MSI Separator Sheet

MSI2010

COLORADO DEPARTMENT OF HIGHWAYS
Form C. D. H. 128
JANUARY, 1952

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0015 (3)	1	

COLORADO
DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED
FEDERAL AID PROJECT NO. S0015 (3)
STATE HIGHWAY NO. 63
LOGAN COUNTY

INDEX OF SHEETS

SCALES OF ORIGINAL DRAWINGS

ON PLAN 1 IN. — 100 FT.
ON PROFILE 1 IN. — 10 FT. VERTICAL

GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD
GROSS LENGTH OF PROJECT 35,930.5 FT. = 6.805 MI.
NET LENGTH OF PROJECT 34,915.0 FT. = 6.613 MI.

CONVENTIONAL SIGNS

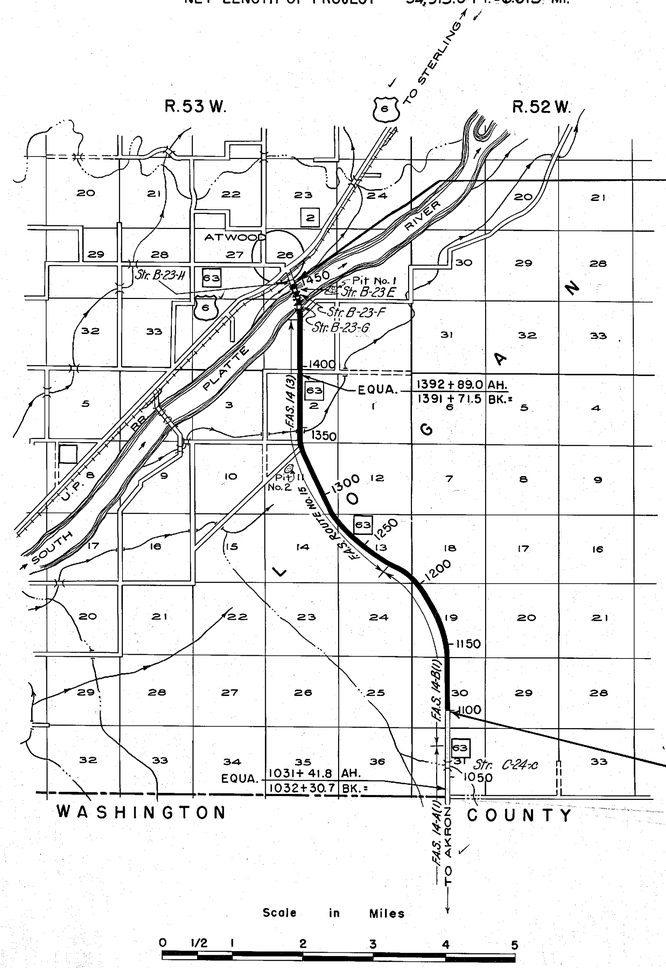
CENTER LINE — PLAN TO SHEET — TITLE TO SHEET
RIGHT OF WAY LINE — R.O.W. MARKER
COUNTY LINE
TOWNSHIP OR RANGE LINE — T. 6 S. R. 89 W. / T. 7 S. R. 89 W.
LAND LINES — SECTION LINE — 1/4 SECTION LINE — 1/16 SECTION LINE
RAILROAD — TITLE SHEET — PLAN SHEET
PROPERTY OR TRACT LINE
CITY LIMITS
BARBED WIRE FENCE
COMBINATION WIRE FENCE
BOARD FENCE
SNOW FENCE
WIRE CABLE GUARD FENCE
TELEPHONE & TELEGRAPH LINE
POWER LINE
DETOUR
PRESENT ROAD (PLAN SHEETS)

TABULATION OF LENGTH AND DESIGN DATA

STATION	ROADWAY LIN. FT.	NO WORK SECTION LIN. FT.	
1030+38.0 BEGIN S0015 (3)= STA. 1030+00 on FAS. 14-B (1) LOGAN COUNTY LINE.			
1032+30.7 Bk. = EQUA.	192.7		
1031+41.8 Ah.			
1050+00	2,148.2		
Str. No. B-23-H BRIDGE		20.5	
1100+00 BEGIN S0015 (3)= STA. 1100+00 on F.A.S. 14-B (1)	4,789.9		
1225+00 END F.A.S. 14-B (1) BEG. F.A.S. 14 (3)	12,500.0		
1391+71.5 Bk. = EQUA.	16,671.5		
1392+89.0 Ah.			
1431+87.0 END F.A.S. 14 (3)	3,898.0		
Str. No. B-23-G BRIDGE		438.5	
1436+25.5	742.8		
1443+68.3 Str. No. B-23-F BRIDGE		368.7	
1447+37	213.7		
1449+50.7 Str. No. B-23-E BRIDGE		208.3	
1451+59.0	88.9		
1460+48.0 END S0015 (3)= South Abut. of Bridge (Str. No. B-23-H)= 260' ± So. of Beginning of Fed. Aid Secondary Route No. 15			
TOTALS	34,915.0	1,015.5	

SUMMARY	LIN. FT.	MILES
ROADWAY S0015 (3)	34,915.0	6.613
NO WORK SECTION	1,015.5	0.192
NET LENGTH	34,915.0	6.613
GROSS LENGTH	35,930.5	6.805

DESIGN DATA	
Maximum Degree of Curve	3°30'
Maximum Grade	3.15 %
Minimum N.P.S.D. - Horizontal	1000'
Minimum N.P.S.D. - Vertical	565
Maximum Design Speed	65 M.P.H.



STA. 1460+48.0 END S0015 (3)=
So. Abut. of Bridge (Str. No. B-23-H) =
260' ± So. of Beginning of Fed. Aid Secondary Route No. 15

STA. 1100+00 BEGIN S0015 (3)=
Sta. 1100+00 on F.A.S. 14-B (1)

NOTICE TO BIDDERS

IT IS RECOMMENDED THAT BIDDERS ON THIS PROJECT GO OVER THE PLAN DETAILS WITH ONE OF THE FOLLOWING FIELD REPRESENTATIVES OF THIS DEPARTMENT:
E.W. Oviatt, Constr. Engineer, Greely, Colo.
J.M. Bay, Resident Engineer, Sterling, Colo.
Home Phone - Sterling 1774

COLORADO DEPARTMENT OF HIGHWAYS
APPROVED:
APPROVED: Mark C. Watson DATE 8-12-54
CHIEF ENGINEER DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
RECOMMENDED FOR APPROVAL:
APPROVED: DATE
DISTRICT ENGINEER DATE
APPROVED:
DIVISION ENGINEER DATE

THE C. F. HOECKEL CO., DENVER

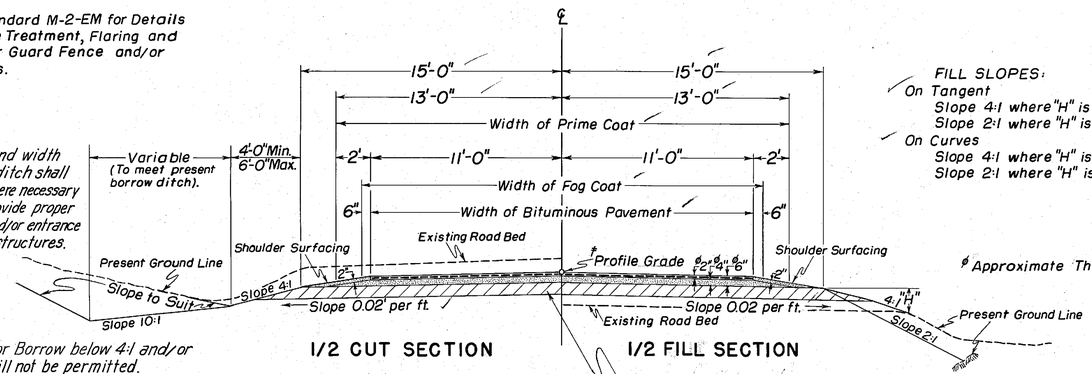
COLORADO DEPARTMENT OF HIGHWAYS
FORM C. D. H. 126
JANUARY, 1952

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0015 (3)	2	

TYPICAL CROSS SECTION OF IMPROVEMENT

NOTE:
See Standard M-2-EM for Details of Cut Slope Treatment, Flaring and Widening for Guard Fence and/or Guard Posts.

