



COLORADO
Department of
Transportation

DOCUMENT SEPARATOR SHEET

REGION 5 – JUNE 2017 CONVERSION

To be placed at the beginning of each separator sheet.



r500000992

Description:

ROW Plans 24X36

Route # and Mile Points:

SH 140

Originating Office:

ROW/Survey

File Name:

S 0097(7)_ROW(.PDF)

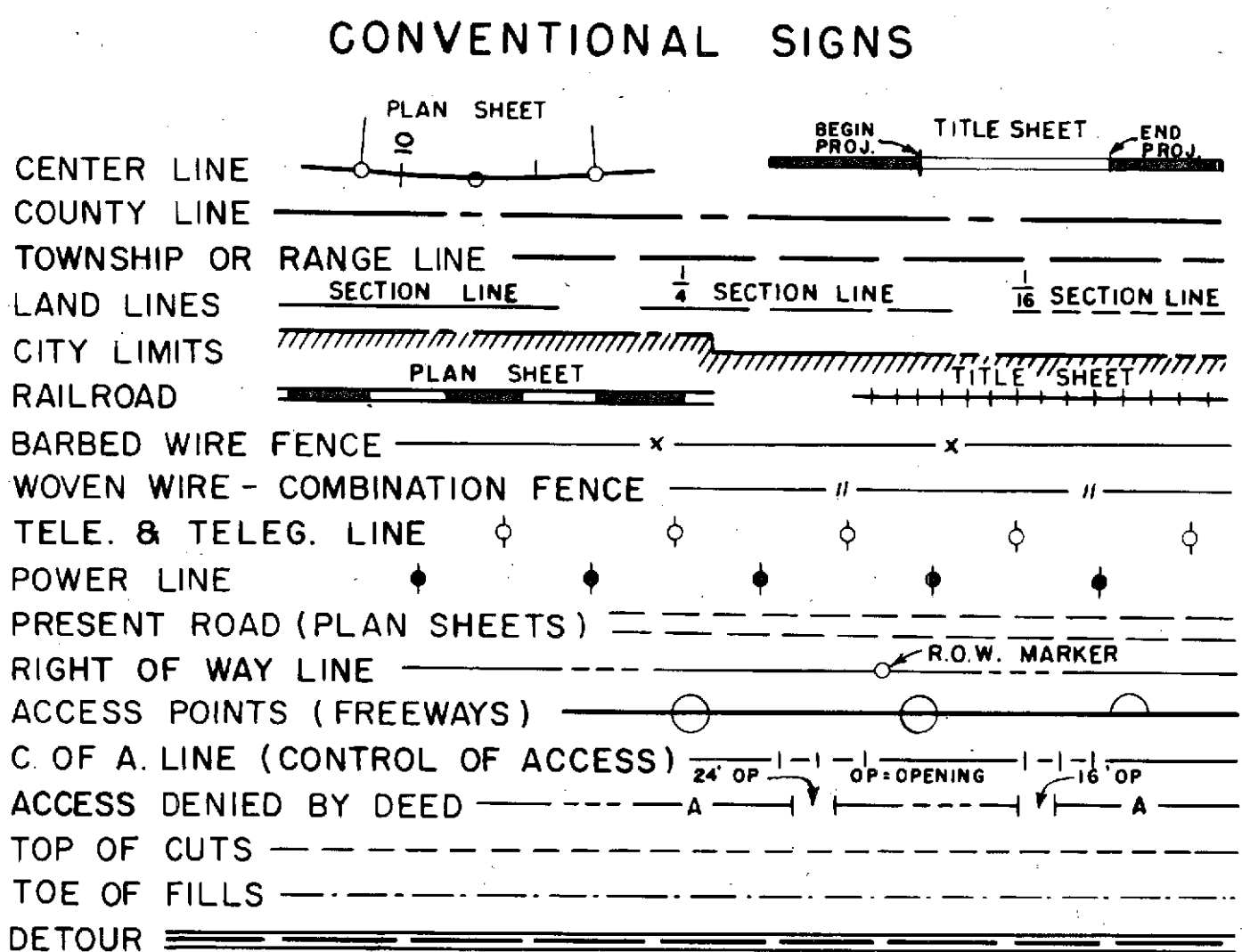
Box Location:

20 (TUBE -4)of 38

50097(7)

DEPARTMENT OF HIGHWAYS
STATE OF COLORADO

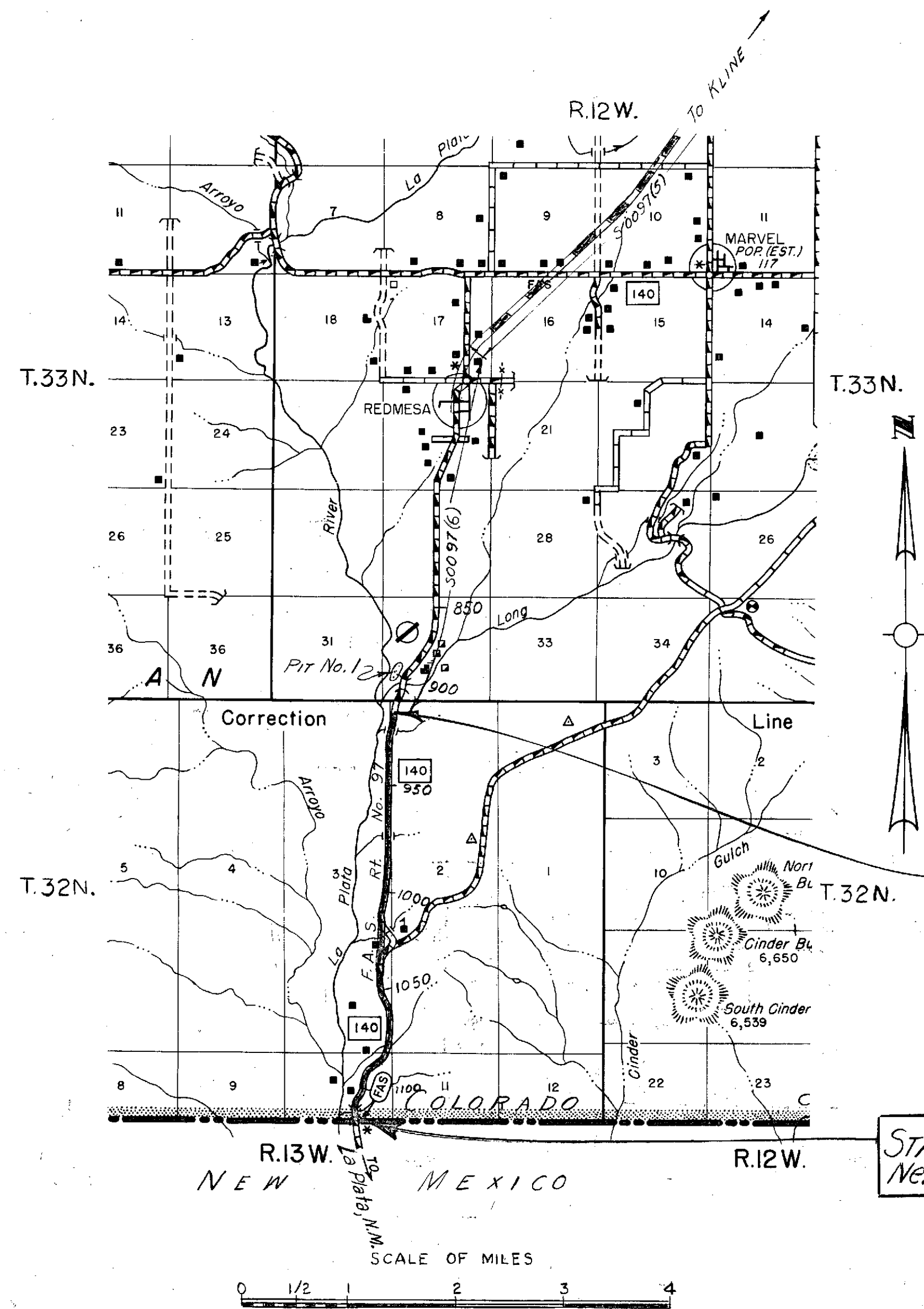
PLAN AND PROFILE OF PROPOSED
FEDERAL AID PROJECT NO. S0097(7)
STATE HIGHWAY NO. 140
LA PLATA COUNTY



SCALES OF ORIGINAL DRAWINGS
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

TABULATION OF LENGTH AND DESIGN

STATION	ROADWAY Lin. Ft.	
STA. 917+66.2 BEGIN S0097(7)= Sta. 917+66.2 End S0097(6) (Construction)	18,732.8	
STA. 1104+99.0 END S0097(7)= New Mexico State Line		
Total	18,732.8	
SUMMARY		
	Lin. Ft.	Miles
Roadway (Net & Gross Length)	18,732.8	3.548
SUMMARY		
Maximum Degree of Curve	5° 00'	
Maximum Grade	4.53 %	
Minimum S.S.D.-Horizontal	620'	
Minimum S.S.D.-Vertical	480'	
Maximum Design Speed	60 M.P.H.	



