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FED. ROAD DIST. NO.	STATE	FAS PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122(1)	1	

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- 3 SUMMARY OF QUANTITIES.
- 4-5 LIST OF STRUCTURES.
- 6 R.O.W. MARKERS, GUARD POSTS, FENCING, BORROW PITS AND DETAILS OF DIVISION BOX STA. 689+.
- 7-8 BRIDGE STA. 666+.
- 9 STANDARD LETTERS & FIGURES FOR YEAR & STRUCTURE NUMBERS.
- 10 STANDARD MARKER POSTS.
- 11 STANDARD HEADWALLS AND APRONS FOR C.M.P. CULVERTS.
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- M-7-B
- M-102-G
- M-103-F
- M-19-B
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- M-1-B
- M-2-C
- M-2-D

COLORADO

STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED

FEDERAL AID SECONDARY PROJECT NO. S-0122 (1)

STATE HIGHWAY NO. 112

SAGUACHE & RIO GRANDE COUNTIES

SCALE OF ORIGINAL TRACINGS

ON PLAN, 1 IN. = 100 FT.

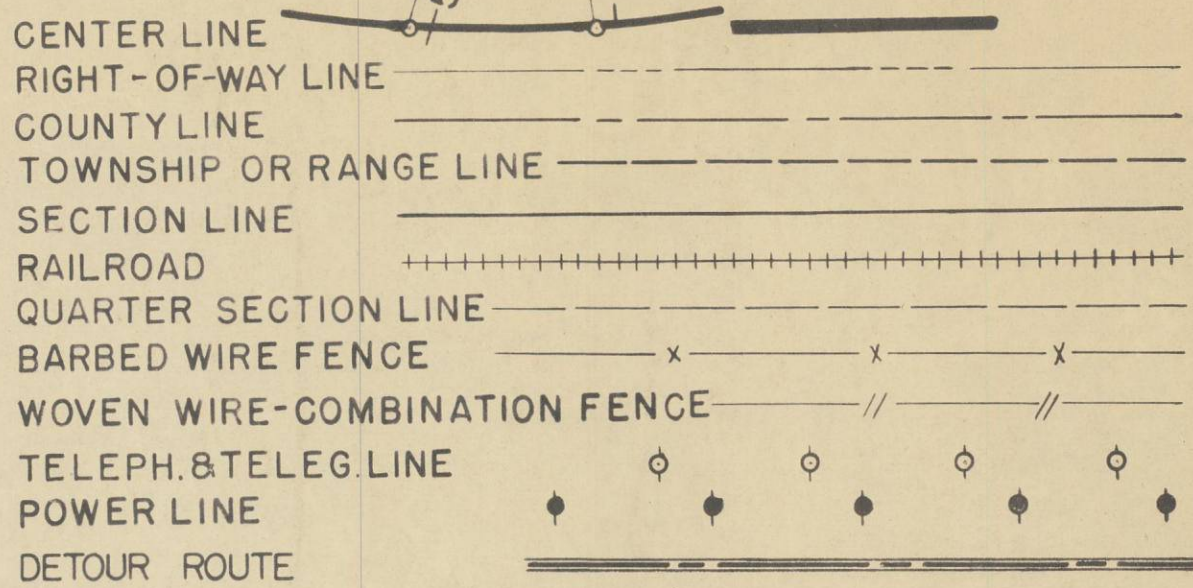
ON PROFILE 1 IN. = 100 FT. HORIZONTAL
1 IN. = 10 FT. VERTICAL

GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

GROSS LENGTH OF PROJECT } 26,604.5 Ft = 5.038 Miles

NET LENGTH OF PROJECT }

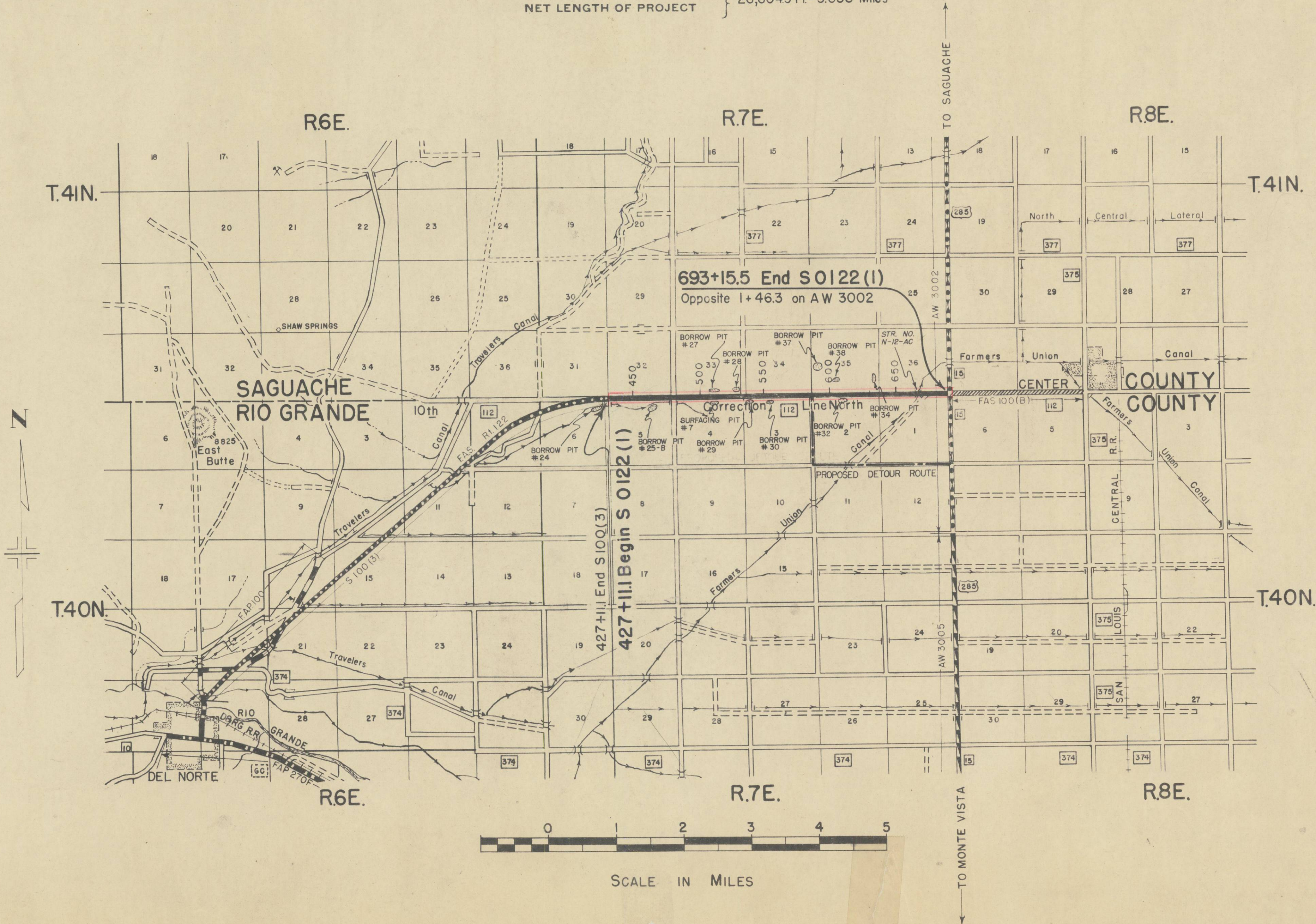
CONVENTIONAL SIGNS



NOTE:

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

Mr C.H. Greene Division Engineer, Alamosa, Colorado



RECOMMENDED FOR APPROVAL

Jack Bell
ASSISTANT ENGINEER DATE
8-15-47

APPROVED

Mark C. Watson
STATE HIGHWAY ENGINEER DATE
8-15-47

RECOMMENDED FOR APPROVAL

DATE

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED

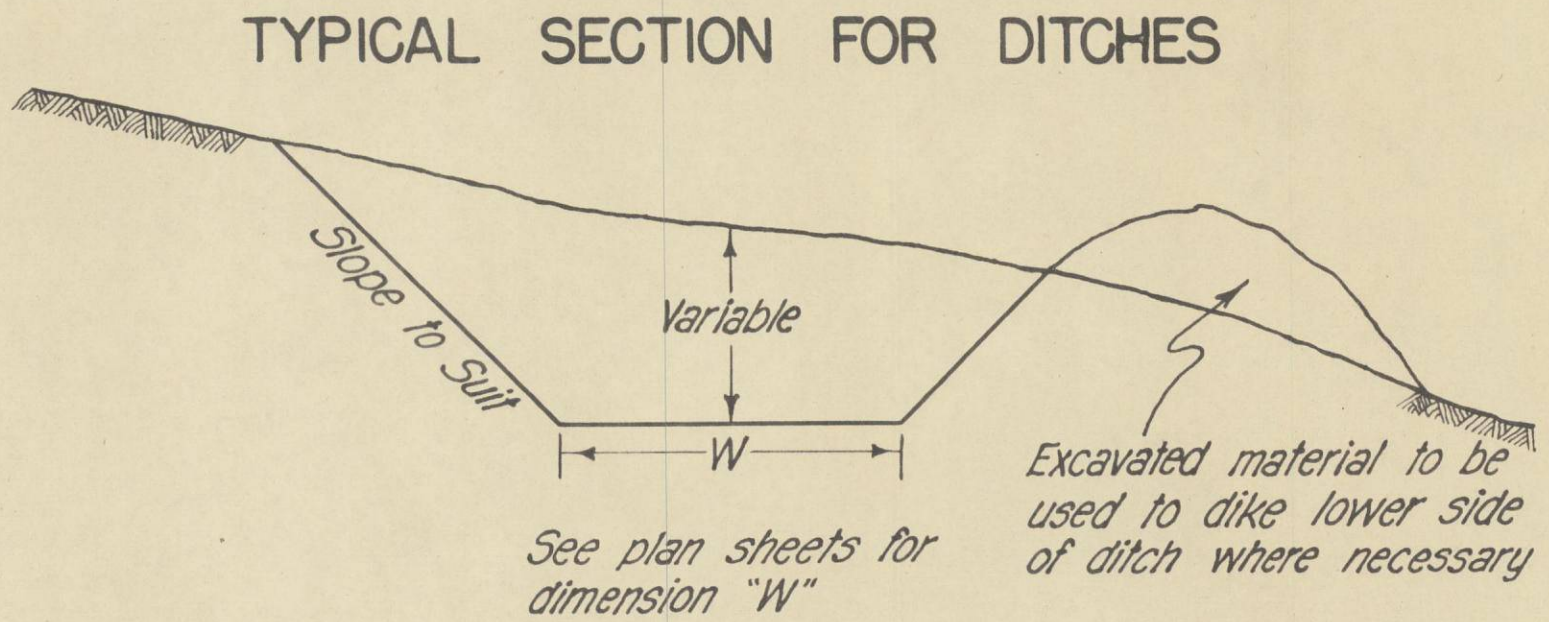
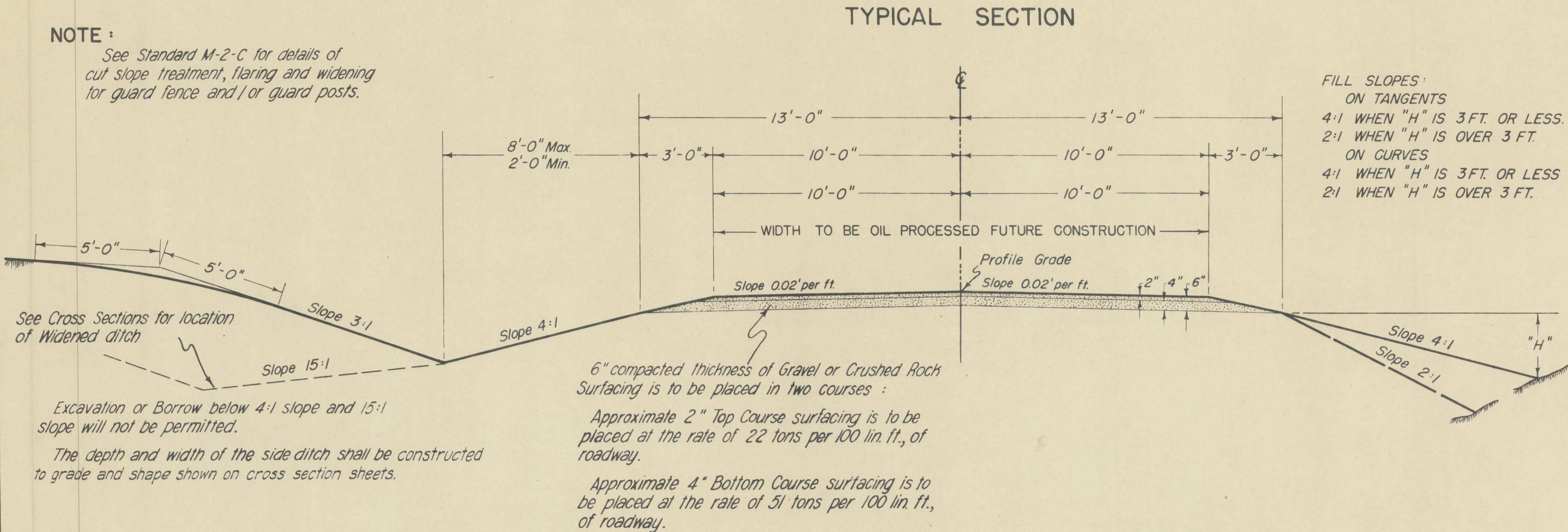
DATE

DIVISION ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

DRAWER #24

S0122(1)

TYPICAL CROSS SECTION OF IMPROVEMENT



GENERAL NOTES

This Project is to be constructed in conformity with the Standard Specifications of the Colorado State Highway Department adopted June 1, 1940.

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 "Embankment", are to be classified and paid for as "Unclassified Excavation". These quantities are to be stated 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.

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.

Right of Way fences, including line posts, shall be constructed approximately six (6) inches inside the boundary of the Highway Right of Way as shown on the plans.

All Corrugated Metal Pipe Cross Culverts shall be laid with Metal Aprons on each end unless otherwise noted on the plans.

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.

The Detour for this project lies along the present traveled road, except for route as indicated on the Title Sheet. At all places on the project where the new work lies along the present traveled road, the Contractor shall, at his own expense, prosecute construction in such manner that traffic may readily pass over the road. Also, the Contractor shall maintain in safe condition and at his own expense, all approaches to and crossings of intersecting roads.

All concrete used on this Project shall be "Air-entrained" concrete.

SURFACING PLAN

It is estimated that material for Gravel Surfacing for the Project is available in the vicinity of the pit indicated in the following tabulation. Estimated quantities involved in this operation are shown below.

Alteration of the Surfacing Plan as here outlined will be allowed only on written permission from the Department.

MATERIAL TO BE PLACED	SOURCE	AVAILABLE TONS	QUANTITY		OVERHAUL TON MILE
			TONS USED		
			TOP COURSE	BOTTOM COURSE	
427+11.1 TO 463+70	Pit #7 650 ft. R. of	24,000	805	1866	925
463+70 " 556+29.9	Sta. 510+00 in N.E. 1/4		2037	4723	Free
556+29.9 " 666+20	Sec. 4, T. 40 N., R. 7 E.		2418	5605	8350
666+20 " 693+15.5	of N.M.P.M.		578	1341	4496
Estimated for Road Approaches			582	73	466
TOTALS			6420	13,608	14,237

TABULATION OF LENGTH & DESIGN DATA

STATION	ROADWAY	MAJOR STRUCTURES	
	LINEAR FEET	LIN. FT.	LOADING
427+11.1 End S 100(3) = 427+11.1 Begin S 0122(1)	12,914.3		
556+25.4 Back- 556+25.3 Ahead } Equation	10,994.7		
666+20.0 Farmers Union Canal } Bridge 666+26.5	26,290	66.5	H-20
693+15.5 End S 0122(1) Opposite 1+46.3 on AW 3002			
SUMMARY			
S 0122(1) Roadway		LIN. FT.	MILES
S 0122(1) Bridges		26,538.0	5.026
Total S 0122(1)		66.5	0.012
DESIGN			
Maximum Degree of Curve		No Curves	
Maximum Grade		0.80 %	
Minimum N.P.S.D. Horizontal		>1300'	
Minimum N.P.S.D. Vertical		1110'	
Maximum Design Speed		50 M.P.H.	

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

TYPICAL CROSS SECTION OF IMPROVEMENT

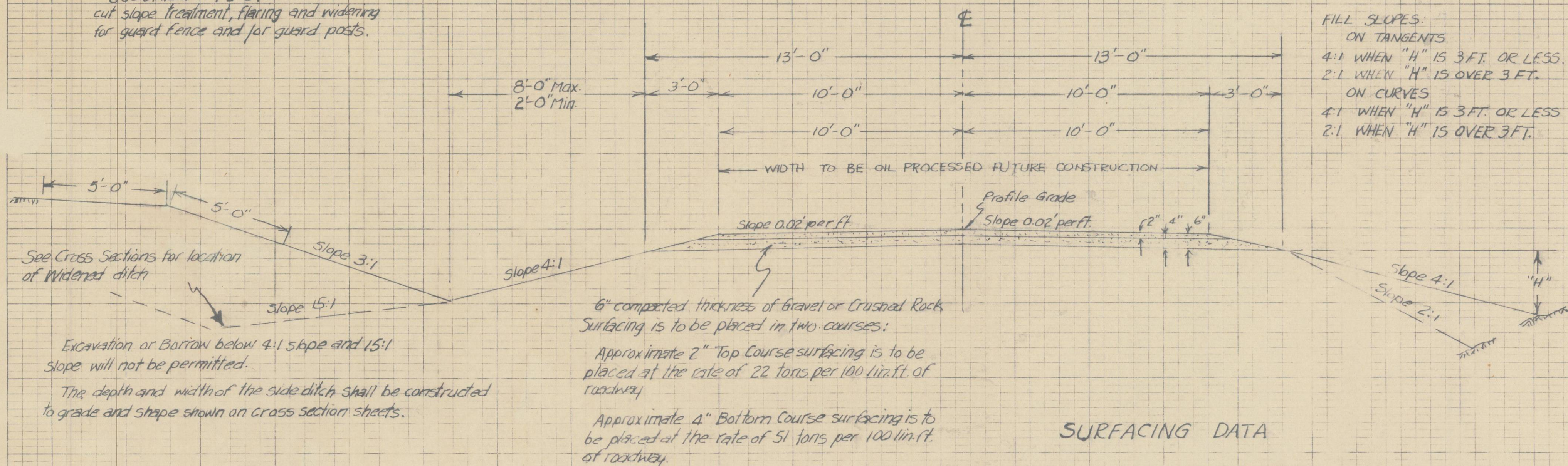
Excavation Area Cu. Yds. Embankment Area Cu. Yds.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	50122(1)	2	

NOTE:

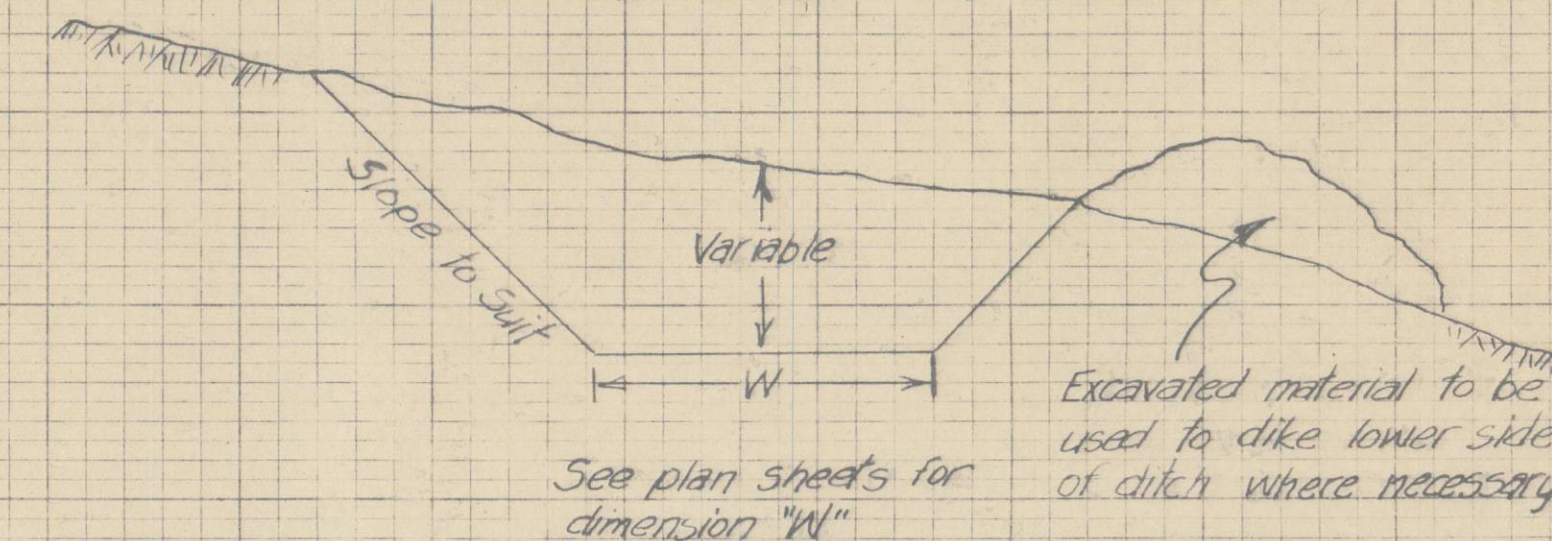
See Standard M-2-C for details of cut slope treatment, flaring and widening for guard fence and for guard posts.