The depth and width of the side ditch shall be varied where necessary in order to provide proper drainage and/or entrance to drainage structures.



FILL SLOPES:
On Tangent
Slope 4:1 where "H" is 3' or less
Slope 2:1 where "H" is over 5'
On Curves
Slope 4:1 where "H" is 5' or less
Slope 2:1 where "H" is over 5'

Approximate Thickness

Excavation or Borrow below 4:1 and/or 10:1 slope will not be permitted.

1/2 CUT SECTION

1/2 FILL SECTION

†Where Profile Grade is not shown the following operations will determine the finished grade:

Sta. 1100+00 to 1123+00, 1133+00 to 1159+00, 1178+00 to 1202+00 — Unsuitable material, (shown as A-7-6 (19)), shall be removed and underlying material stabilized with Sub-Base Material plus Surfacing.

Sta. 1123+00 to 1133+00 — Unsuitable material, (shown as A-7-6 (19)), shall not be removed, but shall be stabilized with 13" Sub-Base Material plus Surfacing.

Sta. 1249+00 to 1339+00 — Present road bed to be stabilized with Sub-Base Material plus Surfacing.

Sta. 1339+00 to 1412+00, 1432+00 to 1460+48 — Present road bed to be stabilized with Surfacing only. (Sub-Base Material if needed to reestablish Superelevations.)

Material above the subgrade is to be constructed of Sub-Base Material at locations designated in Sub-Base Material tabulation. Estimated quantities involved in this operation and thickness of material required are tabulated in the Sub-Base Material Plan.

Approximate 6" compacted thickness of Gravel or Crushed Rock Surfacing shall be placed in separate courses at the following rates per 100 lin. ft. of roadway:

Top Course	25 tons	(Does not include Mineral Filler
Bottom Course	55 tons	
Surfacing for Shoulder Areas	8 tons	

GENERAL NOTES

This project is to be constructed in conformity with the Standard Specifications of the Colorado Department of Highways, adopted June 1, 1952.

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

All curves are to be superelevated and widened as provided by the Standard Superelevation sheet included with the plans.

It is estimated that old road is to be obliterated at the following locations: Sta. 1333+ to Sta. 1337+, Lt.

All side approach roads to the project designated by the Engineer shall be primed and fog coated to approximately 50 feet out from edge of the Asphaltic Surfacing or to the Right of Way line, whichever is less. The following listed approaches shall be primed, asphaltic processed and fog coated: Sta. 1426+ Rt, 1332+ Lt, 1333+ Lt, 1382+ Rt & Lt,

It is estimated that rolling of the Asphaltic Surfacing with Flat Wheeled Roller (Tandem) will be necessary after any rolling with Rubber Tired Rollers in order to provide a firm smooth surface.

For preliminary plan quantities of Asphaltic Road Materials, the following rates of application were used:

PRIME COAT MC	@ 0.40	Gal. per Sq. Yd.
PROCESS	@ 0.61	Gal. per Sq. Yd. per inch
FOG COAT	@ 0.10	Gal. per Sq. Yd.

Rate of application and grade of Asphaltic Material shall be as determined by the Engineer at time of application.

At Bridge Approaches, the Asphaltic Surfacing shall be widened to meet the curbed width of the bridge and shall take place gradually over a distance of 300 ft. from the Bridge end. The Prime Coat and Fog Coat shall be widened beyond Mat as indicated on Typical Section.

SUMMARY OF APPROXIMATE QUANTITIES

ITEM NO.	ITEM	UNIT		PROJECT TOTALS
11a	Removing and Resetting Mail Boxes	Lump Sum		•
11b	Removing Guard Posts	Each		11
12b	Removing and Rebuilding Fence	Lin. Ft.		300
12c	Line Posts (Metal)	Each		4
13c	Unclassified Excavation	Cu. Yd.		16,000
13s	Stripping	Cu. Yd.		2,500
17a	Rolling with Tamping Roller (Two (2) Unit)	Hour		70
17b	Rolling with Tamping Roller (Four (4) Unit)	Hour		10
17c	Rolling with Flat Wheeled Roller (Tandem)	Hour		30
17d	Rolling with Flat Wheeled Roller (Three (3) Wheel)	Hour		140
17e	Rolling with Rubber Tired Roller	Hour		110
17f	Furnishing Tamping Roller (Two (2) Unit)	Each		1
17g	Furnishing Tamping Roller (Four (4) Unit)	Each		1
17h	Furnishing Flat Wheeled Roller (Tandem)	Each		1
17i	Furnishing Flat Wheeled Roller (Three (3) Wheel)	Each		1
17j	Furnishing Rubber Tired Roller	Each		1
17k	Wetting	M Gal.		1,230
18a	Station Yard Overhaul	Sta. Yd.		63,000
18b	Yard Mile Overhaul	Yd. Mi.		1,200
18c	Ton Mile Overhaul	Ton Mi.		175,300
23c	Sub-Base Material (Class 3)	Ton		15,800
23z	Placing Sub-Base Material	Ton		1,700
26d	Gravel or Crushed Rock Surfacing (Grading D)	Ton		9,000
26dx	Gravel or Crushed Rock Surfacing (Grading D)(Bottom & Shlder)	Ton		21,200
26z	Placing Surfacing Material	Ton		2,900
30x	Asphaltic Road Material MC (Prime)	Gal.		42,300
30y	Asphaltic Road Material RC (Fog)	Gal.		9,200
30z	Asphaltic Road Material MC (Process)	Gal.		116,400
31a	Road Mix Asphaltic Processing	Sq. Yd.		87,500
51c	Relaying 24" Pipe	Lin. Ft.		68
92	Timber Guard Posts	Each		90
	FORCE ACCOUNT			
20a	Obliterating Old Road	Lump Sum		•
	STATE FORCES			
81a	Project Markers	Each		2
	NON FEDERAL AID			
11c	Clean Culverts	Each		9
	FORCE ACCOUNT			
	Remove Rubbish, Lt. of Sta. 1448+	Lump Sum		•
	STATE FORCES			
	Signing and Striping Entire Project	Lump Sum		•
	STATE FURNISHED MATERIALS			
	Pit Royalties	Cu. Yd.		4,000
	Pit Royalties	Ton		40,600
	RIGHT OF WAY			
	Land, Damages, Fees and Appraisals	Lump Sum		•

DIETZGEN NO. 139 IMPERIAL

COLORADO DEPARTMENT OF HIGHWAYS
FORM C. D. H. 126
JANUARY, 1952

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0015 (3)	3	

SURFACING PLAN

SUB-BASE PLAN

✓It is estimated that material for Gravel Surfacing and Sub-base Material is available in the vicinity of the pits indicated in the following tabulations. Estimated quantities involved in these operations are shown below.