- INDEX OF SHEETS
- SHEET NO. 1 Sketch Map, Title Page and Tabulation of Length and Design.
- 2 Typical Section, General Notes, Detail of Asphaltic Ditch Paving.
- 3-4 Summary of Approximate Quantities.
- 3A-4A Summary of Final Quantities.
- 5 Fencing Tabulation, Detail of Inlet Basin.
- 5A Fencing Tabulation, Delineators, R.O.W. Markers
- 6 Tabulations of Subbase Material, Surfacing, Delineators, R.O.W. Markers.
- 7 Pit Sheet.
- 8-9 Structure Quantities.
- 8A-9A Final Structure Quantities
- 10-16 Alignment Plan and Profile Sheets.
- 17 Summary of Earthwork Quantities.
- 18 Stripping
- 18-27 Structure Sections.
- 19-33 Structure Sections

- M-1-D Superelevation and Widening of Curves 2-3-64
- M-2-A Approach Roads, Flaring, Cut Slope Treatment, Bridge and Crest Widening 2-3-64
- AA-6-B Construction Traffic Signs (2 Sheets) 1-31-64
- M-6-CA Identification Signs 6-26-64
- M-13-A Ditch Types 2-3-64
- * M-16-A Backfill Around Structures 1-31-64
- M-76-A Wire Fences and Gates (2 Sheets) 2-3-64
- M-81-A Marker Posts and Bench Marks 1-31-64
- M-82-G Cattle Guard 26 Ft. 28 Ft. & 30 Ft. Roadway 1-28-64
- M-95-A Headwalls and Aprons for C.M.P. Culverts. 2-3-64
- M-192-AA Delineators (2 Sheets) 1-28-64
- * M-45-A Culvert Pipe 4-29-64

Durango COPY

SEE SPECIAL PROVISIONS FOR
NOTICE TO BIDDERS

DEPARTMENT OF HIGHWAYS
STATE OF COLORADO

APPROVED: Chas. E. Shumate 7-1-64
CHIEF ENGINEER DATE

by: J. C. Bower, Deputy Chief Engr.

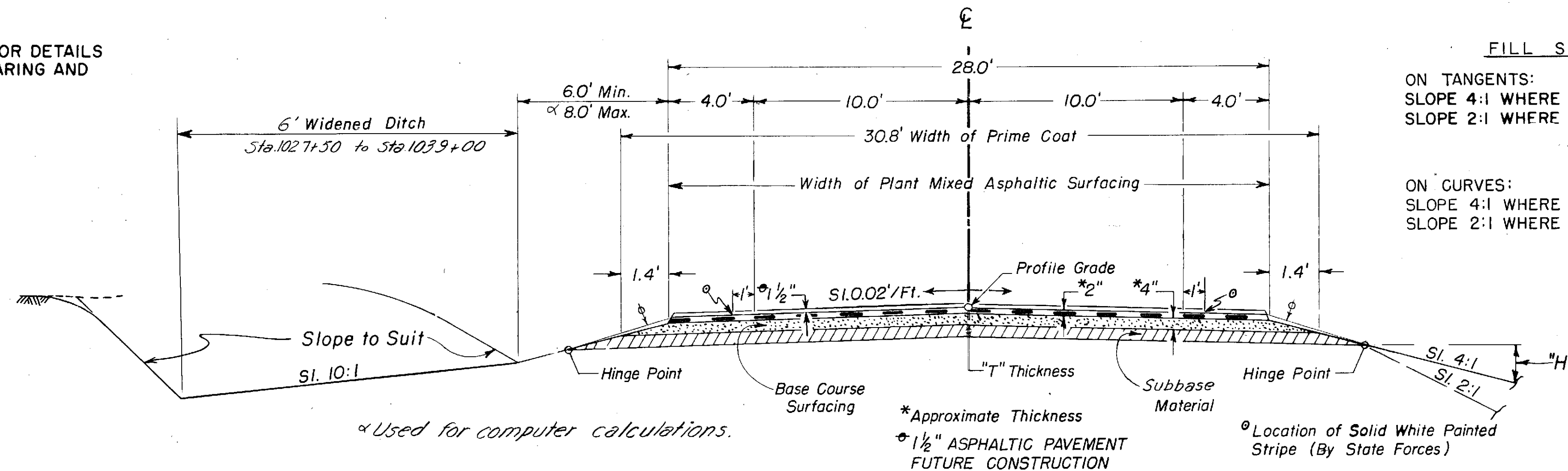
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____ DATE _____

DIVISION ENGINEER

FEDERAL ROAD REGION NO	DIVISION	PROJ. NO	SHEET NO	TOTAL SHEETS
9	COLORADO	S 0097 (7)	2	

NOTE
SEE STANDARDS FOR DETAILS
OF CUT SLOPE TREATMENT, FLARING AND
WIDENING.



FILL SLOPES
ON TANGENTS:
SLOPE 4:1 WHERE "H" IS 3' OR LESS
SLOPE 2:1 WHERE "H" IS OVER 3'

ON CURVES:
SLOPE 4:1 WHERE "H" IS 5' OR LESS
SLOPE 2:1 WHERE "H" IS OVER 5'

Contractor will be required to blade
additional surfacing material to this line
after completion of paving operation.
Material to be paid for as provided
in item 26.

UNCL. EXCAVATION BELOW 4:1 SLOPE AND/OR 10:1
SLOPE WILL NOT BE PERMITTED.

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.

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:

ASPHALTIC PAVEMENT..... 34 TONS
BASE COURSE..... 66 TONS

GENERAL NOTES

THIS PROJECT IS TO BE CONSTRUCTED IN CONFORMITY WITH THE
STANDARD SPECIFICATIONS OF THE COLORADO DEPARTMENT OF HIGHWAYS,
ADOPTED JANUARY 1, 1958.

ALL QUANTITIES ON PRELIMINARY PLANS ARE TO BE CONSIDERED
APPROXIMATE ONLY.

ALL POLES ENCROACHING ON CONSTRUCTION ARE TO BE MOVED BY
THE OWNERS.

FOR PRELIMINARY PLAN QUANTITIES OF ASPHALTIC ROAD MATERIALS,
THE FOLLOWING RATES OF APPLICATION WERE USED.

PRIME COAT..... @ 0.40 GALS. PER SQ. YD.
Asphalt..... @ 6.5% By Weight

RATE OF APPLICATION AND GRADE OF ASPHALTIC MATERIAL SHALL BE AS
DETERMINED BY THE ENGINEER AT TIME OF APPLICATION.

ASPHALTIC DITCH PAVING IS TO BE PLACED FOR EROSION CONTROL
AT ENDS OF ALL SIDE DRAINS AND ENDS OF ALL CROSS CULVERTS
WITH LESS THAN 5 FT. OF COVER. LOCATIONS AND QUANTITIES INVOLVED
ARE SHOWN IN LIST OF STRUCTURES. DETAILS OF ASPHALTIC DITCH
PAVING ARE SHOWN ELSEWHERE ON THIS SHEET

THICKNESS OF SUB-BASE, SURFACING AND ASPHALTIC PAVEMENT
MATERIALS AS SHOWN ON PLANS IS APPROXIMATE ONLY. THESE MATERIALS
ARE TO BE PLACED ON THE BASIS OF TONNAGES SHOWN ON PLANS.

