FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	1	

Rev. 10/2/36 ~ P.A.F.

3002,00

COLORADO
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
A. W. PROJECT NO. 3002
STATE HIGHWAY NO. 15
RIO GRANDE AND SAGUACHE COUNTIES

INDEX OF SHEETS

Sheet No. 1	Sketch Map and Title Page	
" 2	Typical Cross Section and Summary of Quantities	
" 3 to 6	List of Structures	
" 7	Details of Bridge, Sta. 27+	
" 8	" " Bridges, Sta. 183+ & 318+	
" 9	" " Side Drainage Timber Trestles	
" 10	Standard Concrete Box Culverts	M 103 D
" 11	" " " "	M 104 D
" 12	" Reinforced Concrete Culvert Pipe	M 112 C
" 13	" Headwalls for C.M.P. Culverts	M 102 E
" 14	" Siphon Corr. Galv. Iron Pipe with Concrete Inlet & Outlet Boxes	M 123 A
" 15	" Wire Fences (Tr. Wd. Posts) & Marker Posts	M 24 F
" 16	" Structure Number Lettering	M 10 A
" 17	" Methods for Superelevation of Curves	M 1 A
" 18	Typical Side Approach Roads & Roadway Construction Traffic Signs	M 2 B
" 19 to 34	Alignment Plan and Profile	
" 35 to 141	Cross Sections	

SCALES OF ORIGINAL TRACINGS

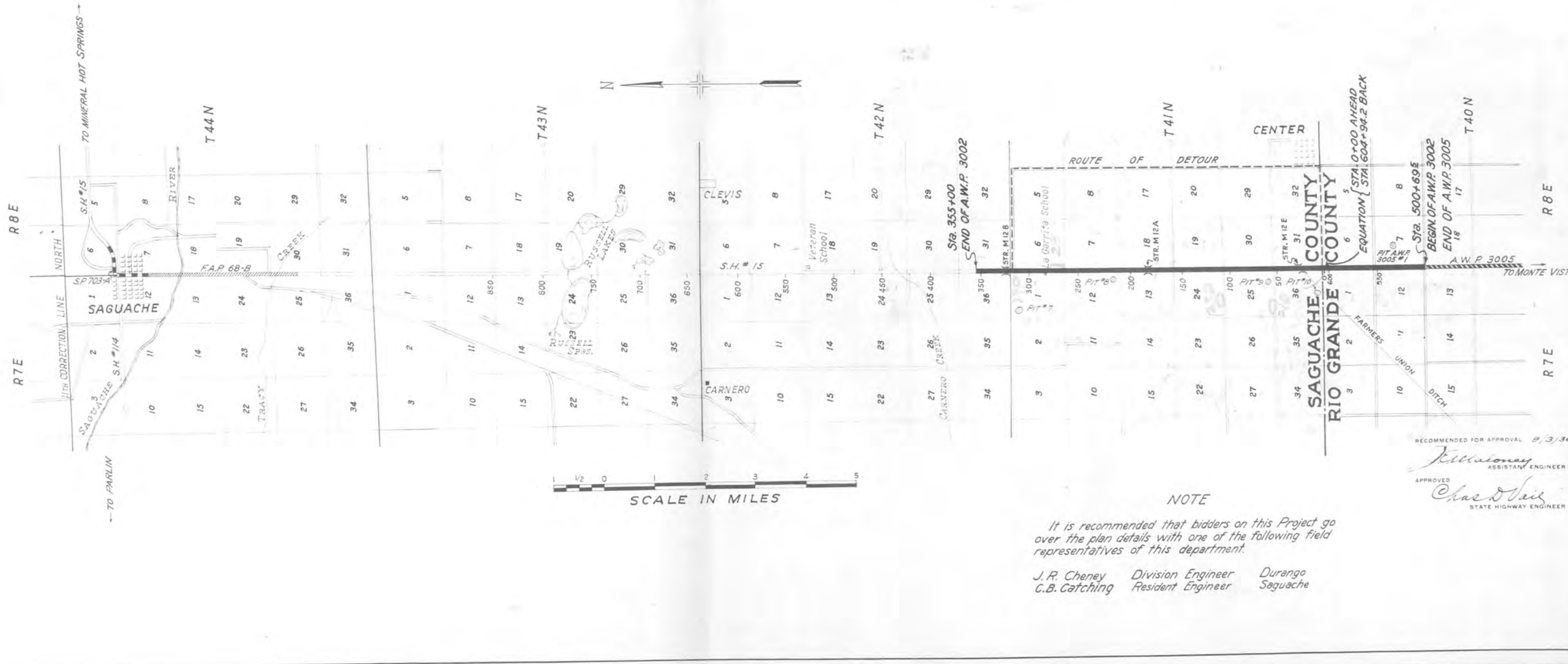
ON PLAN, 1 IN. - 100 FT.
ON PROFILE 1 IN. - 100 FT. HORIZONTAL
1 IN. - 10 FT. VERTICAL

GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

GROSS LENGTH OF PROJECT } 45,924.7 FEET = 8.697 MILES
NET LENGTH OF PROJECT }

CONVENTIONAL SIGNS

Center Line of Survey.
Right of Way Lines.
Township or Range Lines.
Section Lines.
One Quarter Section Lines.
Barbed Wire Fence.
Telephone Lines.



RECOMMENDED FOR APPROVAL 9/3/36
Killaloney
ASSISTANT ENGINEER

APPROVED
Chas D Vail
STATE HIGHWAY ENGINEER

NOTE

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

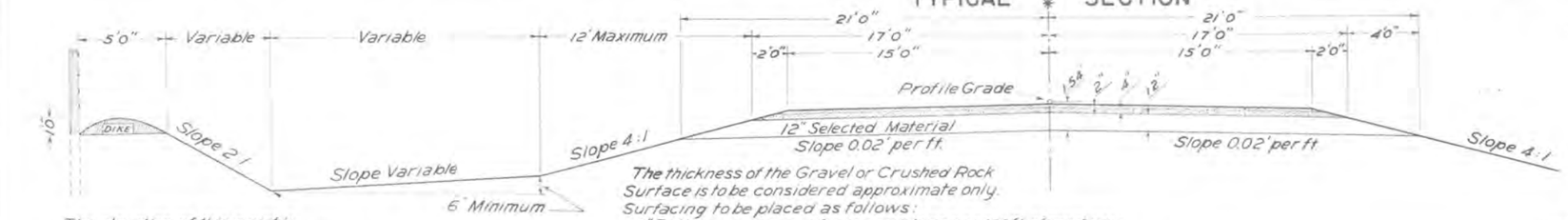
J.R. Cheney Division Engineer Durango
C.B. Catching Resident Engineer Saguache

FED. ROAD DIST. NO.	STATE	A. W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	2	

Rev. 10/2/36 ~ P.A.F.

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

TYPICAL * SECTION



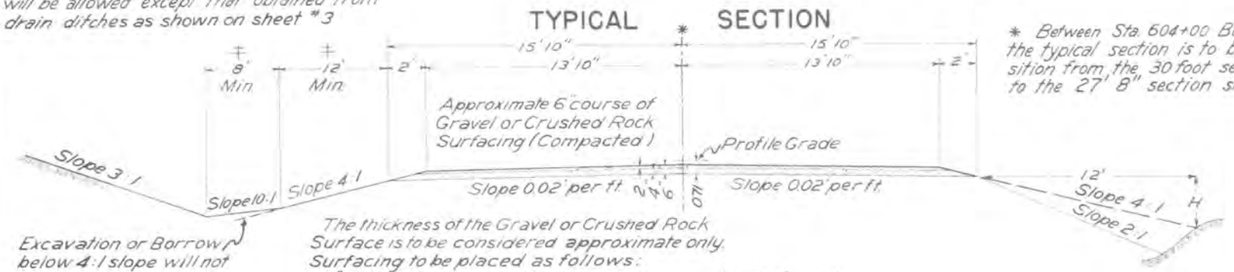
The elevation of this point is definitely controlled by borrow pit grade as laid on the profile.

The thickness of the Gravel or Crushed Rock Surface is to be considered approximate only. Surfacing to be placed as follows:
4" Bottom course surfacing - 67 tons per 100 ft of roadway
2" Upper " " " - 31 " " " 100 " " "

ABOVE SECTION TO BE USED BETWEEN STA. 500+69.5 & 604+00.

† Between Sta 0+00 & 355+00 no side borrow will be allowed except that obtained from drain ditches as shown on sheet #3

TYPICAL * SECTION



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

The thickness of the Gravel or Crushed Rock Surface is to be considered approximate only. Surfacing to be placed as follows:
4" Bottom course surfacing - 62 tons per 100 ft. of roadway
2" Upper " " " 29 " " " 100 ft. " " "

ABOVE SECTION TO BE USED BETWEEN STA. 1+00 & 355+00.

* Between Sta. 604+00 Back & 1+00 Ahead the typical section is to be a gradual transition from the 30 foot section shown above to the 27' 8" section shown at the Left.

CUT SLOPE TREATMENT IN EARTH CUTS

The intersection of cut slopes with the existing ground shall be rounded in earth cuts, beginning 5' outside the slope stake and extending 5' down the cut slope. Where the cut slope is less than 5', reduce each of the above widths of slope treatment to the actual slope distance. Quantities involved in slope treatment shall not be included in Unclassified Excavation. This operation is to be used only where Dike is not constructed at the back of cut slope.

SUMMARY OF APPROXIMATE QUANTITIES

No.	Item	Unit	Roadway	Bridges Sta. 27+	Bridges Sta. 183+	Bridges Sta. 318+		Totals
10a	Clearing & Grubbing Entire Project	Lump Sum	•					•
11a	Removal of Disused Bridge Sta. 27+	Lump Sum		•				•
11b	" " " " " 183+	" "			•			•
11c	" " " " " 318+	" "				•		•
11d	Removal of 75 Structures	" "	•					•
11e	Removing & Resetting Mail Boxes	" "	•					•
11f	" " Rebuilding Cattle Guards	Each	2					2
12a	" Fence	Lin. Ft.	93300					93300
12b	" & Rebuilding Fence	" "	200					200
12c	" " " Gates	Each	5					5
13c	Unclassified Excavation	Cu. Yd.	240000					240000
13d	Cut Slope Treatment	Mile	3.6					3.6
14a	Dry Rock Excavation (Structural)	Cu Yd.	70					70
14b	" Common " "	" "	610	65	36	36		747
14c	Wet Rock " "	" "	70					70
14d	" Common " "	" "	610	15	15	15		655
18a	Station Yard Overhaul	Sta. Yd.	1,638,000					1,638,000
18b	Yard Mile "	Yd. Mi.	36,000					36,000
26a	Gravel or Crushed Rock Surfacing	Ton	43,720					43,720
42a	Untreated Bridge Timber	Mft. bm.	15.1	1.4	0.7	0.7		18.5
42b	Treated " "	" "		27.0	11.6	11.6		50.2
43	Asphalt Plank Wearing Surface	Sq. Ft.		1665	551	551		2767
46a	Class "A" Concrete	Cu. Yd.	317					317
46b	" "B" "	" "	60					60
47	Reinforcing Steel	Lb.	26,600					26,600
53a	15" Corrugated Metal Culvert Pipe	Lin. Ft.	386					386
53b	18" " " " "	" "	1726					1726
53c	24" " " " "	" "	1332					1332
53d	30" " " " "	" "	430					430
53e	36" " " " "	" "	100					100
55b	18" " " Siphon "	" "	85					85
60a	Treated Timber Piling	" "	600	612	388	388		1988
60c	Piling Cut-off Treated	" "		10	10	10		30
60e	Metal Pile Shoes	Each		42	26	26		94
64	Grouted Rubble Slope & Ditch Paving (1' Thick)	Sq. Yd.	43					43
76a	Barbed Wire Fence with Treated Wood Posts	" "	3700					3700
76d	Comb. " " " " " " "	" "	85300					85300
76g	Barbed Wire Gates	Each	16					16
76h	Driveway Gates	"	66					66
76i	Walk "	"	15					15
79a	Water-gas Tar Water-proofing	Sq. Yd.	1540					1540
81a	Project Markers	Each	2					2
81b	Right of Way Markers	"	50					50
85b	Trash Guards for 18" Siphon	"	2					2
89b	Drain Pipe (Timber Floor)	"		6	2	2		10
	FORCE ACCOUNT							
	Obliterating Old Road	Lump Sum	•					•
	Removing & Rebuilding Irrigation Structures	"	•					•
	Flumes, Sta 239+, 292+, & 318+	"	•					•
	ALTERNATE BIDS TO BE RECEIVED FOR REINF. CONC. CULVERT PIPE As an alternate for items 53a, 53b, 53c, 53d, 53e shown in the foregoing, the following items, involving Reinf. Conc. Pipe shall be bid upon:							
51a	15" Reinforced Concrete Culvert Pipe	Lin. Ft.	386					386
51b	18" " " " "	" "	1726					1726
51c	24" " " " "	" "	1332					1332
51d	30" " " " "	" "	430					430
51e	36" " " " "	" "	100					100

GENERAL NOTES

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

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

All roadway excavation required to construct the Project is to be obtained as indicated on the plans. Quantities involved beyond the limits of the ditch as shown on the Typical Section, either noted on Profile as "Borrow" or on Tabulation of Structures as "Embankment" are to be classified and paid for as "Uncl. Excav."

These quantities are to be staked as part of the original excavation at locations indicated on the plans. Slope stakes, beyond the limits of the Typical Section as shown, are subject to change by the Engineer to fit Embankment requirements actually met in construction.

All curves are to be superelevated as provided for on the Standard Superelevation Sheet.

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

Payment for overhaul will be based on measurements along centerline of project, unless otherwise stated on the plans.

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

All side approach roads to the Project shall be gravel surfaced with a 4" thickness of "Gravel or Crushed Rock Surfacing, extending approximately 30 ft from the edge of the highway." Estimated tonnage of surfacing material required in this operation is shown in List of Structures.

Where noted on the plans, the inlet end of Corrugated Metal Pipe Culverts shall be provided with one Grouted Rubble Apron in place of headwall.

All Concrete Box Culverts are to be waterproofed with Water-gas Tar Waterproofing on all surfaces except the bottom of box and top of inside. The approximate area in sq. yds. is shown in "List of Structures".

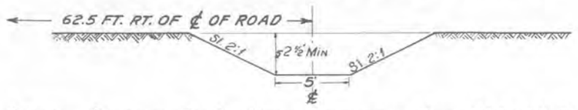
From Sta. 500+69.5 Back to 1+50 Ahead and 318+30 to 355+00 the Detour for this Project lies along the present travelled road. From Sta. 1+50 to 318+30 the Detour lies along the route indicated on the Title Sheet. At all places on the Project, where the new work lies along the present travelled road, the Contractor shall, at his own expense, prosecute construction in such a manner that traffic may safely and readily pass over the road. Also, the Contractor shall maintain in safe condition, and at his own expense, all temporary approaches to and crossings of intersecting roads.