✓Alteration of the Surfacing Plan and Sub-base Plan as here outlined will be allowed only on written permission from the Department.

MATERIAL TO BE PLACED	SOURCE	QUANTITY AVAILABLE	QUANTITY TONS USED — GRADING D TOP COURSE	BOTTOM COURSE BINDER MATERIAL	BOTTOM COURSE *▲WINDROW AGGREGATE	BOTTOM COURSE AGGREGATE FROM PIT	SHLDER. COURSE BNDR. MAT'L	SHLDER. COURSE PIT AGGR.	TON MILE OVERHAUL TON MILES TOP COURSE	BOTTOM COURSE BINDER MATERIAL	BOTTOM COURSE AGGREGATE FROM PIT	SHOULDER COURSE BNDR. MAT'L	SHOULDER COURSE PIT AGGR.
Est. for Appr. to Proj. - 1100+00	Pit #1 ✓ Haul 0.5 Mi. to Sta. 1426+50	35,000 ✓ Cu. Yds.	25 ✓	6 ✓		22 ✓	2 ✓	6 ✓	167 ✓	28 ✓	147 ✓	9 ✓	40 ✓
1100+00 to 1332+00		✓	5800 ✓	2552 ✓		10208 ✓	371 ✓	1485 ✓	25891 ✓	6372 ✓	45569 ✓	926 ✓	6629 ✓
1332+00 to 1339+00	Pit #2 ✓		175 ✓	77 ✓		308 ✓	11 ✓	45 ✓	385 ✓	28 ✓	678 ✓	4 ✓	99 ✓
1339+00 to 1391+71.5 Bk. =	(Bindr. Mt'l.)	8,000 Cu. Yds.	1318 ✓	580 ✓	1687 ✓	633 ✓	84 ✓	338 ✓	2156 ✓	541 ✓	1036 ✓	78 ✓	553 ✓
1392+89.0 Ah. to 1426+50	Haul 0.3 Mi.		840 ✓	370 ✓	1076 ✓	403 ✓	54 ✓	215 ✓	687 ✓	647 ✓	330 ✓	94 ✓	176 ✓
1426+50 to 1428+00	to Sta. 1332+00		38 ✓	17 ✓	48 ✓	18 ✓	2 ✓	10 ✓	20 ✓	35 ✓	9 ✓	4 ✓	5 ✓
1428+00 to 1431+87.0			97 ✓	43 ✓		170 ✓	6 ✓	25 ✓	55 ✓	92 ✓	96 ✓	13 ✓	14 ✓
1436+25.5 to 1443+68.3			186 ✓	82 ✓		327 ✓	12 ✓	47 ✓	140 ✓	191 ✓	247 ✓	28 ✓	35 ✓
1447+37.0 to 1449+50.7	Windrow Mt'l. ✓ Sta. 1339+00 to Sta. 1428+00	Estimated 32 Tons per Station	53 ✓	24 ✓		94 ✓	3 ✓	14 ✓	49 ✓	60 ✓	86 ✓	7 ✓	13 ✓
1451+59.0 to 1460+48.0			222 ✓	98 ✓		391 ✓	14 ✓	57 ✓	235 ✓	257 ✓	414 ✓	37 ✓	60 ✓
Est. for Irregularities in Subgrade (1339+00-1460+48)				121 ✓		485 ✓				182 ✓	528 ✓		
Est. for Road Approaches not on List of Structures	R=80 (After mixing			54 ✓		216 ✓				116 ✓	786 ✓		
Est. for Bridge Widening From List of Structures	and adding Mineral filler)		41 ✓	17 ✓		68 ✓			149 ✓	36 ✓	247 ✓		
			155 ✓	62 ✓		250 ✓			564 ✓	133 ✓	909 ✓		
Est. for Mineral Filler				⊙634									
TOTALS			8,950 ✓	4,737	2,811 ✓	13,593 ✓	559 ✓	2242 ✓	30,498 ✓	8,718 ✓	51,082 ✓	1,200 ✓	7,624 ✓

MATERIAL TO BE PLACED	SOURCE	AVAILABLE	QUANTITY AND THICKNESS CLASS 3 * TOTAL THICKNESS REQUIRED INCHES	FROM WINDROW ◢ RATE PER STATION	FROM WINDROW *TONS	FROM PIT RATE PER STATION	FROM PIT TONS		TON MILE OVERHAUL TON MILES
Est. for Appr. to Proj. - 1100+00	Pit #1 ✓ Haul 0.5 Mi. to Sta. 1426+50	35,000 ✓ Cu. Yds.					26 ✓		173 ✓
	R-66 ✓								
1100+00 to 1123+00			3 ✓	32 ✓	736 ✓	20 ✓	460 ✓		2964 ✓
1123+00 to 1133+00			13 ✓	32 ✓	320 ✓	216 ✓	2160 ✓		13243 ✓
1133+00 to 1159+00			3 ✓	32 ✓	832 ✓	20 ✓	520 ✓		3011 ✓
1159+00 to 1168+00			13 ✓	32 ✓	288 ✓	216 ✓	1944 ✓		10612 ✓
1168+00 to 1202+00	Windrow Mt'l. Sta. 1100+00 to Sta. 1339+00 R-64	Estimated 32 Tons per Station	3 ✓	32 ✓	1088 ✓	20 ✓	680 ✓		3435 ✓
1202+00 to 1220+00			13 ✓	32 ✓	576 ✓	216 ✓	3888 ✓		17725 ✓
1220+00 to 1249+00			3 ✓	32 ✓	928 ✓	20 ✓	580 ✓		2386 ✓
1249+00 to 1339+00			3 ✓	32 ✓	2880 ✓	20 ✓	1800 ✓		5377 ✓
Estimated for Irregularities in Subgrade							1971 ✓		9256 ✓
Estimated for Restoring Superelevation on Curves							1755 ✓		7962 ✓
TOTALS					7,648 ✓		15,784 ✓		76,144 ✓

✓ No Overhaul is estimated on Material in Windrow - Sta. 1100+00 to 1428+00.

– ø Shoulder Surfacing is not to be placed across Road Approaches.

✓▲ If material in Windrow does not meet the estimated rate per station, the total thickness required is to be obtained by increasing or decreasing material obtained from the Pit.

✓† Based on Curve "C".

⊙ No Overhaul allowed on Mineral Filler.