DURING CONSTRUCTION OF THIS PROJECT, TRAFFIC WILL USE
THE PRESENT TRAVELED ROADWAY.

All side approach roads to the project shall be
primed and paved with 2" of asphaltic surfacing to a
distance out from edge of asphaltic surfacing as
follows:
Field Approaches - 4 ft.
All other Approaches - 50 ft. or to the
R.O.W. Line, whichever is less.

Guard Posts are to be removed by State Forces.

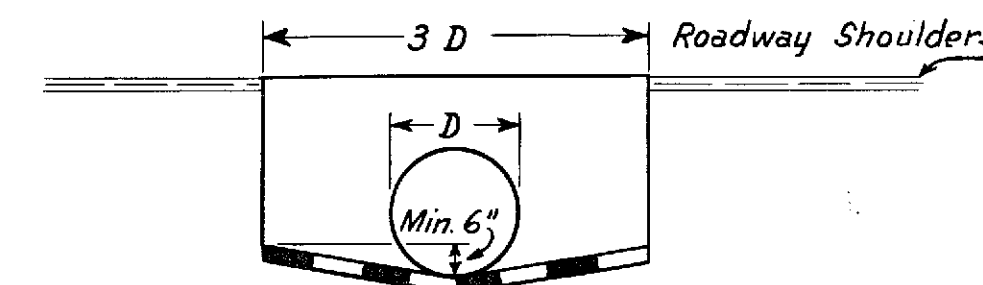
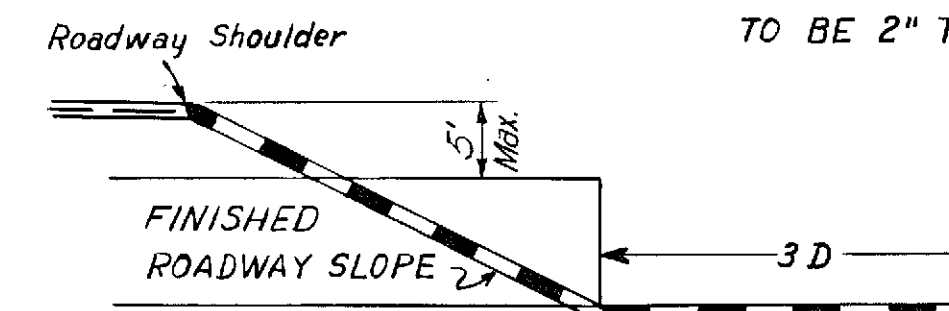
It is estimated that old road is to be obliterated
at the following locations: Sta. 1017+ to Sta. 1024+.

Approximate location and quantities involved
in construction of intercepting ditches are tabulated
in Summary of Earthwork Quantities on Sheet No. 17.

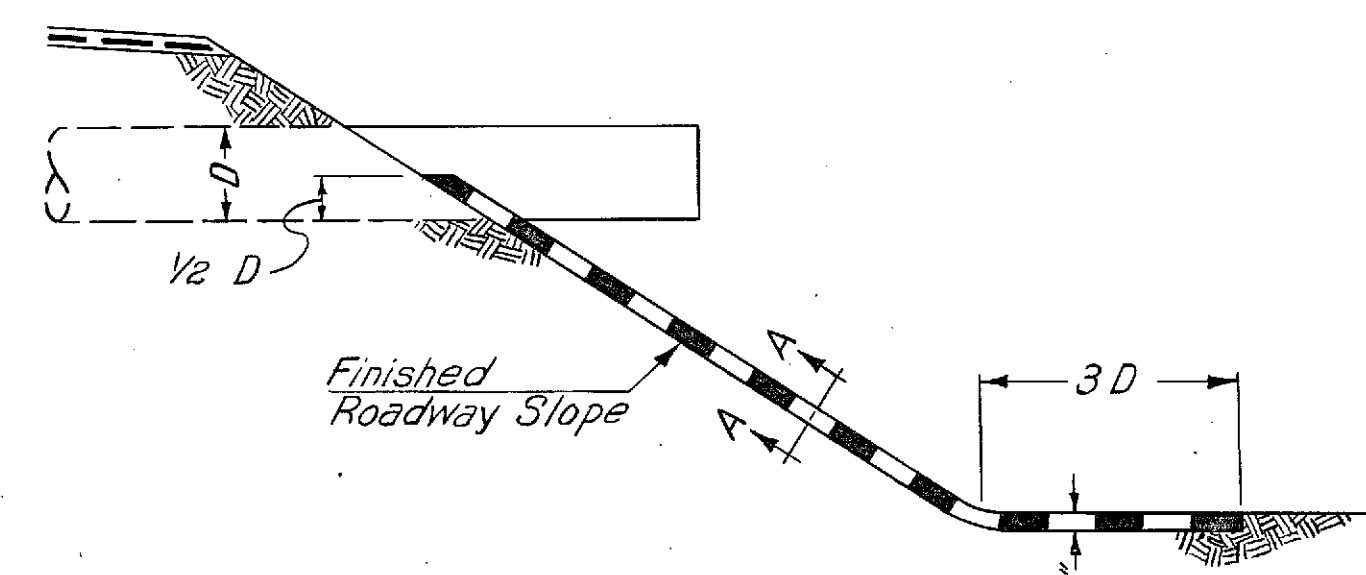
DETAILS OF PLANT MIXED ASPHALTIC DITCH PAVING

FOR EROSION CONTROL

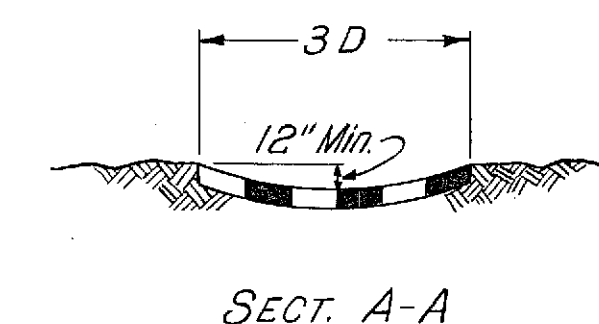
ALL ASPHALTIC DITCH PAVING
TO BE 2" THICK.



FOR CULVERT OUTLETS



For locations see Line Sheets



SECT. A-A

SUMMARY OF APPROXIMATE QUANTITIES

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	5 0097 (7)	3	

SPECIFICATION ITEM NO.	ITEM	UNIT																	PROJECT TOTALS			
11	Removal of Bridge, Sta. 923+	Each																	1			
11	Removal of Structures	Each																	13			
11	Reset Mail Box Structures	Each																	3			
11	Plug Culverts	Each																	4			
12	Removing Fence	Lin. Ft.																	1,400			
12	Removing & Rebuilding Fence	Lin. Ft.																	7,100			
12	Line Posts (Native Cedar)	Each																	40			
13	Unclassified Excavation	Cu. Yd.																	110,000			
13	Unclassified Ditch Excavation	Cu. Yd.																	1,100			
13	Stripping	Cu. Yd.																	13,000			
14	Unclassified Structural Excavation - Miscellaneous	Cu. Yd.																	920			
14	Unclassified Structural Excavation - Bridges	Cu. Yd.																	35			
16	Structure Backfill (Class X)	Cu. Yd.																	520			
17	Compaction (Standard)	Cu. Yd.																	144,000			
17	Wetting	M Gal.																	6,650			
17	Furnishing Heavy Rubber Tired Roller	Each																	1			
17	Rolling with Heavy Rubber Tired Roller	Hour																	20			
18	Station Yard Overhaul	Sta. Yd.																	321,000			
18	Yard Mile Overhaul	Yd. Mi.																	4,900			
18	Ton Mile Overhaul	Ton Mi.																	172,200			
23	Subbase Material (Class 3)	Ton																	48,100			
26	Gravel or Crushed Rock Surfacing (Grading C)	Ton																	13,800			
29	Asphalt (85-100 Penetration)	Ton																	480			
30	Asphaltic Road Material MC (Prime)	Gal.																	25,900			
32	Plant Mixed Asphaltic Surfacing	Ton																	6,480			
32	Plant Mixed Asphaltic Ditch Paving	Ton																	60			
44	Miscellaneous Treated Timber	M Ft. bm.																	0.4			
46	Class "A" Concrete	Cu. Yd.																	9			
47	Reinforcing Steel	Lb.																	500			