TYPICAL SECTION



FILL SLOPES:
ON TANGENTS
4:1 WHEN "H" IS 3 FT. OR LESS
2:1 WHEN "H" IS OVER 3 FT.
ON CURVES
4:1 WHEN "H" IS 3 FT. OR LESS
2:1 WHEN "H" IS OVER 3 FT.

TYPICAL SECTION FOR DITCHES



SURFACING DATA

MATERIAL PLACED	SOURCE	QUANTITY		OVERHAUL	
		PLANS AVAILABLE TONS	TONS PLACED TOP COURSE BOTTOM COURSE	TOP	BOTTOM
427+11.1-463+70	Pit #7	24,000	805	1866	279
463+70-556+293	650 Rt. of		2,037	4,123	Free
556+293-693+155	Sta. 510+00		3,011	6,980	3,902
TOTAL	in NE 1/4 Sec. 4, T. 40 N, R. 7 E of NW 1/4		5,853.00	13,569.00	4,181.00
APPROACHES					
693+00 End of Proj.			72.26	69.35	205.20
428+70 LT			18.70		12.40
480+23 LT			27.85		Free
480+23 RT			46.75		Free
493+30 LT			27.70		Free
533+35 LT			28.90		Free
534+00 RT			19.25		Free
559+76 LT			18.10		1.18
566+40 LT			29.00		5.54
586+32 RT			28.75		16.34
602+40 LT			17.85		15.58
612+85 RT			18.00		19.28
616+25 LT			19.15		21.74
639+00 RT			28.55		44.71
639+30 LT			29.25		45.98
639+90 LT			28.60		45.27
651+25 LT			18.05		32.45
651+38 LT			19.90		35.84
659+10 RT			18.50		36.02
665+00 LT			19.75		40.66
666+20 LT			18.50		38.50
667+15 RT			18.85		39.57
669+10 LT			18.40		39.30
679+80 LT			18.75		43.86
692+45 LT			19.95		51.45
TOTAL APPROACHES			636.31	69.35	790.87
TOTAL ROADWAY			5,853.00	13,569.00	4,181.00
GRAND TOTAL			6,489.31	13,638.35	4,971.87

TABULATION OF LENGTH & DESIGN DATA

STATION	ROADWAY		MAJOR STRUCTURES	
	LINEAR FEET	LIN. FT.	LOADING	
427+11.1 End 5100(3)= 427+11.1 Begin 50122(1)	12,914.3			
556+25.4 Back= } Equation 556+25.4 Ahead }	10,994.7			
666+20.0 Farmers Union Canal } Bridge 666+86.5	26290	665	H-20	
693+15.5 End 50122(1) Opposite 1+46.3 on AW 3002				
	26,538.0	665		
SUMMARY				
		LIN. FT.	MILES	
50122(1) Roadway		26,538.0	5.026	
50122(1) Bridges		66.5	0.012	
Total 50122(1)		26,604.5	5.038	
DESIGN				
Maximum Degree of Curve			No Curves	
Maximum Grade			0.80%	
Minimum N.P.S.D. Horizontal			> 1300'	
Minimum N.P.S.D. Vertical			1110'	
Maximum Design Speed			50 M.P.H.	

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

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.

Right of Way fences, including line posts, shall be constructed approximately six (6) inches inside the boundary of the Highway Right of Ways shown on the plans.

All Corrugated Metal Pipe Cross Culverts shall be laid with Metal Aprons on each end unless otherwise noted on the plans.

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 rimping embankment slopes around and adjacent to the culvert.

The Detour for this project lies along the present traveled road, except for route as indicated on the title sheet. At all places on the project where the new work lies along the present traveled road, the Contractor shall, at his own expense, prosecute construction in such manner that traffic may readily pass over the road. Also, the Contractor shall maintain in safe condition and at his own expense, all approaches to and crossings of intersecting roads.

All concrete used on this Project shall be "Air-entrained" concrete.

SHEET TOTALS

EXCAVATION
EXCAVATION
EMBANKMENT

Cu. Yds.
Cu. Yds.
Cu. Yds.

FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122 (I)	3	

SUMMARY OF APPROXIMATE QUANTITIES

ITEM NO.	ITEM	UNIT	ROADWAY		BRIDGE STA. 666+		PROJECT TOTALS	
10a	Clearing and Grubbing Entire Project	Lump Sum	●				●	
11a	Removal of Bridge Sta. 666+	Lump Sum			●		●	
11b	Removal of 19 Structures	Lump Sum	●				●	
11c	Remove 4'x4'x30' C.B.C. Sta. 665+	Lump Sum	●				●	
11d	Remove 4'x3'x31' C.B.C. Sta. 667+	Lump Sum	●				●	
11e	Removal of Concrete Headwalls	Each	1				1	
11f	Removing and Resetting Mail Boxes	Lump Sum	●				●	
12a	Removing Fence	Lin. Ft.	22,800				22,800	
13c	Unclassified Excavation	Cu. Yd.	125,000				125,000	
13d	Unclassified Ditch Excavation	Cu. Yd.	8,700				8,700	
14a	Dry Rock Excavation (Structural)	Cu. Yd.	20		10		30	
14b	Dry Common Excavation (Structural)	Cu. Yd.	330		140		470	
14c	Wet Rock Excavation (Structural)	Cu. Yd.	15		5		20	
14d	Wet Common Excavation (Structural)	Cu. Yd.	220		430		650	
14e	Mechanical Tamping	Hour	65		35		100	
15a	Rolling Embankments and Cuts	Unit Hr.	310				310	
15b	Furnishing Roller	R. Unit	4				4	
15c	Wetting Embankments and Cuts	M Gal.	2,220				2,220	
15d	Rolling with Finishing Roller	Hour	130				130	
15e	Furnishing Finishing Roller	Lump Sum	●				●	
15y	Selected Backfill	Cu. Yd.	130		460		590	
18a	Station Yard Overhaul	Sta. Yd.	1,191,000				1,191,000	
18b	Yard Mile Overhaul	Yd. Mi.	51,300				51,300	
26a	Gravel or Crushed Rock Surfacing	Ton	20,100				20,100	
26c	Overhaul of Surfacing	Ton Mi.	14,300				14,300	
44b	Miscellaneous Treated Timber	M ft. bm.	0.2				0.2	
46a	Class "A" Concrete	Cu. Yd.	115		214		329	
46r	Class "A" Concrete (Handrails)	Cu. Yd.			6		6	
47	Reinforcing Steel	Lb.	11,200		20,700		31,900	
53b	18" Corrugated Metal Culvert Pipe	Lin. Ft.	185				185	
53c	24" Corrugated Metal Culvert Pipe	Lin. Ft.	358				358	
53d	30" Corrugated Metal Culvert Pipe	Lin. Ft.	488				488	
76a	Barbed Wire Fence with Treated Wooden Posts	Lin. Ft.	19,100				19,100	
76d	Combination Wire Fence with Treated Wooden Posts	Lin. Ft.	22,200				22,200	
76g	Barbed Wire Gates	Each	3				3	
76h	Driveway Gates	Each	10				10	
76i	Walk Gates	Each	1				1	
81a	Project Markers	Each	2				2	
81b	Right of Way Markers	Each	32				32	
92	Timber Guard Posts	Each	28				28	
95b	Metal Aprons for 18" C.M.P. Culverts	Each	1				1	
95c	Metal Aprons for 24" C.M.P. Culverts	Each	10				10	
95d	Metal Aprons for 30" C.M.P. Culverts	Each	14				14	
	FORCE ACCOUNT:							
	Remove and Reset Pump, Well and Appurtenances Sta. 691+	Lump Sum	●				●	
	Relocate Power Line (Work by San Luis Valley Rural Electric Cooperative Inc.)	Lump Sum	●				●	
	Relocate Telephone Line (Work by La Garita Telephone Co.)	Lump Sum	▼●				▼●	

▼ Non Federal Aid

Excavation
Cu. Yds. Area

Embankment
Area Cu. Yds.

Excavation
Cu. Yds. Area

Embankment
Area Cu. Yds.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	CALIF.	50122(1)	3	

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	UNIT	ROADWAY	BRIDGE Sta. 666+	PROJECT TOTALS	WORK ORDER
10a	Clearing & Grubbing Entire Project	Lump Sum	•	•	•	•
11a	Removal of Bridge Sta. 666+	Lump Sum	•	•	•	•
11b	Removal of 21 Structures	Lump Sum	•	•	•	W.O. #6145
11c	Remove 4'x4'x30' C.B.C. Sta. 665+	Lump Sum	•	•	•	•
11d	Remove 4'x4'x31' C.B.C. Sta. 667+	Lump Sum	•	•	•	•
11e	Removal of concrete Headwalls	Each	1		1	
11f	Removing and Resetting Mail Boxes	Lump Sum	2		2	W.O. #6143, 8905
12a	Removing Fence	Lin. Ft.	25037		25037	
13c	Unclassified Excavation	Cu. Yd.	124660		124660	
13d	Unclassified Ditch Excavation	Cu. Yd.	6031.6		6031.6	
14a	Dry Rock Excavation (Structural)	Cu. Yd.	0		0	
14b	Dry Common Excavation (Structural)	Cu. Yd.	792.3		792.3	
14c	Wet Rock Excavation (Structural)	Cu. Yd.	0		0	
14d	Wet Common Excavation (Structural)	Cu. Yd.	234.4		234.4	
14e	Mechanical Tamping	Hour	102		102	
15a	Rolling Embankments and Cuts	Unit Hr.	515		515	
15b	Furnishing Roller	R. Unit	2		2	
15c	Wetting Embankments and Cuts	M. Gal.	1062		1062	
15d	Rolling with Finishing Roller	Hour	181		181	
15e	Furnishing Finishing Roller	Lump Sum	1		1	
15y	Selected Backfill	Cu. Yd.	132	456	588	
18a	Station Yard Overhaul	Sta. Yd.	1,062,787		1,062,787	
18b	Yard Mile Overhaul	Yd. Mi.	35,735		35,735	
26a	Gravel or Crushed Rock Surfacing	Ton	20,127.66		20,127.66	
26c	Overhaul of Surfacing	Ton Mi.	14,844.49		14,844.49	
44b	Miscellaneous Treated Timber	M. ft. 6m.				
46a	Class "A" Concrete	Cu. Yd.	115.0	214.4	329.4	Letter of Feb. 19, 1948
46r	Class "A" Concrete (Handrails)	Cu. Yd.		5.97	5.97	Letter of Feb. 19, 1948
47	Reinforcing Steel	Lb.	11,119	20,630	31,749	
53b	18" Corrugated Metal Culvert Pipe	Lin. Ft.	185		185	
53c	24" Corrugated Metal Culvert Pipe	Lin. Ft.	518		518	W.O. #8903
53d	30" Corrugated Metal Culvert Pipe	Lin. Ft.	488		488	
53e	36" Corrugated Metal Culvert Pipe	Lin. Ft.	34		34	W.O. #6145
76a	Barbed Wire Fence with Treated Wood Posts	Lin. Ft.	0		0	W.O. #6143
76d	Combination Wire Fence with Treated Wood Posts	Lin. Ft.	24,980		24,980	W.O. #6143, 8905
76g	Barbed Wire Gates	Each	3		3	
76h	Driveway Gates	Each	11		11	W.O. #8905
76i	Walk Gates	Each	1		1	
81a	Project Markers	Each	2		2	
81b	Right of Way Markers	Each	31		31	
92	Timber Guard Posts	Each	28		28	
95b	Metal Aprons for 18" C.M.P. Culverts	Each	1		1	
95c	Metal Aprons for 24" C.M.P. Culverts	Each	16		16	W.O. #8903
95d	Metal Aprons for 30" C.M.P. Culverts	Each	14		14	
	FORCE ACCOUNT:					
	Remove and Reset Pump, Well & Appurtenances Sta. 691+11	Lump Sum	•		•	
	Relocate Power Line (Work by San Luis Valley Rural Electric Cooperative Inc.)	Lump Sum	•		•	
	Relocate Telephone Line (Work by La Garita Telephone Co.)	Lump Sum	••		••	

▼ Non Federal Aid

FINAL SURVEY
DATE: 6/16/48
BY: D.H. Grover
NOTE BOOK NO. 1075
REMARKS: (SEE)

ORIGINAL SURVEY
DATE: _____
BY: _____
NOTE BOOK NO. _____
REMARKS: (SEE)

SHEET TOTALS

EXCAVATION
EXCAVATION
EMBANKMENT

Cu. Yds.
Cu. Yds.
Cu. Yds.

FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122 (1)	4	

LIST OF STRUCTURES

STATION	DESCRIPTION	REMOVE STRUCT.	EXCAVATION				STRUCTURAL EXCAVATION				MECH. TAMP.	SELECT BACK- FILL	GRAVEL OR CRUSHED ROCK SURFACING	CONCRETE		REINF. STEEL	CORRUGATED METAL CULVERT PIPE						METAL APRONS FOR C.M.P. CULVERTS						MISCELLANEOUS										
			UNCLASSIFIED	UNCL. DITCH	CU. YD.	●								CL."A"			LINEAR FEET						EACH																
																	NO.	EXCAV.	EMB.	CU. YD.							18"	24"		30"				18"	24"	30"			
427+111 ✓ 428+70 ✓ 453+75 ✓	Project marker Remove 7'x14' wooden bridge, 2 Side drains & road approach Lt Remove 24"x24' C.M.P. with Handrails Cross culvert & ditches (W-2)	1 Wd.Br. 1 C.M.P.		80		4					20					28		30					2				1 Project Marker ✓												
466+ to 480+65 ✓ 480+23 ✓	Ditch change Lt. (W-2) Remove 24"x16' side drain Lt. Side drain in irrigation ditch Lt. Road approaches Rt.&Lt.	1 C.M.P.			430													40																					
492+80 ✓ 493+30 ✓ 493+58 ✓	Walk approach Lt Road approach Lt Remove 18"x24' C.M.P with handrails. Cross culvert & inlet ditch (W-1)	1 C.M.P.		175 10 35							95 5 20																												
493+58 to 508+00 ✓ 496+35 to 507+20 ✓ 507+38 ✓ 507+45 ✓	Ditch change Lt (W-2) Ditch change Lt (W-4) Remove 24"x24' C.M.P with handrails Remove 8"x21'x16' Flume. Culvert to span irrigation ditch Lt.	1 C.M.P. 1 Flume			375 250																																		
533+35 ✓ 533+72 ✓	Cross culvert & ditches (W-2) Road approach Lt. Remove 24' x 24' C.M.P with handrails Cross culvert & ditches (W-2)	1 C.M.P.		50		23			4		45							46					2																
534+00 ✓ 544+ to 560+45 ✓ 547+49 ✓	Road approach Rt. Ditch change Lt (W-2) Remove 18"x30' C.M.P with handrails Cross culvert & inlet ditch (W-2)	1 C.M.P.		50		18			5		20							44					2																
547+49 to 572+ ✓ 560+05 ✓ 566+12 ✓	Ditch change Lt (W-2) Remove 1'x2'x16' Flume. Culvert to span irrigation ditch, Lt. Remove 1'x12'x16' W.B.C. Lt.	1 Flume 1 W.B.C.			600				4									48					2																
566+40 ✓ 572+32 ✓ 572+32 to 586+35 ✓ 572+44 ✓	Side drain in irrigation ditch & Road approach, Lt. Remove 24'x28' C.M.P with handrails Cross culvert & inlet ditch (W-2) Ditch change Lt (W-2) Cross culvert & inlet ditch (W-2)	1 C.M.P.		80		30			5 5 5		45					70		52 48					2 2																
572+44 to 596+00 ✓ 574+46 ✓ 586+32 ✓ 586+65 to 603+70 ✓ 596+10 ✓ 596+65 to 612+95 ✓ 603+88 ✓ 604+75 ✓	Ditch change Lt (W-2) Remove 24"x32' C.M.P with handrails Road approach Rt. Ditch change Lt (W-2) Dike Lt. Ditch change Lt (W-2) Remove 18"x34' C.M.P Cross culvert & ditches (W-2) Side drain in irrigation ditch & road approach Lt.	1 C.M.P.		50	1400 680						50																												
612+57 ✓ 612+57 to 626+25 ✓	Remove 18"x33' C.M.P with handrails Cross culvert & inlet ditch (W-2) Ditch change Lt (W-2)	1 C.M.P.		70		17					20					28		44					2																
612+85 ✓ 616+25 ✓ 626+31 ✓	Road approach Rt. Remove 15"x22' C.M.P Lt Side drain in irrigation ditch & road approach Lt. Remove 24"x30' C.M.P with Handrails	1 C.M.P. 1 C.M.P.		20							15 20																												
626+31 to 639+75 ✓ 626+45 ✓ 626+45 to 654+00 ✓ 627+77 ✓ 638+43 ✓	Cross culvert & inlet ditch (W-2) Ditch change Lt (W-2) Cross culvert & inlet ditch (W-2) Ditch change Lt (W-2) Remove 21"x30' C.M.P with handrails Walk approach Rt	1 C.M.P.			5 390 10 1160	35 31				24 20								50 50					2 2																

CONTINUED ON SHEET 5

LIST OF STRUCTURES
CONTINUED FROM SHEET 4

STATION	DESCRIPTION	REMOVE STRUCT.	EXCAVATION			STRUCTURAL EXCAVATION			MECH. TAMP	SELECT BACK - FILL	GRAVEL OR CRUSHED ROCK SURFACING	CONCRETE		REINF. STEEL	CORRUGATED METAL CULVERT PIPE					METAL APRONS FOR C.M.P. CULVERTS						MISCELLANEOUS												
			UNCLASSIFIED	UNCL. DITCH	CU. YD.	●							CL "A"			LINEAR FEET					EACH																	
																											CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	TON	CU. YD.		LB.	18"	24"	30"
																NO.	EXCAV.	EMB.	CU. YD.	HR.	CU. YD.	TON	CU. YD.															
639+00 ✓ 639+30 ✓ 639+90 ✓	2 Side drains in canal & road approach Rt. 2 Side drains in irrigation ditches & road approach Lt. Side drain in irrigation ditch & road approach Lt.			55 75		6					25 30						{34 34 {30 28																					
651+25 ✓	Side drain in irrigation ditch & road approach Lt.			60 50							25 25						28 26																					
659+10 ✓ 665+00 ✓ 665+43 ✓ 666+20 to 666+86.5 ✓	Road approach Rt. Road approach Lt. Remove 4'x4'x30' C.B.C. 6'x5'x54' C.B.C. & Ditches (W=6') BRIDGE Remove Bridge			20 40							15 20																Remove 4'x4'x30' C.B.C. Remove Bridge											
667+15 ✓ 667+53 ✓ 667+55 to 692+36 ✓ 689+53 ✓	Road Approach, Rt. Remove 4'x3'x31' C.B.C. 4'x4'x74' C.B.C. & Ditches (W=4') Ditch Change Rt. (W=2') Remove Division Box, Rt. Timber Division Box, Rt.			150							30																Remove 4'x3'x31' C.B.C.											
689+53 to 692+50 ✓ 691+11 ✓ 691+60 ✓ 692+12 ✓	Ditch Change Rt. (W=2') Remove and Reset Pump, Well and Appurtenances, Rt. Cross Culvert and Ditches, (W=1') Remove 18"x34' C.M.P.	1-Div. Box ✓				15 1100	157		8	35		52.2 ✓		5527													0.194 M ft. b.m. Miscellaneous Treated Timber											
692+40 ✓ 692+80 ✓ 693 +15.5 ✓	Connection to S.H. 15 Remove Concrete Headwall Extend 18" Culvert 32' Rt. Project Marker	1- C.M.P. ✓				10	8									40			2								Remove 1 Concrete Headwall. 1-Project Marker.											
679+80 ✓	Road Approach Lt.			20 ✓							20																											

● Structural Excavation is estimated to be 95% Common and 5% Rock, each of which is estimated to be 60% Dry and 40% Wet.
⊙ Earthwork included in Profile Quantities.
△ Includes top and bottom course Surfacing.
* (+1)=Allowance for Connecting Band.