TIMBER GUARD POSTS

STATION	SPACING	SIDE	NEW GUARD POST EACH	REMOVE GUARD POST EACH
1148+00	C.B.C.	Rt. & Lt.	2	2
1202+00 to 1207+00	50'	Rt. & Lt.	22	6
1212+73	C.B.C.	Rt. & Lt.	2	1
1246+64	C.M.P.	Rt. & Lt.	2	2
1382+72	C.M.P.	Rt. & Lt.	2	
1436+26 to 1436+87	BRIDGE	Rt. & Lt.	10	
1443+04 to 1443+65	BRIDGE	Rt. & Lt.	10	
1447+40 to 1448+01	BRIDGE	Rt. & Lt.	10	
1448+87 to 1449+48	BRIDGE	Rt. & Lt.	10	
1451+62 to 1452+23	BRIDGE	Rt. & Lt.	10	
1459+84 to 1460+45	BRIDGE	Rt. & Lt.	10	
TOTALS			90 ✓	11 ✓

DIETZGEN NO. 189 IMPERIAL

COLORADO DEPARTMENT OF HIGHWAYS
FORM C. D. H. 126
JANUARY, 1952

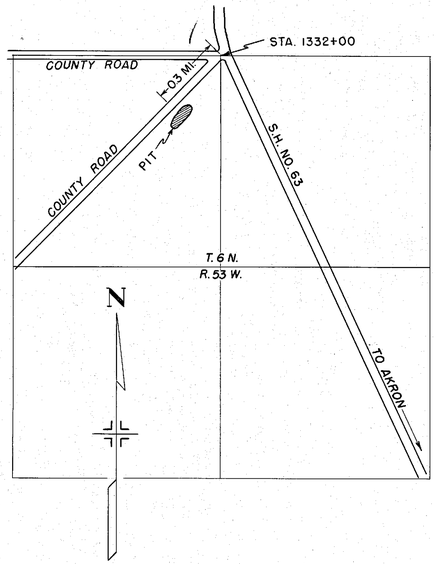
FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0015 (3)	4	

PIT LOCATIONS

PIT NO. 2

Location: N.W. 1/4 Sec. 11, T. 6 N., R. 53 W.
Owner: T. A. Propst, Atwood, Logan County
Quantity Available: 8,000 Cu. Yds.
Proposed Use: Binder Material
Haul Distance: 0.3 Mile to Sta. 1332+00
Sample No. 17249

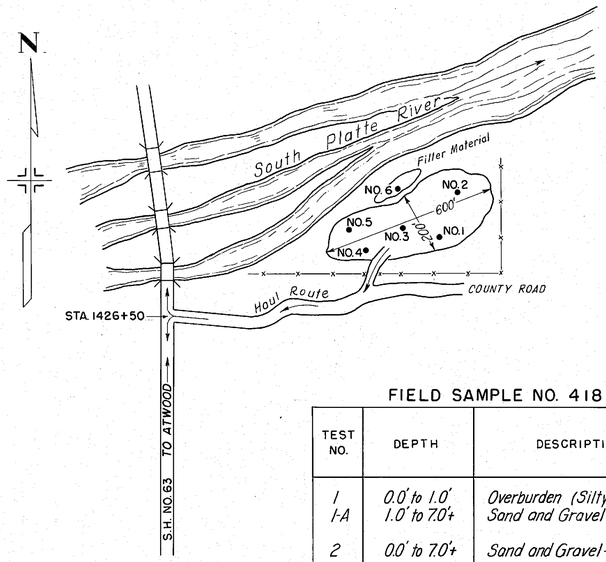
Estimated - No Stripping Required.



PIT NO. 1

Location: S.E. 1/4 of S.W. 1/4 & S.W. 1/4 of S.E. 1/4 Sec. 26, T. 7 N., R. 53 W.
Owner: State Land, Leased by Ben Fish
Quantity Available: 35,000 Cu. Yds.
Proposed Use: Sub-Base Material, Top Course & Aggregate for Shoulder Surfacing & Bottom Course
Haul Distance: 0.5 Mile to Sta. 1426+50
Sample No. 418

Estimated for Stripping Overburden 2,500 Cu. Yds.



FIELD SAMPLE NO. 418

TEST NO.	DEPTH	DESCRIPTION
1	0.0' to 1.0'	Overburden (Silty Sand)
1-A	1.0' to 7.0'+	Sand and Gravel-Water at 4'
2	0.0' to 7.0'+	Sand and Gravel-Water at 4'
3	0.0' to 0.5'	Overburden (Silty Sand)
3-A	0.5' to 7.0'+	Sand and Gravel Sim. #1-A Water at 4'
4	0.0' to 7.0'+	Sand and Gravel Sim #1-A Water at 5'
5	0.0' to 7.0'+	Sand and Gravel Water at 5'
6	0.0' to 3.0'	Filler Material
	Note: Gravel is coarser below water table.	

COLORADO STATE HIGHWAY DEPARTMENT
S H D Form 125
JANUARY 1962

LIST OF STRUCTURES

FED. ROAD DIVISION NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9.	COLO.	S0015 (3)	5	

LOCATION	DESCRIPTION	REMOVE STRUCTURE NO.	REMOVE STRUCTURE KIND	EXCAVATION CUBIC YARDS UNCL.	EXCAVATION CUBIC YARDS EMB.	EXCAVATION CUBIC YARDS UNCL. DITCH	STRUCTURAL EXCAVATION CUBIC YARDS	STRUCTURE BACKFILL CUBIC YARDS CL. 1	MECH. TAMPING HOURS	GRAVEL OR CRUSHED ROCK SURFACING TONS	SUB-BASE MATERIAL (CLASS 3) TONS	CONCRETE CUBIC YARDS CL. "A"	CONCRETE CUBIC YARDS CL. "B"	REINFORCING STEEL LBS.	CORRUGATED METAL CULVERT PIPE LINEAR FEET	RELAYING CMP LINEAR FEET 24"	METAL APRONS FOR C.M.P. CULVERTS NO.	MISCELLANEOUS
1100+00	Approach to Project			•						Δ	‡							
1100+00	Project Marker, Rt.																	1-Project Marker (State Forces)
1163+00	Relay 24"x68' C.M.P. (from 1165+00) as Cross Culvert																	
1165+00	Relay 24"x68' C.M.P. as Cross Culvert at 1163+00															68		Rlg 68 Lin Ft CMP
1188+12	Clean Cross Culvert																	Clean Culverts(1)
1195+10	Clean Side Drain, Rt. & Lt.																	Clean Culverts(2)
1207+00	Clean Cross Culvert																	Clean Culverts(1)
1272+00	Clean Cross Culvert																	Clean Culverts(1)
1321+00	Clean Cross Culvert																	Clean Culverts(1)
1332+	Road Approach, Lt.; Clean Side Drain, Lt.				30					(25-Top Course (47 Bot. Course								Clean Culverts(1)
1332+ - 1333+	Widen Shoulder, Lt. for Turning Movement				60					(30-Top Course (47-Bot. Course								
1333+	Road Approach, Lt.; Clean Side Drain, Lt.				30					(25-Top Course (47-Bot. Course								Clean Culverts(1)
1375+00	Clean Side Drain, Rt.																	Clean Culverts(1)
1381+ - 1383+	Remove and Rebuild Fence, Rt. & Lt.																	#Remove and Rebuild 280 Lin. Ft. Fence
1382+25	Road Approach, Rt. & Lt.				40					(50-Top Course (114-Bot. Course								
1426+50	Road Approach, Rt.				30					(25-Top Course (57-Bot. Course								
1460+	Project Marker, Rt.																	1-Project Marker (State Forces)
PROJECT TOTALS					190					155-Top Course 312-Bot. Course						68		

φ Included in bid price for Relaying Pipe.
Δ Included in Surfacing.
‡ Included in Sub-Base Plan.

• Included in Profile Quantities.
Estimated 4 New Line Posts required.

THE C. F. NIEDNER CO., DENVER

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0015(3)	12	

SW¼ Sec 30 T6N R52W

NW¼ Sec 30 T6N R52W

NOTE:

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

✓ Soil data shown on the plans is obtained from best available testing laboratory information. This information is shown for 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 the grading plan shown on plans will be modified where necessary to secure dense, stable embankments.