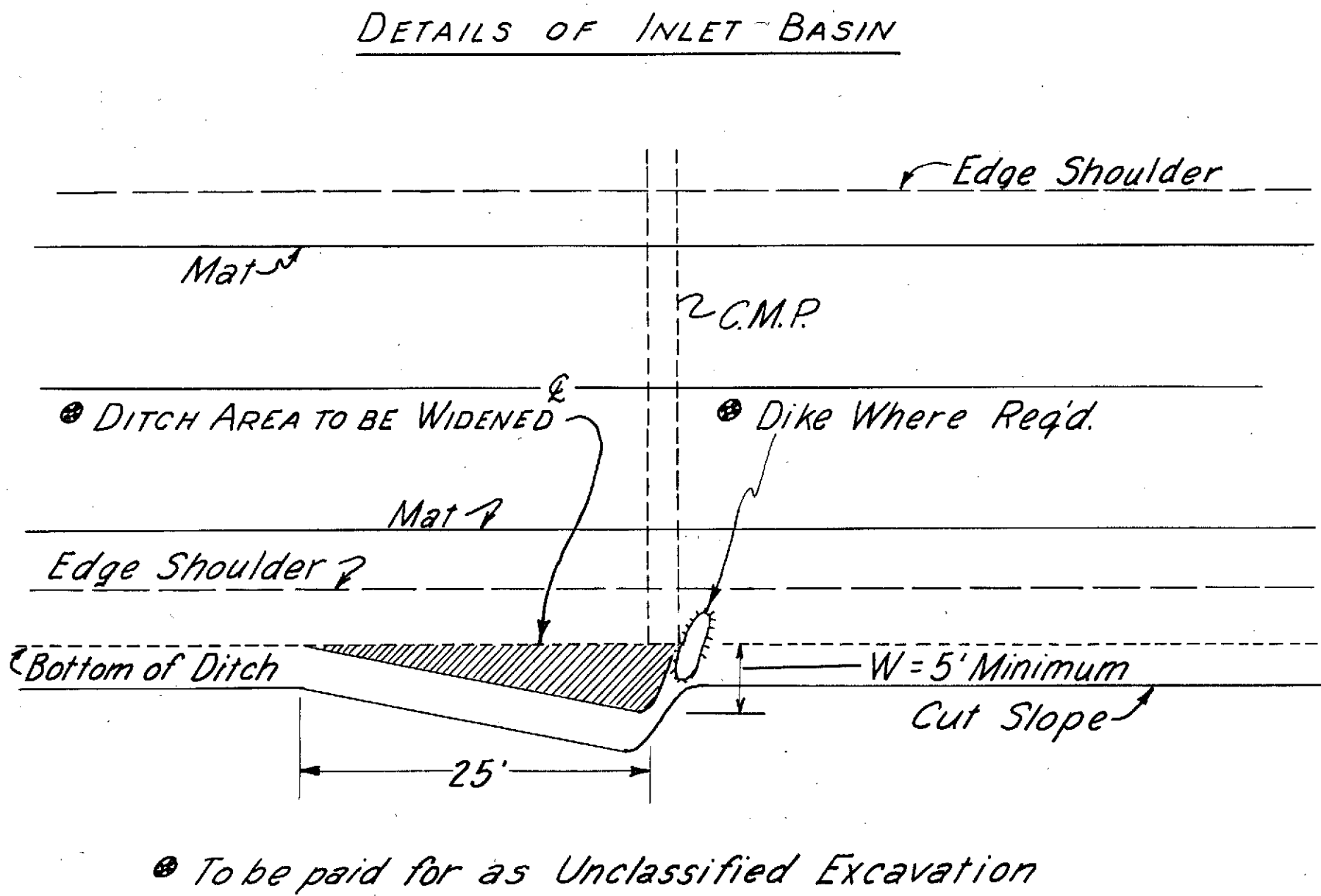
SUMMARY OF APPROXIMATE QUANTITIES

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	50097 (7)	4	

SPECIFICATION ITEM NO.	ITEM	UNIT																	PROJECT TOTALS			
48	Structural Steel	Lb.																	5400 ✓			
51	Relaying 18" Pipe (C.M.P.)	Lin. Ft.																	160 ✓			
51	Relaying 24" Pipe (C.M.P.)	Lin. Ft.																	44 ✓			
53	18" Corrugated Metal Culvert Pipe	Lin. Ft.																	906 ✓			
53	24" Corrugated Metal Culvert Pipe	Lin. Ft.																	249 ✓			
53	36" Corrugated Metal Culvert Pipe	Lin. Ft.																	146 ✓			
53	48" Corrugated Metal Culvert Pipe	Lin. Ft.																	94 ✓			
53	72" Corrugated Metal Culvert Pipe	Lin. Ft.																	184 ✓			
76	Barbed Wire Fence with Metal Posts	Lin. Ft.																	12,000 ✓			
76	Combination Wire Fence with Metal Posts	Lin. Ft.																	2400 ✓			
76	End Posts	Each																	16 ✓			
76	Corner & Line Brace Posts	Each																	23 ✓			
76	Driveway Gates	Each																	3 ✓			
81	Right-of-Way Markers	Each																	25 ✓			
95	29"x 18" Metal Aprons for Corrugated Metal Pipe Arch Culverts	Each																	2 ✓			
95	36"x 22" Metal Aprons for Corrugated Metal Pipe Arch Culverts	Each																	1 ✓			
134	29"x 18" Corrugated Metal Pipe Arch Culverts	Lin. Ft.																	130 ✓			
134	36"x 22" Corrugated Metal Pipe Arch Culverts	Lin. Ft.																	52 ✓			
134	43"x 27" Corrugated Metal Pipe Arch Culverts	Lin. Ft.																	74 ✓			
192	Delineators (Type I)	Each																	142 ✓			
	<u>FORCE ACCOUNT</u>																					
20	Obliterating Old Road	Lump Sum																	• ✓			
	Relocate Telephone Poles (Work by Suburban Telephone Company of Colorado) [Relocated on Project 50097(6)]																					
	Furnish & Install Identification Signs (Work by State Forces)	Each																	2 ✓			
	<u>NON-FEDERAL AID</u> Signing & Striping Entire Project (Work by State Forces)	Lump Sum																	• ✓			

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	50097(7)	5	

FENCING TABULATION



STATION TO STATION	SIDE	REMOVE FENCE LIN. FT.	REMOVE & REBUILD FENCE LIN. FT.	* BUILD FENCE				GATES B.W. EACH	GATES DRIVEWAY EACH
				BW LIN. FT.		Comb. LIN. FT.			
920+80 to 930+00 930+00 to 942+26 946+00 to 957+72	Rt. Rt. Rt.		920 1,260 1,210						
999+00 to 1003+00 1012+00 to 1014+00 1025+90 to 1028+30	Rt. Rt. Rt.	220 260	400						
1039+20 to 1045+50 1069+27 to 1082+25 1014+00 to 1020+00	Rt. Rt. Lt.	620	650 1,300						
1023+10 to 1025+90 1040+00 to 1048+00 1100+00 to 1104+89	Lt. Lt. Lt.	280	850 500						
1012+00 to 1020+00 1020+00 to 1028+30 1082+25 to 1105+15	Rt. Rt. Rt.			800 830		2,315			
945+00 to 1023+20 1058+25 to 1082+65 936+70	Lt. Lt. Rt.			7,850 2,440				1	
954+90 1016+50 1039+20	Rt. Rt. Rt.							1 1 1	
1041+20 956+00 1004+00	Rt. Lt. Lt.							1 1 1	
1045+40 1073+00 1100+40	Lt. Lt. Lt.							1 1 1	
1026+50 1090+00 1102+90	Rt. Rt. Rt.								1 1 1
TOTALS		1,380	7,090	11,920		2,315			3

NOTE: It is estimated that 35 new Line posts will be needed for Removing & Rebuilding Fence.
New Line Posts are to be native cedar
It is estimated that 16 End Posts and 23 Line Brace and Corner Posts will be needed to
to complete the new Fence on this Project.