Excavation
Cu. Yds. Area

Embankment
Area Cu. Yds.

Excavation
Cu. Yds. Area

Embankment
Area Cu. Yds.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	C.O.D.	5 0122(1)	4	

LIST OF STRUCTURES

STATION	DESCRIPTION	REMOVE	EXCAVATION		STRUCTURAL EXCAVATION		MECH. TAMP. HRS.	SELECT BACKFILL CU. YDS.	GRAVEL OR CR. ROCK SURFAC. CL. "A" CU. YD.	CONCRETE CL. "A" CU. YD.	REINF. STEEL	CORR. METAL CULV. PIPE					METAL APRONS FOR C.M.P. CULV. EACH				REMARKS	
		STRUCT. NO.	UNCLASSIFIED CU. YD.		UNCL. DITCH	CU. YDS.						LIN. FT.										
			EXCAV.	EMBANK.		W. COMM.						D. COMM.	18"	24"	30"	36"	18"	24"	30"	36"		
427+11/428+70 428+61 453+79	Project Marker, 427+50 to 428+28, Ditch Change Lt. Remove 7'x14' Wooden Bridge 2 Side Drains & Road Approach Lt.	W.O. Bridge		Rd App. 88	2		9.0	1.8					20	36						1 Project Marker Removed by property owner 30 cu yds. Wet Comm. on 30"x36" Pipe		
466+24 to 480+59 462+71 480+23	Cross Culvert & Ditches (W=2') Remove 24"x24' C.M.P. with Handrails Ditch Change Lt. Cross Culvert & Ditches Remove 24"x16' Sidedrain Lt.	IC.M.P.		358 110	24 31		0.0	30.2	4					42				2		W.O. #8903		
480+23 493+34 493+58	Side Drain Lt. & Road Approaches Rt. & Lt. Road Approach Lt. (492+80 Walk Approach) Remove 18"x24' C.M.P. with Handrails Cross Culvert & Ditches	IC.M.P.		Rd App. 87 44			0.0	5.0	3					40						Walk app. eliminated (Property owners req.)		
493+58 to 507+65 493+50 to 507+20 507+38 507+45	Cross Culvert & Ditches Ditch Change Lt. (W=2') Ditch Change Lt. (W=2') Remove 24"x24' C.M.P. with Handrails Remove 8'x21'x16' Flume Culvert to span irrigation ditch Cross Culvert & Ditches	IC.M.P. 1 Flume		8 120 28	26 279 246		0.0 0.0	15.4	3					44				2				
533+343 533+72 533+90	Road Approach Lt. Remove 24"x24' C.M.P. with Handrails Cross Culvert & Ditches Road Approach Rt.	IC.M.P.		6 43 2 27	29 10		0.0 0.0	1.6 24.4 18.2	3 5					16 46 44				2 2				
545+75 to 560+45 547+49 547+30 547+40 559+76	Ditch Change Lt. (W=2') Remove 18"x30' C.M.P. with Handrails Cross Culvert & Ditches Cross Culvert & Ditches Road Approach Lt.	IC.M.P.		65 19	427 16 16		0.0 0.0	23.1 23.0	3 3					48 48				2 2		W.O. #8903		
547+44 to 572+00 560+05 566+12 566+40	Ditch Change Lt. (W=2') Remove 1'x2'x16' flume. Culvert to span irrigation ditch, Lt. Remove 1'x1.2'x16' W.B.C. Lt. Side Drain in irrigation ditch Lt. & Road App.	1 Flume 1 W.B.C.			556		0.0 0.0	0.4 7.2						18						Moved to 547+34		
572+32 572+32 to 586+35 572+44 572+44 to 603+70 604+00 to 612+45	Remove 24"x28' C.M.P. with handrails; x-culvert Ditch change Lt. (W=2') Cross Culvert & Ditches Ditch Change Lt. (W=2') Ditch Change Rt.	IC.M.P.		4 5 84	5 501 1051 209		0.0 0.0	15.9 16.0	5 4					52 48				2 2				
574+46 586+32 586+65 to 603+70 596+10 603+70 to 612+51 603+88	Remove 24"x32' C.M.P. with handrails Road Approach Rt. Ditch Change Lt. (W=2') Dike Lt. Ditch Change Lt. (W=2')	IC.M.P.		48																Outer ditch eliminated, request ditch tenant		
602+40 612+57	Remove 18'x34' C.M.P. Cross Culvert & Ditches (W=2') Side Drain Lt. & Road Approach Lt. Remove 18'x33' C.M.P. with handrails Cross Culvert & Inlet Ditch (W=2')	IC.M.P.		11 27	9 11		0.0 0.0	18.1 1.6	4 3				54 44				2					
613+00 to 626+25 612+90 610+25 626+31	Ditch Change Lt. (W=2') Road Approach Rt. Remove 15'x22' C.M.P. Lt. Side drain & Road Approach Lt. Remove 24"x30' C.M.P. with Handrails	IC.M.P.		240 22 37	317		0.0	0.6					44 26									
626+35 626+50 626+35 to 639+75 626+50 to 654+00	Cross Culvert & Ditches Cross Culvert & Ditches Ditch Change Lt. Ditch Change Lt.			6 3 19	12 8 635		0.0 0.0	22.1 31.1	3 3	24 24		50 50					2 2					
627+77 638+85 639+00 639+30 639+90	Remove 21'x30' C.M.P. with handrails Walk Approach Rt. Side Drain in Canal & Road App. Rt. 2 Side Drains & Road Approach Lt. Side Drain Lt. & Road Approach Lt.	IC.M.P.					9.8 0.0 0.0	3.7 3.1 2.6					34 28							Included in Road Approach (W.O. #6145)		
651+25 651+55 659+13 665+35	Side Drain Lt. & Road Approach Lt. Road Approach Lt. Road Approach Rt. Road Approach Lt.						0.0	1.7					26									
665+43 666+20 to 666+863 667+81, 85 666+79 667+53 666+30 667+55 to 692+36 669+08	Remove 4'x4'x30' C.B.C. 6'x5'x54' C.B.C. & Ditches (W=6') BRIDGE Remove bridge Cross Culvert, 667+85 Remove 24'x52' C.M.P. Road Approach Rt. Remove 4'x3'x31' C.B.C.; 4'x4'x74' C.B.C. Road Approach Lt. Ditch Change Rt. (W=2') Road Approach Lt.	IC.M.P.			722		11.6 133.0	129.9 253.6	11 26	32 456	628 2031	5592 20630					2			Remove 4'x4'x30' C.B.C. Letter of Feb. 15, 1948 Remove Bridge W.O. #8903 Remove 4'x3'x31' C.B.C.		
679+83 689+53 689+53 to 692+50 691+11 691+60 692+12 692+40 692+80 692+45	Road Approach Lt. Remove Division Box Rt. Timber Div. Box Ditch Change Rt. (W=2') Remove & Reset Pump, well & Appurtenances Rt. Cross Culvert & Ditches Remove 18'x34' C.M.P. Connection to S.H. 15 Remove Concrete Headwall Extend 18' Culvert 32' Rt. Project Marker	1 Div. Box					0.0	8.5	3				40				2			0.044 ft. 6 m. Misc. Treated Timber Eliminated (Owners Request) Remove Concrete Headwall 1 Project Marker		
* 639+00	2 30'x34' C.M.P.'s replaced by 1-36'x34'	2 C.M.P.'s					0.0	7.7					32+1				1			Replaced with 1 36'x34' C.M.P. (W.O. #6145)		
TOTALS		21		2159	6031.6		234.4	792.3	102	588		33537	31749		185 518 488 34	1 16 14				SHEET TOTALS EXCAVATION EMBANKMENT		

7-6-88
D.H. Grover

FINAL SURVEY

DATE

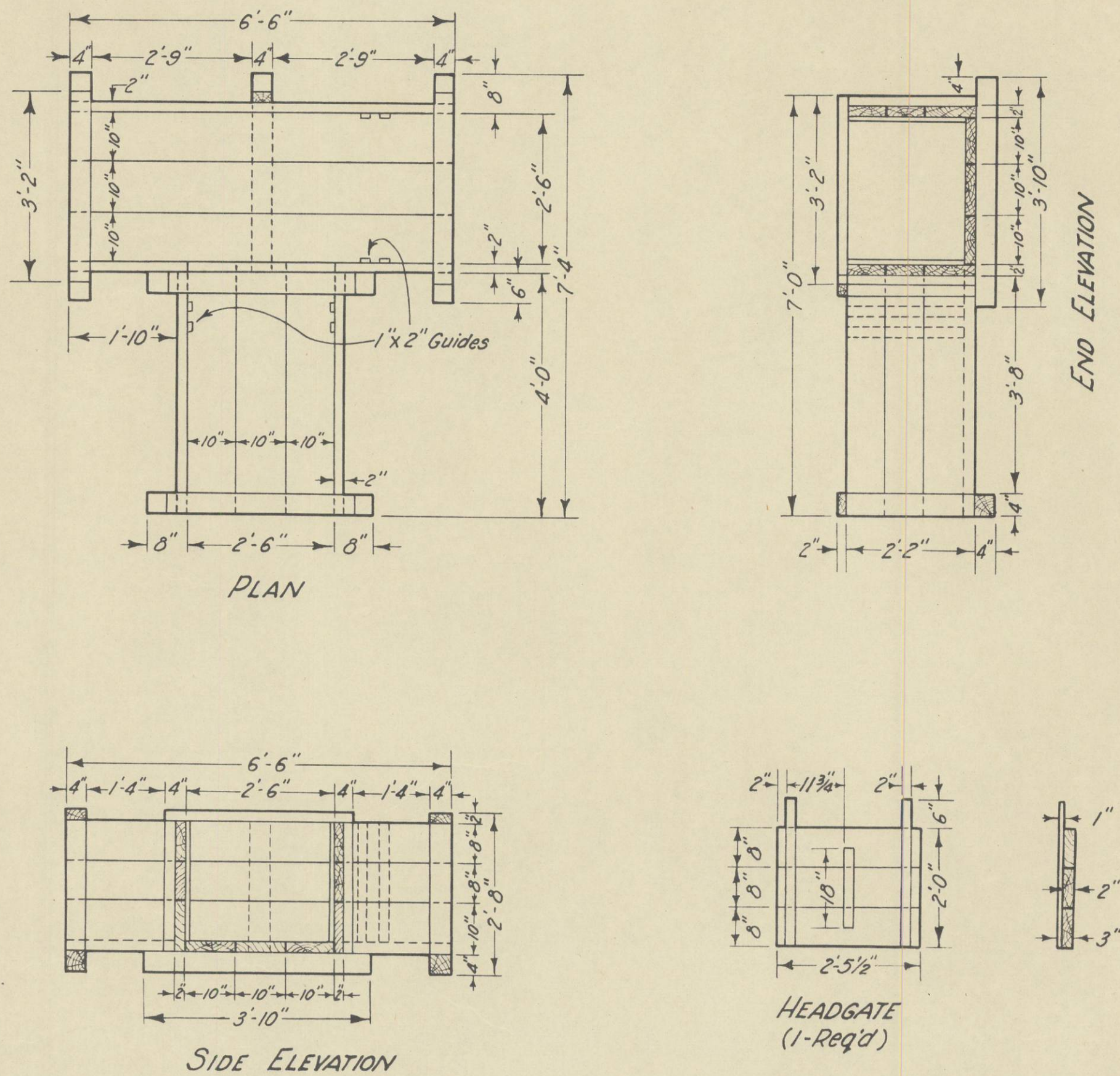
BY

ORIGINAL SURVEY

Excavation
Cu. Yds.
Embankment
Cu. Yds.

FED. ROAD DIST. NO.	STATE	F.A.S. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122 (I)	6	

DETAILS OF TIMBER DIVISION BOX STA.689+



LIST OF MATERIALS FOR ONE TIMBER BOX

DESCRIPTION	NO.	SIZE	LENGTH	BD. FT.	TYPE
Sides	4	2"x8"	4'-0"	21.3	S.2.S.
"	2	2"x10"	4'-0"	13.3	"
"	4	2"x8"	2'-0"	10.7	"
"	2	2"x10"	2'-0"	6.7	"
"	1	2"x10"	6'-6"	10.8	"
"	2	2"x8"	6'-6"	17.3	"
Flooring	3	2"x10"	6'-6"	32.5	"
"	3	2"x10"	4'-2"	20.8	"
Sills	4	4"x4"	3'-10"	20.4	Unsurf.
"	1	4"x4"	3'-4"	4.4	"
Vertical Braces	9	2"x4"	2'-2"	13.0	"
Cap Braces	4	2"x4"	3'-2"	8.4	"
Guides	8	1"x2"	2'-0"	2.7	"
Headgate	3	2"x8"	2'-5 1/2"	9.8	S.2.S.
" Handles	2	1"x2"	2'-6"	0.8	Unsurf.
" Brace	1	1"x2"	1'-6"	0.3	"
Total				193.2	

NAILING DIRECTIONS

2"x8" Sides to Braces ~ 4-16d per piece per Brace.
2"x10" Sides to Braces ~ 5-16d per piece per Brace.
2"x10" Flooring to Sills ~ 5-16d per piece per Sill.
Braces to Braces and top of Sides ~ 3-16d per piece per Brace.
Guides to Sides ~ 9-10d per Guide.
Handles to Headgate ~ 9-10d per Handle.
Brace to Headgate ~ 7-10d per Brace.
Sides to Floor ~ 1-16d @ 6" spacing.

NOTE: All Timber to be Treated.

R.O.W. MARKERS

STATION	SIDE	NUMBER
427+11.1	Lt.	1
427+35	Rt.	1
442+00	Rt.	1
443+00	Rt.	1
454+04	Rt. & Lt.	2
455+00	Rt.	1
467+50	Lt.	1
468+50	Lt.	1
479+93	Rt.	1
480+52	Lt.	1
506+74	Rt. & Lt.	2
523+00	Rt.	1
524+00	Rt.	1
533+02	Lt.	1
533+33	Rt.	1
545+00	Lt.	1
546+00	Lt.	1
559+90	Rt. & Lt.	2
586+02	Rt.	1
586+35	Lt.	1
613+00	Rt. & Lt.	2
639+82	Rt. & Lt.	2
665+00	Rt.	1
666+50	Rt. & Lt.	2
692+45	Lt.	1
692+70	Rt.	1
TOTAL		32

TIMBER GUARD POSTS

STATION	SIDE	SPACING	NUMBER
453+75	Rt. & Lt.	Culvert	2
493+58	Rt. & Lt.	Culvert	2
507+45	Rt. & Lt.	Culvert	2
533+72	Rt. & Lt.	Culvert	2
665+56 to 666+17	Rt. & Lt.	Bridge	10
666+22 to 666+83	Rt. & Lt.	Bridge	10
TOTAL			28

FENCING REQUIREMENTS

STATION TO STATION	SIDE	REMOVE FENCE	BUILD COMBINATION FENCE	BUILD BARBED WIRE FENCE	GATES		
		LIN. FT.	LIN. FT.	LIN. FT.	WALK	DRIVE	B.W.
455+00 to 468+50	Lt.	1350	1350				
545+00 to 601+82	Lt.	5682	5682				
559+82	Lt.						1
566+12	Lt.						1
613+00 to 666+20	Lt.	5320	5330				
639+30	Lt.						1
639+90	Lt.						1
651+25	Lt.						1
651+38	Lt.						1
665+40	Lt.						1
667+00 to 692+50	Lt.	2550	2580				
679+80	Lt.						1
665+40	Lt.						1
427+32 to 453+70	Rt.	2703	2650				
638+82 to 658+90	Rt.	2008					
638+43	Rt.						1
638+00 to 657+70	Rt.		1970				
639+00	Rt.						1
657+70 to 658+90	Rt.			120			
660+30 to 666+20	Rt.	590		590			
667+00 to 692+70	Rt.	2570	2580				
667+06	Rt.						1
453+70 to 480+10	Rt.			2645			
480+35 to 586+28	Rt.			10604			
534+00	Rt.						1
586+65 to 638+00	Rt.			5135			
612+85	Rt.						1
TOTALS		22773	22142	19094	1	10	3

TABULATION OF BORROW PITS

It is estimated that Borrow for this project is available in the vicinity of the pits tabulated below.

PIT NO.	LOCATION	QUANTITIES	
		AVAILABLE CU. YDS.	USED CU. YDS.
24	N.E. 1/4 Sec. 6, T.40N., R.7E. - 600' Rt. Sta. 425+	11800	11000
25b	N.E. 1/4 Sec. 5, T.40N., R.7E. - 360' Rt. Sta. 464+	22000	21300
27	S.E. 1/4 Sec. 33, T.41N., R.7E. - 380' Lt. Sta. 511+	8600	8200
28	S.E. 1/4 Sec. 33, T.41N., R.7E. - 750' Lt. Sta. 533+	5800	5600
29	N.W. 1/4 Sec. 3, T.40N., R.7E. - 630' Rt. Sta. 536+	8300	8000
30	N.W. 1/4 Sec. 3, T.40N., R.7E. - 630' Rt. Sta. 557+	8300	8000
32	N.W. 1/4 Sec. 2, T.40N., R.7E. - 270' Rt. Sta. 609+	13300	12700
34	S.E. 1/4 Sec. 35, T.41N., R.7E. - 1500' Lt. Sta. 639+	16600	15814
37	S.W. 1/4 Sec. 35, T.41N., R.7E. - 2640' Lt. Sta. 586+	11200	11200
38	S.W. 1/4 Sec. 35, T.41N., R.7E. - 1400' Lt. Sta. 604+	800	800
TOTALS		106700	102614

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

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

ROW MARKERS

STATION	SIDE	NO.	ELEV.
427+35	RT	1	7723.00
442+00	RT	1	7731.01
443+00	RT	1	7731.33
454+04	RT	1	7734.23
454+04	LT	1	7734.85
455+00	RT	1	7735.26
467+50	LT	1	7729.93
468+50	LT	1	7730.29
479+53	RT	1	7727.03
480+52	LT	1	7727.10
506+74	LT	1	7719.43
506+74	RT	1	7719.42
523+00	RT	1	7726.36
524+00	RT	1	7724.19
533+02	LT	1	7709.85
533+33	RT	1	7711.67
545+00	LT	1	7707.75
546+00	LT	1	7707.81
559+30	LT	1	7702.51
559+30	RT	1	7702.62
586+02	RT	1	7695.61
586+35	LT	1	7696.18
613+00	RT	1	7698.75
613+00	LT	1	7687.29
639+82	RT	1	7682.37
639+82	LT	1	7682.32
665+00	RT	1	7675.03
666+50	LT	1	7674.77
666+50	RT	1	7675.15
692+45	LT	1	7668.35
692+70	RT	1	7667.68
TOTAL		31	

PROJECT MARKERS

STATION	SIDE	NO.
427+11.1	LT	1
692+45	LT	1
TOTAL		2

TIMBER GUARD POSTS

STATION	SIDE	SPACING	NUMBER
453+79	RT & LT	C.M.P. Culvert	2
493+58	RT & LT	C.M.P. Culvert	2
507+45	RT & LT	C.M.P. Culvert	2
533+72	RT & LT	C.M.P. Culvert	2
666+56 to 666+17	RT & LT	Bridge	10
666+22 to 666+83	RT & LT	Bridge	10
TOTAL			28

FENCING DATA

STATION TO STATION	SIDE	REMOVE FENCE	COMB. FENCE	B.W. FENCE	GATES	WORK ORDER	REMARKS
		LIN. FT.	LIN. FT.	LIN. FT.	D.W. W. B.W.	No.	LIN. FT.
454+99 - 468+99	LT	1,404	1,404				
533+65 - 566+23	LT	3,260	3,260		1-14'	6143	1,130
559+76	LT				1-14'		
566+15	LT						
566+63 - 616+08	LT	4,944	4,944		1-14'	8005	1,118
602+40	LT				1-14'		
616+37 - 666+34	LT	5,008	5,008		1-14'		
639+53	LT				1-14'		
640+14	LT				1-14'		
651+27	LT				1-14'		
651+56	LT				1-14'		
665+82	LT				1-14'		
666+22	LT				1-14'		
692+45	LT						
667+09 - 692+45	LT	2,550	2,544				
669+08	LT						
679+83	LT						
TOTAL LT.		17,166	17,160		2-126' 2-36'		2248'
427+36 - 454+05	RT	2,703	2,670				
638+87	RT						
638+80 - 665+96	RT	2,598	2,748				
638+96	RT				1-14'		
661+81	RT				1-14'		
666+74 - 692+67	RT	2,570	2,592				
TOTAL RT.		7,871	8,010		2-28' 1-0'		
TOTAL RT. & LT.		25,037	25,170		11-154' 1-36'		
NET TOTAL (LESS GATES, 120')			24,980				

TABULATION OF BORROW PITS

PIT No.	LOCATION	AVAILABLE CU. YDS.	QUANTITIES USED CU. YDS.	SELECTED BACKFILL MATERIAL CU. YDS.
24	N.E. 1/4 Sec. 6, T. 40N, R. 7E. - 320' RT Sta. 424+90	11800	12,043	
25b	N.E. 1/4 Sec. 5, T. 40N, R. 7E. - 164' RT Sta. 468+50	22000	19,275	
7-A	N.E. 1/4 Sec. 4, T. 40N, R. 7E. - 300' RT Sta. 509+25		23,767	
3.	N.W. 1/4 Sec. 2, T. 40N, R. 7E. - 370' RT Sta. 604+50	13300	43,497	588
4.	S.E. 1/4 Sec. 35, T. 41N, R. 7E. - 1500' LT Sta. 639+80	16600	16,695	
TOTALS			115,277	

MAIL BOXES

STATION	SIDE	NO.
428+20	LT	1
480+50	RT	1
TOTAL		2

DATE
6-16-48

BY
D.H. Grever

FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
NO.

ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
NO.

ALL AS CHECKED

DATE

BY

ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
NO.

ALL AS CHECKED

Excavation

Cu. Yds.

Area

Embankment

Area

Cu. Yds.

Excavation

Cu. Yds.

Area

Embankment

Area

Cu. Yds.

FED. ROAD DIST. NO.

STATE

PROJ. NO.

SHEET NO.

TOTAL SHEETS

3

COLO.

50122(1)

7

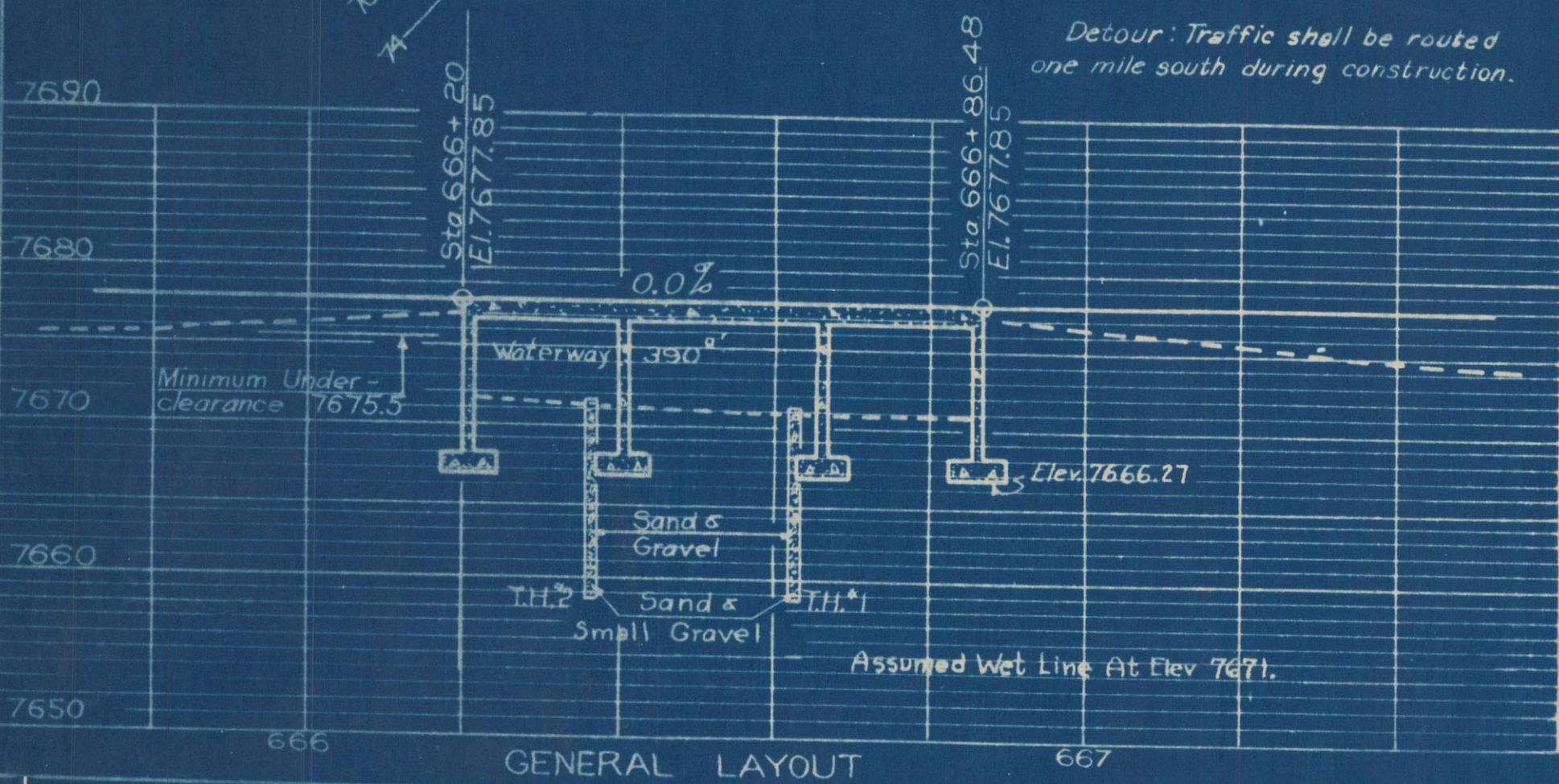
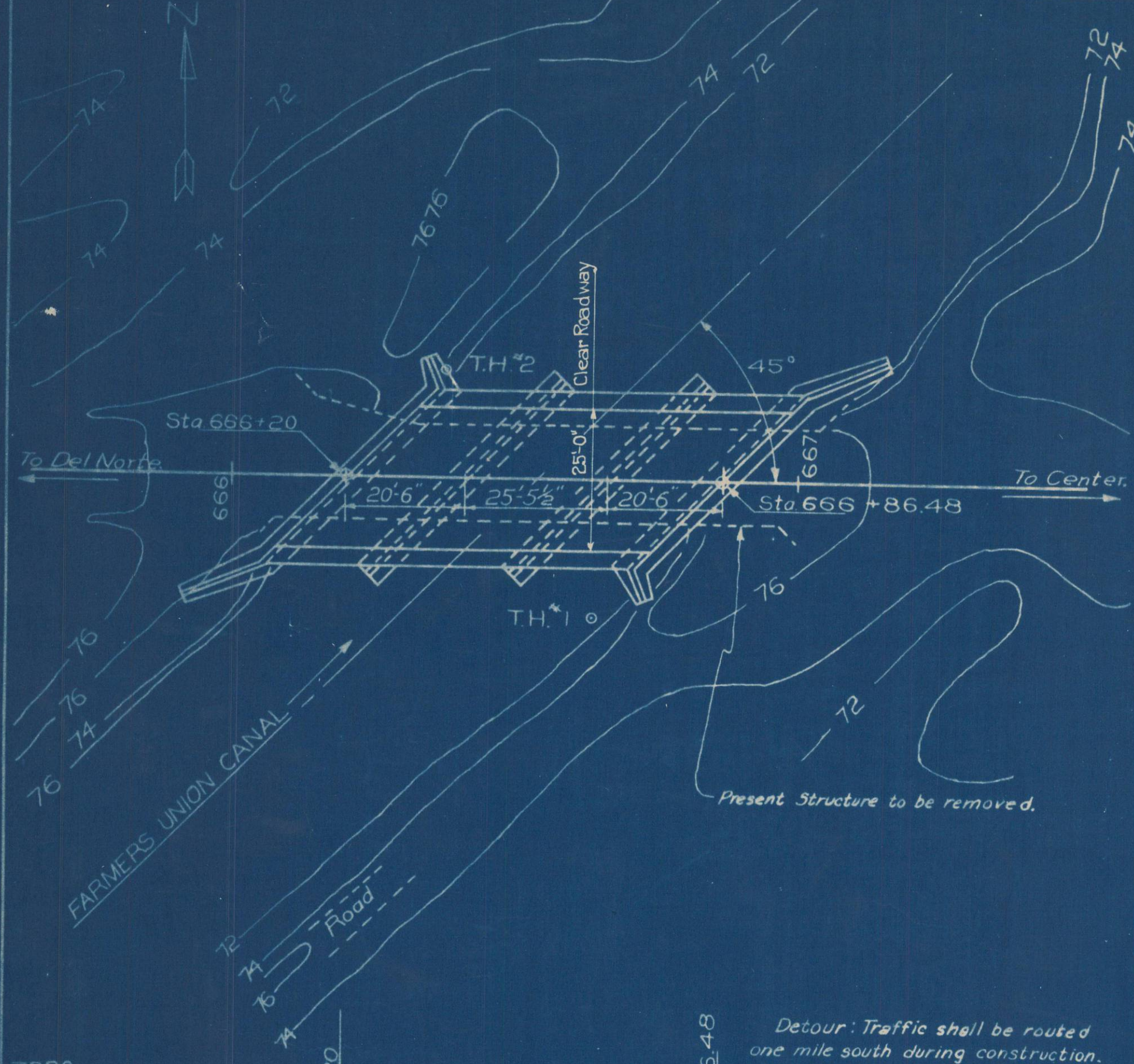
SUMMARY OF FINAL QUANTITIES

ITEM No.	ITEM	UNIT	ROADWAY			BRIDGE, Sta. 666+			PROJECT TOTALS			WORK ORDER, REMARKS
			PLANS	FINAL	DIFF.	PLANS	FINAL	DIFF.	PLANS	FINAL	DIFF.	
10a	Clearing & Grubbing Entire Project	Lump Sum	.	.	.	.	.	.	.	.	.	Plans Remove 12; (W.O. # 6143)
11a	Removal of Bridge Sta. 666+	Lump Sum	.	.	.	.	.	.	.	.	.	
11b	Removal of 21 Structures	Lump Sum	.	.	.	.	.	.	.	.	.	
11c	Remove 4' x 4' x 30' C.B.C. Sta. 665+	Lump Sum	.	.	.	.	.	.	.	.	.	
11d	Remove 4' x 4' x 31' C.B.C. Sta. 667+	Lump Sum	.	.	.	.	.	.	.	.	.	W.O. # 1643, 8905
11e	Removal of Concrete Headwalls	Each	1	1	0	.	.	.	1	1	0	
11f	Removing & Resetting Mail Boxes	Lump Sum	.	.	.	.	.	.	.	.	.	
12a	Removing Fence	Lin. Ft.	22,800	25,037	+2237	.	.	.	22,800	25,037	+2237	
13c	Unclassified Excavation	Cu. Yd.	125,000	124,660	-340	.	.	.	125,000	124,660	-340	
13d	Unclassified Ditch Excavation	Cu. Yd.	8,700	6,031.6	-2668.4	.	.	.	8,700	6,031.6	-2668.4	
14a	Dry Rock Excavation (Structural)	Cu. Yd.	25	0	-25	5	0	-5	30	0	-30	
14b	Dry Common Excavation (Structural)	Cu. Yd.	332	538.7	+206.7	138	253.6	+115.6	470	792.3	+322.3	
14c	Wet Rock Excavation (Structural)	Cu. Yd.	15	0	-15	5	0	-5	20	0	-20	
14d	Wet Common Excavation (Structural)	Cu. Yd.	227	414	-180.6	428	193.0	-235.0	650	234.4	-415.6	
14e	Mechanical Tamping	Hour	65	76	+11	35	26	-9	100	102	+2	
15a	Rolling Embankments and Cuts	Unit Hr.	310	515	+205	.	.	.	310	515	+205	
15b	Furnishing Roller	R. Unit	4	2	-2	.	.	.	4	2	-2	
15c	Wetting Embankments and Cuts	M. Gal.	2,220	1062	-1158	.	.	.	2220	1062	-1158	
15d	Rolling with Finishing Roller	Hour	130	181	+51	.	.	.	130	181	+51	
15e	Furnishing Finishing Roller	Lump Sum	.	1	.	.	.	.	.	1	.	
15y	Selected Backfill	Cu. Yd.	136	132	-4	454	456	+2	590	588	-2	
18a	Station Yard Overhaul	Sta. Yd.	1,191,000	1,062,787	-128,213	.	.	.	.	.	.	
18b	Yard Mile Overhaul	Yd. Mi.	57,300	35,735	-21,565	.	.	.	.	.	.	
26a	Gravel or Crushed Rock Surfacing	Ton	20,100	20,127.66	+27.66	.	.	.	20,100	20,127.66	+27.66	
26c	Overhaul of Surfacing	Ton Mi.	14,300	14,844.49	+544.49	.	.	.	14,300	14,844.49	+544.49	Letter of Feb. 19, 1948
44b	Miscellaneous Treated Timber	M. Ft. Bm.	0.2	0	-0.2	.	.	.	0.2	0	-0.2	
46a	Class "A" Concrete	Cu. Yd.	115	115.0	0	214	214.4	+0.4	329	329.4	+0.4	
46c	Class "A" Concrete (Handrails)	Cu. Yd.	0	0	0	6	5.97	-0.03	6	5.97	-0.03	
47	Reinforcing Steel	Lb.	11,200	11,019	-181	20,700	20,480	-220	31,900	31,749	-151	Diff. between Approx. & Str. Quan.
53b	18" Corrugated Metal Culvert Pipe	Lin. Ft.	185	185	0	.	.	.	185	185	0	
53c	24" Corrugated Metal Culvert Pipe	Lin. Ft.	358	518	+160	.	.	.	358	518	+160	
53d	30" Corrugated Metal Culvert Pipe	Lin. Ft.	488	488	0	.	.	.	488	488	0	
53e	36" Corrugated Metal Culvert Pipe	Lin. Ft.	.	.	.	.	.	.	.	.	.	W.O. # 8903
76a	Barbed Wire Fence with Treated Wooden Posts	Lin. Ft.	13,100	0	-13,100	.	.	.	13,100	0	-13,100	
76d	Combination Wire Fence with Treated Wooden Posts	Lin. Ft.	22,200	24,980	+2,780	.	.	.	22,200	24,980	+2,780	
76g	Barbed Wire Gates	Each	3	3	0	.	.	.	3	3	0	
76h	Driveway Gates	Each	10	11	+1	.	.	.	10	11	+1	W.O. # 8905
76i	Walk Gates	Each	1	1	0	.	.	.	1	1	0	
81a	Project Markers	Each	2	2	0	.	.	.	2	2	0	
81b	Right of Way Markers	Each	32	31	-1	.	.	.	32	31	-1	
92	Timber Guard Posts	Each	28	28	0	.	.	.	28	28	0	W.O. # 8903
95b	Metal Aprons for 18" C.M.P. Culverts	Each	1	1	0	.	.	.	1	1	0	
95c	Metal Aprons for 24" C.M.P. Culverts	Each	10	16	+6	.	.	.	10	16	+6	
95d	Metal Aprons for 30" C.M.P. Culverts	Each	14	14	0	.	.	.	14	14	0	
FORCE ACCOUNT:												
Remove & Reset Pump, Well & Appurtenances, Sta. 691+11		Lump Sum	.	.	.	.	.	.	.	.	.	
Relocate Power Line (Work by San Luis Valley Rural Electric Cooperative Inc.)		Lump Sum	.	.	.	.	.	.	.	.	.	
Relocate Telephone Line (Work by La Grulla Telephone Co.)		Lump Sum	.	.	.	.	.	.	.	.	.	

SHEET TOTALS

EXCAVATION
EXCAVATION
EMBANKMENT

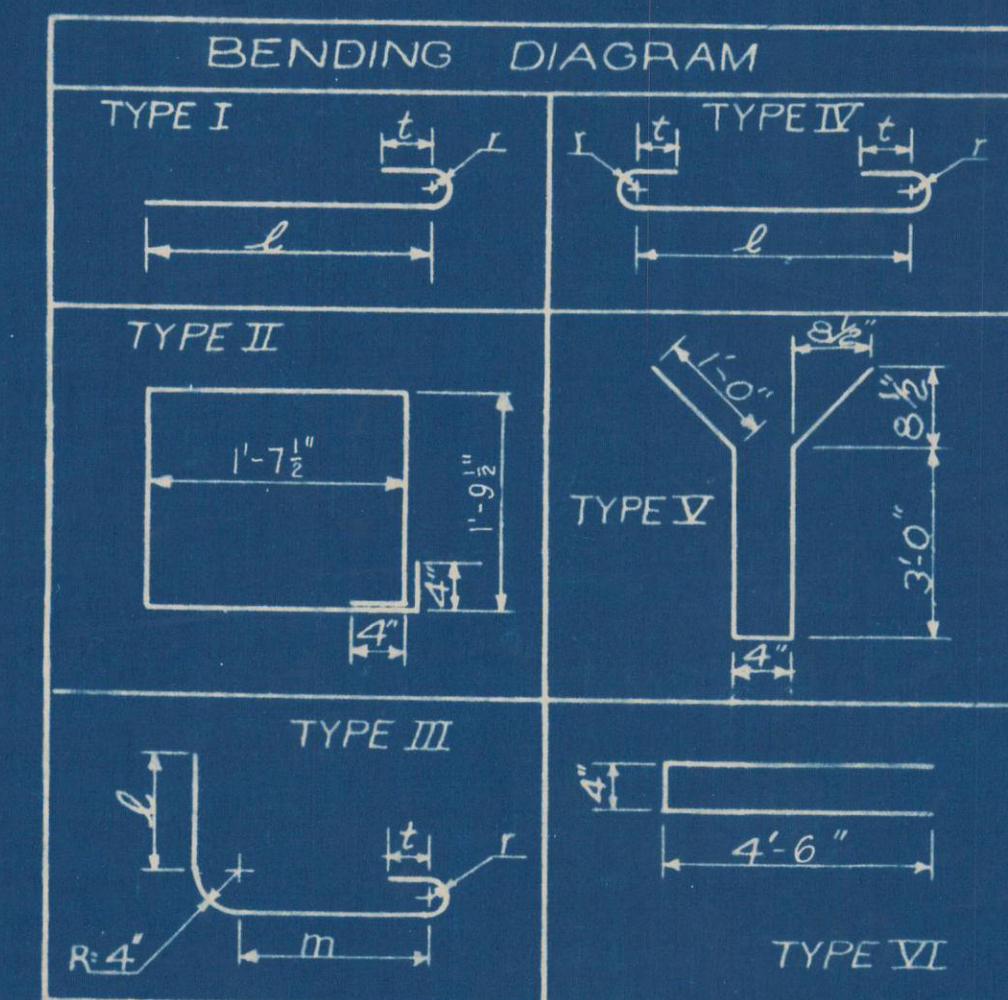
Cu. Yds.
Cu. Yds.
Cu. Yds.