✓ Guard Posts are tabulated on sheet No. 3

Sta 1099+00 24'x 30' CMP Cross Drain (Leave in Place)

Sta 1108+47.9 50' Ins. Gate

Sta 1120+00 24'x 76' CMP Cross Drain (Leave in Place)

P.C. 1129+74.9

R.O.W. Along Present Fence

R.O.W. Along Present Fence

89°41'

90°14'

N 0°52'W

100 105 110 115 120 125 130

STA. 1100+00 BEG. S0015(3)= STA. 1100+00 on F.A.S. 14-B (1)

S0015(3)

1100+00 ± Regd. Approach to Project

1100+00 ± Regd. Project Marker, Rt. (State Forces)

3761' to SE Corner Sec. 30 S. 46°33' E.

N 89°08' E

2 Strip Gate

SE¼ Sec 30 T6N R52W

NE¼ Sec 30 T6N R52W

	Test #1A	Test #1B	Test #8	0.0-0.1 Surfacing	Test #8A	0.1-0.4 Similar to Test #1A	Test #8B	0.4-3.0 Similar to Test #1B	Test #9	0.0-0.1 Surfacing	Test #9A	0.1-0.4 Similar to Test #1A	Test #9B	0.4-3.0 Similar to Test #1B	Test #10	0.0-0.1 Surfacing	Test #10A	0.1-0.4 Similar to Test #1A	Test #10B	0.4-3.0 Similar to Test #1B
	A-7-6(19)	A-2-4(0)																		
	LL = 60.8	LL = NV																		
	PI = 37.0	PI = NP																		
	%200 = 69.0	%200 = 16.0																		
	CBR = 2.6	CBR = 9.5																		

Top of Subgrade, not Profile grade

4180 4170 4160 4150

+0.50% -0.50%

#8A #8B #9A #9B #10A #10B

EL 651.1 EL 644.4

72.70 73.70 72.70

400' V.C. N.P.S.D. = 930'

NOTE:
STA. 1101+ to 1106+ ± Material to be removed to elevations shown to improve sight distance. Included in Unsuitable Material.

EXCAV. FACTOR																				
EXCAV.																				
EXCAV. X FACTOR																				
EMBANK.																				
STA.-YD. O.H.																				
YD. MI. O.H.																				
BORROW																				
BORROW SOURCE																				

1398

Unsuitable Material — Disposed of by Widening Shoulders within Free Haul Limits. (Includes Approach to Project).

1100 1105 1110 1115 1120 1125 1130

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

KEUFFEL & ESSER CO., NEW YORK.

K & E Cat. No. 046-910

PLAN — SURVEYED / PLOTTED / DRAWN / CHECKED / NOTE BOOK / PAGE NO. 18014 / STA. YDS. CHECKED / ST. DIV. WAY CHECKED

PROFILE — SURVEYED 5-29-54 / PLOTTED / DRAWN D.A.R. / CHECKED / NOTE BOOK / PAGE NO. 18014 / GRADES CHECKED / S. M.'S NOTED / SIGNATURES COMPARED

COLORADO DEPARTMENT OF HIGHWAYS Form 204, 1-54 April 1952

MICROFILMED

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0015(3)	13	

NW¼ Sec 30 T6N R52W

SW¼ Sec 19 T6N R52W

PC 1129+78.8

1130

1135

ROW Marker

1135+30 ROW Marker

N 69°08' E

N 0°52' W

Sta 1140+00 24"x48' CMP Cross Drain (Leave in Place)

Δ - 27°56'L
D - 1°
T - 142.51'
L - 279.93'
R - 5730.0'
Hor SD > 1000'

1140

1145

Guard Posts

Sta 1148+00 6'x7'x37' CSC Cattle Pass (Leave in Place)

1150

R.O.W. Along Present Fence

N 28°48' W

20' RW Gate

1155

PT 1157+68.2

1160

R.O.W. Along Present Fence

PI 1142+00.8

NE¼ Sec 30 T6N R52W

SE¼ Sec 19 T6N R52W

N

	Test #1A	Test #1B	Test #11	Test #11A	Test #11B	Test #12	Test #12A	Test #12B	Test #13	Test #13A	Test #13B
	A-7-6(19) LL = 60.8 PI = 31.0 %200 = 69.0 CBR = 2.6	A-2-4(0) LL = NV PI = NP %200 = 16.0 CBR = 9.5	0.0-0.1 Surfacing	0.1-0.4 Similar to Test #1A	0.4-3.0 Similar to Test #1B	0.0-0.1 Surfacing	0.1-0.4 Similar to Test #1A	0.4-3.0 Similar to Test #1B	0.0-0.1 Surfacing	0.1-0.4 Similar to Test #1A	0.4-3.0 Similar to Test #1B

4190 4180 4170 4160

#11A #11B #12A #12B #13A #13B

FL 744 FL 769

NPSD = 895' NPSD = 720'

87.10

-0.70%

EXCAV. FACTOR	
EXCAV.	1326
EXCAV. X FACTOR	
EMBANK.	
STA.-YD. O.H.	
YD. MI. O.H.	
BORROW	
BORROW SOURCE	

Unsuitable Material — Disposed of by Widening Shoulders within Free Haul Limits.

1130 1135 1140 1145 1150 1155 1160

PLAN: SURVEYED — PLOTTED — DESIGNED — CHKD. — NOTE BOOK — ALIGNMENT CHECKED — FIELD BOOK — QUANTITIES CHKD. — NO 18014 — STRUCTURE NOTATNS CHKD.

PROFILE: SURVEYED — PLOTTED — DESIGNED — D.A.Q. — CHKD. — NOTE BOOK — QUANTITIES CHECKED — FIELD BOOK — STRUCTURE NOTATNS CHKD. — NO 18014 — 5-28-54

COLORADO DEPARTMENT OF HIGHWAYS Feb 27 N.A. 1954 April 1954

UNOFFICIAL

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

KEUFFEL & ESSER CO., NEW YORK

K & E CO. No. 356-410

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0015(3)	14	

PLAN	BY	DATE
NOTE BOOK NO. 18014		
SURVEYED		
PLOTTED		
ALIGNMENT CHECKED		
RT. OF WAY CHECKED		

PROFILE	BY	DATE
NOTE BOOK NO. 18014		
SURVEYED		
PLOTTED		
GRADES CHECKED	DAQ	5-26-53
B. M.S NOTED		
STRUCTURE NOTAT'NS CH'KD.		

COLORADO DEPARTMENT OF HIGHWAYS
Form C.D.H. 134
April 1952

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0015(3)	15	

PLAN	
NOTE BOOK No. 18014	SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED

PROFILE		BY	DATE
NOTE BOOK No. 18014	SURVEYED / PLOTTED / GRADES CHECKED / B. M.S NOTED / STRUCTURE NOTAT'NS CH'KD.	DAQ	5-26-54

C.D. 5-26-54

MICROFILMED

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0015(3)	16	

COLORADO DEPARTMENT OF HIGHWAYS
FORM CDH 134
April 1952

PLAN	DATE
SURVEYED	
PLOTTED	
NOTE BOOK	LAYOUT CHECKED
NO. 1804	RT. OF WAY CHECKED

PROFILE	DATE	BY
SURVEYED	5-24-54	D.A.Q.
PLOTTED		
NOTE BOOK	GRADES CHECKED	
NO. 1804	BL. RE. NOTED	
	STRUCTURE NOTATIONS CHKD.	