* The Fence Spacing shown on Standard M-76-A is to be modified at locations designated by
the Engineer.

Excavation
Cu. Yds. Area

Embankment
Area Cu. Yds.

Excavation
Cu. Yds. Area

Embankment
Area Cu. Yds.

FED. ROAD
REGION
9

DIVISION
COLO.

PROJ. NO.
50097 (7)

SHEET
NO.
5-A

TOTAL
SHEETS

FENCING REQUIREMENTS

STATION	SIDE	REMOVE FENCE	REMOVE REBUILD FENCE	BUILD FENCE		GATES		POSTS		
				Barbed Wire	Comb Wire	Barbed Wire	Drive- way	End	Corner Time	New Line
908+70 - 950+10	LT.			4210		1		3	12	
950+10 - 969+05	LT.			1913		1		2	3	
969+10 - 1025+00	LT.			5547		1		2	13	
1025+80	LT.			114			1	1		
1042+80 - 1048+03	LT.		628							35
1058+34 - 1082+62	LT.			2457		2		4	4	
1100+30 - 1105+00	LT.	500		506				1	2	
922+60 - 936+40	RT.		1390							15
936+40 - 942+80	RT.	586		660				1	2	
948+00 - 958+60	RT.	965		956		1		3		
999+00 - 1003+00	RT.		403							2
1012+00 - 1026+13	RT.	1790		1470				1	4	
1026+85	RT.						1	2		
1026+92 - 1028+30	RT.	150		138						
1039+04 - 1045+45	RT.	650		624					3	
1069+33 - 1082+82	RT.		1267							64
1082+22 - 1089+76	RT.				155			1		
1083+84	RT.					1				
1083+92 - 1091+92	RT.				700			2		
1092+00	RT.					1				
1092+08 - 1102+85	RT.				163			2	1	
1102+93	RT.					1				
1103+01 - 1105+00	RT.				222			2	1	
TOTAL		4641	3688	18595	2245	5		27	45	116

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DELINEATORS

Station	To Station	Side	Spacing	Type
919+00	929+50	LT & RT	4° Curve	10
929+50	947+35	LT & RT	3° Curve	14
947+35	960+00	LT & RT	1° 30' Curve	10
960+00	1008+00	LT & RT	Tanp.	12
1008+00	1023+88	LT & RT	3° Curve	10
1023+88	1035+91	LT & RT	5° Curve	12
1035+91	1049+00	LT & RT	4° Curve	10
1049+00	1065+00	LT & RT	Tanp.	5
1065+00	1085+00	LT & RT	3° Curve	16
1085+00	1093+00	LT & RT	Tanp.	2
1093+00	1103+00	LT & RT	3° Curve	8
TOTAL				109

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R.O.V. MARKERS

Station	Side	Number
S.T. 927+537	LT & RT	2
I.S. 931+894	LT & RT	2
948+00	RT	1
PT. 956+42.4	LT & RT	2
978+00	LT	1
1000+00	LT & RT	2
I.S. 1016+19.5	LT & RT	2
1025+00	LT & RT	3
ST. 1036+03.1	LT	1
1039+00	RT	1
ST. 1045+66.9	LT & RT	2
I.S. 1069+26.6	LT & RT	2
ST. 1081+63.8	LT & RT	2
I.S. 1101+89.1	LT & RT	2
TOTAL		25

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SHEET TOTALS

EXCAVATION
EXCAVATION
EMBANKMENT

CU. YDS.
CU. YDS.
CU. YDS.

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	50097(7)	6	

DELINEATORS

STATION TO STATION	SIDE	SPACING	TYPE I	
919+00 to 929+72	Lt. & Rt.	4° Curve	18	
929+72 to 948+06	Lt. & Rt.	3° Curve	20	
948+06 to 964+43	Lt. & Rt.	1°30' Curve	10	
964+43 to 1009+10	Lt. & Rt.	Tangent	12	
1009+10 to 1025+48	Lt. & Rt.	3° Curve	16	
1025+48 to 1037+12	Lt. & Rt.	5° Curve	18	
1037+12 to 1052+38	Lt. & Rt.	4° Curve	14	
1052+38 to 1063+50	Lt. & Rt.	Tangent	2	
1063+50 to 1088+74	Lt. & Rt.	3° Curve	22	
1096+13 to 1104+89	Lt. & Rt.	6° Curve	10	
TOTAL			142	

R.O.W. MARKERS

STATION	SIDE	No.	
T.S. 917+66.2	Lt. & Rt.	0	
S.T. 927+53.7	Lt. & Rt.	2	
T.S. 937+89.4	Lt. & Rt.	2	
948+00	Lt. & Rt.	2	
P.T. 956+42.4	Lt. & Rt.	2	
978+00	Lt.	1	
1000+00	Lt. & Rt.	2	
T.S. 1016+19.5	Lt. & Rt.	2	
1025+00	Lt. & Rt.	2	
S.T. 1036+03.1	Lt.	1	
1039+00	Rt.	1	
S.T. 1045+66.9	Lt. & Rt.	2	
T.S. 1069+26.6	Lt. & Rt.	2	
S.T. 1081+63.8	Lt. & Rt.	2	
T.S. 1101+89.1	Lt. & Rt.	2	
TOTAL		25	

SURFACING AND SUBBASE MATERIAL PLANS

It is estimated that Surfacing and Subbase Material for the project are available in the vicinity of the pit indicated in the following tabulations. Estimated quantities involved in these operations are shown below.

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

SURFACING

STATION TO STATION	SOURCE AVAILABLE & "R" VALUE	TONS			TON MILE OVERHAUL		
		PLANT MIXED ASPHALTIC SURFACING		BASE COURSE SURFACING "C"	PLANT MIXED ASPHALTIC SURFACING		BASE COURSE SURFACING
917+66.2 to 955+00	Pit No. 1 Taylor	1,270		2,465	1,307		2,536
955+00 to 1098+00		4,862		9,438	13,306		25,829
1098+00 to 1104+99	"R" = 82	238		461	989		1,916
From List of Structures		62		175	279		429
Est. for: Blading against edge of Shoulder Pavement	Haul Route 3566' to Sta. 917+66.2			1,124			2,753
Curve Widening Sta. 924±		14		27	11		22
Curve Widening Sta. 1031±		15		29	43		82
Curve Widening Sta. 1043±		11		20	34		61
Curve Widening Sta. 1103±		4		7	17		29
TOTALS		6,476		13,746	15,986		33,657

^a Includes Overhaul on 52 Tons Asph. Ditch Paving.

SUBBASE

STATION TO STATION	SOURCE AVAILABLE & "R" VALUE	*THICKNESS INCHES	SUBBASE MATERIAL CLASS 3	TON MILE OVERHAUL
			TONS	
917+66.2 to 955+00	Pit No. 1 Taylor	8"	5,601	5,763
955+00 to 1098+00	R = 7.9	13"	36,751	100,578
1098+00 to 1104+99	Haul Route 3566' to Sta. 917+66.2	8"	1,049	4,361
Estimated for Correcting Irregularities			4,340	11,070
Curve Widening Sta. 924±			53	43
Crest Widening Sta. 955±			103	144
Curve Widening Sta. 1031±			92	261
Curve Widening Sta. 1043±			65	199
Curve Widening Sta. 1103±			14	59
TOTALS			48,068	122,478

* Approximate Thickness Based on Design Curve "D."

Excavation
Cu. Yds. Area

Embankment
Area Cu. Yds.

Excavation
Cu. Yds. Area

Embankment
Area Cu. Yds.

FED. ROAD REGION	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	50097(11)	6-A	

SURFACING

STATION TO STATION	Source	TONS.			TON MILE OVERHAUL		
		Plant Mix Surf	Plant Mix Ditch Gravel Gr. C.	B.C. Surf.	Plant Mix Surf	Plant Mix Gravel Gr. C.	B.C. Surf.
922+00 To 955+00	Pit	1143.15	1730	2663.90	1223	19	2851
955+00 To 1098+00	No I	4934.30	3375	10942.20	13504	93	29946
1098+00 To 1104+99	Taylor	143.90		656.20	593		2927
ROAD APPROACHES		64.35		39475	211		903
TOTAL		6285.50	5105	14596.85	15336	111	36829

J.P.P.