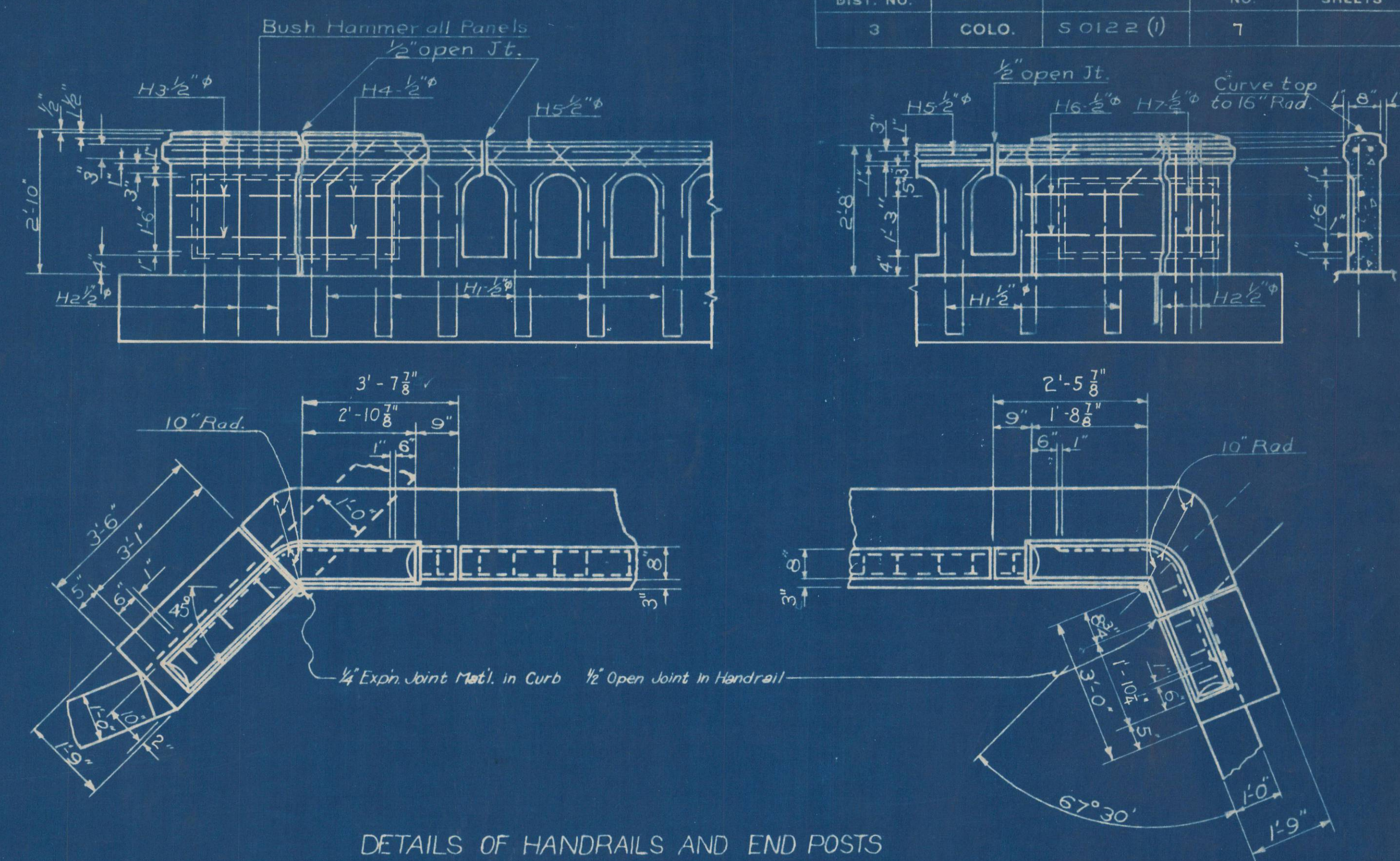
SUMMARY OF QUANTITIES FOR ENTIRE STRUCTURE			
ITEM	DESCRIPTION	UNIT	TOTAL
11a	REMOVAL OF PRESENT STRUCTURE	Lump Sum	
14a	DRY ROCK EXCAVATION (STR.)	Cu.Yd.	5
14b	DRY COMMON EXC. (STR.)	Cu.Yd.	138
14c	WET ROCK EXC. (STR.)	Cu.Yd.	5
14d	WET COMMON EXC. (STR.)	Cu.Yd.	428
15y	SELECTED BACKFILL	Cu.Yd.	454
46a	CLASS "A" CONCRETE	Cu.Yd.	213.4
46r	CLASS "A" CONCRETE (HANDRAIL)	Cu.Yd.	5.7
47	REINFORCING STEEL (1% incl.)	Lbs.	20,630
14e	MECHANICAL TAMPING	Hrs.	35
*	1/4" EXPANSION MATERIAL	Sq.Ft.	50

* To be included in Bid Price of Class "A" Concrete

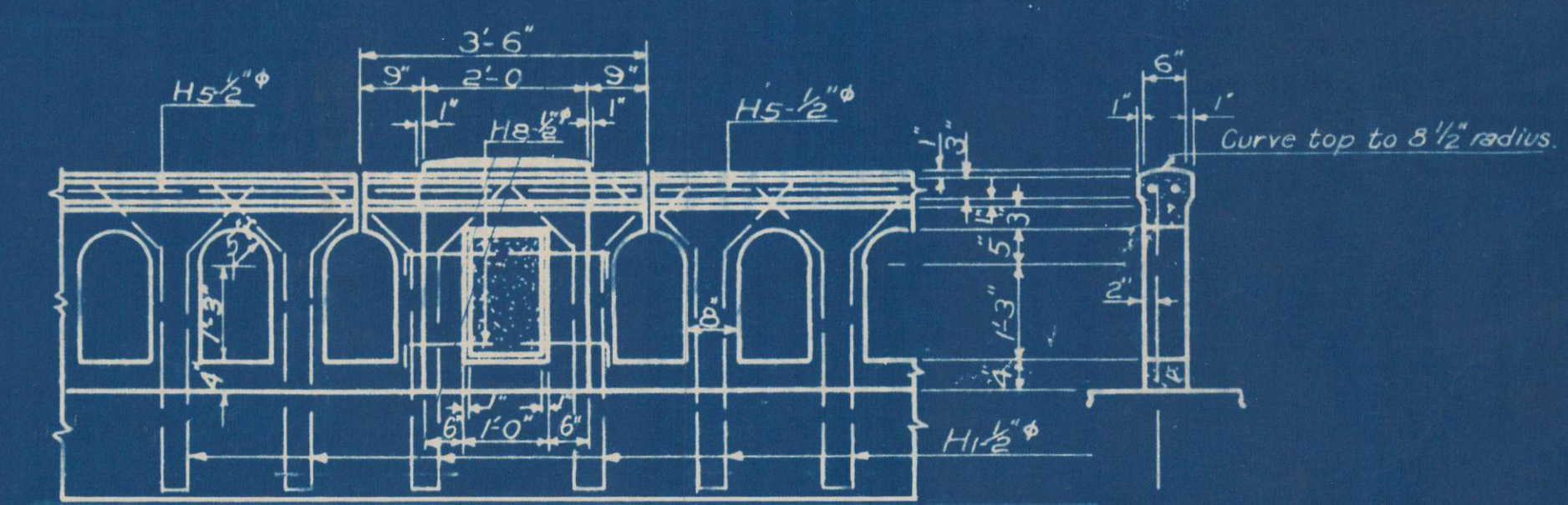
BAR LIST FOR 3 SPAN BRIDGE									
Mark	Size	NB	Length	Type	Dimensions				
		Reqd.			l	m	n	r	t
A1	3/4"	50	21'-9 1/2"	I	20'-7 1/2"			3 1/2"	3"
A2	3/4"	50	27'-0 1/2"	Str.					
A3	3/4"	25	19'-6"	Str.					
A4	3/4"	50	21'-7 1/2"	I	20'-7 1/2"			3"	2 1/2"
A5	3/4"	25	8'-6"	Str.					
A6	3/4"	85	40'-0"	Str.					
B1	3/4"	16	22'-4"	Str.					
B2	3/4"	8	28'-6"	Str.					
B3	3/4"	16	18'-0"	Str.					
B4	3/4"	8	37'-10"	Str.					
B5	3/4"	134	7'-6"	II					
C1	3/4"	10	14'-6"	III	11'-2"	2'-0"		2 1/2"	2"
C2	3/4"	6	13'-6"	III	10'-0"	2'-2"		2 1/2"	2"
C3	3/4"	6	12'-10"	III	9'-5"	2'-1"		2 1/2"	2"
C4	3/4"	6	12'-2"	III	8'-11"	1'-11"		2 1/2"	2"
C5	3/4"	6	11'-6"	III	8'-4"	1'-10"		2 1/2"	2"
C6	3/4"	6	10'-11"	III	7'-10"	1'-9"		2 1/2"	2"
C7	3/4"	6	10'-2"	III	7'-3"	1'-7"		2 1/2"	2"
C8	3/4"	18	7'-8"	III	4'-2"	2'-2"		2 1/2"	2"
C9	3/4"	10	6'-9"	III	3'-6"	1'-11"		2 1/2"	2"
C10	3/4"	10	6'-7"	III	3'-6"	1'-9"		2 1/2"	2"
C11	3/4"	8	6'-4"	III	3'-6"	1'-6"		2 1/2"	2"
C12	3/4"	14	21'-6"	Str.					
C13	3/4"	2	14'-6"	Str.					
C14	3/4"	2	9'-6"	Str.					
C15	3/4"	2	5'-9"	Str.					
D1	3/4"	14	22'-0"	Str.					
D2	3/4"	14	10'-0"	Str.					
D3	3/4"	24	23'-4"	Str.					
E1	3/4"	6	14'-11"	III	11'-2"	2'-5"		2 1/2"	2"
E2	3/4"	4	13'-4"	III	9'-11"	2'-1"		2 1/2"	2"
E3	3/4"	4	12'-3"	III	9'-0"	1'-11"		2 1/2"	2"
E4	3/4"	4	11'-0"	III	8'-0"	1'-8"		2 1/2"	2"
E5	3/4"	2	10'-5"	III	7'-6"	1'-7"		2 1/2"	2"
E6	3/4"	8	7'-7"	III	4'-2"	2'-1"		2 1/2"	2"
E7	3/4"	8	6'-6"	III	3'-6"	1'-8"		2 1/2"	2"
E8	3/4"	4	6'-5"	III	3'-6"	1'-7"		2 1/2"	2"
E9	3/4"	14	8'-9"	Str.					
E10	3/4"	2	6'-6"	Str.					
E11	3/4"	2	4'-3"	Str.					
E12	3/4"	2	2'-6"	Str.					
F1	3/4"	166	2'-5"	Str.					
F2	3/4"	34	5'-4"	I	4'-6"			2 1/2"	2"
F3	3/4"	26	4'-10"	I	4'-0"			2 1/2"	2"
F4	3/4"	12	4'-3"	I	3'-5"			2 1/2"	2"
U	3/4"	34	40'-0"	Str.					
V1	3/4"	164	11'-7"	IV	10'-3"			2"	2"
V2	3/4"	82	11'-10"	IV	10'-2"			2 1/2"	2"
H1	3/4"	86	8'-4"	Y					
H2	3/4"	14	9'-4"	Y					
H3	3/4"	8	2'-9"	Str.					
H4	3/4"	8	3'-3"	Str.					
H5	3/4"	16	13'-0"	Str.					
H6	3/4"	8	3'-4"	Str.					
H7	3/4"	8	1'-6"	Str.					
H8	3/4"	8	3'-0"	Str.					



BAR SUMMARY OF 3 SPAN BRIDGE			
Length	Size	Quantity	Weight
9788 Lin. Ft.	3/4"	166	6538 Lbs.
3866 "	3/4"	104	4032 "
1439 "	3/4"	150	2161 "
3370 "	3/4"	204	6888 "
303 "	3/4"	267	809 "
Plus 1% for Overrun = 202 "			
Total = 20,630 Lbs.			



DETAILS OF HANDRAILS AND END POSTS



SECTION THRU RAILING

GENERAL NOTES

ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO STATE HIGHWAY DEPARTMENT, JUNE 1, 1944.

ALL CONCRETE SHALL BE CLASS "A."

FORMS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SHIPLAP OR TONGUE AND GROOVE LUMBER S3S UNLESS FACED WITH PANEL BOARD.

CONCRETE GIRDERS, FLOOR SLABS AND CURB SHALL BE POURED MONOLITHICALLY. FOOTINGS IN ROCK SHALL BE POURED OUT TO THE ROCK AND NOT FORMED.

ALL REINFORCING BARS SHALL BE DEFORMED AND TAGGED WITH THE STATION NUMBER AND LETTER DESIGNATION.

SOUNDINGS AND DEPTH OF FOOTINGS SHOWN ARE ACCORDING TO THE BEST AVAILABLE DATA. IF ESSENTIALLY DIFFERENT CONDITIONS ARE ENCOUNTERED THE BRIDGE ENGINEER WILL INSPECT AND DETERMINE IF REDESIGN IS NECESSARY.

REIN. STEEL SHALL BE OF INTERMEDIATE GRADE.

REFERENCE DRAWING

Details of Substructure and Superstructure: See Sheet No. 8.

LOADING DATA.

LIVE LOAD - A. A. S. H. O. 1944 H-20-44

DEAD LOAD - ASSUMES SOLES PER SQ. FT. ADDITION

AL WEARING SURFACE WHICH INCLUDES THE 5 INCH ASPHALT MIX WEARING SURFACE SHOWN.

DESIGNING DATA.

FC = 833 Lbs. per Sq. Ft.

FS = 15000 Lbs. per Sq. Ft.

n = 12

COLORADO

STATE HIGHWAY DEPARTMENT

2 SPANS @ 13'-0", 1 SPAN @ 17'-0"

CONCRETE SLAB BRIDGE

Across FARMERS UNION CANAL

Sta. 666+20 to 666+86.48

Near CENTER Sec. 36 T4N R7E

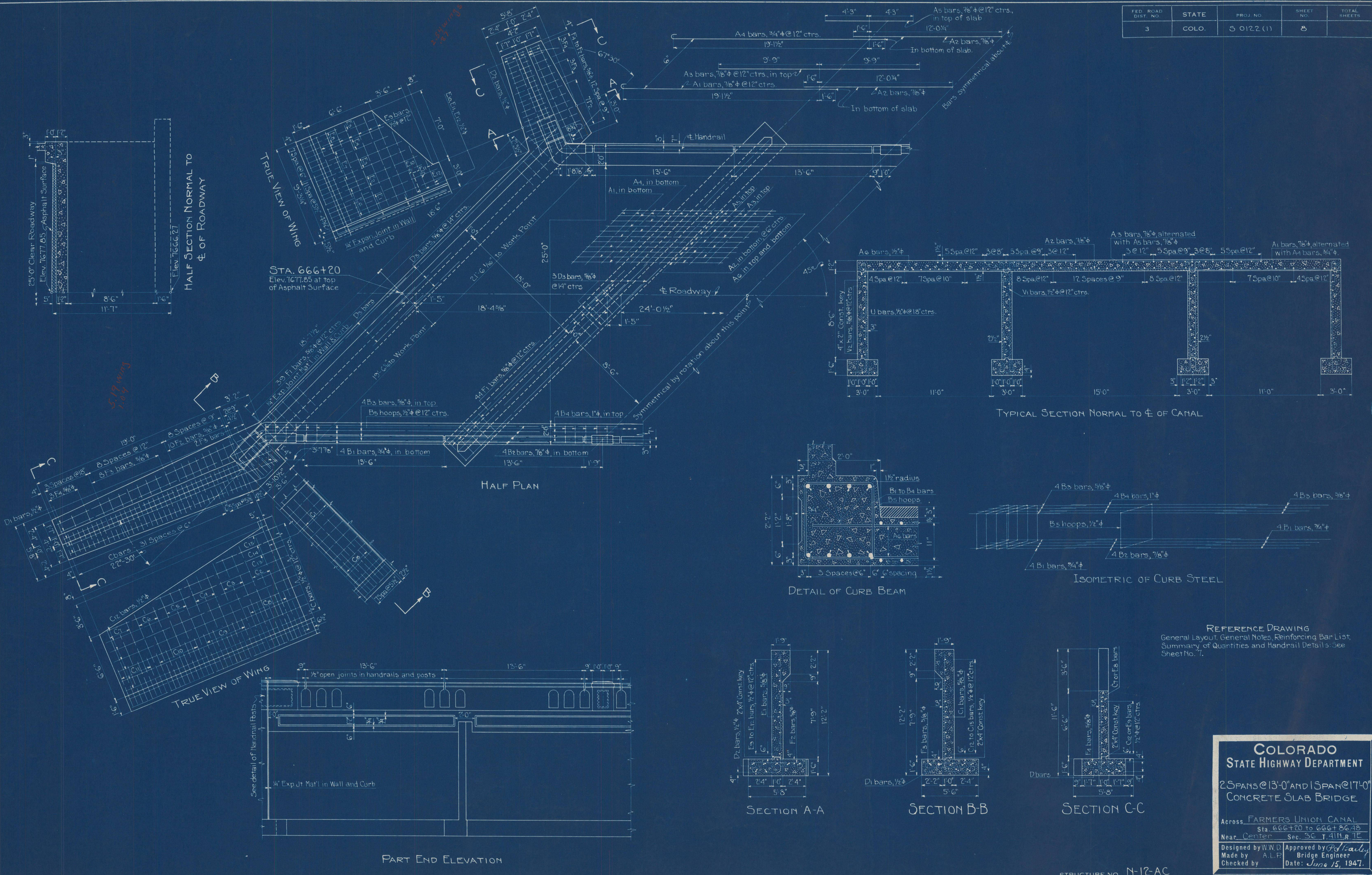
Designed by W.W.D. Approved by P.B. Bailey

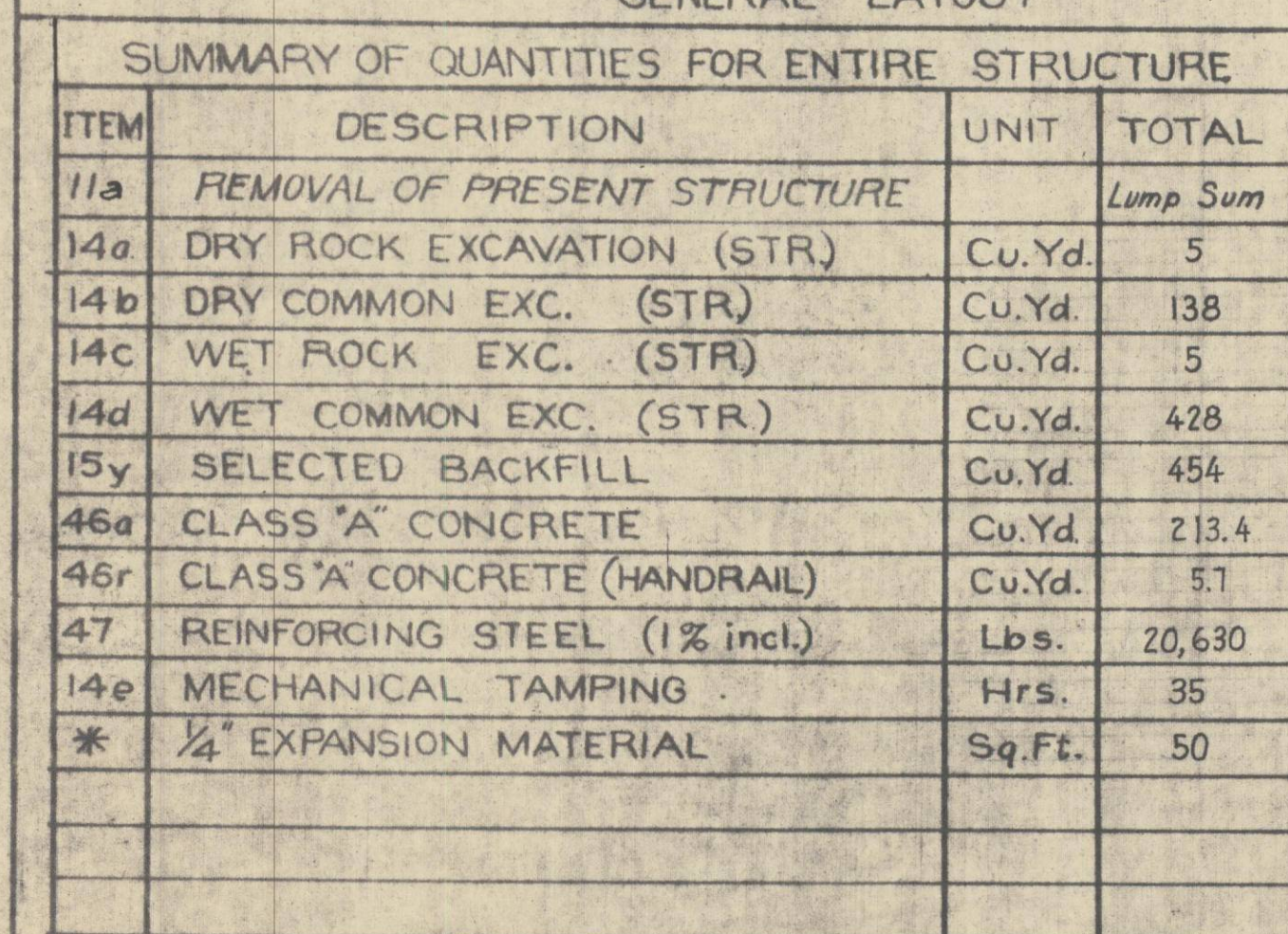
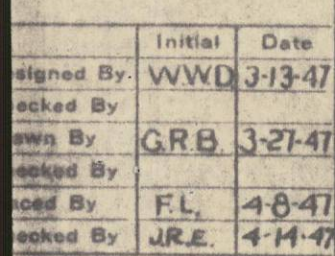
Made by G.R.B. Bridge Engineer