The entire Project is to be cleared of light willows and brush along both sides of the present road and of such trees as are indicated on the plans. The cost, thereof, is to be included in the lump sum price for "Clearing and Grubbing the Entire Project."

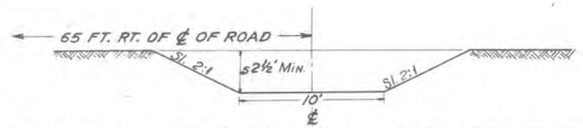
REVISIONS

FED. ROAD DIST. NO.	STATE	A.W.P.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	3	

TYPICAL SECTION OF DRAIN DITCH



ABOVE SECTION TO BE USED BETWEEN STA. 214+00 & 319+00.



ABOVE SECTION TO BE USED BETWEEN STA. 319+00 & 355+00.

SELECTED MATERIAL

The 12" of material immediately underlying the Gravel or Crushed Rock surfacing as shown on the Typical Section (Sta 500+69.5 to 604+00) is to be constructed with Selected Material, which is to be classified and paid for as "Unclassified Excavation."

The 12" of Selected Material underlying gravel surfacing is to be obtained from pits designated, or from pits furnishing suitable material and shall be placed on the subgrade at the rate of 162 cu. yds. per station.

MATERIAL REQUIRED	QUANTITY	SOURCE	OVERHAUL	
STATION TO STATION	CU. YDS.		STA. YDS.	YD. MI.
500+69.5 ~ 513+00	1994	From Pit #16-2660' Rt. of Sta 526	21934	1124
513+00 ~ 526+00	2106	" " #16A-2710' Lt. " " 526	23166	702
526+00 ~ 539+50	2187	" " #17 - 575' Rt. " " 539+50	16403	
539+50 ~ 552+00	2025	" " #17A-1150' Rt. " " 539+50	22275	68
552+00 ~ 565+00	2106	" " #18 - 2690' Rt. " " 579	23166	1253
565+00 ~ 578+00	2106	" " #18A - 2690' Lt. " " 579	23166	734
578+00 ~ 591+00	2106	" " #19 - 140' Rt. " " 585	1404	
591+00 ~ 604+94.2	2259	" " #19A - 2740' Lt. " " 580	24849	1257
TOTAL	16889		156 363	5138

The estimated overhaul on Selected Material is shown in the tabulation above. If the Contractor, for his own convenience, elects to use pits other than those designated, actual overhaul will be paid, provided however, that overhaul in excess of the Department's plan will not be allowed.

LIST OF STRUCTURES

STATION	DESCRIPTION	REMOVE STRUCT.	UNCLASSIFIED		STRUCTURAL EXCAVATION		GRAVEL OR CRUSHED ROCK SURF.	UNTREATED BRIDGE TIMBER	CONCRETE		REINFORCING STEEL	CORRUGATED METAL CULVERT PIPE					CORR. METAL SIPHON PIPE	TREATED TIMBER PILING	GROUTED RUBBLE SLOPE PAVING 1 FT. THICK	WATER-GAS TAR WATER PROOFING	MISCELLANEOUS
		CU. YDS.			CU. YDS.				CU. YDS.			LIN. FT.					LIN. FT.				
		EACH	EXCAV.	EMBANK.	*		TONS	M.F.T.BM.	CLASS "A"	CLASS "B"	LBS.	15"	18"	24"	30"	36"	18"	LIN. FT.	SQ. YDS.	SQ. YDS.	
500 + 90	Project Marker																				1 Project Marker
501+00 to 517+00	Irrigation Ditch Rt.		125																		
501 + 02	C.M.P. Cross Culvert & Ditches		5		10					1.65				56							
	Remove 15"x 26' C.M.P.	1																			
511 + 70	C.M.P. Cross Culvert & Ditches		5		15					1.65				58							
511 + 90	C.M.P. Side Drain & Road Approach Rt.			35	5		10						26								
	Remove 1'x 1'x 12' Wood Box	1																			
526 +40	C.M.P. Cross Culvert & Ditches		5		15					1.65				54							
526+70	Road Approach Lt.			45			10														
526 + 83	6'x3'x37' Concrete Box Culvert				20				41.2		3251								192		
	Remove 6'x 2'x 24' Concrete Box Culvert	1																			
527 + 00	Road Approach Rt.			15			10														
	18"x 80' C.M.P. Siphon H = 2.5'				70				3.5		255						84.7				2 Trash Guards (18")
527 + 24	C.M.P. Cross Culvert & Inlet		5		5					1.65				48							
	Remove 15"x 26' C.M.P.	1																			
527+25 to 553+00	Rebuild Irrigation Ditch Rt.		200																		
528 + 60	Road Approach Lt.			50			10														
530 + 60	C.M.P. Side Drain & Road Approach Rt.			55	1		10						26								
532 + 60	Remove 15"x 26' C.M.P.	1																			
539 + 00	C.M.P. Cross Culvert & Ditches		5		20					1.65				58							
540 + 35	C.M.P. Side Drain & Road Approach Lt.			65	1		10						28								
	Road Approach Rt. & C.M.P. Side Drain			30	1		10					16									
553 + 10	C.M.P. Cross Culvert & Ditches		5		20					1.65				66							
553 + 30	C.M.P. Culvert under Irrigation Ditch				10									20							
	Build 2'x 1'x 300' Drain Ditch Rt.		25																		
553 + 53	C.M.P. Side Drain in Irrig. Ditch & Rd. Appr. Rt.			55	1		20						36								
	Road Approach Lt.			65			20														
	Remove 18"x 44' C.M.P. Lt.	1																			
	" 15"x 16' " Rt.	1																			
	" 15"x 36' " Rt.	1																			
553 + 75	C.M.P. Culvert under Irrigation Ditch				10									20							
	Build 2'x 1'x 300' Drain Ditch Rt.		25																		
	Remove 15"x 20' C.M.P. Rt.	1																			
554 + 00 to 579 + 45	Rebuild Irrigation Ditch Rt.		300																		
554 + 10	C.M.P. Cross Culvert & Ditches		5		20					1.65				66							
555 + 15	Remove 2'x 2'x 28' Concrete Box Culvert	1																			
560 + 90	C.M.P. Side Drain & Road Approach Rt.			65	1		10						28								
	" Culvert in Irrigation Ditch Rt.				1								26								
	Remove 18"x 26' C.M.P. in Irrigation Ditch Rt.	1																			
565 + 50	Road Approach Lt.			50			20														
567 + 00	C.M.P. Cross Culvert & Ditches		5		20					1.65				62							
579 + 45	" " "		5		10					1.65				58							
	Remove 15"x 26' C.M.P.	1																			
579 + 60	Road Approach Rt. & Lt.			75			40														
579 + 81	4'x 3'x 39' Concrete Box Culvert & Ditches		35		85				31.8		2705								169		
	Remove 4'x 2'x 24' Concrete Box Culvert.	1																			
580 + 10	C.M.P. Cross Culvert				5					1.65				50							
580 + 75	Remove 18"x 28' C.M.P. Cross Culvert	1																			
580+10 to 606+00	Rebuild Irrigation Ditch Rt.		240																		
594 + 20	C.M.P. Cross Culvert & Inlet		5		20					1.65				60							
596 + 15	Road Approach Lt.			25			10														
604 + 90	C.M.P. Cross Culvert & Inlet		5		15					1.65				50							
0 + 10	Road Approach Lt.			30			10														
	Remove 1'x 1'x 12' Wood Box	1																			
1 + 20	Drain Ditch Rt.		35																		
1 + 40	Road Approach Rt. & Lt			60			40														
1 + 70	C.M.P. Cross Culvert & Inlet (Skew 60°)		5		10					1.1			100								
	Remove 18"x 70' C.M.P.	1																			
1+80 to 21+50	Irrigation Ditch Rt.		395																		
12 + 65	C.M.P. Side Drain & Road Approach Rt.			20	1		10					16									
16 + 00	" Cross Culvert & Ditches		10		10								60					5			
17 + 20	Walk Approach Rt.			5			3														
20 + 50	C.M.P. Cross Culvert & Ditches		5		20					1.1			64								
21 + 00	Remove 24"x 24' Side Drain Lt.	1																			
21 + 32	Road Approach Lt.			15			10														
21 + 90	Remove 24"x 24' C.M.P. Side Drain Lt.	1																			
26 + 65	4'x 3'x 36' Conc. Box Culv. & Channel Imprmnt.		*200		50				30.2		2555								160		
	Remove 4'x 3'x 26' Conc. Box Culvert	1																			

Continued on Sheet No. 4

REVISIONS

FED. ROAD DIST. NO	STATE	A.W.P.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	4	

FENCING REQUIREMENTS

STATION	SIDE	REMOVE FENCE	REMOVE AND REBUILD FENCE	BUILD FENCE	
				BARB WIRE	COMBINAT.
		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
500+90 - 553+27	L	5440			
500+90 - 553+27	R	5600			
513+90 - 516+90	R	300			
553+87 - 604+942	L	5250			
553+87 - 1+20	R	5370			
1+80 - 27+40	R.L&X	2673			
11+00 - 27+20	L	1730			
16+10 - 19+10	L	315			
28+00 - 54+00	L	2660			
28+00 - 54+00	R	2620			
54+40 - 106+75	L	5480			
54+40 - 106+75	R	5420			
107+30 - 159+65	L	5471			
107+30 - 159+65	R	5453			
160+10 - 212+50	L	5382			
160+15 - 212+50	R	5330			
213+10 - 243+10	L	3118			
213+10 - 265+20	R	5320			
243+50 - 317+90	L	7620			
265+70 - 318+10	R	5410			
318+70 - 355+00	L	3650			
318+70 - 355+00	R	3630			
500+90 - 553+27	L				5205
553+87 - 594+35	L				4000
594+35 - 595+95	L		160		
595+95 - 1+10	L				982
11+00 - 27+20	L				1615
27+95 - 54+00	L				2545
54+40 - 106+75	L				5092
107+30 - 159+65	L				5130
160+10 - 183+00	L				2215
183+45 - 212+45	L				2885
213+05 - 243+10	L				2990
243+55 - 317+90	L				7393
318+70 - 355+00	L				3616
500+90 - 553+27	R				5230
513+90 - 516+90	R				300
553+87 - 1+10	R				5190
1+75 - 27+40	R				2558
28+15 - 54+00	R				2564
54+40 - 106+75	R				5150
107+30 - 159+65	R				5190
160+15 - 183+00	R				2269
183+45 - 212+45	R				2898
213+10 - 265+15	R				5132
265+70 - 318+10	R				5125
318+70 - 355+00	R			3602	
TOTALS		93,242	160	3,602	85,274

LIST OF STRUCTURES

Continued from Sheet No. 3

STATION	DESCRIPTION	REMOVE STRUCT.	UNCLASSIFIED	STRUCTURAL EXCAVATION	GRAVEL OR CRUSHED ROCK SURF.	UNTREATED BRIDGE TIMBER	CONCRETE	REINFORCING STEEL	CORRUGATED METAL CULVERT PIPE					CORR. METAL SIPHON PIPE	TREATED TIMBER PILING	GROUTED RUBBLE SLOPE PAVING 1 FT. THICK	WATER-GAS TAR WATER PROOFING	MISCELLANEOUS
			CU. YDS.	CU. YDS.			CU. YDS.		LIN. FT.					LIN. FT.				
		EACH	EXCAV. EMBANK	*	TONS	M.FT.BM.	CLASS "A"	CLASS "B"	LBS.	15"	18"	24"	30"	36"	18"	LIN. FT.	SQ. YDS.	SQ. YDS.	
26+90	Road Approach Rt.		25		10													
27+38 to 27+95.2	Tr. Timb. Bridge 3@ 18'-6"		(Quantities in	Summary)														
	Remove 3 Span Concrete Bridge & Ret. Walls																	
28+15	Remove & Rebuild Cattle Guard Rt																	Remove & Rebuild Cattle Guard
28+25	Road Approach Rt.		15		10													
	Remove & Rebuild 12'x 15'x 6' Timb. Diver'n Box Lt		(Force Account)															
28+25 to 54+00	Irrigation Ditch Lt.		515															
28+35	Road Approach Lt.		15		10													
28+60	6'x 4'x 42' Concrete Box Culvert & Ditches (Skew 60°)		50	90			51.8	3870									253	
	Remove 4'x 4'x 19' Concrete Box Culvert	1																
28+70	C.M.P. Cross Culvert & Ditches (Skew 60°)		5	10				1.65				62						
	Remove 24"x 24' C.M.P.	1																
28+90	C.M.P. Side Drain & Road Approach Lt.		35	1	10					16								
39+10	" " " " " "		20	1	10					16								
40+00	" Cross Culvert			10				1.1			48							
42+00 to 53+90	Irrigation Ditch Rt.		240															
48+00	C.M.P. Cross Culvert & Ditches		10	15				1.1			54							
48+20	" Side Drain & Road Approach Lt.		20	1	10							24						
	Remove 24" x 20' C.M.P.	1																
50+30	C.M.P. Side Drain & Road Approach Lt.		15	1	10					16								
54+25	" Cross Culvert & Ditches (Skew 45°)		25	35				1.65				74						
	Remove 24"x 70' C.M.P.	1																
54+30	Road Approaches Rt. & Lt.		40		40													
	Remove 1'x 1'x 30' Wood Box Rt.	1																
54+40 to 80+50	Irrigation Ditch Rt.		525															
57+55	Road Approach Rt.		20		10													
58+00	C.M.P. Side Drain & Road Approach Rt.		15	1	10					16								
66+90	" " " " " "		30	1	10						20							
	Remove 18"x 24' C.M.P.	1																
67+20	Road Approach Lt		20		10													
67+15	C.M.P. Cross Culvert & Ditches (Skew 45°)		10	15				1.1			66							
	Remove 1'x 1'x 53' Wood Box	1																
68+10	Road Approach Lt.		15		10													
70+30	C.M.P. Cross Culvert & Ditches		20	20				1.1			64							
	Remove 18"x 26' C.M.P.	1																
74+45	C.M.P. Side Drain & Road Approach Rt.		40	1	10					16								
80+35	" " " " " " "		10	1	10					16								
80+28 to 81+00	Remove 24"x 72' Side Drain Lt.	1																
80+45	3'x 3'x 38' Concrete Box Culvert			30			27.9	2337									157	
	Remove 30"x 38' C.M.P.	1																
80+60	C.M.P. Side Drain & Road Approach Lt		20	1	10						24							
80+70	Remove & Rebuild 5'x 7' Diversion Box Rt.		(Force Account)															
80+75	C.M.P. Cross Culvert & Ditches		5	15				1.65				52						
	Remove 24"x 24' C.M.P	1																
80+75 to 125+00	Irrigation Ditch Rt.		885															
80+75 to 106+70	" " "		520															
88+00	C.M.P. Cross Culvert & Outlet		5	5							54						5	
97+50	Road Approach Lt.		20		10													
	Remove 30"x 15' C.M.P. Lt.	1																
101+00	C.M.P. Cross Culvert & Outlet		5	10				1.1			50							
106+75	" " " & Ditches		20	20				1.1			56							
107+00	Rd. Approach Lt.		25		20													
	Remove 24"x 48' C.M.P.	1																
	C.M.P. Side Drain & Road Approach Rt.		20	1	20					34								
	Remove 15"x 44' C.M.P. Rt.	1																
107+50	C.M.P. Cross Culvert & Outlet		5	10								58					8	
110+00	" " " " "		10	15							64						5	
114+00	Road Approach Lt.		10		10													
	Remove 24"x 24' C.M.P. Lt.	1																
115+09	Remove & Rebuild 3' Timber Headgate Rt.		(Force Account)															
117+70	C.M.P. Side Drain & Road Approach Rt.		20	1	10					16								
119+30	" " " " " " "		15	1	10					16								
127+00	" Cross Culvert & Outlet		5	10				1.1			44							
129+00	Road Approach Lt.		15		10													
130+30	Remove 24"x 14' C.M.P.	1																
133+50	C.M.P. Cross Culvert & Outlet.		10	15				1.1			62							
	Road Approach Lt		25		10													
	Remove 24"x 56' C.M.P. Lt.	1																