MICROFILMED

W ½ Sec. 13 T6N. R53W

R.O.W. Along Present Fence

R.O.W. Outside Present Fence

R.O.W. Marker

Sta 1229+89 24'-8" CMP Cross Drain (Leave in Place)

R.O.W. Along Present Fence

Sta 1246+64 82'-8" CMP Cattle Pass (Leave in Place) Guard Post

1220 1225 1230 1235 1240 1245 1250

60' 80' 80' 80' 80' 90' 90'

N 54° 53' W

R.O.W. Along Present Fence

R.O.W. Outside Present Fence

R.O.W. Marker

R.O.W. Marker

STA. 1225+00 = END F.A.S. 14-B(1) = BEG. F.A.S. 14 (3)

P.C. 1221+81.2

Δ = 3°-59'-Rt
D = 1°-00'
R = 5730.0'
T = 164.2'
L = 319.8'
Hor. SD 71300'

E ½ Sec. 13, T6N, R53W

	Test #1D	0.0-0.1 Surfacing	Test #1DA	0.1-0.4 Similar to Test #1A	Test #1DB	0.4-3.0 Similar to Test #1B	Test #1	0.0-0.1 Surfacing	Test #1A	0.1-3.0 Similar to Test #1B	Test #2	0.0-0.1 Surfacing	Test #2A	0.1-3.0 Similar to Test #1B
Test							#1A		#1B					
							A-7-6(19) LL = 60.8 PI = 32.0 %200 = 69.0 CBR = 2.6		A-2-4(0) LL = NV PI = NP %200 = 16.0 CBR = 9.5					

4139.00 P.I.

4140 4130 4120 4110

38.42 33.70 26.40 15.46 13.78 4121.50 P.I. 16.87 06.50

3.15% +0.70% -3.00%

1000' V.C. 400' V.C. NPSD = 835' 1000' V.C. NPSD = 630'

#1D #1DA #1DB #1A #2A

It is estimated that the upper portion of the Sub-grade (Min. 13"), 9 sta. 1220+00 to 1223+78 will be constructed of material from cut, Sta. 1241+ to 1242+, showing a C.B.R. of 9.5

Estimated additional overhaul = 1,000 Sta. Yds. 30 Yd. Mi.

P.I. 4110.65

EXCAV. FACTOR	0.90		0.90
EXCAV.		3571	831
EXCAV. X FACTOR		3214	748
EMBANK.	3214		
STA. YD. O.H.	17,044		
YD. MI. O.H.	10		
EXCESS EXCAV.			

748/0.90 = 831 Cu. Yds. Excess Excavation to be Disposed of by Widening Shoulders within Free Haul Limits.

1220 1225 1230 1235 1240 1245 1250

COLORADO DEPARTMENT OF HIGHWAYS
FORM 108-R
APRIL 1952

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0015(0)	17	

PLAN — SURVEYED — PLOTTED — GRADES CHECKED — R.M.S NOTED — PT. OF VAR. CHECKED — NOTE BOOK — NO. 1801A — BY — DATE

PROFILE — SURVEYED — PLOTTED — GRADES CHECKED — R.M.S NOTED — STRUCTURES NOTED & CHKD. — NOTE BOOK — NO. 1801A — BY D.A.G. — DATE 7-28-54

APPROVED
Lon D. Satterfield 7-26-54

NE ¼ Sec 14 T6N R53W

N 54°53'W

P.I. 1258 + 23.5

5 Guard Posts

5 Ea 12'5" x 32" x 16 GA CMP Cross Drain (Leave in Place)

21°57'

20' BW Gate

20' BW Gate

R.O.W. Along Present Fence

1272+00 ~ Regd. Clean Cross Culvert

5 Ea 12'7" x 40' x 16 GA CMP Cross Drain (Leave in Place)

ROW Marker

ROW Marker

61°31'

POT 1278 + 65.3

N 22°54'W

R.O.W. Along Present Fence

20' BW Gate

20' BW Gate

340.4' to P.O.T. 037' Rt of P.I.

PT 1273 + 19.5

ROW Marker

ROW Marker

ROW Marker

Δ = 31°59' Rt
D = 1°00'
R = 5730.0'
T = 1642.2'
L = 3198.3'
Hor SD > 1300'

W½ Sec 13, T6N R53W

SE ¼ Sec 11, T6N R53W

1250 1255 1260 1265 1270 1275 1280

4210 4200 4190 4180 4170

4080 4070 4060 4050

Test #13 — 0.0-0.1 Surfacing — Test #13A — 0.1-3.0 Similar to Test #1B

Test #1B — A-2-4(0) LL = NV PI = NP %100 = 16.0 CBR = 9.5

Test #14 — 0.0-0.1 Surfacing — Test #14A — 0.1-3.0 Similar to Test #1B

Test #15 — 0.0-0.1 Surfacing — Test #15A — 0.1-3.0 Similar to Test #1B

#13A

FL. 845

NPSD = 860'

#14A

FL. 602

#15A

NPSD = 610'

EXCAV. FACTOR
EXCAV.
EXCAV. X FACTOR
EMBANK.
STA.—YD. O.H.
YD. MI. O.H.
BORROW
BORROW SOURCE

PLATE 3 — PLAN-PROFILE O. P. E. & R. C. STANDARD
KNAPP & BISER CO., NEW YORK
K & B Co. No. 340-10

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0015(3)	18	

SE¼ Sec 11, T6N, R53W

N

Sta 1294+00 Irrig Ditch Cross Drain (Leave in Place)

POT 1303+00

R.O.W. Along Present Fence

70'

1280 1285 1290 1295 1300 1305 1310

100'

N 22°54' W

R.O.W. Along Present Fence

TRANSMISSION LINE

NE¼ Sec 11, T6N R53W

Test #1B	A-2-4(0) LL = NV PI = NP %200 = 16.0 CBR = 9.5	Test #1C	0.0-0.1 Surfacing	Test #1CA	0.1-3.0 Similar to Test #1B	Test #1D	0.0-0.1 Surfacing	Test #1DA	0.1-3.0 Similar to Test #1B	Test #1E	0.0-0.1 Surfacing	Test #1EA	0.1-3.0 Similar to Test #1B

4060 4050 4040 4030 4020

#1CA

EL. 4036 #1DA

#1EA

NPSD = 590'
Widen for Crest of Grade
Sta. 1300+ to 1305+

EXCAV. FACTOR
EXCAV.
EXCAV. X FACTOR
EMBANK.
STA.—YD.—O.H.
YD. MI. O.H.
BORROW
BORROW SOURCE

1280 1285 1290 1295 1300 1305 1310

PLATE 1—PLAN-PROFILE C. P. P. & B. E. STANDARD
PFAUTEL & ERGER CO., NEW YORK
P & E CO. No. 3410-10

COLORADO DEPARTMENT OF HIGHWAYS
FED. ROAD DIST. NO. 9
Aug. 1962

PLAN — SURVEYED — DRAWN — TRACED — QUANTITIES CHECKED — NOTE BOOK — NO. 18014 — PT. OF WAY CHECKED

PROFILE — SURVEYED — DRAWN — TRACED — GRADES CHECKED — NOTE BOOK — NO. 18015 — R. M.'s NOTED — STRUCTURES NOTED — NOTES CHECKED

MICROFILMED

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0015(3)	19	

FOR FINAL CONSTRUCTION

COLORADO DEPARTMENT OF HIGHWAYS
FED. ROAD DIST. NO. 9
APR 1972

PLAN
SURVEYED
PLOTTED
NOTE BOOK (IF MORE THAN ONE CHECKED)
NO. 1801 (NO. OF LAST CHECKED)
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK GRADES CHECKED
NO. 1801 (NO. OF LAST CHECKED)
BY DAQ
DATE 5-28-74
STRUCTURE NOTES NO STR'S AS.