Checked by Date: June 17, 1947

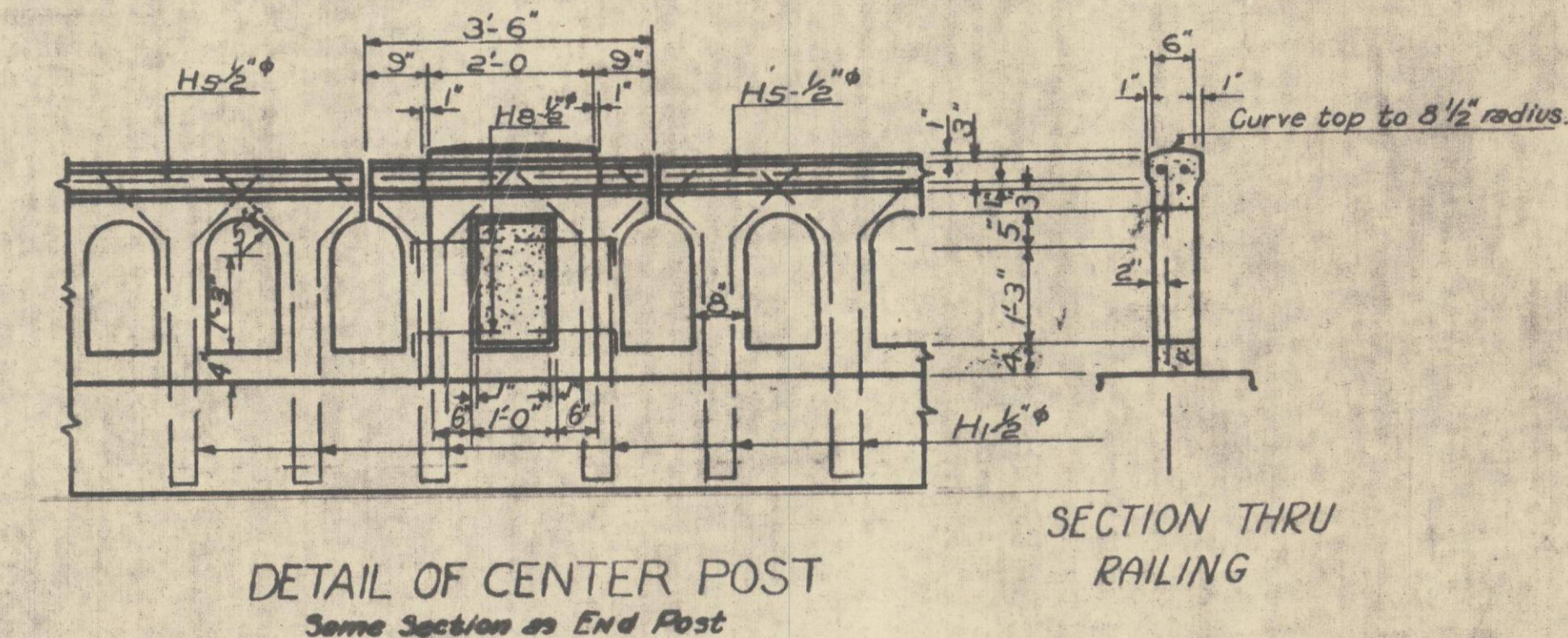
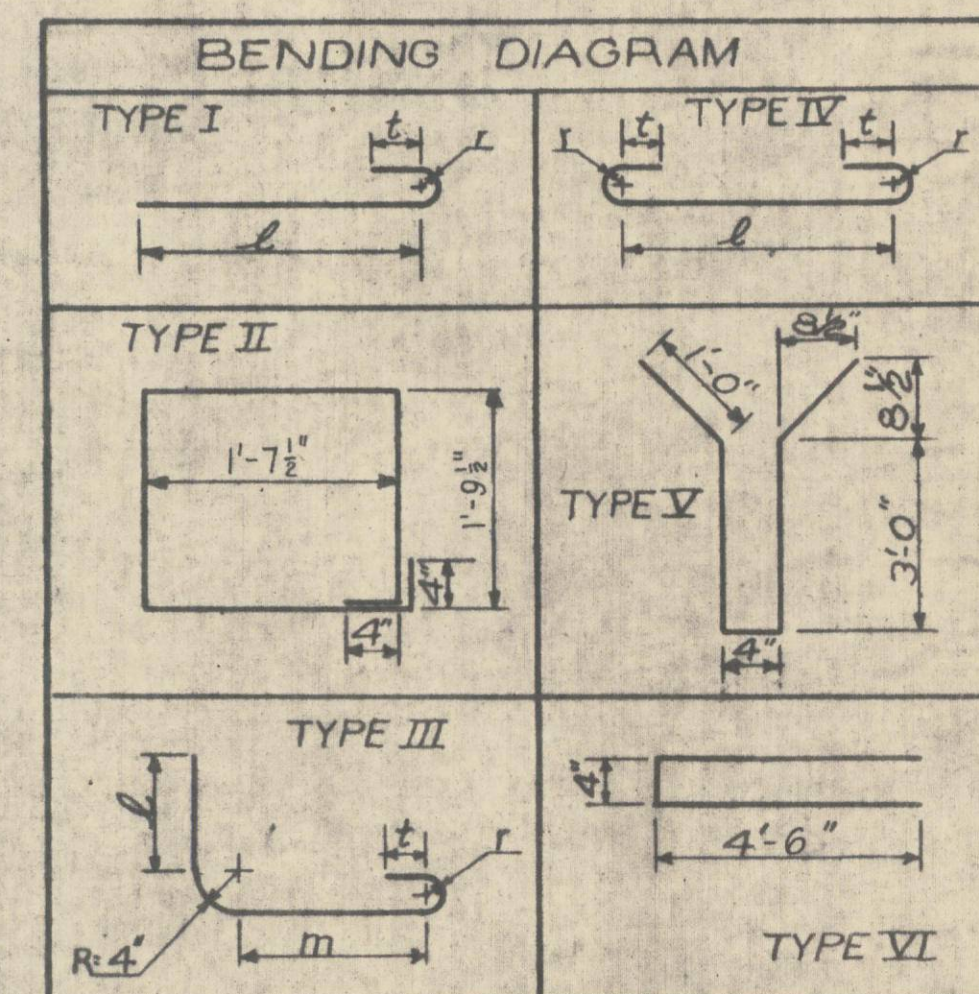
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122 (1)	8	

Designed By	Initial	Date
Checked By	W.W.D.	5-21-47
Drawn By	A.L.P.	5-31-47
Checked By	W.W.D.	6-10-47
Traced By	A.L.P.	6-5-47
Checked By	W.W.D.	6-10-47





BAR LIST FOR 3 SPAN BRIDGE										ALP	HML
Mark	Size	No Reqd.	Length	Type	Dimensions				r	t	
					g	m	n				
A1	1" x 1/2"	50	21'-9 1/2"	I	20'-7 1/2"				3 1/2"	3"	
A2	1" x 1/2"	50	27'-0 1/2"	Str.							
A3	1" x 1/2"	25	19'-6"	Str.							
A4	1" x 1/2"	50	21'-7 1/2"	I	20'-7 1/2"				3"	2 1/2"	
A5	1" x 1/2"	25	8'-6"	Str.							
A6	1" x 1/2"	85	40'-0"	Str.							
B1	1" x 1/2"	16	22'-4"	Str.							
B2	1" x 1/2"	8	28'-6"	Str.							
B3	1" x 1/2"	16	18'-0"	Str.							
B4	1" x 1/2"	8	37'-10"	Str.							
B5	1" x 1/2"	134	7'-6"	II							
C1	1" x 1/2"	10	14'-6"	III	11'-2"	2'-0"			2 1/2"	2"	
C2	1" x 1/2"	6	13'-6"	III	10'-0"	2'-2"			2 1/2"	2"	
C3	1" x 1/2"	6	12'-10"	III	9'-5"	2'-1"			2 1/2"	2"	
C4	1" x 1/2"	6	12'-2"	III	8'-11"	1'-11"			2 1/2"	2"	
C5	1" x 1/2"	6	11'-6"	III	8'-4"	1'-10"			2 1/2"	2"	
C6	1" x 1/2"	6	10'-11"	III	7'-10"	1'-9"			2 1/2"	2"	
C7	1" x 1/2"	6	10'-2"	III	7'-3"	1'-7"			2 1/2"	2"	
C8	1" x 1/2"	18	7'-8"	III	4'-2"	2'-2"			2 1/2"	2"	
C9	1" x 1/2"	10	6'-9"	III	3'-6"	1'-11"			2 1/2"	2"	
C10	1" x 1/2"	10	6'-7"	III	3'-6"	1'-9"			2 1/2"	2"	
C11	1" x 1/2"	8	6'-4"	III	3'-6"	1'-6"			2 1/2"	2"	
C12	1" x 1/2"	14	21'-6"	Str.				Field Bend			
C13	1" x 1/2"	2	14'-6"	Str.				Field Bend			
C14	1" x 1/2"	2	9'-6"	Str.				Field Bend			
C15	1" x 1/2"	2	5'-9"	Str.				Field Bend			
D1	1" x 1/2"	14	22'-0"	Str.				Field Bend			
D2	1" x 1/2"	14	10'-0"	Str.				Field Bend			
D3	1" x 1/2"	24	23'-4"	Str.							
E1	1" x 1/2"	6	14'-11"	III	11'-2"	2'-5"			2 1/2"	2"	
E2	1" x 1/2"	4	13'-4"	III	9'-11"	2'-1"			2 1/2"	2"	
E3	1" x 1/2"	4	12'-3"	III	9'-0"	1'-11"			2 1/2"	2"	
E4	1" x 1/2"	4	11'-0"	III	8'-0"	1'-8"			2 1/2"	2"	
E5	1" x 1/2"	2	10'-5"	III	7'-6"	1'-7"			2 1/2"	2"	
E6	1" x 1/2"	8	7'-7"	III	4'-2"	2'-1"			2 1/2"	2"	
E7	1" x 1/2"	8	6'-6"	III	3'-6"	1'-8"			2 1/2"	2"	
E8	1" x 1/2"	4	6'-5"	III	3'-6"	1'-7"			2 1/2"	2"	
E9	1" x 1/2"	14	8'-9"	Str.							
E10	1" x 1/2"	2	6'-6"	Str.							
E11	1" x 1/2"	2	4'-3"	Str.							
E12	1" x 1/2"	2	2'-6"	Str.							
F1	1" x 1/2"	166	2'-5"	Str.							
F2	1" x 1/2"	34	5'-4"	I	4'-6"				2 1/2"	2"	
F3	1" x 1/2"	26									



REFERENCE DRAWING
Details of Substructure and Superstructure: See Sheet No. 8.

BAR SUMMARY OF 3 SPAN BRIDGE										ALP H.M.L.
9788	Lin. Ft. of	$2\frac{1}{2}$ "	bars @	0.668	Lbs. per lin. ft.	=	6538	Lbs.		
3866	"	"	"	1.043	"	"	=	4032	"	
1439	"	"	"	1.502	"	"	=	2161	"	
3370	"	"	"	2.044	"	"	=	6888	"	
303	"	"	"	2.67	"	"	=	809	"	
							Plus 1% for Overrun	=	202	"
							Total	=	20,630	Lbs.

ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO STATE HIGHWAY DEPARTMENT, JUNE 1, 1944.

ALL CONCRETE SHALL BE CLASS "A."

FORMS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SHIPLAP OR TONGUE AND GROOVE LUMBER S3S UNLESS FACED WITH PANEL BOARD.

CONCRETE GIRDERS, FLOOR SLABS AND CURB SHALL BE POURED MONOLITHICALLY. FOOTINGS IN ROCK SHALL BE POURED OUT TO THE ROCK AND NOT FORMED.

ALL REINFORCING BARS SHALL BE DEFORMED AND TAGGED WITH THE STATION NUMBER AND LETTER DESIGNATION.

SOUNDINGS AND DEPTH OF FOOTINGS SHOWN ARE ACCORDING TO THE BEST AVAILABLE DATA. IF ESSENTIALLY DIFFERENT CONDITIONS ARE ENCOUNTERED THE BRIDGE ENGINEER WILL INSPECT AND DETERMINE IF REDESIGN IS NECESSARY.

REINF. STEEL SHALL BE OF INTERMEDIATE GRADE.

LOADING DATA.
LIVE LOAD=A. A. S. H. O 1944 H-20-44
DEAD LOAD=ASSUMES 50 LBS. PER SQ. FT. ADDITIONAL WEARING SURFACE WHICH INCLUDES THE 5 INCH GRANULIT MIX WEARING SURFACE SHOWN.

DESIGNING DATA.
fc = 833 Lbs. per Sq. Ft.
fs = 18000 Lbs. per Sq. Ft.
n = 12

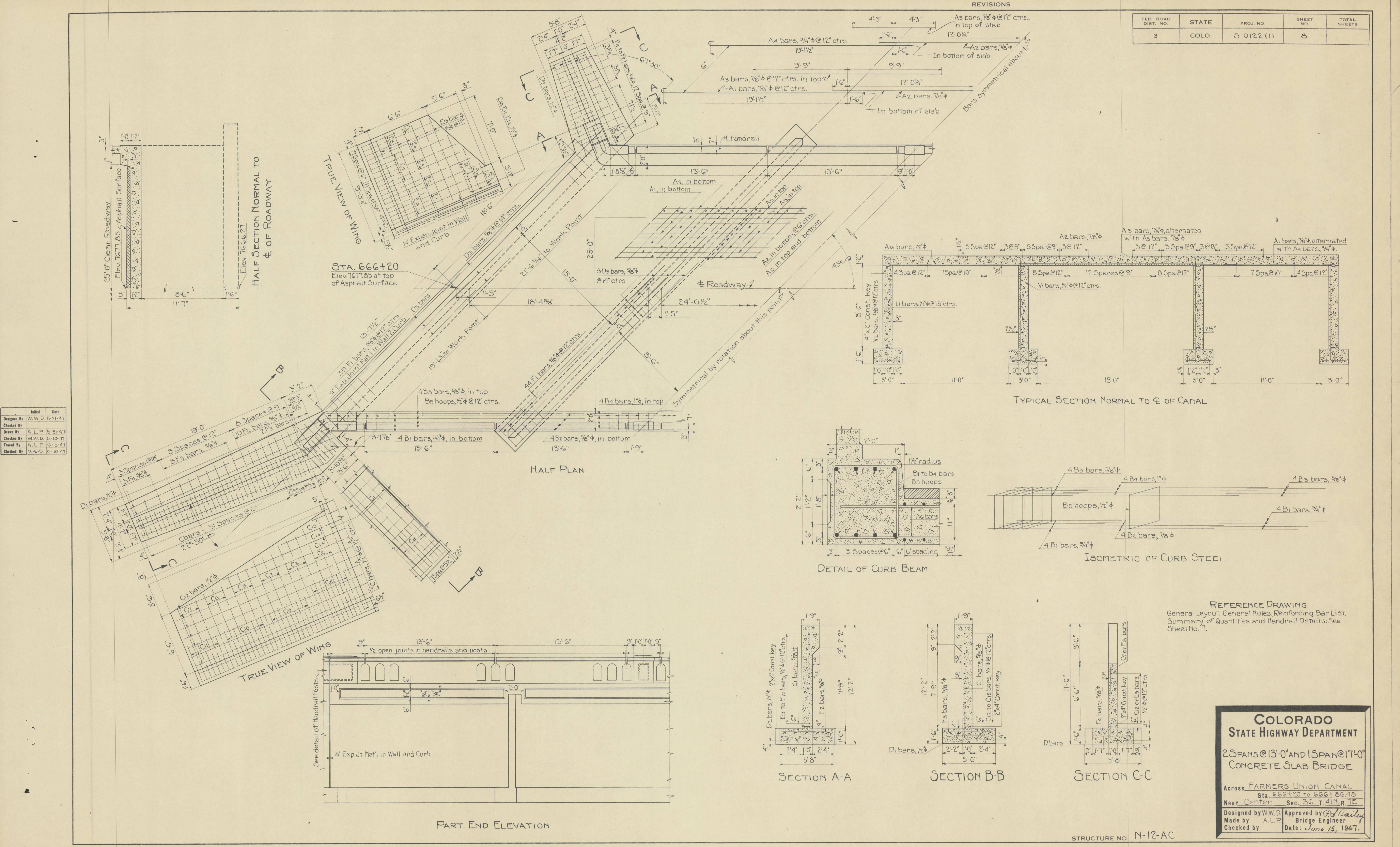
COLORADO
STATE HIGHWAY DEPARTMENT
2 SPANS @ 13'-0", 1 SPAN @ 17'-0"
CONCRETE SLAB BRIDGE

Across FARMERS UNION CANAL
Sta. 666+20 to 666+85.48
Near CENTER Sec. 36 T4N R7E

Designed by <u>W.W.D.</u>	Approved by <u>P. L. Bailey</u>
Made by <u>GRB</u>	Bridge Engineer
Checked by	Date: <u>June 14, 1947</u>

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122 (1)	8	

Designed By	Initial	Date
W.W.D.		5-21-47
Checked By		
A.L.P.		5-31-47
W.W.D.		6-10-47
A.L.P.		6-5-47
W.W.D.		6-10-47



COLORADO

STATE HIGHWAY DEPARTMENT

2 SPANS @ 13'-0" AND 1 SPAN @ 17'-0"

CONCRETE SLAB BRIDGE

Across FARMERS UNION CANAL

Sta. 666+20 to 666+86.48

Near Center Sec. 36 T. 41 N. R. 7 E

Designed by W.W.D.

Made by A.L.P.

Checked by

Approved by P.D. Bailey

Bridge Engineer

Date: June 15, 1947.

STRUCTURE NO. N-12-AC

S.E. 1/4 Sec. 31
T. 41 N., R. 7 E.

NOTE:

Alignment and Grades as shown are subject to modification during construction after approval by the Denver Office.

The soil data shown on the plans is obtained from best available testing laboratory information. This information is shown for the convenience of the Contractor and the Department does not guarantee the accuracy of these tests. If materials not conforming to the data on plans are encountered during construction, necessary modifications of the grading plan shown on plans will be made to secure dense, stable embankments.

Fencing, R.O.W. Markers and Guard Posts are tabulated on Sheet 6.

Locations of Borrow Pits are tabulated on Sheet 6.