SUB-BASE

STATION TO STATION	Source Thickness	Sub-base Class 3	Ton Mile	SOIL DATA			
				Classification	C.B.R.	Depth 177 Trenches	Total Cover
922+00 To 953+00		4326.95	4548	H-4 (2)	6.9	8"	12.9
953+00 To 973+00	Pit	6507.00	2982	H-6 (3)	4.0	11"	17.4
973+00 To 993+00	No I	4813.70	2208	H-4 (3)	4.5	10"	16.4
993+00 To 1013+00		3216.66	2371	H-6 (8)	4.0	11"	18.4
1013+00 To 1023+00	Taylor	3533.30	2183	H-6 (10)	3.1	14"	19.2
1023+00 To 1033+00		2982.35	2262	H-6 (9)	3.7	12"	18.1
1033+00 To 1053+00		6135.15	10708	H-6 (11)	3.3	13"	19.2
1053+00 To 1063+00		3167.55	10558	H-6 (10)	3.1	14"	19.2
1063+00 To 1104+99		11637.90	44523	H-6 (9)	3.7	12"	18.2
ROAD APPROACHES		136.55	1579				
TOTAL		46851.75	123862				
TOTAL TON MILE			123862				

J.P.P.

Note: For a short area from sta 965+00 To 967+00 & from sta 972+ to 974+ on the LT side at B. Classification was H-6-13 C.B.R. of 2%, Depth of Sub-base used was 16". Total Cover 21.5

SHEET TOTALS

EXCAVATION
EXCAVATION
EMBANKMENT

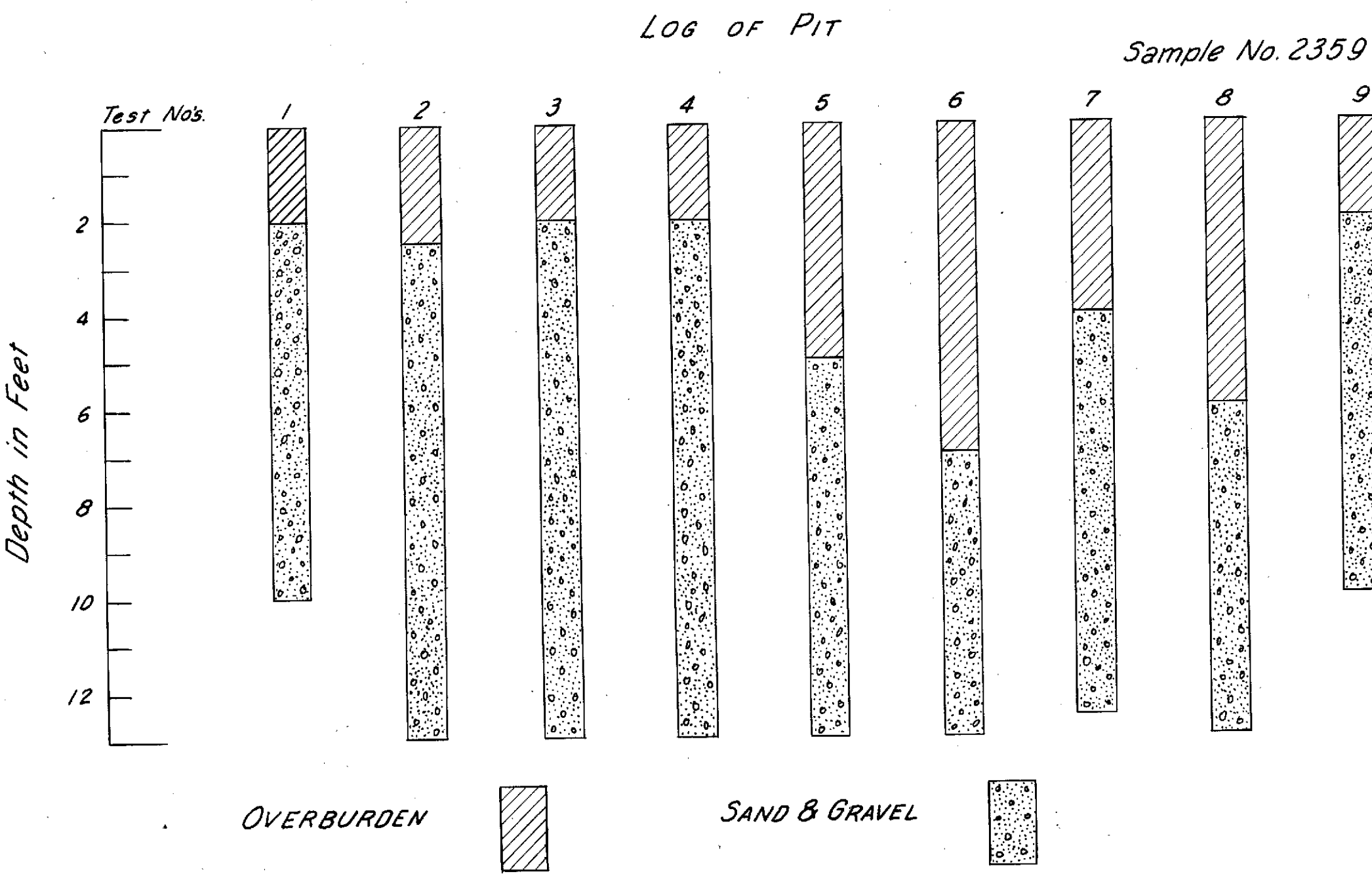
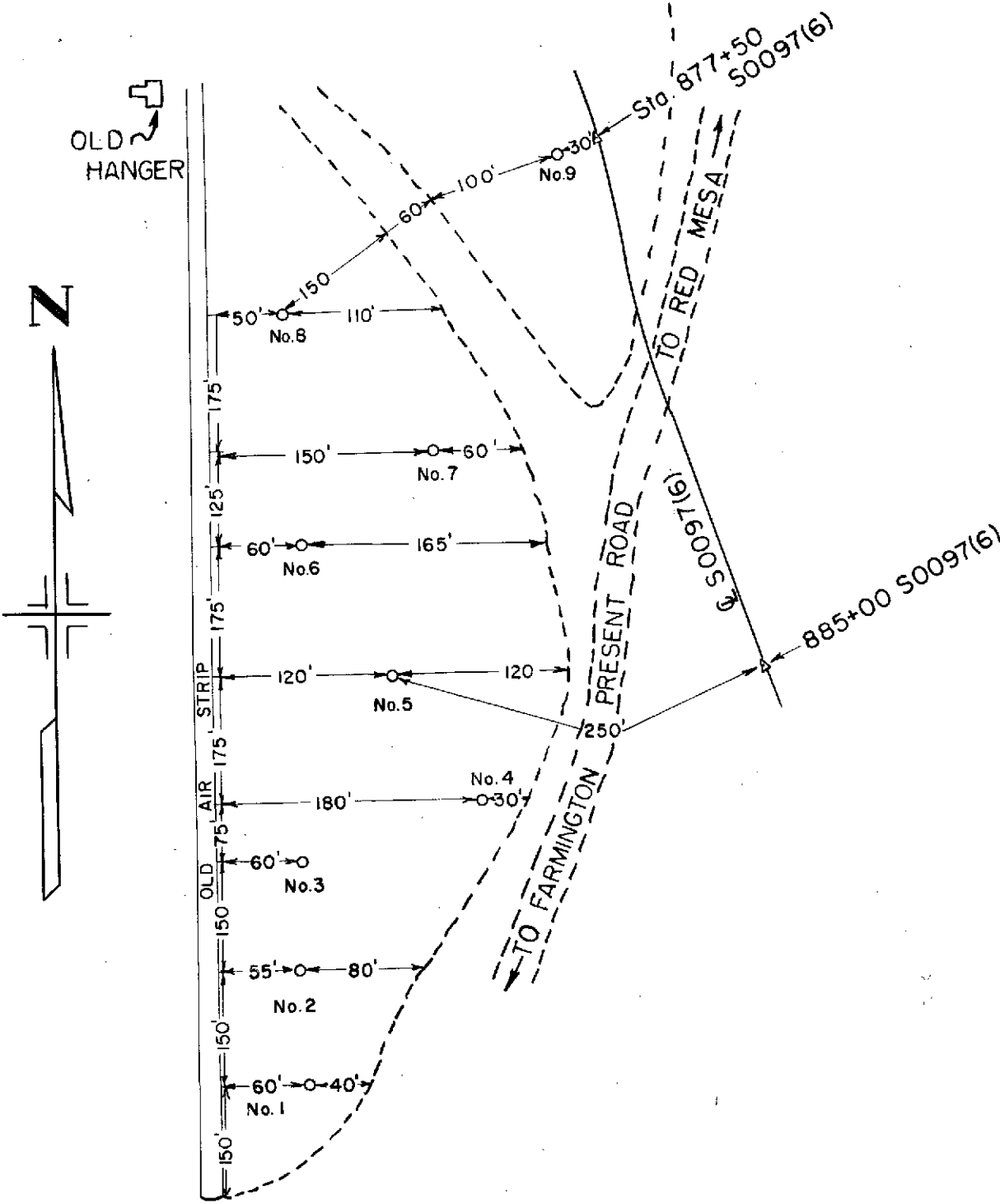
CU. YDS.
CU. YDS.
CU. YDS.