Continued on Sheet No. 5

REVISIONS

FED. ROAD DIST. NO.	STATE	A.W.P.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	5	

R.O.W. MARKERS

STATION	SIDE	NO.
511+80	R	2
513+94	R	2
527+02	R&L	2
553+27	R&L	2
565+52	L	2
566+65	L	2
579+90	R&L	2
594+35	L	2
595+70	L	2
604+94.2	L	2
1+12	L	1
1+18	R	1
1+75	R	1
11+00	L	1
28+70	R	1
28+92	L	1
54+03	R&L	2
80+17	L	1
80+65	R	1
106+76	R&L	2
133+50	R	1
133+73	L	1
159+63	R&L	2
186+33	R&L	2
213+03	R&L	2
239+13	R&L	2
265+26	R&L	2
291+72	R	1
291+81	L	1
317+90	L	1
318+10	R	1
344+87	R&L	2
TOTAL		50

LIST OF GATES

STATION	SIDE	REMOVE & REBUILD No.	BUILD BARBED WIRE No.	BUILD DRIVE-WAY No.	BUILD WALK No.
500+90	R	1			
516+90	R	1			
526+70	L			1	
526+95	R			1	
528+00	L				1
528+60	L			1	
530+60	R			1	
535+00	L	1			
539+50	R				1
540+35	R			1	
540+35	L				1
560+90	R			1	
565+00	R	1			
565+40	L			1	
565+60	L			1	
565+90	L				1
570+85	R	1			
579+60	R&L			2	
595+25	L				1
596+10	L			1	
0+10	L			1	
12+65	R			1	
17+20	R				1
21+32	L			1	
21+60	L				1
26+75	R			1	
27+40	R			1	
28+20	R			1	
28+20	L			1	
28+85	L			1	
39+00	L			1	
48+25	L			1	
50+25	L			1	
54+40	R			1	
54+40	L			1	
57+20	R			1	
57+50	L		1	1	
57+95	R			1	
66+65	L				1
66+95	R			1	
67+05	L			1	
68+05	L			1	
74+03	L			1	
74+45	R		1	1	
76+90	R			1	
80+15	L			1	
80+30	R			1	
80+60	L			1	
97+50	L			1	
109+80	R			1	
113+45	L			1	
113+85	L			1	
115+10	L				1
117+80	R			1	
119+20	R			1	
119+80	R				1
129+00	L			1	
129+80	L			1	
133+35	L			1	
134+40	L				1
135+20	L			1	
147+15	L			1	
159+65	L			1	
165+75	L			1	
170+85	L			1	
171+30	L			1	
171+45	R			1	
171+85	L				1
173+35	L			1	
173+80	L			1	
182+75	L			1	
182+85	R			1	
186+15	L			1	
186+50	R			1	
187+90	L				1
228+75	L				1
229+80	R			1	
230+00	L				1
243+30	R			1	
248+90	R			1	
253+30	R				1
254+00	R			1	
255+70	R			1	
258+20	L				1
271+40	R		1		
271+60	R		1		
280+35	L		1		
286+90	R		1		
292+20	L		1		
292+50	R		1		
293+50	R		1		
293+50	R				1
293+60	R		1		
301+00	R		1		
304+80	R		1		
319+15	L		1		
319+75	R		1		
344+90	R		1		
346+85	R		1		
TOTALS		5	16	66	15

LIST OF STRUCTURES

Continued from Sheet No. 4

STATION	DESCRIPTION	REMOVE STRUCT. EACH	UNCLASSIFIED CU. YDS. EXCAV.	UNCLASSIFIED CU. YDS. EMBANK	STRUCTURAL EXCAVATION CU. YDS.	GRAVEL OR CRUSHED ROCK SURFACING TONS	UNTREATED BRIDGE TIMBER M.F.T.BM.	CONCRETE CU.YDS. CLASS "A"	CONCRETE CU.YDS. CLASS "B"	REINFORCING STEEL LBS.	CORRUGATED METAL CULVERT PIPE LIN. FT. 15"	18"	24"	30"	36"	CORR. METAL SIPHON PIPE LIN.FT. 18"	TREATED TIMBER PILING LIN. FT.	GROUTED RUBBLE SLOPE PAVING 1 FT. THICK SQ. YDS.	WATER GAS TAR WATER PROOFING SQ. YDS.	MISCELLANEOUS
133+65	3'x3'x36' Concrete Box Culvert & Ditches		10		55			27.0		2250									152	
	Remove 30"x 24' C.M.P.	1																		
133+80	C.M.P. Cross Culvert & Ditches		10		15				1.65				50							
	Remove 12"x 28' C.M.P.	1																		
133+80 to 152+80	Irrigation Ditch Rt.		380																	
133+90	C.M.P. Cross Culvert & Ditches		10		15				1.65				46							
	Remove 18"x 27' C.M.P.	1																		
133+90 to 179+00	Irrigation Ditch Rt.		905																	
135+25	Road Approach Lt.-Remove 24"x 24' C.M.P. Lt.	1		10		10														
139+65	C.M.P. Cross Culvert & Outlet		5		10				1.1				50							
147+20	Road Approach Lt.-Remove 24"x 18' C.M.P. Lt.	1		15		10														
159+60	C.M.P. Cross Culvert & Outlet		5		10				1.1				46							
159+85	Road Approach Lt.-Remove 24"x 48' C.M.P. Lt.	1		15		20														
	C.M.P. Side Drain & Road Approach Rt.			15	3	20							28							
	Remove 12"x 28' C.M.P. Rt.	1																		
161+00	C.M.P. Cross Culvert & Outlet		5		15				1.1				48							
165+70	Road Approach Lt.-Remove 24"x 24' C.M.P.	1		15		10														
170+80	Road Approach Lt.			20		10														
171+30	" " " " " " "	1		10		10														
171+50	C.M.P. Side Drain & Road Approach Rt.			10	1	10					16									
173+80	Road Approach Lt.-Remove 24"x 24' C.M.P. Lt.	1		15		10														
176+00	C.M.P. Cross Culvert & Ditches		10		10				1.1				46							
182+70	" Side Drain & Road Approach Lt			20	5	10								30						
	Remove 24"x 26' C.M.P. Lt.	1																		
182+90	Road Approach Rt			10		10														
183+12 to 183+32.5	Tr. Timber Bridge-1@ 19'				(Quantities in Summary)															
	Remove 21' Timber Bridge																			
183+30	Remove & Rebuild 2x2' Timber Checkgate Rt.		(Force Account)																	
183+40	C.M.P. Cross Culvert & Outlet		10		15				1.65				54							
	Remove 18"x 30' C.M.P.	1																		
	Remove & Rebuild 1'x 1.5'x 16' Wood Flume Rt.		(Force Account)																	
183+50 to 239+00	Irrigation Ditch Rt.		1110																	
186+20	Road Approach Lt.			25		10														
186+55	C.M.P. Side Drain & Road Approach Rt.			35	1	10					16									
187+90	" " " " " " Lt			25	2	10						24								
194+40 to 198+00	Irrigation Ditch Rt.		75																	
197+00	C.M.P. Cross Culvert & Outlet		5		10				1.1				46							
200+00 to 202+40	Irrigation Ditch Rt.		50																	
203+30	Remove 3'x 6'x 8' Headgate Lt.	1																		
206+00	C.M.P. Cross Culvert & Outlet		5		10								60					5		
212+70	" " " " Ditches (Skew 45°)			10	50				3.0						100					
212+80	" Side Drain & Road Approach Rt.			25	2	20							24							
	Remove 18"x 24' C.M.P. Rt.	1																		
	Road Approach Lt.-Remove 30"x 40' C.M.P. Lt	1		25		20														
213+15	Remove Log Cribbing Lt.	1																		
227+00	C.M.P. Cross Culvert & Outlet		5		5								54					5		
229+80	" Side Drain & Road Approach Rt.			20	2	10								30						
	" " " Rt.				1						16									
230+00	" " " " " " Lt			25	3	10						24								
	Remove 30"x 24' C.M.P. Lt	1																		
231+68	Remove 3'x 3'x 6' Headgate Lt.	1																		
236+30	C.M.P. Cross Culvert & Outlet		5		5								56					5		
	Remove 1'x 1' Wood Box & Manhole	1																		
239+20	Flume across Drain Ditch		(Force Account)																	
	C.M.P. Cross Culvert & Ditches		10		30				1.65					58						
	Remove 24"x 60' C.M.P.	1																		
239+20 to 252+75	Irrigation Ditch Rt.		275																	
243+30	C.M.P. Side Drain & Road Approach Rt.			30	1	10								30						
	" " " Rt.				1						16									
	Road Approach Lt.-Remove 30"x 25' C.M.P. Lt.	1		20		20														
243+60	Remove Log Cribbing Lt	1																		
252+80 to 256+00	C.M.P. Side Drain & Road Approach Rt.			600	5	100								320						
253+80	Remove & Rebuild Cattle Guard Rt.																			Remove & Rebuild Cattle Guard
255+90 to 265+10	Irrigation Ditch Rt.		185																	
258+18	C.M.P. Cross Culvert & Inlet		5		15				2.25					50						
	Remove 10' Timber Bridge	1																		
	Remove 3'x 6'x 12.5' Timber Weir on Lt. & Rebuild on Rt.		(Force Account)																	
258+35	Road Approach Lt.			25		10														
260+60	Remove 12.5'x 6'x 3' Headgate Lt.	1																		
265+14	C.M.P. Cross Culvert & Ditches.		5		15				1.65					48						

Continued on Sheet No. 6

REVISIONS

FED. ROAD DIST. NO.	STATE	A.W.P.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	6	

LIST OF STRUCTURES (Continued from Sheet No. 5)

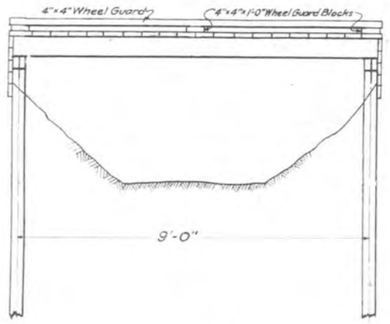
STATION	DESCRIPTION	REMOVE STRUCT.	UNCLASSIFIED		STRUCTURAL EXCAVATION		GRAVEL OR CRUSHED ROCK SURFACING	UNTREATED BRIDGE TIMBER	CONCRETE		REINF. STEEL	CORRUGATED METAL CULVERT PIPE					CORMETAL SIPHON PIPE	TREATED TIMBER PILING	GROUTED RUBBL. SLOPE PAVING 1 FT. THICK	WATER-GAS TAR WATER PROOFING	MISCELLANEOUS
			CU. YDS.		CU. YDS.				CU. YDS.			LIN. FEET					LIN. FT.				
		EACH	EXCAV.	EMBANK.	*		TONS	M. FT. BM	CLASS "A"	CLASS "B"	LBS.	15"	18"	24"	30"	36"	18"	LIN. FT.	SQ. YDS.	SQ. YDS.	
265+14	Remove 24"x 40' Flume Rt	1																			
	" 24"x 30' C.M.P. Rt.	1																			
265+50	Side Trestle & Road Approach Rt			10			20	1.569										60			
	Remove 18"x 24' C.M.P.	1																			
265+85 to 291+00	Irrigation Ditch Rt.		500																		
271+50	Side Trestle & Road Approach Rt.			10			10	1.569										60			
	C.M.P. Side Drain Rt.				1							16									
278+00	" Cross Culvert & Ditches		5		10					1.1			48								
280+30	Road Approach Lt.- Remove 30"x 16' C.M.P. Lt.	1		10			10														
286+90	Side Trestle & Road Approach Rt.			30			10	1.569										60			
	C.M.P. Side Drain Rt.				1							16									
291+30	Remove 36"x 26' C.M.P. & 1 Headwall	1																			
292+00	10'x 4'x 38' Concrete Box Culvert & Ditches (Type 10-I)		10		90				722		6678									279	
	Remove 8' Timber Bridge	1																			
	Flume across Irrigation Ditch	(FORCE ACCOUNT)																			
292+20	Road Approach Lt.- Remove 2'x2'x14' Wood Box Lt.	1		30			10														
292+23	C.M.P. Cross Culvert				10					1.65				50							
	Remove 18" x 52' C.M.P.	1																			
292+25 to 317+20	Irrigation Ditch Rt.		500																		
292+30	Remove Timber Dike	1																			
292+50	Side Trestle & Road Approach Rt.			50			10	1.569										60			
	C.M.P. Side Drain Rt.				1							16									
293+50	Side Trestle & Road Approach Rt.			50			10	1.569										60			
	Remove 18"x 5' C.M.P. Rt.	1																			
	C.M.P. Side Drain Rt.				1							16									
301+10	Side Trestle & Road Approach Rt.			40			10	1.569										60			
	C.M.P. Side Drain Rt.				1							16									
305+75	Side Trestle & Road Approach Rt.			50			10	1.569										60			
	C.M.P. Side Drain Rt.				1							16									
306+50	" Cross Culvert & Ditches		5		15					1.1			62								
317+50	Remove 36"x 26' C.M.P. & 2 Headwalls	1																			
318+00	Flume across Irrigation Ditch	(FORCE ACCOUNT)																			
	3'x 3'x 46' Concrete Box Culvert & Ditches		90		70				31.4		2686									177	
318+35	Side Trestle & Road Approach Rt			50			20	1.569										60			
	Road Approach Lt.- Remove 3'x 3'x 38' Wood Box Lt.	1		20			20														
318+60	Remove 16' Timber Dike Lt.	1																			
	" 14' " " "	1																			
318+75 to 318+95.5	Treated Timber Bridge 1 @ 19'			(Quantities in Summary)																	
	Remove 12' Timber Bridge																				
318+80 to 355+00	Irrigation Ditch Rt.		725																		
318+98	Remove & Rebuild 2-3'x 5'x 14' Timb. Diversion Boxes Rt.	(FORCE ACCOUNT)																			
319+80	Road Approach Lt.- Remove 3'x 3'x 28' Wood Box	1		25			10														
	Side Trestle & Road Approach Rt.			65			10	1.569										60			
	C.M.P. Side Drain Rt.				1							16									
321+10	Remove & Rebuild 3'x 6'x 8' Timber Headgate Rt.	(FORCE ACCOUNT)																			
333+70	" " " " " 7' " " "		"	"																	
335+00	C.M.P. Cross Culvert & Outlet		5		5									58						5	
345+70	Remove & Rebuild 3'x 6'x 7' Timber Headgate Rt.	(FORCE ACCOUNT)																			
346+80	Side Trestle & Road Approach Rt.			50			10	1.569										60			
	C.M.P. Side Drain Rt.				1							16									
348+00	C.M.P. Cross Culvert & Outlet		5		10					1.1			52								
355+00	Project Marker & Approach to Project.			• 300			200														1 Project Marker
	TOTALS	75	9265	2765	1339		1283	15.690	317.0	59.7	26,587	386	1726	1332	430	100	84.7	600	43	1539	

* Structural Excavation is estimated to be 90% Common and 10% Rock, each of which is estimated to be 50% Dry and 50% Wet.