Log House

Div. Box

Gate

Bridge (7'x14' Wood)

Mail Box

425

430

435

440

445

450

455

460

465

470

475

480

485

490

495

500

505

510

515

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970

975

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985

990

995

1000

1005

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1075

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1095

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1195

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1945

1950

1955

1960

1965

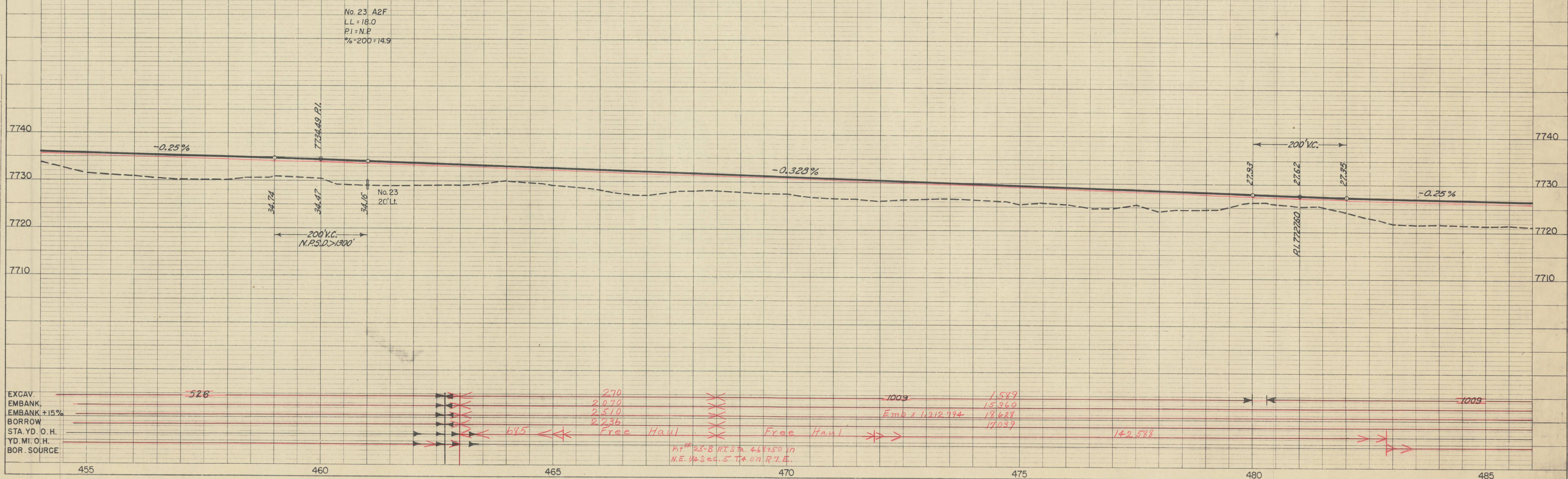
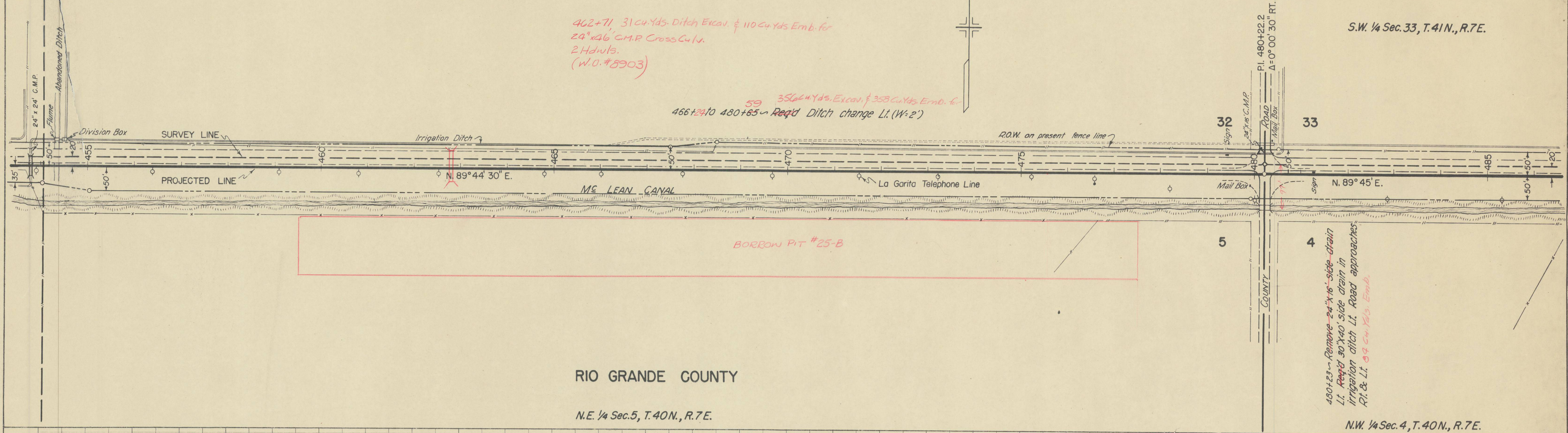
197

SAGUACHE COUNTY

59 356 Cu Yds. Excav. f 358 Cu Yds. Ernd. for
466 + 24 to 480 + 65 ~ Reg'd Ditch change Lt. (W=2')

S.W. ¼ Sec. 33, T.41N., R.7E.

FED. ROAD DIST. NO.	STATE	FAS PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122(1)	19	

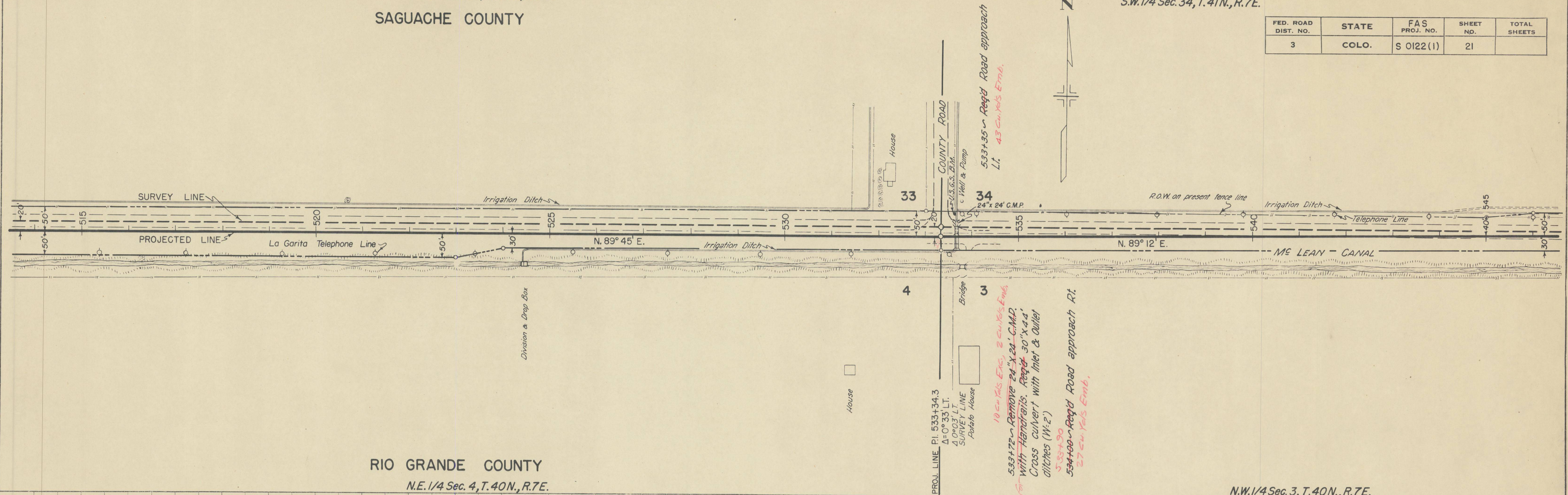


S.E. 1/4 Sec. 33, T.41N., R.7E.
SAGUACHE COUNTY

S.W. 1/4 Sec. 34, T.41N., R.7E.

FED. ROAD DIST. NO.	STATE	FAS PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122 (1)	21	

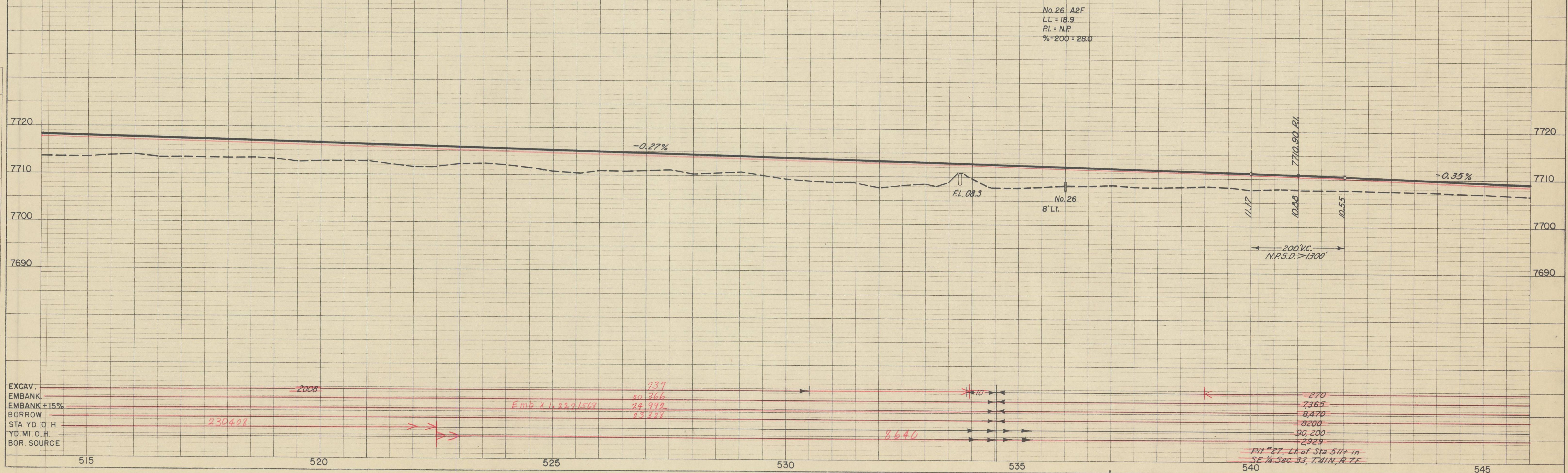
PLAN	DATE
NO. 12868	



RIO GRANDE COUNTY
N.E. 1/4 Sec. 4, T.40N., R.7E.

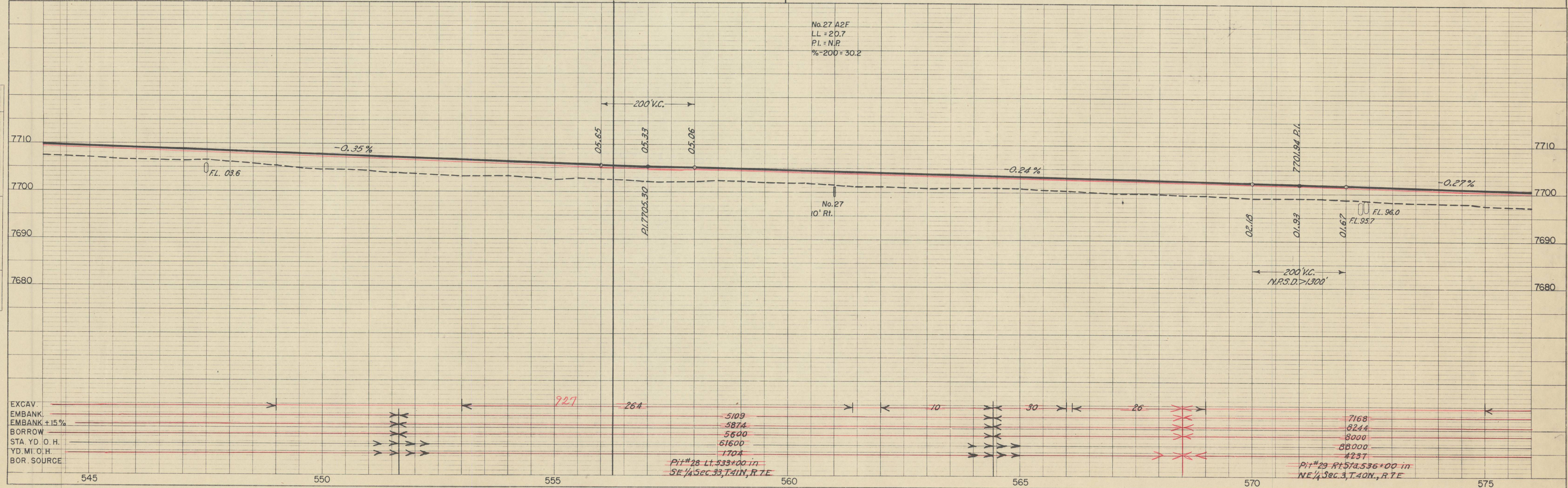
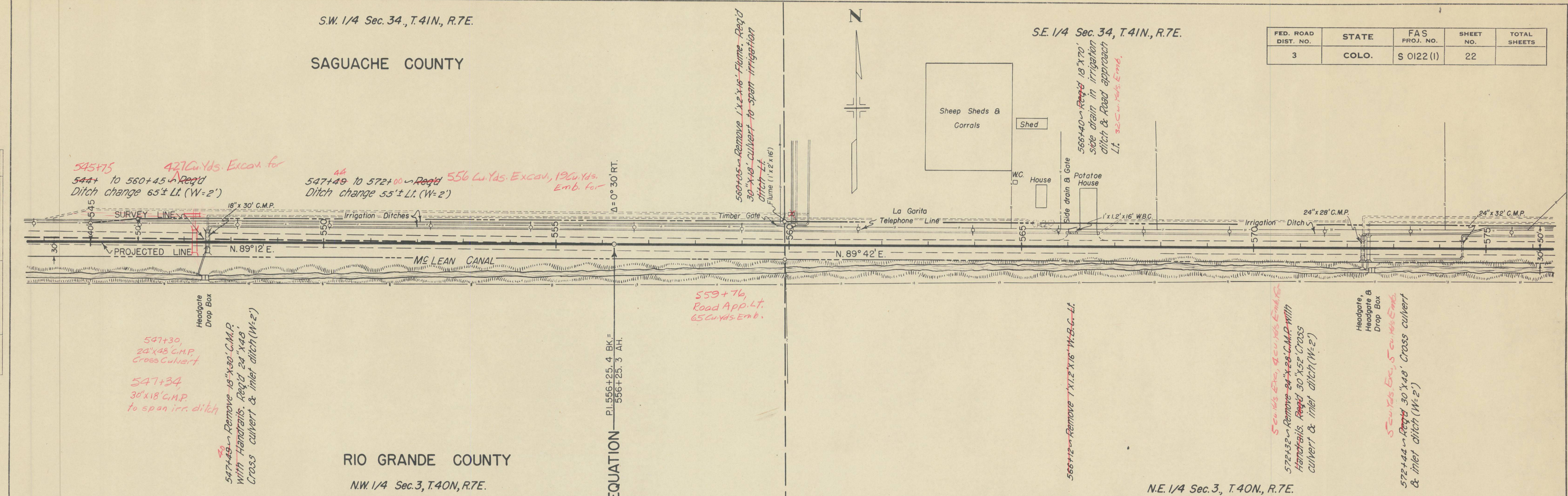
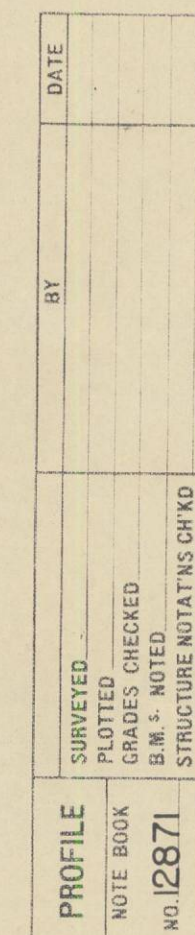
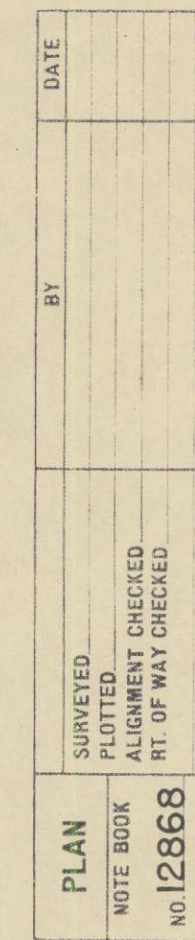
N.W. 1/4 Sec. 3, T.40N., R.7E.

PROFILE	DATE
NO. 12871	



SAGUACHE COUNTY

FED. ROAD DIST. NO.	STATE	FAS PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122 (1)	22	



S.E. 1/4 Sec. 3, T.41N, R.7E.

SAGUACHE COUNTY

572+32 to 586+35 - *Req'd. Ditch change*
65'± Lt. (W-2').

572+44 to 586+00 - *Req'd. Ditch change*
55'± Lt. (W-2').

603+70 to 612+57,
199 cu. yds. Excav., 43 cu. yds. Emb.
for ditch change Lt.

RIO GRANDE COUNTY

N.E. 1/4 Sec. 3, T.40N, R.7E.

S.W. 1/4 Sec. 35, T.41N, R.7E.

586+65 to 603+70 - *Req'd. Ditch change*
65'± Lt. (W-2').

596+65 to 612+95 - *Req'd. Ditch change*
55'± Lt. (W-2').

596+10 - *Req'd. Ditch Lt.*

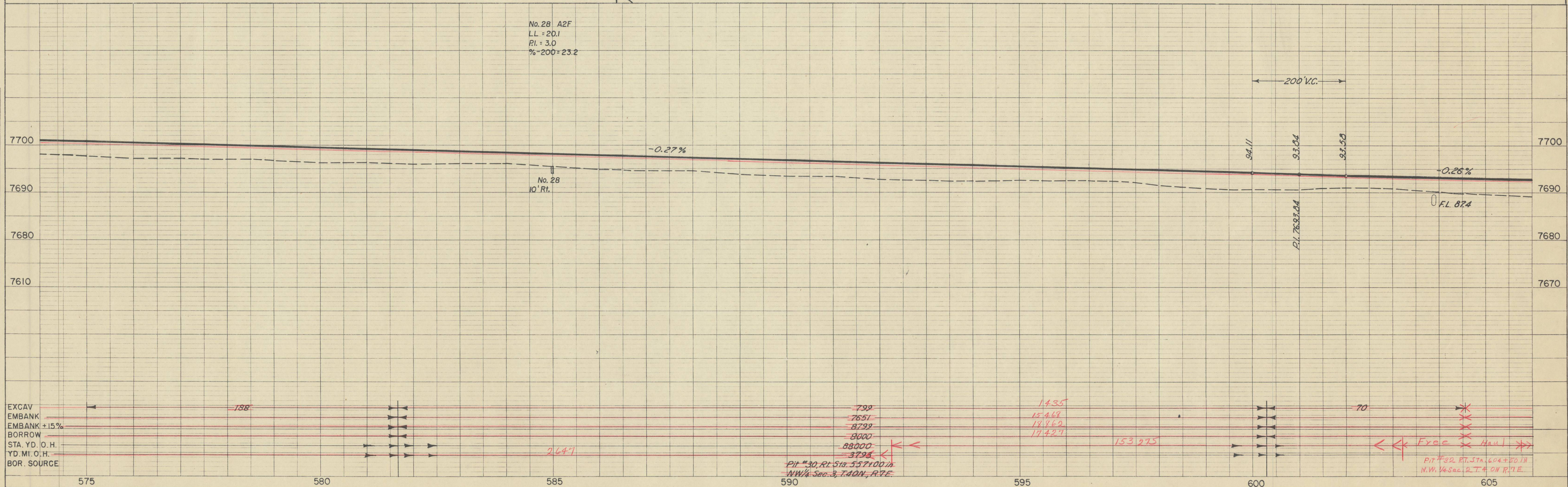
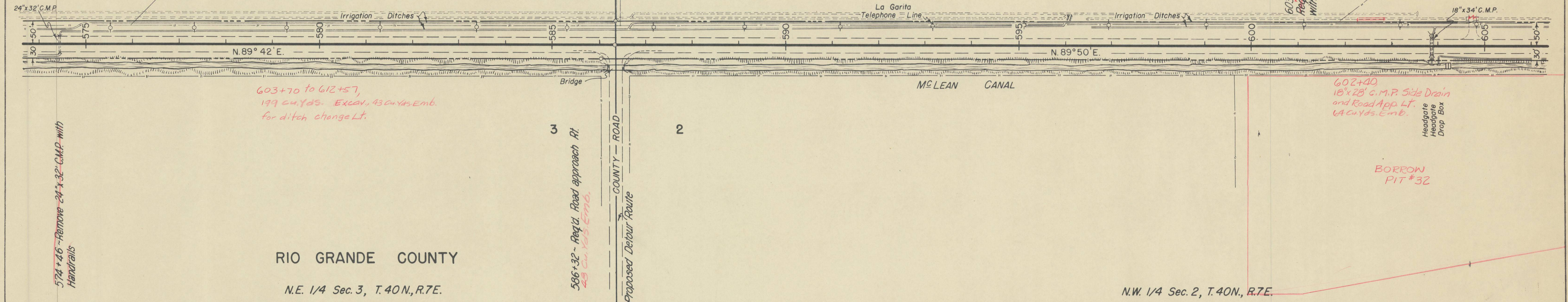
FED. ROAD DIST. NO.	STATE	FAS PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122(1)	23	

603+88 - *Remove 18" x 34" C.M.P. - Req'd. 24" x 34" Cross Culvert with inlet & outlet ditches (W-2')*

602+40
18" x 28" C.M.P. Side Drain
and Road App. Lt.
64 cu. yds. Emb.