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	50097(7)	7	

PIT LOCATION

PIT NO. 1

Owner: Bob Taylor, Hesperus, Colorado
Location: S.W. 1/4 Sec. 32 T. 33N., R. 12 W., N.M.P.M.
Use: Subbase, Surfacing, Plant Mixed Aggregate
Quantity: Ample
Haul Route: 3566' to Sta. 917+66.2
Stripping: 13,000 Cu. Yds.



FINAL LIST OF STRUCTURES

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0097(7)	8-A	

INDEX			LOCATION	DESCRIPTION	REMOVE STRUCTURE		UNCLASSIFIED EXCAVATION			UNCLASSIFIED STRUCTURAL EXCAVATION	MISC. TREATED TIMBER	STRUCTURE BACKFILL	STRUCT. STEEL	GRAVEL OR CRUSHED ROCK	ASPHALTIC SURFACING	CONCRETE	REINFORCING STEEL	CORRUGATED METAL CULVERT PIPE Subdivide as project requires					C.M.A.P.			PLANT MIXED ASPHALTIC DITCH PAVING	CULVERT END SECTIONS									
Book	Page	Sheet			No.	Kind	Cubic Yards			CUBIC YARDS		M. FT. BM.	CUBIC YARDS	lbs.	SURFACING	TONS	TONS	CUBIC YARDS	LBS.	LINEAR FEET								L TONS	R TONS	RELAY C.M.P.		PLUG C.M.P.				
							Exc.	Emb.	Ditch	MISC.	BRIDGE									CL. X	18"	24"	36"	48"	72"	29"x18"	36"x22"			43"x27"	18"					
3	7		917±	Identification Sign, Rt. (STATE FORCES)																																
3	9	19	923+00	Remove Bridge, Double 72'x81' C.M.P. Cross Culvert, Inlet & Outlet	1	BRIDGE			6	120			111																							
3	11	19	924+25	Road Approach, Lt. No Dirt Quantities																																
3	14	19	930+55	Remove C.M.P., 24'x68' C.M.P. Cross Culvert, Inlet & Outlet	1	C.M.P.			2	17			12																							
3	16	19	933+50	Road Approach, Rt.					100*																											
3	17	19	937+40	Relay 12' of 24" C.M.P., Inlet				7		8			11																							
3	19	20	940+80	24"x64' C.M.P. Cross Culvert, Inlet Basin, Outlet ditch.				44		41			13																							
3	23	20	947+30	Remove C.M.P., 24'x66' C.M.P. Cross Culvert, Inlet ditch.	1	C.M.P.			5	29			12																							
3	25	20	953+59	18"x30' C.M.P. Cross Culvert						5			4																							
3	27	21	956+00	Road Approach, Lt. No Dirt Quantities																																
3	29	21	964+40	Relay 30' of 18" C.M.P., Inlet Basin, Outlet ditch.				34		13	11		7																							
3	32	21	969+10	72"x22' C.M.P. Cross Culvert, Inlet ditch						36	31		12																							
3	34	22	973+75	Road Approach, Rt. No Dirt Quantities																																
3	37	22	977+80	Remove C.M.P. 18"x66' C.M.P. Cross Culvert, Inlet ditch.	1	C.M.P.			2	10			9																							
3	39	22	981+70	Relay 36' of 18" C.M.P. Inlet & Outlet						6	19		7																							
3	42	22	990+90	Extend 18" C.M.P. Cross Culvert Lt. & Rt. Inlet ditch						2	4		4																							
3	43	23	997+50	18"x24' C.M.P. Side Drain, Road Approach, Lt. No Dirt Quantities.							3		4																							
3	44	23	998+45	Road Approach, Rt.						72*																										
3	50	23	1000+00	36'x76' C.M.P. Cross Culvert						24			18																							
3	46	23	1000+10	Remove C.M.P.	1	C.M.P.																														
3	55	24	1006+98	Remove C.M.P. 18"x70' C.M.P. Cross Culvert, Inlet Basin, Outlet Ditch	1	C.M.P.	60		33	24			10																							
3	57	24	1013+68	Relay 62' of 18" C.M.P. Cross Culvert, 18"x50' C.M.P. Inlet Ditch				30		17			14																							
3	59	25	1012+ to 1015+	Relocate Irrigation Ditch, Rt.						157																										
3	63	25	1023+60	48'x94' C.M.P. Cross Culvert, Channel Change, Lt. & Rt.						200	40		38																							
3	66	25	1025+50	30' Cattle Guard & County Road Approach Lt.						415		40	0.323		17		6255		10.4		525															
3	68	26	1026+20	18"x68' C.M.P. Cross Culvert, Inlet						5	9		9																							
3	70	26	1026+50	Relay 4' 24" C.M.P. Side Drains, Road Approach Rt.						2200																										
3	72	26	1031+50	Relay 38' of 18" C.M.P. 18"x28' C.M.P. Cross Culvert Inlet Basin.				27		7			8																							
3	73	27	1035+60	Remove C.M.P., 18"x62' C.M.P. Cross Culvert, Inlet Ditch	1	C.M.P.			1	11			8																							
3	74	27	1037+50	18"x52' C.M.P. Cross Culvert, Inlet Basin, Outlet Ditch.				40		13	13		7																							
3	75	27	1039+14	29"x18'x100' C.M.A.P. Cross Culvert Metal Apron Inlet, Inlet Ditch.						1	67		14																							
3	76	28	1039+25	Remove C.M.P.	1	C.M.P.																														
3	77	28	1039+ to 1041+	Relocate Irrigation Ditch, Rt.						30																										
3	78	28	1039+ to 1045+	Relocate Irrigation Ditch, Lt.						117																										
3	80	28	1041+50	18"x64' C.M.P. Cross Culvert, Inlet Ditch.						1	6		9																							

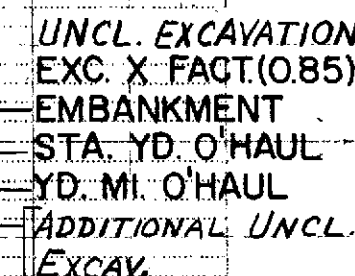
* External Connecting Band * Included in I.B.M. Earthwork Quantities.

FINAL LIST OF STRUCTURES

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0097(7)	9-A	

OK. 7/6/65
KAD.

INDEX			LOCATION	DESCRIPTION	REMOVE STRUCTURE		UNCLASSIFIED EXCAVATION			UNCLASSIFIED STRUCTURAL EXCAVATION	MISC. TREATED TIMBER	STRUCTURE BACKFILL	STRUCT. STEEL	CONCRETE	REINFORCING STEEL	CORRUGATED METAL CULVERT PIPE Subdivide as project requires					C. M. A. P.			PLANT MIXED ASPHALTIC DITCH PAVING L R TONS	RELAY C.M.P.		PLUS C.M.P.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Book	Page	Sheet			No.	Kind	Cubic Yards			CUBIC YARDS		M. Ft. bm.	CUBIC YARDS	lbs	CU YDS.	lbs	LINEAR FEET					29" x 18"	36" x 22"		43" x 27"	18"	24"	PLUG C.M.P.	18"	24"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				</



PLAN	SURVEYED	BY	DATE
NOTED	FLIGHT		
NO. 24697	ALIGNED		
	RT. OF WAY		
	CHECKED		

PROFILE	SURVEYED	BY	DATE
NOTED	FLIGHT		
NO. 24697	ALIGNED		
	RT. OF WAY		
	CHECKED		

Lot 12 Sec. 2
T.32N.,R.13W.,N.M.P.M.