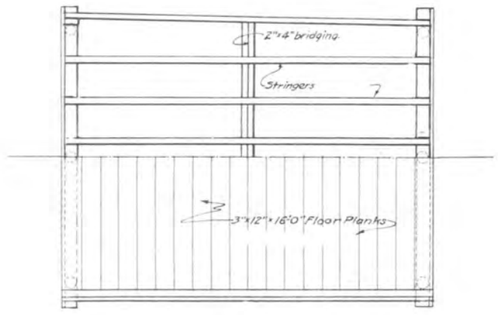
• Included in Profile Quantities for Payment.

A.& O. ROAD DIST. No.	STATE	A.W.	SHEET No.	TOTAL SHEETS
3	COLO.	3002	9	

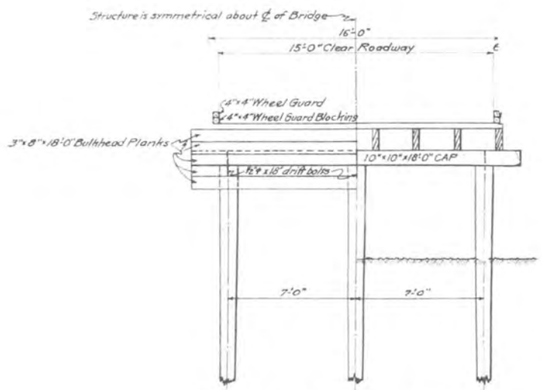
Revised March 2 1928 A.L.P.
Revised 1-35 A.A.H. Southern Longleaf changed to Dense Southern
Specified Woods: D.F. W.C.D.F. Dense So.



ELEVATION



SECTIONAL PLAN



HALF END VIEW HALF SECTION

NAILING DIRECTIONS

Wheel Guard Blocks - 2-20d. nails per block.
Wheel Guards to Blocking - 2-60d. nails per wheel guard per block.
Floor Planks to Stringers - 2-60d. nails per plank per stringer.

Stringers to Caps - 2-60 d. nails per stringer per cap.
Bulkhead Planks to Stringers - 2-60d. nails per plank per stringer.

Bridging to Stringers - 4-20d. nails per piece.

ONE ABUTMENT

PILING	3 Piles 10 Ft Long =		30 Lin Ft.
STRUCTURAL TIMBER			
CAP	1 Pc. 10"x10"x18'-0" Long =		150 Bd. Ft.
TOTAL STRUCTURAL TIMBER			150 Bd. Ft.
NATIVE TIMBER			
WHEEL GUARD BLOCKING	2 Pcs. 4"x 4" x 1'-0" do =		3 Bd. Ft.
BULKHEAD PLANKS	5 Pcs. 3"x 8" x 18'-0" do =		180 Bd. Ft.
TOTAL NATIVE TIMBER			183 Bd. Ft.

ONE SPAN OF SUPERSTRUCTURE

DESCRIPTION		TYPE D-6
STRUCTURAL TIMBER		
STRINGERS	NUMBER	6
	SIZE	4"x14"x 16'-0"
TOTAL STRUCTURAL TIMBER		374 Bd. Ft.
NATIVE TIMBER		
	NUMBER	
	SIZE	
	NUMBER	
	SIZE	
	NUMBER	
	SIZE	
WHEEL GUARDS	NUMBER	2
	SIZE	4" x 4" x 16'-0"
WHEEL GUARD BLOCKING	NUMBER	2
	SIZE	4" x 4" x 1'-0"
FLOOR PLANKS	NUMBER	3
	SIZE	3" x 12" x 16'-0"
BRIDGING	NUMBER	14
	SIZE	2" x 4" x 2'-0"
TOTAL NATIVE TIMBER		529 Bd. Ft.

NAILS ETC.

DESCRIPTION		UNIT	TYPE D-6
ONE SPAN SUPERSTRUCTURE	20d Common	Lbs.	2
	60d Common	Lbs.	20
ONE ABUTMENT	20d Common	Lbs.	
	60d Common	Lbs.	
DRIFT BOLTS 7/8" ϕ x 18"	ONE ABUTMENT	Lbs.	3
	ONE BENT	Lbs.	

SUMMARY OF QUANTITIES

STRUCTURAL TIMBER - UNTREATED (ITEM No 42a)			
1 SPAN	@ 374 Bd Ft Each	374	Bd Ft
2 ABUTMENTS	@ 150 do	300	Bd Ft
			Bd Ft
	TOTAL	674	Bd. Ft.
NATIVE TIMBER - UNTREATED (ITEM No 42a)			
1 SPAN	@ 529 Bd Ft Each	529	Bd Ft
2 ABUTMENTS	@ 183 do	366	Bd Ft
			Bd Ft
	TOTAL	895	Bd. Ft.
PILING - TREATED (ITEM No 60a)			
2 ABUTMENTS	@ 30 Lin. Ft Each	60	Lin Ft
			Lin Ft
	TOTAL	60	Lin. Ft.

NAILS & DRIFT BOLTS

DESCRIPTION	DRIFT BOLTS Each	DRIFT BOLTS Total	20d Common Each	20d Common Total	60d Common Each	60d Common Total
1 SPAN	3	6	2	2	20	20
2 ABUTMENTS						
TOTAL Lbs.		6		2		20

SIDE DRAINAGE TIMBER TRESTLE
REQ'D ON RIGHT AT FOLLOWING STATIONS

265 + 50
271 + 50
286 + 00
292 + 50
293 + 50
301 + 10
305 + 75
318 + 35
319 + 80
346 + 80

GENERAL NOTES

All work shall be done in accordance with the Standard Specifications of the Colorado State Highway Department adopted August 1, 1925
Caps and Stringers shall be West Coast Douglas Fir or Southern Longleaf Yellow Pine. Wheel guards, wheel guard blocking, floor planks, bulkhead planks and bridging may be good grade native lumber.

A ½" space shall be maintained between floor planks.
Entire structure shall be securely nailed together as per nailing directions.
Piling Shall be West Coast Douglas Fir, Dense Southern Yellow Pine, Oak, Southern Cypress or Red Spruce.

COLORADO
STATE HIGHWAY DEPARTMENT
SIDE DRAINAGE
TIMBER TRESTLE

Across
STA.
Near Sec. T. R.

Designed by E.P.W.
Made by E.P.W.
Checked by P.S.B.

Approved by C.D. Bailey
Bridge Engineer
Date Oct. 24th 1928

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	19	

N.E. 1/4, SEC. 13

S.E. 1/4 SEC. 12, T. 40 N., R. 7 E.

N

NOTE:
R.O.W. Fencing is tabulated on Sheet No. 4
R.O.W. Markers and Gates are tabulated on Sheet No. 5
All poles encroaching on the construction are to be moved by the owners.
Alignment and Grades, as shown, are subject to Modification.

COUNTY ROAD

Mail Box

P.I. 500+69.5
Δ = 0° 03' Rt.

R.O.W. Marker in place

N. 0° 17' W.

N. 0° 14' W.

500 505 510 515 520

60' 60' 40' 40' 60' 60'

House

Cellar

Barn

R.O.W. Marker in place

STA. 500+69.5-END OF A.W.P.-3005
BEG. OF A.W.P.-3002.

℄ SEC. LINE

Sta. 501+02 ~ Regd. 24" x 56' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet & Outlet. Remove 15' x 26' C.M.P. Culvert.

Sta. 500+90 ~ Regd. Project Marker.

Sta. 501+00 to 517+00 ~ Regd. 125 Cu. Yds. Excav. for Irrigation Ditch, Rt.

Sta. 511+70 ~ Regd. 24" x 58' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet & Outlet.

Sta. 511+90 ~ Regd. 18" x 26' C.M.P. Culvert side drain & 35 Cu. Yds. Embank. for Road Approach, Rt. Remove 1' x 1' x 12' Wood Box.

S.W. 1/4 SEC. 7, T. 40 N., R. 8 E.

N.W. 1/4, SEC. 18

CLEARING AND GRUBBING:
Sta. 506+00 ~ Remove 1 Willow tree 30 ft. Left.

200' V.C.

P.I. 768+80.62

P.I. 767+89.94

P.I. 767+69.94

7680
7670
7660

-0.02 %
-0.14 %
-0.20 %
-0.05 %
-0.14 %
-0.10 %

74.90 80.64 80.59 80.48 F.L. 75.6 75.20 79.08 78.92 78.74 F.L. 74.0 72.94 77.14 76.99

200' V.C.

200' V.C.

Excavation	905	1068	635	905		693		
Embankment	1894	928	552	1971		2804		
Embankment +15 %	2177	1068	635	2267		3224		
Borrow	1272			1362		2581		
Sta. Yd. O'haul.	13,592			14,982		27,841		
Yd. Mile O'haul.	811			619		916		
Borrow Source	From Pit #16 approx. 2660' Rt. Sta. 526+00			From Pit #16 approx. 2660' of Sta. 526+00		From Pit #16-A approx. 2710' Lt. of Sta. 526+00		

495 500 505 510 515 520

PLATE 1 - PLAN-PROFILE (C. P. R. & P. C. STANDARD)
REUFFEL & ESSER CO., NEW YORK.

PLAN — SURVEYED, PLOTTED, NOTE BOOK ALIGNMENT CHECKED, NO. 4762, RT. OF WAY CHECKED, BY, DATE

PROFILE — SURVEYED, PLOTTED, NOTE BOOK GRADES CHECKED, NO. 4763, IL M.S. NOTED, STRUCTURE NOTATIONS CHECKED, BY, DATE

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	20	

S.E.4 Sec. 12
T. 40 N., R. 7 E.
ROSCOE WATSON

N.E. 4 Sec. 12
T. 40 N., R. 7 E.
G.W. McCONNELL

Sta. 526+70 ~ Regd. 45 Cu. Yds. Embank. for Road Approach, Lt.

P.O.T. 526+00

Sta. 528+60 ~ Regd. 50 Cu. Yds. Embank. for Road Approach, Lt.

Sta. 532+60 ~ Remove 15' x 26' C.M.P. Culvert.

Sta. 540+35 ~ Regd. 18" x 28' C.M.P. Side drain & 65 Cu. Yds. Embank. for Road Approach, Lt.

House

Cellar

N

520 525 530 535 540 545 550

60' 60'

N. 0° 14' W. N. 0° 14' W.

Sta. 526+40 ~ Regd. 24" x 54' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet & Outlet.

Sta. 526+83 ~ Regd. 6' x 3' x 37' Conc. Box Culvert. Remove 6' x 2' x 24' Conc Box Culvert.

Sta. 527+00 ~ Regd. 15 Cu. Yds. Embank. for Road Approach, Rt.

Sta. 527+00 ~ Regd. 18" x 80' C.M.P. Siphon on Rt. (H= 25) for Borrow Pit drainage.

Sta. 527+24 ~ Regd. 24" x 48' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet.

Remove 15' x 26' C.M.P. Culvert.

Barn

Sta. 530+60 ~ Regd. 18" x 26' C.M.P. side drain & 55 Cu. Yds. Embank. for Road Approach, Rt.

Sta. 527+25 to 553+00 ~ Regd. 200 Cu. Yds. Excav. for Irrigation Ditch, Rt.

Sta. 539+00 ~ Regd. 24" x 58' C.M.P. Culvert & 5 Cu. Yds. Excav. for Inlet & Outlet.

Sta. 540+35 ~ Regd. 30 Cu. Yds. Embank. for Road Approach, Rt. & 15" x 16' C.M.P. side drain in Irrigation Ditch.

JOHN WERTZ
S.W. 4 Sec. 7
T. 40 N., R. 8 E.

G.W. McCONNELL
N.W. 4 Sec. 7
T. 40 N., R. 8 E.

PLAN — SURVEYED, PLOTTED, NOTE BOOK ALIGNMENT CHECKED, NO. 4762, PT OF WAY CHECKED, BY, DATE

PROFILE — SURVEYED, PLOTTED, NOTE BOOK GRADES CHECKED, NO. 4763, BY W.S. NOTED, STRUCTURE NOTATIONS CHKD., BY, DATE

200' V.C.

7680 7670 7660

-0.20 % 0.00 % -0.05 % -0.10 % -0.15 %

77.14 76.99 76.94 572.94 P.I. 76.76.94 P.I. 76.76.94

F.L. 727 F.L. 717 F.L. 733 F.L. 710

72.67 76.94 72.17 76.91 76.84

200' V.C.