R.O.W. Along Present Fence
N 22° 54' W
100'
1310
1315
1320
20' BN Gate
24'+60' CMP Cross Drain (Leave in Place)
POT 1325+00
5' ROW Marker
Present R.O.W. 1
100'
1330
1332+ ↔ Read. Road Approach, Lt.; Clean Side Drain, Lt.
TO MERINO
200'±
18'+40' CMP Side Drain
Guard Rail
1333+ ↔ Read. Road Approach, Lt.; Clean Side Drain, Lt.
COUNTY ROAD
18"+60' CMP Side Drain
Shed
House
Barn
1335+41.8
POT 1335+
Present R.O.W. 1
Guard Rail
SW¼ Sec 2 T6N R53W
1340
N0° 18'W
100'
1332+ to 1333+ ↔ Read. Widen Shoulder, Lt. for Turning Movement
PC 1330+33.7
1321+00 ↔ Read. Clean Cross Culvert
20'±BN Gate 2
20'±BN Gate 2
ROW Marker 5
18"+60' Side Drain
18"+60' CMP Cross Drain (Leave in Place)
PT 1340+36.1
Δ = 22° 34' Rt
D = 2° 15'
R = 2546.7'
T = 508.1'
L = 1008.0'
Hor. SD > 1300'
NE¼ Sec. 11, T6N R53W
SE¼ Sec 2 T6N R53W

	Test #18	0.0-0.1 Surfacing	Test #29	0.0-0.1 Surfacing	Test #29A	0.1-3.0 Similar to Test #18	Test #30	0.0-0.1 Surfacing	Test #30A	0.1-3.0 Similar to Test #18	Test #31	0.0-0.1 Surfacing	Test #31A	0.1-3.0 Similar to Test #18
	A-2-4(0) LL -NV- PI -NP- %100 #16.0 CBR=9.5													

4040
4030
4020
4010
4000
#29A
F.L. 15²
#30A
NPSD=565'
#31A
F.L. 00²

EXCAV. FACTOR
EXCAV. -
EXCAV. X FACTOR
EMBANK.
STA.-YD.-O.H.
YD. MI. O.H.
BORROW
BORROW SOURCE

1310 1315 1320 1325 1330 1335 1340

PLATE 1—PLAN-PROFILE O. F. P. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
K-E-E Cat. No. 04-8140

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0015(3)	20	

SW¼, Sec. 2 T6N, R53W

NW¼ Sec. 2 T6N R53W

NE¼, Sec. 2, T6N R53W

SE¼, Sec. 2. T6N, R53W.

Guard Post

100'

ROW Marker

18"x42" Side Drain

Wood Fence Post Corner Post Cleave in Place

PT 1340 + 36.7

1340

1345

5 17° BW Gate

5 20° BW Gate

1350

1355

R.O.W. Along Present Fence

1360

5 15° BW Gate

5 ROW Marker

U.S.C.&G.S. B.M. P.63 1935

1365

1370

N 0° 18' W

Irrigation Ditch in Place

R.O.W. Along Present Fence

Test #32 — 0.0-1.5 A-1-b(0) LL = NV PI = NP %200 = 16.0 R = 67

Test #32A — 1.5-3.0 A-7-5(20) LL = 65.9 PI = 35.3 %200 = 73.0 CBR = 2.6

Test #33 — 0.0-1.2 Similar To Test #32

Test #33A — 1.2-3.0 Similar To Test #32A

Test #34 — 0.0-1.0 Similar To Test #32

Test #34A — 1.0-3.0 Similar To Test #32A

#32 / #32A

#33 / #33A

#34 / #34A

4010

4000

3990

3980

EXCAV. FACTOR
EXCAV.
EXCAV. X FACTOR
EMBANK.
STA.-YD. O.H.
YD. MI. O.H.
BORROW
BORROW SOURCE

1340 1345 1350 1355 1360 1365 1370

PLAN — SURVEYED — PLOTTED — QUANTITIES CHECKED — NOTE BOOK — NO. 18014 — RT. OF WAY CHECKED

PROFILE — SURVEYED — PLOTTED — QUANTITIES CHECKED — NOTE BOOK — NO. 18015 — STRUCTURE NOTES AND CVERT.

DATE — BY — D.A.P.

COLORADO DEPARTMENT OF HIGHWAYS
FILE NO. 124
April 1952

APPROVED

PLATE 1 — PLAN-PROFILE O. P. R. & B. R. STANDARD
KRAFFEL & DESIGN CO., NEW YORK.
H & R CO., No. 24-5-10

COLORADO DEPARTMENT OF HIGHWAYS
Form 216 M, 1-64
April 1972

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0015(3)	21	

PLAN — NOTE BOOK 1801A — SURVEYED — PLOTTED — PLANS CHECKED — FT. OF MAP CHECKED — BY — DATE

PROFILE — NOTE BOOK 1801S — SURVEYED — PLOTTED — PLANS CHECKED — FT. OF MAP CHECKED — BY D A G — DATE 6-26-72 — STRUCTURE NOT IN SCOPE

NW¼ Sec2 T6N R53W

SW¼ Sec 35, T7N R53W

N

1370 1375 1380 1385 1390 1395 1400

50' 30' 30' 30' 30'

18' BW Gate

20' BW Gate

Sta 1381+86 30'x66' CMP Cross Drain (Leave in Place)

Sta 1382+62 24'x 66' CMP Cross Drain (Leave in Place)

Sta 1383+28 24'x 48' CMP Cross Drain (Leave in Place)

18' BW Gate

R.O.W. Along Present Fence

10' BW Gate

Sta 1393+18 18'x 54' CMP Cross Drain (Leave in Place)

16' Comb. W. Gate

20' BW Gate

3' Walk Gate

N 0° 18' W

N 0° 46' W

Irrigation Ditch in Place

18' BW Gate

15"x 24' CMP Side Drain

R.O.W. Along Present Fence

15' BW Gate

20' BW Gate

COUNTY ROAD

1375+00 ± Regd. Clean Side Drain, Rt.

1382+25 ± Regd. Road Approach, Rt. & Lt.

1381+ to 1383+ ± Remove & Rebuild 280 Lin. Ft. Fence, Rt. & Lt.