BORROW
PIT #32

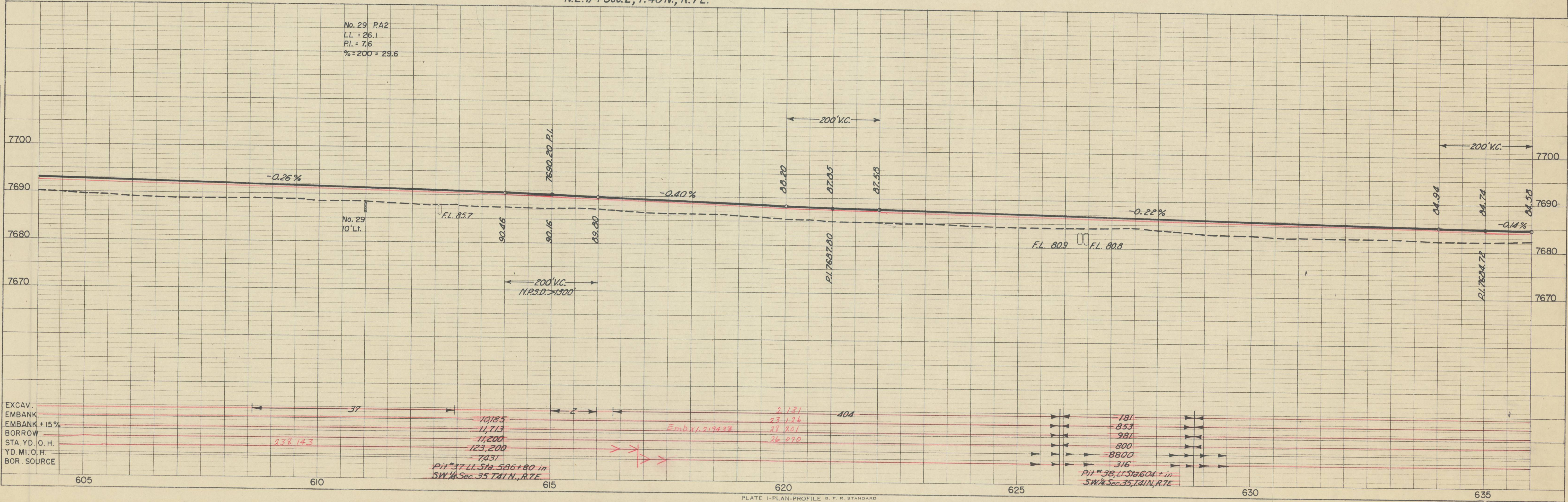
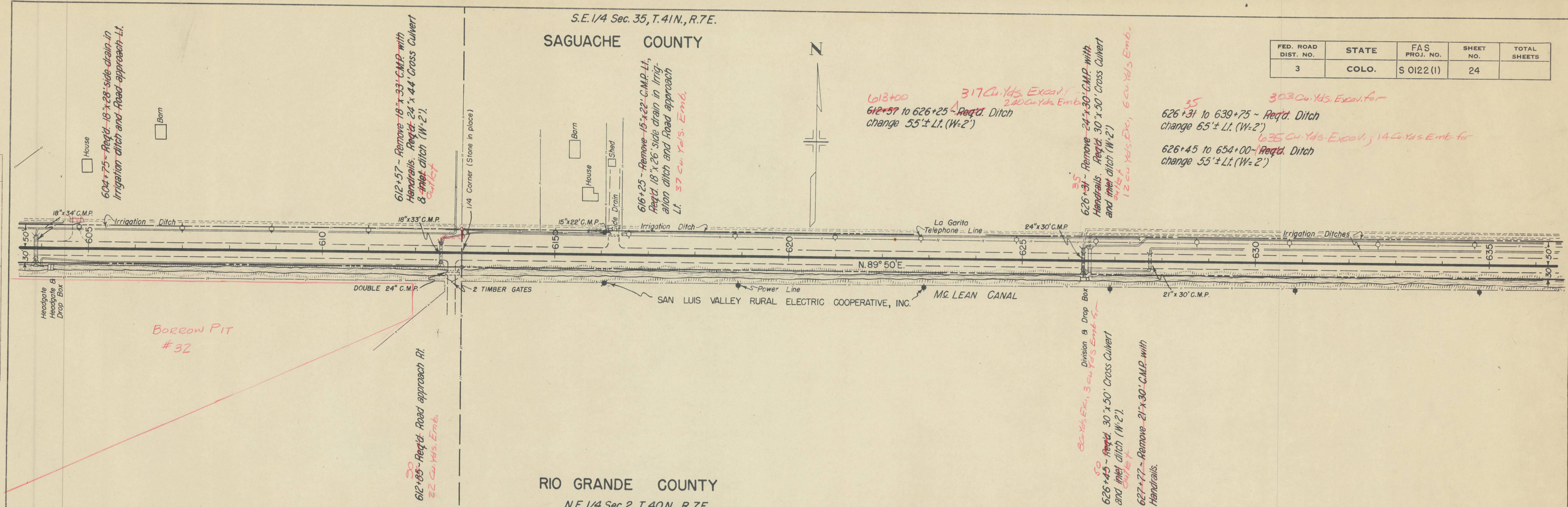
N.W. 1/4 Sec. 2, T.40N, R.7E.



PLAN	DATE
NO. 12868	

PROFILE	DATE
NO. 12872	

FED. ROAD DIST. NO.	STATE	FAS PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122 (I)	24	



PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO. 12868	CHECKED		
	RT. OF WAY CHECKED		

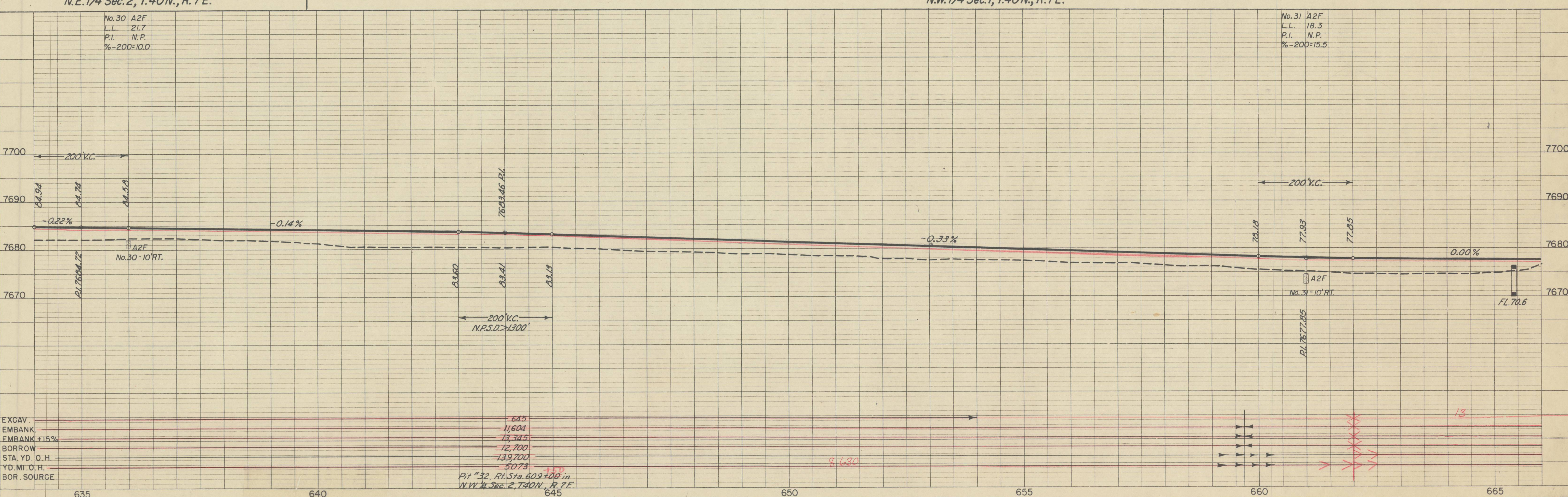
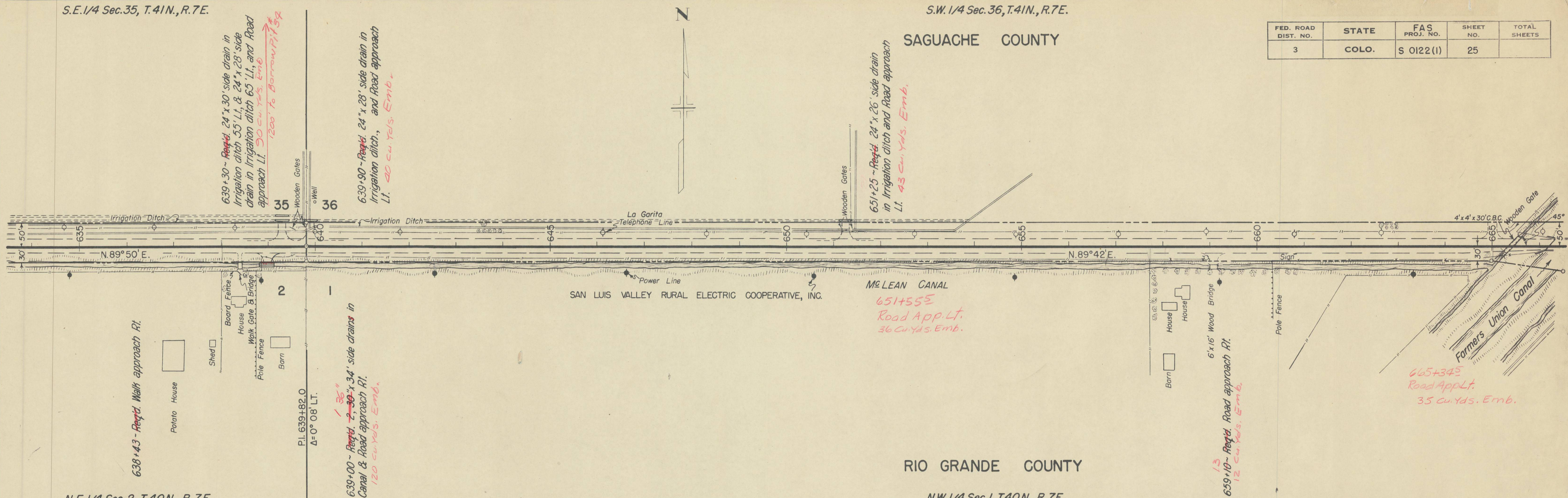
PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO. 12872	CHECKED		
	STRUCTURE NOTATIONS CHKO		

S.E. 1/4 Sec. 35, T. 41 N., R. 7 E.

S.W. 1/4 Sec. 36, T. 41 N., R. 7 E.

SAGUACHE COUNTY

FED. ROAD DIST. NO.	STATE	FAS PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0122 (I)	25	



PLAN	SURVEYED PLOTTED ALIGNMENT CHECKED RT. OF WAY CHECKED	BY	DATE
NOTE BOOK NO. 12868			

NO. 12872	SURVEYED _____ PLOTTED _____ GRADES CHECKED _____ E.M. S. NOTED _____ STRICTION NOTATIONS FILED _____	BY _____	DATE _____
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SAGUACHE COUNTY

RIO GRANDE COUNTY

STRUCTURE NOTES FOR BRIDGE STA.666+20 TO STA.666+86.48
STRUCTURE NO. N-12-AC - SKEW ANGLE 45°

PRESENT STRUCTURE:
SPAN - 3 at 19'-6"
CLEAR ROADWAY - 16'-7"
CLEAR WATERWAY
TYPE OF SUPERSTRUCTURE - Conc. Slab & Girders
TYPE OF SUBSTRUCTURE - Conc. Gravity
REQUIREMENTS AS TO REMOVAL - Remove

STREAM DATA:
DRAINAGE AREA - Irrigation Canal
VELOCITY DURING HIGH WATER
ELEVATION OF
MAXIMUM HIGH WATER
LOW WATER - 7670.7
NORMAL STAGE
DRIFT

STREAM BED - 7670.0
SCOUR

PROPOSED STRUCTURE :
POSITION REFERRED TO PRESENT STRUCTURE - Same
SPAN - 2 at 13'-0", 1at 17'-0"
CLEAR ROADWAY - 25'-0"
CLEAR WATERWAY - 390 sq.ft.
TYPE OF SUPERSTRUCTURE - Conc. Slab
TYPE OF SUBSTRUCTURE - Conc. Abuts.
DETOUR STRUCTURE REQUIREMENTS - Use County Rd. 1 Mi. South
R.R. SIDING - Monte Vista HAUL TO BRIDGE SITE - 11 Miles

NEARBY STRUCTURES ON SAME STREAM :
LOCATION - 1 Mi. South, 2 Mi. West, Str. No. N-12-AB
WATERWAY
RECORD DURING FLOODS

No. 32 A2F
LL = 18.9
P.I = N.P.
%-200 = 14.5

Marker
STA. 693+15.5 END S 0122(1)
Opposite Sta. 1+46.3 on A W 3002

R. 7 E.
R. 8 E.

SAGUACHE COUNTY

S.E. 1/4 Sec. 36, T.41N, R.7E.

RIO GRANDE COUNTY

N.E. 1/4 Sec. 1, T.40N, R.7E.

STRUCTURE NOTES FOR BRIDGE STA. 666+20 TO STA. 666+86.48
STRUCTURE NO. N-12-AC - SKEW ANGLE 45°

PRESENT STRUCTURE:
 SPAN - 3 at 19'-6"
 CLEAR ROADWAY - 16'-7"
 CLEAR WATERWAY
 TYPE OF SUPERSTRUCTURE - Conc. Slab & Girders
 TYPE OF SUBSTRUCTURE - Conc. Gravity
 REQUIREMENTS AS TO REMOVAL - Remove

PROPOSED STRUCTURE:
 POSITION REFERRED TO PRESENT STRUCTURE - Same
 SPAN - 2 at 13'-0", 1st 17'-0"
 CLEAR ROADWAY - 25'-0"
 CLEAR WATERWAY - 390 sq. ft.
 TYPE OF SUPERSTRUCTURE - Conc. Slab
 TYPE OF SUBSTRUCTURE - Conc. Abuts.
 DETOUR STRUCTURE REQUIREMENTS - Use County Rd., 1 Mi. South
 R.R. SIDING - Monte Vista HAUL TO BRIDGE SITE - 11 Miles

STREAM DATA:
 DRAINAGE AREA - Irrigation Canal
 VELOCITY DURING HIGH WATER
 ELEVATION OF
 MAXIMUM HIGH WATER
 LOW WATER - 7670.7
 NORMAL STAGE
 DRIFT
 STREAM BED - 7670.7
 SCOUR

NEARBY STRUCTURES ON SAME STREAM:
 LOCATION - 1 Mi. South, 2 Mi. West, Str. No. N-12-AB
 WATERWAY
 RECORD DURING FLOODS

STA. 693+15.5 END S.O. 122 (1)
 Opposite Sta. 1+46.3 on A.W. 3002

EXCAV. EMBANK. EMBANK. + 15% BORROW STA. YD. O. H. YD. MI. O. H. BOR. SOURCE

Table 1: Excavation and Embankment Data

Station	Excavation (Yd.)	Embankment (Yd.)	Borrow (Yd.)	Station	Excavation (Yd.)	Embankment (Yd.)	Borrow (Yd.)
665+00	14.225	16.747	16.672	675+00	17.3954	10.433	
665+20	14.225	16.747	16.672	675+20	17.3954	10.433	
665+40	14.225	16.747	16.672	675+40	17.3954	10.433	
665+60	14.225	16.747	16.672	675+60	17.3954	10.433	
665+80	14.225	16.747	16.672	675+80	17.3954	10.433	
666+00	14.225	16.747	16.672	676+00	17.3954	10.433	
666+20	14.225	16.747	16.672	676+20	17.3954	10.433	
666+40	14.225	16.747	16.672	676+40	17.3954	10.433	
666+60	14.225	16.747	16.672	676+60	17.3954	10.433	
666+80	14.225	16.747	16.672	676+80	17.3954	10.433	
667+00	14.225	16.747	16.672	677+00	17.3954	10.433	
667+20	14.225	16.747	16.672	677+20	17.3954	10.433	
667+40	14.225	16.747	16.672	677+40	17.3954	10.433	
667+60	14.225	16.747	16.672	677+60	17.3954	10.433	
667+80	14.225	16.747	16.672	677+80	17.3954	10.433	
668+00	14.225	16.747	16.672	678+00	17.3954	10.433	
668+20	14.225	16.747	16.672	678+20	17.3954	10.433	
668+40	14.225	16.747	16.672	678+40	17.3954	10.433	
668+60	14.225	16.747	16.672	678+60	17.3954	10.433	
668+80	14.225	16.747	16.672	678+80	17.3954	10.433	
669+00	14.225	16.747	16.672	679+00	17.3954	10.433	
669+20	14.225	16.747	16.672	679+20	17.3954	10.433	
669+40	14.225	16.747	16.672	679+40	17.3954	10.433	
669+60	14.225	16.747	16.672	679+60	17.3954	10.433	
669+80	14.225	16.747	16.672	679+80	17.3954	10.433	
670+00	14.225	16.747	16.672	680+00	17.3954	10.433	
670+20	14.225	16.747	16.672	680+20	17.3954	10.433	
670+40	14.225	16.747	16.672	680+40	17.3954	10.433	
670+60	14.225	16.747	16.672	680+60	17.3954	10.433	
670+80	14.225	16.747	16.672	680+80	17.3954	10.433	
671+00	14.225	16.747	16.672	681+00	17.3954	10.433	
671+20	14.225	16.747	16.672	681+20	17.3954	10.433	
671+40	14.225	16.747	16.672	681+40	17.3954	10.433	

Final as Const Plans
S0122(1) Del Norte Center
1947-1948

S0122(1)

PROJECT NUMBER S.P.S.-23-112-500
SET UP OF Common Borrow PITS

Sheet No. 5

[illegible]

PROJECT NUMBER SPS-23-112-500
SET UP OF Common BORROW PITS

Sheet No. 4

STATION TO STATION	CU. YDS. EMB. REQUIRED % INCLUDED	EMBANKMENT SOURCE		BORROW PIT INFORMATION									REMARKS
		SIDE BOR. OR CUT - CU. YDS.	FROM BOR. PIT - CU. YDS.	BORROW PIT No.	OWNER AND ADDRESS	LOCATION	TIE TO & OF PROJECT	CU. YDS. AVAIL. IN PIT.	ACRES AVAIL. IN PIT.	ROYALTY	DATA ON TESTS	OPTION INFORMATION	
521+00 to 532+50			3,485	#28 OK	J.B. Sager San Diego, Calif. Mrs. Lucille Sager Schofield 2638 Grand ave. San Diego, Calif.	S.E. 1/4 Section 33 R-7-E, T-41-N	500' ht. Sta. 531+00	Ample	Ample 1 Acre		Not Tested	Signed 1-25-43	Wrote 6-9-44 - 8-27-44 not assumed 7-1-44 Option mailed 10-21-44 <u>Rider Obtained</u>
533+00 to 546+60			7,234	#29 OK	C.H. Frame Monte Vista, Colo. Center	NW 1/4 Section 3 R-7-E, T-40-N	500' Rt. Sta. 536+00	Ample	Ample 1 1/2 Acres		Not Tested	Signed 11-20-1944	Agreeable Option Given 10-30-44
547+00 to 570+60			7,109	#30 OK	C.H. Frame Monte Vista, Colo. Center	N.W. 1/4 Section 3 R-7-E, T-40-N	500' Rt. Sta. 559+00	Ample	Ample 1 1/2 Acres		Not Tested	Signed 11-20-1944	Agreeable Option Given 10-30-44
571+00 to 593+50			11,195	#31 Out	State Land	S.E. 1/4 Section 34 R-7-E, T-41-N	500' Lt. Sta. 582+00	Ample	Ample 2 1/2 Acres		Not Tested	Not Approved	Wrote (P) Option given Mr. Prentice, 10-31-44
594+00 to 611+00			8,520	#32 OK	Cory and Robley Dietrich Center, Colo. Carrie S Dietrich	N.W. 1/4 Section 2 R-7-E, T-40-N.	500' Rt. Sta. 606+00	Ample	Ample 2 Acres		Not Tested	Signed 12-13-1944	Agreeable Option Given 10-30-44
612+00 to 627+00			3,928	#33 Out	State Land	S.E. 1/4 Section 35 R-7-E, T-41-N	500' Lt. Sta. 615+00	Ample	Ample 1 Acre		Not Tested	Not Approved	Wrote (P) Option given Mr. Prentice 10-31-44
627+40 to 650+65			8,629	#34 Out	State Land	S.E. 1/4 Section 35 R-7-E, T-41-N	500' Lt. Sta. 638+00	Ample	Ample 2 Acres		Not Tested	"	Wrote (P)
651+00 to 670+00			7,674	#35 Out	State Land	S.W. 1/4 Section 36 R-7-E, T-41-N.	500' Lt. Sta. 665+00	Ample	Ample 2 Acres		Not Tested	"	Wrote (P)

Surfacing & Select Mat. Pits
Common Barrow Pits
Admix Pits

Eng-SPS 23-112-500
Sketch-Map of Material Pits
1"=800'



R-7-E

R-7-E

R-8-E

Surf & Select Mat. Pits
Comm. Barrow Pits
Admix Pits