	520	525	530	535	540	545	550
Excavation	982		996	1226	556	1382	1069	1919
Embankment		3887		3186	483	1878	929	1668
Embankment+15		4470		3664	556	2159	1069	1919
Borrow		2492		2438		777		
Sta. Yd. O'haul.		26,251		26,022		7361		
Yd. Mile O'haul.		169		62		1		
Borrow Source		From Pit #17 approx. 575' Rt. of Sta. 539+50		From Pit #17-'A' approx. 1150' Rt. of Sta. 539+50		From Pit #17-'A' approx. 1150' Rt. of Sta. 539+50		

PLATE 1 — PLAN-PROFILE D.P.R. & R.E. STANDARD

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	21	

N. E.4 Sec. 12
T.40N., R.7 E.
G.W. McCONNELL

S.E.4 Sec. 1
T.40 N., R.7E.
ROY H. DAVID

N

Sta. 553+53 ~ Regd. 65 Cu Yds. Embank. for Road Approach, Lt.
Remove 18"x 44' C.M.P. Culvert, Lt.
" 15"x 16' " Culvert, Rt.
" 15"x 36' " " Rt.

P.I. 553+54.0
Δ 0°03' R.

Sta. 555+15 ~ Remove 2'x 2'x 28' Concrete Box Culvert.

Sta. 565+50 ~ Regd. 50 Cu. Yds. Embank. for Road Approach, Lt.

House
House
Cellar

Sta. 579+60 ~ Regd. 75 Cu. Yds. Embank. for Road Approaches, Rt. & Lt.

Sta. 580+75 ~ Remove 18"x 28' C.M.P. Cross Culvert.

60' 60'
550 555 560 565 570 575
N. 0°14' W. N. 0°11' W.
60' 60'

Sta. 553+10 ~ Regd. 24"x 66' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet & Outlet.

Sta. 553+30 ~ Regd. 24"x 20' C.M.P. Culvert (Under irrig. ditch) & 25 Cu. Yds. Excav. for drain ditch, Rt. (2'x 1'x 300')

County Road

Sta. 553+53 ~ Regd. 18"x 36' C.M.P. side drain & 55 Cu. Yds. Embank. for Road Approach, Rt.

Sta. 553+75 ~ Regd. 24"x 20' C.M.P. Culv. (Under irrig. ditch) & 25 Cu. Yds. Excav. for 2'x 1'x 300' drain ditch, Rt. Remove 15"x 20' C.M.P. Culvert, Rt.

Sta. 554+10 ~ Regd. 24"x 66' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet & Outlet.

Sta. 560+90 ~ Regd. 18"x 28' C.M.P. side drain & 65 Cu. Yds. Embank. for Road Approach, Rt. Regd. 18"x 26' C.M.P. Culvert in Irrigation Ditch, Rt. Remove 18"x 26' C.M.P. in Irrigation Ditch, Rt.

Shed
Cellar

Sta. 554+00 to 579+45 ~ Regd. 300 Cu. Yds. Excav. for Irrigation Ditch, Rt.

Sta. 567+00 ~ Regd. 24"x 62' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet & Outlet.

Sta. 579+45 ~ Regd. 24"x 58' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet & Outlet. Remove 15"x 26' C.M.P. Culvert.

Sta. 579+81 ~ Regd. 4'x 3'x 39' Conc. Box Culvert & 35 Cu. Yds. Excav. for Inlet & Outlet. Remove 4'x 2'x 24' Conc. Box Culvert.

Sta. 580+10 ~ Regd. 24"x 50' C.M.P. Cross Culvert.

P.O.T. 580+00

G.W. McCONNELL
N.W.4 Sec.8
T.40 N., R.8E.

CHAS. MONTER
S.W.4 Sec. 6
T. 40 N., R.8 E.

CLEARING AND GRUBBING:
Sta. 565+70 to 566+70 ~
Remove front line of trees.

200' V.C.
7680
7670
7660
-0.10 %
-0.15 %
74.44
74.36
74.32
F.L. 68.8
F.L. 68.5
56835
56835
P.I. 7674.34

-0.02 %
+0.03 %
F.L. 68.9

P.I. 7673.94
-0.10 %
73.96
73.92
73.84
200' V.C.
F.L. 69.7
-0.20 %
F.L. 67.9
69.10
F.L. 69.6
68.80

	550	555	560	565	570	575	580
Excavation		244	604	2948		2582	
Embankment		2254		4680		4345	
Embankment +15		2591		5382		4997	
Borrow		1743		2434		2415	
Sta. Yd. O'haul.		19,173		26,274		12,936	
Yd. Mile O'haul.		1161		1228		4	
Borrow Source		From Pit #18 approx. 2690' Rt. of Sta. 579+00		From Pit #18-A approx. 2690' Lt. of Sta. 579+00		From Pit #19 approx. 140' Rt. of Sta. 585+00	

PLAN — SURVEYED, PLOTTED, NOTE BOOK, ALIGNMENT CHECKED, GRADES CHECKED, R.W. NOTES, STRUCTURE NOTES CHKD., NO. 4762

PROFILE — SURVEYED, PLOTTED, NOTE BOOK, GRADES CHECKED, R.W. NOTES, STRUCTURE NOTES CHKD., NO. 4763

PLATE 1 — PLAN-PROFILE O. P. R. & P. E. STANDARD

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	22	

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

S.E. 1/4 SEC. 36

N

P.O.T. 580+00

Barn

Barn

House

Sta. 596+15 ~ Regd. 25 Cu. Yds. Embank. for Road Approach, Lt.

P.C. 598+93.9

Δ=1°21' Lt.
D=1°
T=67.5'
L=1350'
R=5730'

P.T. 600+28.9

Hog Lot

Sta. 0+10 ~ Regd. 30 Cu. Yds. Embank. for Road Approach Lt. Remove 1'x1'x12' Wood Box.

P.C. 605+00 Back = 0+00 Ahead

Δ=10°24'
D=4°
T=130.4'
L=260'
R=1432.5'

P.T. 2+60.0

COUNTY

COUNTY

U.S.G.S. Bench Mark

F R.O.W.

R.O.W.

N.0°59'W.

N.0°22'E.

N.0°11'W.

EQUATION IN BEARING
N.0°11'W. BACK
N.0°22'E. AHEAD

60'

60'

50'

50'

585

590

595

600

Sta. 580+10 to 606+00 ~ Regd. 240 Cu. Yds. Excav. for Irrigation Ditch, Rt.

Sta. 594+20 ~ Regd. 24" X 60' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet.

P.I. 599+61.4 (PROJECTED LINE)

PROJECTED LINE TO BE CONSTRUCTED

Sta. 604+90 ~ Regd. 24" X 50' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet.

Sta. 604+94.2 Back = Sta. 0+00.0 Ahead (PROJECTED LINE)

P.I. 1+30.9

EQUATIONS

RIO GRANDE
SAGUACHE

Sta. 1+20 ~ Regd. 35 Cu. Yds. Excav. for drainage Ditch, Rt.

1/4 SEC. LINE

N.W. 1/4 SEC. 6, T. 40N. R. 8E.

S.W. 1/4 SEC. 31

CLEARING AND GRUBBING:
Sta. 594+20 to 595+75 ~ Six trees on roadside to be trimmed, 35ft. Left.

7680
7670
7660

-0.10 %
-0.20 %
-0.161 %
-0.10 %

F.L. 68.6
F.L. 69.7
F.L. 67.9
F.L. 66.1
F.L. 650
F.L. 65.6

6.88
72.94
72.81
72.64
7.04
70.85
70.68
6.92
6.90
68.95
64.00

200' V.C.
200' V.C.
100'

P.I. 76+72.84
P.I. 76+70.84
P.I. 76+69.00

Sta. 604+94.2 Back = Sta. 0+00.0 Ahead

Excavation	2577	1098	3785	
Embankment	3977	964	3293	
Embankment+15	4574	1098	3785	
Borrow	1997			
Sta. Yd. O'haul	21,967		1021	
Yd. Mile O'haul	637			
Borrow Source	From Pit 19-A approx 2740' Lt. of Sta. 580+00			

580 585 590 595 600 604 0 5

PLAN — SURVEYED, PLOTTED, NOTE BOOK, NO. 4762

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, NOTE BOOK, NO. 4763, STRUCTURE NOS. & MS NOTED, STRUCTURE NOS. & MS CHKD.

BY DATE

PLATE 1—PLAN-PROFILE C. P. R. R. STANDARD
REGISTER & ENGR CO., NEW YORK

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	23	

Rev. Earthwork 10/6/36 A.Z.

N.E. 1/4 SEC. 1

SE 1/4 SEC. 36 T 01 N - R 7 E M. M. Sutley

Projected Line
Δ = 1° 21' L
D = 1°
T = 67.5'
L = 135.0'
R = 5730.0'

P.C. 598+93.9

P.T. 600+28.9

P.I. 599+61.4

Sta. 1+40 - Regd. 60 Cu. Yds. Embank. for Road Approaches Rt. & Lt.

COUNTY
COUNTY

Sta. 603+00 BACK EQUALS 0+00 AHEAD

P.C. Chaser

Δ = 10° 24' L
D = 4°
T = 130.4'
L = 260.0'
R = 1432.5'

P.T. 2+60

P.I. 5+062

N 0° 59' W

N 0° 22' E

N 10° 02' W

PROJECTED LINE
To Be Constructed

P.I. 15+00 (PROJECTED LINE)

N 01° 31' E

Sta. 21+00 - Remove 24" x 24' C.M.P. Side Drain Lt.

Sta. 21+32 - Regd. 15 Cu. Yds. Embank. for Road Approach Lt.

Sta. 21+90 - Remove 24" x 24' C.M.P. Side Drain Lt.

Mail Box

Sta. 1+80 to 21+50 - Regd. 395 Cu. Yds. Excav. for Irrigation Ditch Rt.

Sta. 604+94.2 Back = Sta. 0+00 Ahead (PROJECTED LINE)

P.I. 1+30.4

RIO GRANDE
SAGUACHE

Sta. 1+70 - Regd. 18" x 100' C.M.P. Cr. Culv. (Skew 60°) & 5 Cu. Yds. Excav. for Inlet. Remove 18" x 70' C.M.P. Culvert.

Mail Boxes

P.C. 3+613

Δ = 11° 33' R
D = 4°
T = 144.9'
L = 288.8'
R = 1432.5'

P.T. 6+501

Sta. 12+65 - Regd. 20 Cu. Yds. Embank. for Road Approach Rt. & 15" x 16' C.M.P. Side Drain in Irrigation ditch.

P.C. 13+75

Projected Line
Δ = 2° 30' R
D = 1°
T = 125.0'
L = 250.0'
R = 5730.0'

P.T. 16+25

Sta. 16+00 - Regd. 18" x 60' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for Inlet and Outlet. (Apron on Left.)

Sta. 17+20 - Regd. 5 Cu. Yds. Embank. for Walk approach Rt.

Sta. 20+50 - Regd. 18" x 64' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet and Outlet.

Sta. 26+65 - Regd. 4' x 3' x 36' C.B.C. & 200 Cu. Yds Excav. for Channel Improvement. Remove 4' x 3' x 26' C.B.C. Excavated material to be used in roadway embankment.

Sta. 26+90 - Regd. 25 Cu. Yds Embank for Road Approach Rt.

N.W. 1/4 SEC. 6

Ethel Gawthrup
SW 1/4 SEC. 31, T 01 N R 8 E

CLEARING AND GRUBBING:
Sta 1+40 to Sta. 18+00 - Rabbit Brush on Lt.

EQUATION

Sta. 604+94.2 Back
Sta. 0+00 Ahead

68.08 68.01 68.25 (100')

-0.16 1/2 %

-0.16 7/8 %

F.L. 65.0

F.L. 65.6

64.00

P.I. 766+02.8

-0.10%

100' V.C.

67.55 67.51 67.50

F.L. 63.3

P.I. 7667.50

0.00%

F.L. 62.0

7667.50

F.L. 62.2

Excavation	8936
Embank	10,276
Embank +15 %	10,275
Borrow	92,257
Sta. Yd. O'haul	1056
Yd. Mile O'haul	
Borrow Source	

From P.I. 350 Lt. of Sta. 30+50 (Pit # 20)

600 BACK 604 0 AHEAD 5 10 15 20 25

PLAN — SURVEYED — PLOTTED — NOTE BOOK — No. 5429 5433

PROFILE — SURVEYED — PLOTTED — NOTE BOOK — No. 5430

FED. ROAD DIST. NO.	STATE	A.W PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	24	

Rev. Earthwork 10/6/36 ~A.Z.

PLAN — SURVEYED / PLOTTED / NOTE BOOK ALIGNMENT CHECKED / No. 5429 / BY OF NOTE CHECKED / 5435

PROFILE — SURVEYED / PLOTTED / NOTE BOOK GRADES CHECKED / No. 5430 / G. M. & M. NOTES / ENGINEER IN CHARGE CHECKED

N.E. 1/4 SEC. 36, T. 41 N., R. 7 E. STATE OF COLORADO

S.E. 1/4 SEC. 25

Sta. 27+38 to 27+95.2 ~ Regd. Treated Timber Bridge, 3 Spans @ 18'-6" (Skew 60°) as per details shown on sheet No. 7. Remove 3 Span Concrete Bridge & Ref. Walls.

Sta. 28+15 ~ Remove and Rebuild Cattle Guard Rt.

Force Account Sta. 28+25 ~ Remove & Rebuild 12'x 15'x 6' Timber Diversion Box Lt.

Sta. 28+25 ~ Regd. 15 Cu. Yds. Embank. for Road Approach Rt. P.I. 28+00, Δ = 0° 04' L.

Sta. 28+35 ~ Regd. 15 Cu. Yds. Embank. for Road Approach Lt.

Sta. 26+60 ~ Regd. 6'x 4'x 42' C.B.C. & 50 Cu. Yds. Excav. for Inlet & Outlet. (Skew 60°) Remove 4'x 4'x 19' C.B.C.

Sta. 28+90 ~ Regd. 35 Cu. Yds. Embank for Road Approach Lt. & 15'x 16' C.M.P. Side Drain in Irrigation ditch.

Sta. 28+70 ~ Regd. 24"x 62' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet and Outlet. (Skew) Remove 24"x 24' C.M.P. Culvert.

PIT # 20 BORROW PIT STATE Tom Cotrell Lessee

Sta. 28+25 to 54+00 ~ Regd. 515 Cu. Yds. Excav. for Irrigation Ditch on Lt.

Sta. 39+10 ~ Regd. 20 Cu. Yds. Embank. for Road Approach Lt. & 15"x 16' C.M.P. Side Drain in Irrigation ditch.

Sta. 40+00 ~ Regd. 18"x 48' C.M.P. Cross Culvert.

Sta. 42+00 to 53+90 ~ Regd. 240 Cu. Yds. Excav. for Irrigation Ditch on Rt.

Sta. 48+20 ~ Regd. 24"x 24' C.M.P. Side Drain Lt. (In irrigation ditch) & 20 Cu. Yds. Embank. for Road Approach Lt. Remove 24"x 20' C.M.P. Culvert.