P.I. 1391+11.6 = 1392+89 Abd
Δ = 0°28' Lt

EQUATION

NE¼ Sec 2 T6N R53W

SE¼ Sec35, T7N, R53W

	Test #34	Test #32A	Test #35	Test #35A	Test #36	Test #36A	Test #37	Test #37A
	A-1-b(0) LL = NV PI = NP %200 = 16.0 R = 67	A-7-5(20) LL = 65.9 PI = 35.3 %200 = 73.0 CBR = 2.6	0.0-1.0 Similar to Test #32	1.0-3.0 Similar to Test #32A	0.0-1.2 Similar to Test #32	1.2-3.0 Similar to Test #32A	0.0-1.5 Similar to Test #32	1.5-3.0 Similar to Test #32A

1391+11.6 BK
1392+89 AHD

4000
3990

#35 #35A #36 #36A #37 #37A

FL. 993 FL. 993 FL. 993 FL. 993

EXCAV. FACTOR
EXCAV.
EXCAV. X FACTOR
EMBANK.
STA.—YD. O.H.
YD. MI. O.H.
BORROW
BORROW SOURCE

1370 1375 1380 1385 1390 1395 1400

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0015(3)	22	

COLORADO DEPARTMENT OF HIGHWAYS
FILE NO. 134
April 1962

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO. 1801A
ALIGNMENT CHECKED
RT. OF WAY CHECKED

DATE
BY

SW¼ Sec 35 T7N R53W

NW¼ Sec 35, T7N R53W

SE¼ Sec 35 T7N R53W

NE¼ Sec 35 T7N R53W

1400 1405 POT 1406+00 1410 1415 1420 1425 1430

19'BW Gate

R.O.W. Along Present Fence

N 0°46' W

24"x 62' CMP Cross Drain (Leave in place)

P.C. 1423+64.8

Δ = 5°53'44"
D = 1°00'
T = 294.4'
L = 588.3'
R = 5730.0'
Hor. SD > 1300'

P.T. 1429+36.9

RIVER

PRAIRIE

N 6°39' W

6 Guard Posts

STA. 1431+87.0
END F.A.S. 14(3)

Irrigation Ditch in Place

20'BW Gate

Mail Boxes
2-19'BW Gates

18'BW Gates

R.O.W. Along Present Fence

P.I. 1426+43

1426+50 ± Reqd. Road Approach, Rt.

	Test #32	Test #32.1	Test #32.1A	Test #38	0.0-2.0 Similar to Test #32	Test #38A	2.0-3.0 Similar to Test #32A
	A-1-b(0)		A-7-5(20)				
	LL = NV		LL = 65.9				
	PI = NP		PI = 35.3				
	%200 = 16.0		%200 = 73.0				
	R = 67		GOR = 2.6				

	Test #39	0.0-1.0 Similar to Test #32	Test #39A	1.0-3.0 Similar to Test #32A	Test #40	0.0-1.5 Similar to Test #32	Test #40A	1.5-3.0 Similar to Test #32A

4000 3990 3980

400' V.C.

91.60 90.06 88.78

P.I. 3989.60

#38 #38A #39 #39A #40 #40A

NPSD = 810'

-1.00% +0.09% -0.50%

FL. 84.5

3991.00 P.I.

90.82 90.70 90.00

Std. Elev. 89.8

400' V.C.
NPSD = 1300'

EXCAV. FACTOR	0.90
EXCAV.	2,706
EXCAV. X FACTOR	35,863
EMBANK.	1,012
STA. YD. O.H.	2706 / 1083 = 3260
YD. MI. O.H.	
BORROW	Borrow to be obtained from Pit
BORROW SOURCE	0.5 Mile from Sta. 1426+50

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO. 1801S
GRADES CHECKED
R/W NOTED
STRUCTURES LOCATIONS CHK'D

DATE 5-22-62
BY D.A.G.

P.E. 2-22-62

PLATE 1—PLAN-PROFILE U.S.F.R.A.B.R. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

R.B.&C. CO., INC., DENVER

COLORADO DEPARTMENT OF HIGHWAYS
FORM 216.24
April 1952

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0015(3)	23	

PLAN — SURVEYED / PLOTTED / DRAWN / CHECKED / QUANTITIES CHECKED / ALIGNMENT CHECKED / PLT. OF WAY CHECKED — NOTE BOOK No. 1801A — BY — DATE

PROFILE — SURVEYED / PLOTTED / DRAWN D.A.G. / QUANTITIES CHECKED / STRUCTURE NOTE(S) CHKD. — NOTE BOOK No. 1801B — BY — DATE 5-24-54

NW ¼ Sec 35 T1N R53W

SW ¼ Sec 26 T1N R53W

Pt 1429+36.9

1430

N6°39'W

6' Guard Posts

TIMBER BRIDGE B236
South Abut'l 1431+37.8
North Abut'l 1436+23.5
(Leave in Place)

1435

17' BW Gate

PC 1437+03.3

Δ = 12°01' Lt
D = 3°30'
T = 172.3'
L = 343.3'
R = 1637.1'
Hor. SD ≯ 1300'

Pt 1440+20.5

1440

TIMBER BRIDGE B235F
North Abut'l 1442+31.3
South Abut'l 1442+31.3
(Leave in Place)

1445

N

CHANNEL

FORCE ACCOUNT
Sta. 1448+ to 1449+ ∽
Remove Rubbish, Lt.

TIMBER BRIDGE B236F
North Abut'l Sta 1451+39
South Abut'l Sta 1449+50.1
(Leave in Place)

1450

R.O.W. Along Present Fence

1455

PC 1456+78.4

Δ = 6°00' Lt
D = 2°00'
T = 150.2'
L = 300.9'
R = 2865.2'
Hor. SD ≯ 1300'

Pt 1459+78.4

1460

TIMBER BRIDGE
South Abut'l Sta 1460+48
North Abut'l Sta 1460+78.5
(Leave in Place)

N 24°40'W

N 18°40'W

R.O.W. Along Present Fence

RR Sign

S 0015(3)

Pt 1458+29.6

18' BW Gate

1460+ ∽ Rejd. Project Marker, Rt.
(State Forces)

Sta 1430+ to 1452+
R.O.W. Along Present Fences
or a Minimum of 80 Feet.

STA. 1431+87.0 -
END F.A.S. 14(3)

1436+23.5

NO WORK SECTION

SOUTH PLATTE RIVER

CHANNEL

Pt 1438+13.2

21' BW Gate

1443+68.3

NO WORK SECTION

1447+37.0

1449+50.1

NO WORK SECTION

1451+59.0

STA. 1460+48.0
END S 0015(3) =
South Abut. of Bridge
(St. No. B-23-H) =
260'± So. of Beginning
of Fed. Aid Secondary
Route No. 15

Test #32	Test #41	Test #42	Test #43
A-1-b(0)	0.0-4.0 Similar to Test #32	0.0-4.0 Similar to Test #32	0.0-3.5 Similar to Test #32
LL = NV			
PI = NP			
%200 = 16.0			
R = 67			

NOTE: Sufficient Material at Bridge Approaches shall be removed to allow for Surfacing and Asphaltic Material. Material to be used to widen Shoulders.
Estimated Excavation involved = 300 Cu. Yds.

3991.00 P.I.

3990 +0.09% -0.50

3980

3970

90.70

400' V.C.
NPSD = <1300'

90.00

Sta 1431+87 Elev. 899

Sta 1436+26 Elev. 899

#41

Sta 1443+68 Elev. 898

Sta 1447+37 Elev. 898

#42

Sta 1449+50.1 Elev. 898

Sta 1451+59 Elev. 898

#43

Sta 1460+48 Elev. 884

Sta 1460+78.5 Elev. 885

BRIDGE

BRIDGE

BRIDGE

BRIDGE

EXCAV. FACTOR
EXCAV.
EXCAV. X FACTOR
EMBANK.
STA.-YD.-O.H.
YD. MI. O.H.
BORROW
BORROW SOURCE

1430 1435 1440 1445 1450 1455 1460

PLATE 1—PLAN—PROFILE. C. P. R. & I. E. STANDARD
HEFFRON & EBERT CO., NEW YORK
K. E. E. Co. No. 3148-10

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