Sta. 48+00 ~ Regd. 18"x 54' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for Inlet & Outlet.

Barn

Sta. 50+30 ~ Regd. 15 Cu. Yds. Embank. for Road Approach Lt. & 15"x 16' C.M.P. Side Drain in Irrigation ditch

House

Sta. 54+25 ~ Regd. 24"x 74' C.M.P. Cross Culvert & 25 Cu. Yds. Excav. for Inlet & Outlet (45° Skew) Remove 24"x 70' C.M.P. P.I. 54+00, Δ = 0° 02' L.

SEC. LINE

Sta. 54+30 ~ Regd. 40 Cu. Yds. Embank. for Road Approaches Rt. & Lt. Sta. 54+30 Remove 1'x 1'x 30' Wood Box on Rt.

SW. 1/4 SEC. 30

N01°21'E — N01°27'E — N01°23'E

CLEARING AND GRUBBING:
Sta. 23+00 to Sta. 31+00 ~ Strub Willows on Lt.
Sta. 27+50 to Sta. 56+00 ~ Willows on Rt.
Sta. 27+50 to Sta. 56+00 ~ Rabbit Brush on Lt.
Sta. 39+50 to Sta. 40+50 ~ Willows on Lt.

7680 / 7670 / 7660 / 7650

200' V.C. — 300' V.C.

0.00% — -0.37% — -0.10% — -0.12%

P.I. 7667.50 — P.I. 7665.65 — P.I. 7663.75

66.02 — 65.72 — 65.55

F.L. 62.2 — F.L. 62.9 — F.L. 61.5 — F.L. 60.0 — F.L. 59.1

67.50 — 67.36 — 66.95

GRAVEL — FINE SAND & GRAVEL — ROCK & BOULDER

STRUCTURE NOTES FOR BRIDGE, STA. 27+38 TO 27+95.2 STRUCT. M-12-E.

PRESENT STRUCTURE:
- SPAN ~ 3 @ 14'0"
- CLEAR ROADWAY
- CLEAR WATERWAY
- TYPE OF SUPERSTRUCTURE ~ CONCRETE
- TYPE OF SUBSTRUCTURE ~ CONCRETE
- REQUIREMENTS AS TO REMOVAL ~ COMPLETE

STREAM DATA:
- DRAINAGE AREA IN SQ. MILES ~ IRRIGATION
- VELOCITY DURING HIGH WATER

ELEVATION OF:
- MAXIMUM HIGH WATER
- NORMAL STAGE
- DRIFT ~ LIGHT
- SCOUR ~ NONE
- LOW WATER ~ DRY
- STREAM BED ~ 7661.3

PROPOSED STRUCTURE:
- POSITION REFERRED TO PRESENT STRUCTURE ~ SAME
- SPAN ~ 3 @ 18'6"
- CLEAR ROADWAY ~ 30'-0"
- CLEAR WATERWAY ~ 125 Sq. Ft.
- TYPE OF SUPERSTRUCTURE ~ TREATED TIMBER
- TYPE OF SUBSTRUCTURE ~ TR. PILES WITH SUB-ABUT.
- DETOUR STRUCTURE REQUIREMENTS
- R.R. SIDING ~ MONTE VISTA HAUL TO BRIDGE SITE ~ 11 MILES

NEARBY STRUCTURE ON SAME STREAM:
- LOCATION
- WATERWAY
- RECORD DURING FLOODS

| | | |

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	25	

Rev. Earthwork 10/6/36 AL

SE 1/4 SEC. 25
T 41N - R 7E
STATE OF COLORADO

N.E. 1/4 SEC. 25

BORROW PIT #22
STATE
J.E. Siebert, Lessee

Sta. 57+55 - Reqd. 20 Cu. Yds. Embank. for Road Approach Rt.

Sta. 67+20 - Reqd. 20 Cu. Yds Embank. for Road Approach Lt.

Sta. 68+10 - Reqd. 15 Cu. Yds Embank. for Road Approach Lt.

N

N01°25'E

Sta. 54+40 to 80+50 - Reqd. 525 Cu. Yds. Excav. for Irrigation Ditch Rt.

Sta. 80+60 Reqd. 18"x24" C.M.P. Side Drain & 20 Cu. Yds. Embank. for Road Approach Lt.

Sta. 80+28 to 81+00 - Remove 24"x72" C.M.P. Side Drain. Lt.

POT 84-00

Sta. 58+00 - Reqd. 15 Cu. Yds. Embank. for Road Approach Rt. & 15"x16" C.M.P. Side Drain in Irrigation ditch.

Sta. 66+90 - Reqd. 18"x20' C.M.P. Side Drain (In Irrigation ditch) & 30 Cu. Yds. Embank. for Road Approach Rt. Remove 18"x24' C.M.P. Side Drain.

Sta. 67+15 - Reqd. 18"x66' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for Inlet and Outlet. (Skew 45°) Remove 1'x1'x53' Wood Box

SW 1/4 SEC. 30, T 41N R 8E
ALICE B. CHENEY

Sta. 70+30 - Reqd. 18"x64' C.M.P. Cross Culvert & 20 Cu. Yds Excav. for Inlet and Outlet. Remove 18"x26' C.M.P.

Sta. 74+45 - Reqd. 40 Cu. Yds. Embank for Road Approach Rt. & 15"x16' C.M.P. Side Drain in Irrigation ditch.

Sta. 80+35 - Reqd. 10 Cu. Yds. Embank for Road Approach Rt. & 15"x16' C.M.P. Side Drain in Irrigation ditch
Sta. 80+45 - Reqd. 3'x3'x38' Conc. Box Culvert Remove 30"x38' C.M.P. Culvert.

Sta. 80+75 - Reqd. 24"x52' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet and Outlet. Remove 24"x24' C.M.P.

FORCE ACCOUNT
Sta. 80+70 - Remove & Rebuild 5'x7' Diversion Box Rt.

N.W. 1/4 SEC. 30

CLEARING AND GRUBBING
Sta. 56+00 to Sta. 86+00 - Willows on Rt.
Sta. 56+00 to Sta. 86+00 - Rabbit Brush Lt.

PLAN
NOTE BOOK No. 5429
BLUELINED
PLOTTED
ALIGNMENT CHECKED
ST. OF WAY CHECKED
5433

PROFILE
NOTE BOOK No. 5430
SURVEYED
PLOTTED
GRADES CHECKED
R.W.'s NOTED
STRUCTURE QUESTIONS CHECKED

7680
7670
7660
7650

7663.63

+0.12%

7659.79

F.L. 58.5
F.L. 56.0
F.L. 55.0
F.L. 56.0

Excavation		
Embank.	6506	
Embank. +15 %	7482	
Borrow	7482	
Sta. Yd. O'haul	74,284	
Yd. Mile O'haul	545	
Borrow Source	From Pit #21 approx. 1000' Rt. of Sta. 54+30.	From Pit 370' Lt. of Sta. 57+00 (Pit #22)

+42+

55 60 65 70 75 80 85

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	26	

Rev. Earthwork 10/16/96 A.Z.

N.E. 1/4 SEC. 25, T. 41N., R. 7E. L.T. SHARP

N

SE. 1/4 SEC. 24

POT 91+00

Sta. 97+50 - Reqd. 20 Cu. Yds. Embank. for Road Approach Lt. Remove 30' x 15' C.M.P. Side Drain.

Sta. 107+00 - Reqd. 25 Cu. Yds. Embank. for Road Approach Lt. Remove 24' x 40' C.M.P. Side Drain.

Sta. 114+00 - Reqd. 10 Cu. Yds. Embank. for Road Approach Lt. Remove 24' x 24' C.M.P. Side Drain

House

50' 50' 50' 50'

90 95 100 105 110 115

N01°25'E N01°09'E

25 24 30 19

Sta. 88+00 - Reqd. 18" x 54' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Outlet. (Apron on Lt.)

Sta. 80+75 to 125+00 - Reqd. 885 Cu. Yds. Excav. for Irrigation Ditch Rt.

Sta. 80+75 to 106+70 - Reqd. 520 Cu. Yds. Excav. for Irrigation Ditch Rt.

Sta. 101+00 - Reqd. 18" x 50' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Outlet.

N.W. 1/4, SEC. 30, T. 41N., R. 8E. J.C. MAYFIELD

Sta. 106+75 - Reqd. 18" x 56' C.M.P. Cross Culvert & 20 Cu. Yds. Excav. for Inlet & Outlet.

SEC. LINE

P.I. 107+00
Δ - 0°16'

Sta. 107+00 - Reqd. 15" x 34' C.M.P. Side Drain & 20 Cu. Yds. Embank. for Road Approach Rt. Remove 15" x 44' C.M.P. Side Drain.

Sta. 107+50 - Reqd. 24" x 56' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for outlet (Apron on Lt.)

Sta. 110+00 - Reqd. 18" x 64' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for Outlet. (Apron on Lt.)

FORCE ACCOUNT
Sta. 115+09 - Remove & Rebuild 3' Timber Headgate Rt.

SW. 1/4 SEC. 19

CLEARING AND GRUBBING:
Sta. 86+00 to Sta. 116+00 ~ Rabbit Brush, Lt.
Sta. 86+00 to Sta. 111+00 ~ Willows on Rt.

7680
7670
7660
7650

7660.03

-0.12%

7636.19

FL. 56.3 FL. 54.1 FL. 52.5 FL. 53.5 FL. 52.5

Excavation			
Embank.		15,525	
Embank + 15 %		17,856	
Borrow		17,802	
Sta Yd. O'haul		195,822	
Yd Mile O'haul		7336	
Borrow Source	From Pit # 22 ~ 370' Lt. of Sta. 57+00		From Pit 150' Lt. of Sta. 104+50 (Pit #23)

+12

85 90 95 100 105 110 115

PLAN
SPECIFIED
CHECKED
PROJ. NO. 5429 5433

PROFILE
SPECIFIED
CHECKED
PROJ. NO. 5430

PLATE 1 - PLAN PROFILE - S.H. 8 & 8E (Hilltop)

FED. ROAD DIST. NO.	STATE	A.W PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	27	

Revised Earthwork, 10/6/36, R.R.A.

S.E. 1/4 SEC. 24, T. 41 N., R. 7 E.
HERB LINSTROM

N.E. 1/4 SEC 24
HERBERT HAZARD

N

HOUSE

P.O.T. 125+00

Sta. 129+00 – Reqd. 15 Cu. Yds. Embank. for Road Approach Lt. Remove 24" x 14' C.M.P. Side Drain.

Sta. 133+50 – Reqd. 25 Cu. Yds. Embank. for Road Approach Lt. Remove 24" x 56' C.M.P. Side Drain Lt.

HOUSE

P.O.T. 135+00

Sta. 135+25 – Reqd. 10 Cu. Yds. Embank. for Road Approach Lt. Remove 24" x 24' C.M.P. Side Drain.

50' 50' 120 125 130 135 140 145 50' 50'

N 01° 09' E

Sta. 117+70 – Reqd. 20 Cu. Yds. Embank. for Road Approach Rt. & 15" x 16' C.M.P. Side Drain in irrigation ditch.

Sta. 119+30 – Reqd. 15 Cu. Yds. Embank for Road Approach Rt. & 15" x 16' C.M.P. Side Drain in irrigation ditch

HOUSE

Sta. 127+00 – Reqd. 18" x 44' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Outlet.

Sta. 130+30 – Reqd. 18" x 62' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for Outlet.

Sta. 133+65 – Reqd. 3' x 3' x 36' C.B. C. & 10 Cu. Yds. Excav. for Inlet and Outlet. Remove 30" x 24' C.M.P.

Sta. 133+80 – Reqd. 24" x 50' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for Inlet and Outlet. Remove 12" x 28' C.M.P.

Sta. 133+90 – Reqd. 24" x 46' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for Inlet and Outlet. Remove 18" x 27' C.M.P.

PIT #24
STATE
RAYMOND FELMLEE
LESSEE

Sta. 139+65 – Reqd. 18" x 50' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Outlet.

Sta. 133+80 to 152+80 – Reqd. 380 Cu. Yds. Excav. for Irrigation Ditch Rt.

S.W. 1/4 SEC. 19, T. 41 N., R. 8 E.
EDDIE HAZARD

N.W. 1/4 SEC. 19
STATE OF COLORADO

CLEARING AND GRUBBING:
Sta. 116+00 to Sta. 146+00 – Rabbit Brush Lt.
Sta. 129+00 to Sta. 146+00 – Willows on Rt.

7656.43

7660
7650
7640

-0.12%

F.L. 51.5
F.L. 49.2
F.L. 50.5
F.L. 50.3
F.L. 48.8
F.L. 49.7

7662.59

Excavation	27	58	2	1971	6995
Embank	4423			2267	8045
Embank. + 15 %	5085			2265	8045
Borrow	5000			3791	58,922
Sta Yd O'haul	55,000				245
Yd Mile O'haul	1164				
Borrow Source	From Pit # 23 – 1200' Lt. of Sta. 106+00.			From Pit # 24 – 320' Rt. of Sta. 136+00	From Pit 320' Rt. of Sta. 136+00 (Pit # 24)

115 120 125 130 135 140 145

PLAN
NO. 5439
SHEET 5433

PROFILE
NO. 5430
SHEET 5432

FED. ROAD DIST. NO.	STATE	AW PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	28	

Revised Earthwork, 10/6/36. R.R.A.

N.E. 1/4 SEC. 24
HERBERT HAZARD

S.E. 1/4 SEC. 13,
T. 41 N., R. 7 E.
STATE OF COLORADO

N

Sta. 147+20 - Reqd. 15 Cu. Yds. Embank. for Road Approach Lt. Remove 24" x 18' C.M.P. Side Drain.

Sta. 159+85 - Reqd. 15 Cu. Yds. Embank. for Road Approach Lt. Remove 24" x 48' C.M.P. Side Drain

Sta. 165+70 - Reqd. 15 Cu. Yds. Embank. for Road Approach Lt. Remove 24" x 24' C.M.P. Side Drain

Sta. 170+80 - Reqd. 20 Cu. Yds. Embank. for Road Approach Lt.

Sta. 171+30 - Reqd. 10 Cu. Yds. Embank. for Road Approach Lt. Remove 24" x 24' C.M.P. Side Drain.

House

Sta. 173+80 - Reqd. 15 Cu. Yds. Embank. for Road Approach Lt. Remove 24" x 24' C.M.P. Side Drain

Potato Cellar

24 13 19 18

50 150 155 160 165 170 175 50

N01°09'E N01°06'E

Sta. 159+85 - Reqd. 18" x 28' C.M.P. Side Drain @ 15 Cu. Yds. Embank. for Road Approach Rt. Remove 12" x 28' C.M.P. Side Drain.

Sta. 159+60 - Reqd. 18" x 46' C.M.P. Cross Culvert @ 5 Cu. Yds. Excav. for Outlet.

SEC. LINE

P.I. 160+00
Δ = 0°03'L.

Sta. 161+00 - Reqd. 18" x 48' C.M.P. Cross Culvert @ 5 Cu. Yds. Excav. for Outlet.

Sta. 133+90 to 179+00 - Reqd. 905 Cu. Yds. Excav. for Irrigation Ditch Rt.

Sta. 171+50 - Reqd. 10 Cu. Yds. Embank. for Road Approach Rt. @ 15" x 16' C.M.P. Side Drain in irrigation ditch.

Sta. 176+00 - Reqd. 18" x 46' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for inlet and outlet.

STATE OF COLORADO
N.W. 1/4 SEC. 19

L.R. SIMS
S.W. 1/4 SEC. 18, T. 41 N., R. 8 E.

CLEARING AND GRUBBING:
Sta. 146+00 to Sta. 176+00 ~ Rabbit Brush, Lt.
Sta. 146+00 to Sta. 164+00 ~ Willows on Rt.

7660 7650 7640 7630

7652.83

-0.12%

F.L. 48.0 F.L. 47.5

100' V.C.

49.53 49.49 49.47

P.I. 7649.47

0.00%

F.L. 46.0

Excavation						
Embank.	1055			6703		
Embank. +15 %	1213			7709		
Borrow	1213			7588		
Sta. Yd. O'haul	9704			80,438		
Yd. Mile O'haul				1211		
Borrow Source	Pit 1200' Rt. Sta. 158+00 (Pit #25)			From Pit 1200' Rt. of Sta. 158+00 (Pit #25)		
	145	150	155	160	165	170	175

PLAN — DRAWN, PLOTTED, ALIGNMENT CHECKED, PROFILE CHECKED — DATE, BY — No. 5429, No. 5433

PROFILE — DRAWN, PLOTTED, SCALES CHECKED, 1 MIN. NOTE, ELEVATIONS CHECKED — DATE, BY — No. 5430

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
	COLO.	3002	29	

Rev. Earthwork 10-6-36 F.C.M.

S.E. 1/4 SEC. 13
STATE OF COLORADO

N.E. 1/4 SEC. 13.
T.41N., R.7E.
W.C. PALMER

Sta 182+70 - Reqd. 24"x30' C.M.P. Side Drain & 20 Cu. Yds. Embank. for Road Approach Lt.
Remove 24"x26' C.M.P. Side Drain

POT. 184+00

Sta. 186+20 - Reqd. 25 Cu. Yds. Embank for Road Approach Lt.

Sta. 187+90 - Reqd. 18"x24' C.M.P. Side Drain & 25 Cu. Yds. Embank. for Road Approach Lt.

HOUSE

Corral

Sta. 203+30 - Remove 3'x6'x8' Timber Headgate Lt.

N

50' 50'

180 185 190 193 200 205

N 01°06' E

Sta. 182+90 - Reqd. 10 Cu. Yds. Embank. for Road Approach Rt.

Sta. 183+12 to 183+325 - Reqd. Treated Timber Bridge, 1 Span @ 19'-0" as per details shown on sheet No. 8.
Remove 21' Timber Bridge.

Sta. 183+40 - Reqd. 24"x54' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for outlet
Remove 18"x30' C.M.P.

FORCE ACCOUNT
Sta. 183+30 - Remove & Rebuild 2'x2' Timber Checkgate Rt.
Sta. 183+40 - Remove & Rebuild 1'x1.5'x16' Wood Flume Rt.

Sta. 186+55 - Reqd. 35 Cu. Yds. Embank for Road Approach Rt. & 15"x16' C.M.P. Side Drain in irrigation ditch.

BORROW PIT #26
STATE
Lightfoot & Meredith
Lessees.

Sta. 194+40 to 198+00 - Reqd. 75 Cu. Yds. Excav. for Irrigation Ditch Rt.

Sta. 197+00 - Reqd. 18"x46' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for outlet.

Sta. 200+00 to 202+40 - Reqd. 50 Cu. Yds. Excav. for Irrigation Ditch Rt.

Sta. 206+00 - Reqd. 18"x60' C.M.P. Cross Culvert & 5 Cu. Yds Excav. for Outlet (Apron on Lt.)

S.W. 1/4 SEC. 18
L.R. SIMS

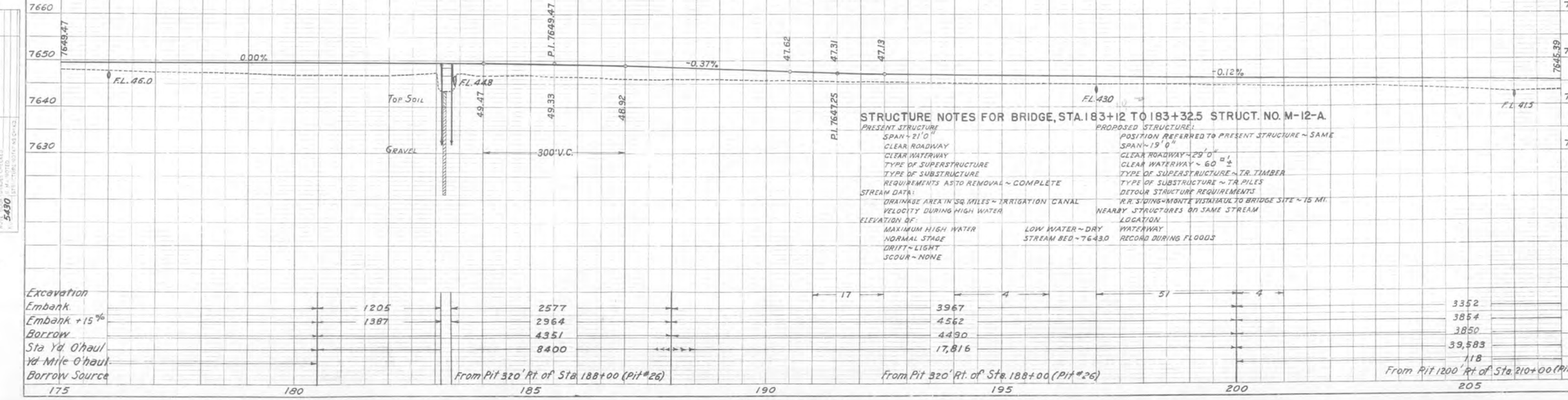
N.W. 1/4 SEC. 18, T.41N., R.8E.
STATE OF COLORADO

CLEARING & GRUBBING:
Sta. 176+00 to 206+00 ~ Rabbit Brush, Lt.
Sta. 177+00 to 221+00 ~ Willows, Rt.

PLAN
APPROVED
PLOTTED
NOTE BOOK ALIGNMENT CHECKED
NO. 5429 PT. OF W.AY CHECKED

5433

PROFILE
APPROVED
PLOTTED
NOTE BOOK GRADE CHECKED
NO. 5430 STRUCTURES NOTED ON HO.



STRUCTURE NOTES FOR BRIDGE, STA. 183+12 TO 183+32.5 STRUCT. NO. M-12-A.

PRESENT STRUCTURE
- SPAN ~ 21'0"
- CLEAR ROADWAY
- CLEAR WATERWAY
- TYPE OF SUPERSTRUCTURE
- TYPE OF SUBSTRUCTURE
- REQUIREMENTS AS TO REMOVAL ~ COMPLETE

STREAM DATA:
- DRAINAGE AREA IN SQ. MILES ~ IRRIGATION CANAL
- VELOCITY DURING HIGH WATER

ELEVATION OF:
- MAXIMUM HIGH WATER
- NORMAL STAGE
- DRIFT ~ LIGHT
- SCOUR ~ NONE

LOW WATER ~ DRY
STREAM BED ~ 7643.0

PROPOSED STRUCTURE:
- POSITION REFERRED TO PRESENT STRUCTURE ~ SAME
- SPAN ~ 19'0"
- CLEAR ROADWAY ~ 29'0"
- CLEAR WATERWAY ~ 60 ± 2
- TYPE OF SUPERSTRUCTURE ~ T.R. TIMBER
- TYPE OF SUBSTRUCTURE ~ T.R. PILES
- DETOUR STRUCTURE REQUIREMENTS
- R.R. SIDING ~ MONTE VISTA HAUL TO BRIDGE SITE ~ 15 MI.

NEARBY STRUCTURES ON SAME STREAM
- LOCATION
- WATERWAY
- RECORD DURING FLOODS

	175	180	185	190	195	200	205
Excavation							
Embank.		1205	2577		3967		3352
Embank. +15%		1387	2964		4562		3854
Borrow			4351		4490		3850
Sta Yd. O'haul			8400		17,816		39,583
Yd Mile O'haul							118
Borrow Source			From Pit 320' Rt. of Sta 188+00 (Pit #26)		From Pit 320' Rt. of Sta. 188+00 (Pit #26)		From Pit 1200' Rt. of Sta. 210+00 (Pit #27)

17 4 51 4

FED. ROAD DIST. NO.	STATE	A.W PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	30	

Rev. Earthwork, 10-6-36 F.C.M.

N.E. 1/4 SEC. 13
W.C. PALMER

S.E. 1/4 SEC. 12,
T. 41 N., R. 7 E.
L.M. GARDNER

N

Sta. 212+80 - Reqd. 25 Cu. Yds. Embank. for Road Approach Lt. Remove 30" x 40' C.M.P. Side Drain.

Sta. 213+15 - Remove Log Cribbing Lt.

P.I. 213+00
Δ 0°07' R

Sta. 230+00 - Reqd. 18" x 24' C.M.P. Side Drain & 25 Cu. Yds. Embank. for Road Approach Lt. Remove 30" x 24' C.M.P. Side Drain.

HOUSE

Potato Cellar

P.O.T. 232+00

Sta. 231+68 - Remove 3' x 3' x 6' Timber Headgate Lt.

N01°06'E — N01°13'E

5' Drainage Ditch

Sta. 183+50 to 239+00 - Reqd. 1110 Cu. Yds. Excav. for Irrigation Ditch Rt.

5' Drainage Ditch

Sta. 212+70 - Reqd. 36" x 100' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for Outlet & Inlet (Skew 45° Rt.)

SEC. LINE

Sta. 212+80 - Reqd. 18" x 24' C.M.P. Side Drain (in Irrigation Ditch) & 25 Cu. Yds. Embank. for Road Approach Rt. Remove 18" x 24' C.M.P. Side Drain.

Sta. 227+00 - Reqd. 18" x 54' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Outlet. (Apron on Lt.)

Sta. 229+80 - Reqd. 30" x 30' C.M.P. Side Drain & 20 Cu. Yds. Embank for Road Approach Rt. & 15' x 16' C.M.P. Side Drain in irrigation ditch.

Sta. 236+30 - Reqd. 18" x 56' C.M.P. Cross Culvert (Apron on Lt.) & 5 Cu. Yds Exv. for Outlet. Remove 1' x 1' Wood Box & Manhole (40' Lt.)

N.W. 1/4 SEC. 18

S.W. 1/4 SEC. 7, T. 41 N., R. 8 E.
C.W. BELL

CLEARING AND GRUBBING:
Sta. 206+00 to Sta. 236+00 - Rabbit Brush Lt.

PLAN
DRAWN
PLOTTED
NOTE BOOK
No. 5429 SHT. OF MAP CHECKED
5433

PROFILE
DRAWN
PLOTTED
NOTE BOOK
No. 5430 SHT. OF MAP CHECKED
5430

7650
7640
7630

7645.63
F.L. 41.5
F.L. 39.5
-0.12%
F.L. 39.9
7644.79
F.L. 38.5

Excavation		12		950			
Embank			5151				
Embank +15%			5924				
Borrow			4962				
Sta Yd O'haul			50,566				
Yd Mile O'haul			201				
Borrow Source	From Pit 1200' Rt. of Sta. 210+00 (Pit #27)						

205 210 215 220 225 230 235

PLAT 1 - PLAN-PROFILE

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	31	

Rev. Earthwork 10-6-36 F.C.M.ª

S.E. 1/4 SEC. 12

N.E. 1/4 SEC. 12
T 41 N., R. 7 E.
A.E. CRAMER

N

Sta. 243+30 - Reqd. 20 Cu. Yds. Embank. for Road Approach Lt. Remove 30"x 25' C.M.P. Side Drain.

Sta. 243+60 - Remove Log Cribbing Lt. P.O.T. 244+00

Sta. 258+35 - Reqd. 25 Cu. Yds. Embank. for Road Approach Lt.

Sta. 260+60 - Remove Timber Headgate Lt. (12.5' x 6' x 3')

12 1

50 240 245 250 255 260 265 50

N01°13'E N01°11'E

Mail Box Mail Box

5' Drainage Ditch

Sta. 239+20 to 252+75 - Reqd. 275 Cu. Yds. Excav. for Irrigation Ditch Rt.

Trees to remain in place

House Cattle Guard Potato Cellar

Sta. 255+90 to 265+10 - Reqd. 185 Cu. Yds. Excav. for Irrigation Ditch Rt.

7 6

P.I. 265+50 Δ 1°02'

SEC. LINE

FORCE ACCOUNT
Sta. 239+20
Reqd. Flume to carry irrigation ditch across drain ditch.

Sta. 239+20 - Reqd. 24"x 58' C.M.P. Cross Culvert & 10 Cu. Yds. Excav. for Inlet and Outlet. Remove 24"x 60' C.M.P. Culvert.

Sta. 243+30 - Reqd. 30"x 30' C.M.P. Side Drain & 30 Cu. Yds. Embank. for Road Approach Rt.

Reqd. 15"x 16' C.M.P. Side Drain in Irrigation Ditch Rt

Sta. 252+80 to 256+00 - Reqd. 30"x 320' C.M.P. Side Drain and 600 Cu. Yds. Embank for Road Approach Rt.

Sta. 253+80 - Remove & Rebuild Cattle Guard Rt.

FORCE ACCOUNT
Sta. 258+18 - Remove 3'x 6'x 12.5" Timber Weir Lt. & Rebuild on Rt.

Sta. 258+18 - Reqd. 30"x 50' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet. Remove 10' Timber Bridge.

Sta. 265+14 - Reqd. 24"x 48' C.M.P. Cross Culvert & 5 Cu. Yds. Excav. for Inlet & Outlet. Remove 24"x 40' Metal Flume Rt. Remove 24"x 30' C.M.P. Rt.

S.W. 1/4 SEC. 7

JACOB REFROR
N.W. 1/4 SEC. 7, T 41 N, R. 8 E.

CLEARING AND GRUBBING:
Sta. 236+00 to Sta. 266+00 - Rabbit Brush, Lt.
Sta. 234+00 to Sta. 253+00 - Willows on Rt.
Sta. 261+00 to Sta. 266+00 - Rabbit Brush, Rt.

PLAN
TRACED
PLOTTED
NOTE BOOK
No. 5429
SUBMENT CHECKED
CHECKED BY
No. 5433

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
No. 5430
SUBMENT CHECKED
CHECKED BY
STRUCTURE KITTENS CH NO.

7650
7640
7630

764203

-0.12%

F.L. 38.5
F.L. 36.4
F.L. 35.3
F.L. 34.5

P.I. 7638.37

-0.10%

7650
7640
7630

Excavation		6700				
Embank.		20,265				
Embank. +15%		23,303				
Borrow		16,571				
Sta Yd. O'haul		182,260				
Yd Mile O'haul		7522				
Borrow Source		From Pit 270' Rt. of Sta 279+00 (Pit #28)				

235 240 245 250 255 260 265

PLATT 1 - PLAN PROFILE

FED. ROAD DIST. NO.	STATE	A.W PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	32	

SE 1/4 SEC. 1
T 41 N - R 7 E
A. E. CRAMER

N.E. 1/4 SEC. 1 Rev. Earthwork 10-6-36 A.V.F.

N

Sta. 280+30~Regd. 10 cu. yds. Embank. For Road Approach, Lt.
Remove 30"x16' C.M.P. Culvert, Lt.

P.O.T. 281+00

Sta 292+20~Regd. 30 cu. yds. Embank for Road Approach, Lt.
Remove 2"x2"x14' Wood Box Culvert, Lt.

Sta. 292+30~Remove timber Dyke.

N01°11'E

265 270 275 280 285 290 295

50' 50' 50'

5' Drainage Ditch

P.I. 265+50
Δ 0°02'

Sta. 265+50~Regd. side drainage Timber Trestle & 10 cu. yds. Embank. For Road Approach, Rt. Remove 18"x 24' C.M.P. Culvert, Rt.

Sta. 271+50~Regd. side drainage Timber Trestle & 10 cu. yds. Embank. For Road Approach, Rt. Regd. 15"x 16' C.M.P. side drain in Irrigation ditch, Rt.

Sta 278+00~Regd. 18"x 48' C.M.P. Cross culvert & 5 cu. yds. Excav. for Inlet & outlet.

Sta. 265+85 to 291+00~Regd. 500 cu. yd's. Excav. For Irrigation Ditch on, Rt.

ORION H. CHENEY
PIT #28

SW 1/4 SEC 6, T 41 N - R 8 E

Sta. 286+90~Regd. side drainage Timber Trestle & 30 cu. yds. Embank. For Road Approach, Rt. Regd. 15"x 16' C.M.P. side drain in Irrigation ditch, Rt.

Sta 291+30~Remove 36"x 26' C.M.P. Culvert. (Headwall.)

FORCE ACCOUNT
Sta. 292+00
Regd. Flume to carry drain ditch across Irrig. ditch Rt.

Sta. 292+00~Regd. 10'x 4'x 38' conc. Box Culvert (Type 10-1) & 10 cu. yds. Excav. For Inlet & Outlet. Remove 8' Timber Bridge.

Sta. 292+23~Regd. 24"x 50' C.M.P. Cross Culvert. Remove 18"x 52' C.M.P. culvert.

Sta. 292+50~Regd. side drainage Timber Trestle & 50 cu. yds. Embank. for Road Approach, Rt. Regd. 15"x 16' C.M.P. side drain (In irrigation) Sta. 293+50~Regd. side drainage Timber Trestle & 50 cu. yds. Embank. for Road Approach, Rt. Remove 18"x 5' C.M.P. Rt. Regd. 15"x 16' C.M.P. side drain in Irrigation ditch, Rt.

N.W. 1/4 SEC. 6

CLEARING AND GRUBBING:
Sta. 266+00 to Sta. 296+00~Rabbit Brush, Lt.
Sta. 266+00 to Sta. 296+00~Rabbit Brush, Rt.

7650
7640
7630

P.I. 7638.37
0
F.L. 34.5

-0.10 %

F.L. 33.8

200' V.C.

36.32 36.31 36.48

P.I. 7636.22

+0.26 %

P.I. 7637.52

37.13 37.27

F.L. 33.0
F.L. 30.4

36.92

300' V.C.

-0.40 %

7635.52

Excavation	5758
Embank	17,923
Embank +15 %	19,922
Borrow	14,164
Sta Yd. O'haul	147,533
Yd Mile O'haul	3308
Borrow Source	From Pit 350' Lt. of Sta. 306+00 (Pit #29)

270 275 280 285 290 295

PLAN SURVEYED PLOTTED NOTE BOOK LEVEL BOOK 5429 5833

PROFILE SURVEYED PLOTTED NOTE BOOK LEVEL BOOK 5430

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	33	

Rev. Earthwork - 10-6-36 A.V.F.

N.E. 1/4 SEC. 1, T. 41 N., R. 7 E. C.W. WADSWORTH

S.E. 1/4 SEC. 36, T. 42 N., R. 7 E. J.C. SCHMITTEL

N

Sta 318+75 to 318+95.5 ~ Regd. Treated Timber Bridge, 1 span @ 19'0" as per details shown on sheet No. 8 Remove 12 Timber Bridge.

Sta 317+50 ~ Remove 36'x 26' C.M.P. Culvert. & 2 Headwalls.

T'WP. 41 N., RANGE 7 E.
T'WP. 42 N., RANGE 7 E.

P.I. 318+30 Δ = 0°52'

Sta 318+35 ~ Regd. 20 Cu. Yd Embank. for Road Approach Lt. Remove 3'x 3'x 38' Wood Box Culvert, Lt.

Sta 318+60 ~ Remove 2 Timber Dykes, Lt.

Sta 319+80 ~ Regd. 25 cu. yds. Embank. for Road Approach Lt. Remove 3'x 3'x 28' Wood Box Culvert.

Sta 301+10 ~ Regd. side drainage Timber Trestle & 40 cu. yds. Embank. for Road Approach, Rt. Regd. 15" x 16' C.M.P. side drain in Irrigation ditch.

Sta 305+75 ~ Regd. side drainage Timber Trestle & 50 cu. yds. Embank. for Road Approach, Rt. Regd. 15" x 16' C.M.P. side drain in Irrigation ditch.

Sta 306+50 ~ Regd. 18"x 62' C.M.P. Cross Culvert & 5 cu. yds. Excav. for inlet & Outlet

N.W. 1/4 SEC. 6, T. 41 N., R. 8 E. STATE OF COLORADO

Sta. 292+25 to 317+20 ~ Reqd. 500 cu. yds. Excav. for Irrigation Ditch, Rt.

5' Drainage Ditch

Borrow Pit #30

STATE C.A. FRAME, LESSEE

Sta 318+00 ~ Regd. 3'x 3'x 46' Concrete Box Culvert & 90 cu. yds. Excav. for Inlet & Outlet. (Sta. 318+00 ~ Required Flume to carry drain ditch across Irrig. ditch.

T'WP 41 N., RANGE 8 E.
T'WP 42 N., RANGE 8 E.

Sta 318+35 ~ Regd. side drainage Timber Trestle & 50 cu. yds. Embank. for Road Approach, Rt.

FORCE ACCOUNT. Sta. 318+98 ~ Remove & Rebuild 2~3'x 5'x 14' Timber Diversion Boxes, Rt.

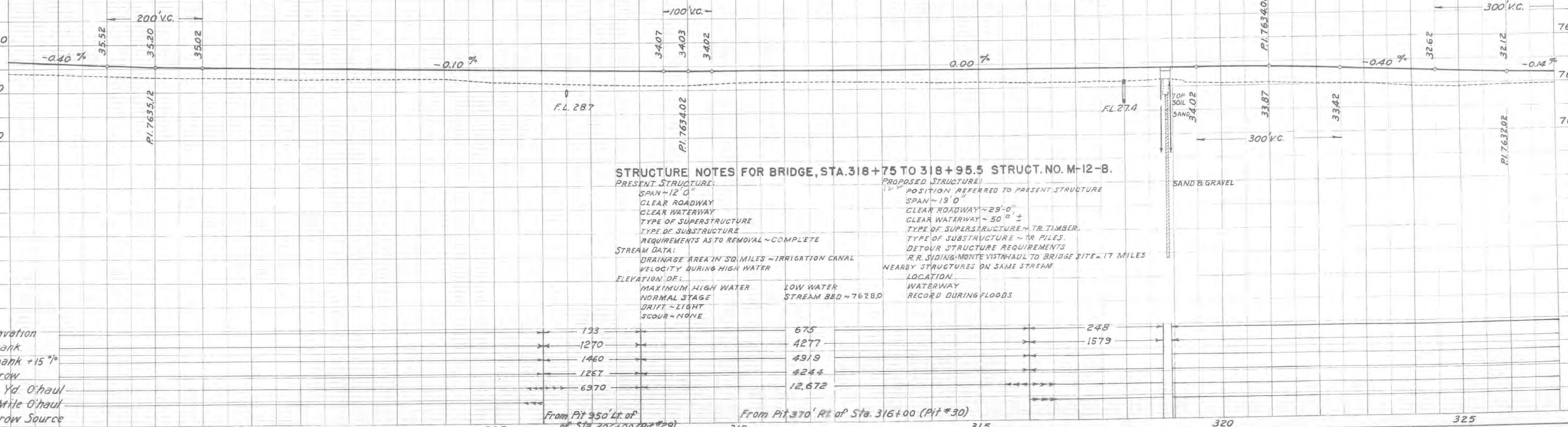
FORCE ACCOUNT. Sta 321+10 ~ Remove & Rebuild 3'x 6'x 8' Timber Headgate, Rt.

Sta. 319+80 ~ Regd. side drainage Timber Trestle & 65 cu. yds. Embank. for Road Approach, Rt. Regd. 15" x 16' C.M.P. side drain in Irrigation ditch.

S.W. 1/4 SEC. 31, T. 42 N., R. 8 E. COLO. VALLEY LAND CO.

N01°11'E

N02°03'E



STRUCTURE NOTES FOR BRIDGE, STA. 318+75 TO 318+95.5 STRUCT. NO. M-12-B.

Present Structure:
- Span ~ 12'0"
- Clear Roadway
- Clear Waterway
- Type of Superstructure
- Type of Substructure
- Requirements as to Removal ~ Complete

Stream Data:
- Drainage Area in Sq. Miles ~ Irrigation Canal
- Velocity during High Water

Elevation of:
- Maximum High Water
- Normal Stage
- Drift ~ Light
- Scour ~ None
- Low Water Stream Bed ~ 7628.0

Proposed Structure:
- Position Referred to Present Structure
- Span ~ 19'0"
- Clear Roadway ~ 29'-0"
- Clear Waterway ~ 50 sq. ft. ±
- Type of Superstructure ~ Tr. Timber.
- Type of Substructure ~ Tr. Piles.
- Detour Structure Requirements
- R.R. Siding ~ Monte Vista ~ Haul to Bridge Site ~ 17 Miles

Nearby Structures on Same Stream
- Location
- Waterway
- Record during Floods

Excavation	133	675	248	
Embank.	1270	4277	1579	
Embank. +15 %	1460	4919		
Borrow	1267	4244		
Sta. Yd. O'haul	6970	12,672		
Yd. Mile O'haul				
Borrow Source	From Pit 950' Lt. of of Sta. 306+00 (Pit #29)		From Pit 370' Rt. of Sta. 316+00 (Pit #30)	

PLAN — Plotted — Checked — Note Book — Alignment Checked — Profile — Traced — Mylars — Cut of Way Checked — 5429 — 5433

PROFILE — Plotted — Checked — Note Book — Traced — Mylars — Structure Notes Revised — 5430

FED. ROAD DIST. NO.	STATE	A.W. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	3002	34	

Rev. Earthwork 10-6-36 A.V.F.

SE 1/4 SEC 36
T 42 N - R 7 E
J.C. SCHMITTEL

N.E. 1/4 SEC. 36
J.C. SCHMITTEL

N

P.O.T. 332+00

335

P.O.T. 343+00

Sta. 355+00 ~ Reqd. Project Marker & 300 Cu. Yds. Embank. for Approach to Project. Embank. Material to be included in Profile Quantities for Payment.

50' 50' 330 340 345 350 355 50' 50'

N 02° 03' E

10' Drainage Ditch

FORCE ACCOUNT.
Sta. 333+70 ~ Remove & Rebuild 3'x6'x7' Timber Headgate, Rt.

Sta. 335+00 ~ Regd. 18'-58' C.M.P. Cross Culvert (Apron on Lt.) & 5 cu. yds. Excav. for Outlet.

FORCE ACCOUNT.
Sta. 345+70 ~ Remove & Rebuild 3'x6'x7' Timber Headgate, Rt.

Sta. 346+80 ~ Regd. Side drainage Timber Trestle & 50 cu. yds. Embank. for Road Approach, Rt.

Regd. 15'x16' C.M.P. side drain in Irrigation ditch, Rt.

Sta 348+00 ~ Regd. 18'-52' C.M.P. Cross Culvert & 5 cu. yds. Excav. for Outlet.

Sta 318+80 to 355+00 ~ Reqd. 725 cu. yds. Excav. for Irrigation Ditch, Rt.

STA. 355+00
END OF
A.W.P.-3002

SW 1/4 SEC 31, T 42 N R 8 E
COLO. VALLEY LAND CO.

N.W. 1/4 SEC. 31
COLO. VALLEY LAND CO.

CLEARING AND GRUBBING:
Sta. 326+00 to Sta. 356+00 ~ Rabbit Brush, Lt.
Sta. 326+00 to Sta. 356+00 ~ Rabbit Brush, Rt.

PLAN
SURVEYED
PLOTTED
NOTE BOOK
TRACED
CHECKED
5429
5433

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
TRACED
CHECKED
5430

300' V.C.

32.12

31.81

7630

7620

7610

Fl. 7632.02

F.L. 27.3

F.L. 24.6

-0.14 %

7627.68

Excavation	3165	184		2696		Approach to Project
Embank	12,109	517		7793		261
Embank. +15 %	15,740	595		8961		300
Borrow	12,327	411		6265		300
Sta. Yd. O'haul	88,878	2795		64,780		3300
Yd-Mile O'haul	474			441		65
Borrow Source	From Pit 370' Rt. of Sta. 316+00 (Pit #30)		From Pit 1130' Lt. of Sta. 340+00 (Pit #31)		From Pit 1130' Lt. of Sta. 340+00 (Pit #31)	From Pit #31-1130' Lt. of Sta. 340+00

325 330 335 340 345 350 355