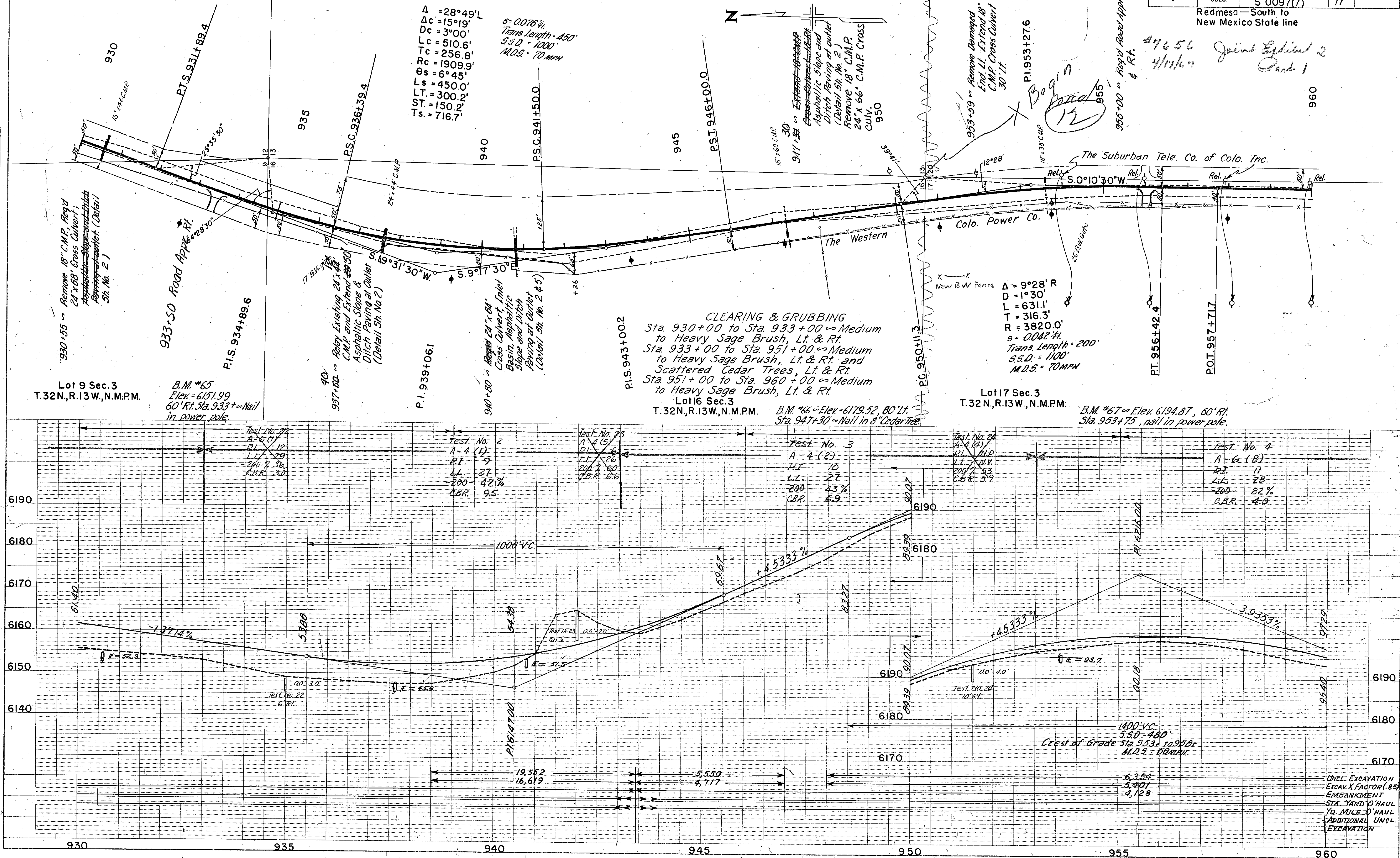
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Lot 20 Sec. 2
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FED. ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0097(7)	11	

Redmesa—South to
New Mexico State line

47656 Joint Exhibit 2
4/17/67 Park 1



FED. ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0097(7)	12	

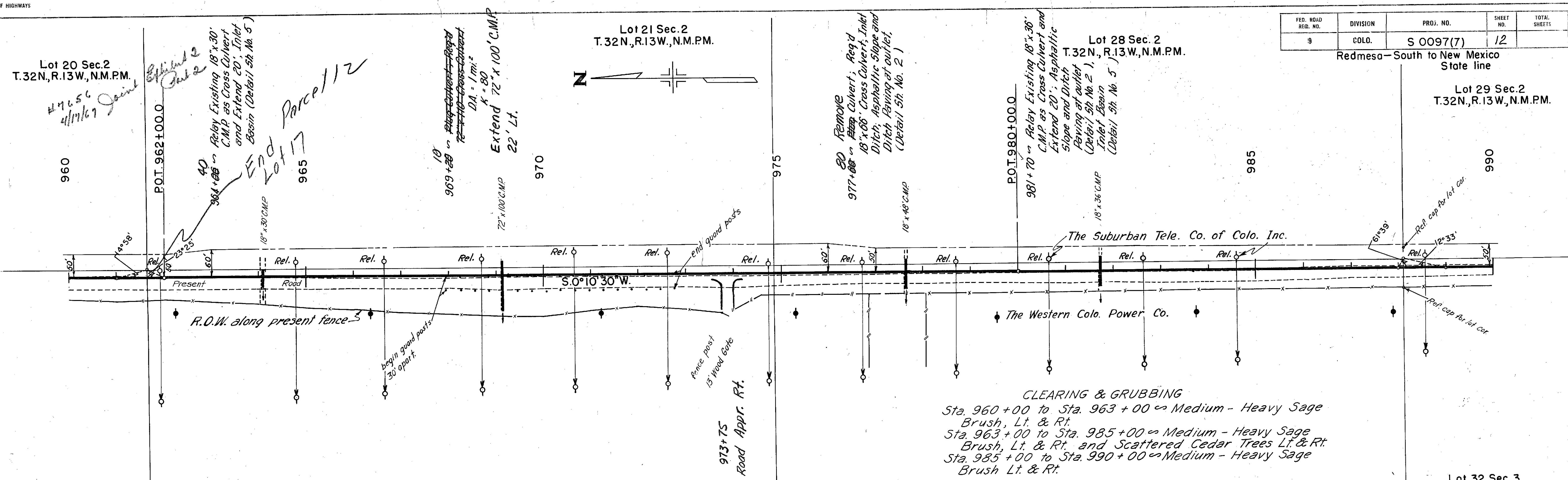
Redmesa—South to New Mexico
State line

Lot 29 Sec.2
T.32N.,R.13W.,N.M.P.M.

Lot 28 Sec.2
T.32N.,R.13W.,N.M.P.M.

Lot 21 Sec.2
T.32N.,R.13W.,N.M.P.M.

Lot 20 Sec.2
T.32N.,R.13W.,N.M.P.M.



CLEARING & GRUBBING
Sta. 960+00 to Sta. 963+00 ~ Medium - Heavy Sage
Brush, Lt. & Rt.
Sta. 963+00 to Sta. 985+00 ~ Medium - Heavy Sage
Brush, Lt. & Rt. and Scattered Cedar Trees Lt. & Rt.
Sta. 985+00 to Sta. 990+00 ~ Medium - Heavy Sage
Brush Lt. & Rt.

Lot 17 Sec.3
T.32N.,R.13W.,N.M.P.M.

Lot 24 Sec.3
T.32N.,R.13W.,N.M.P.M.

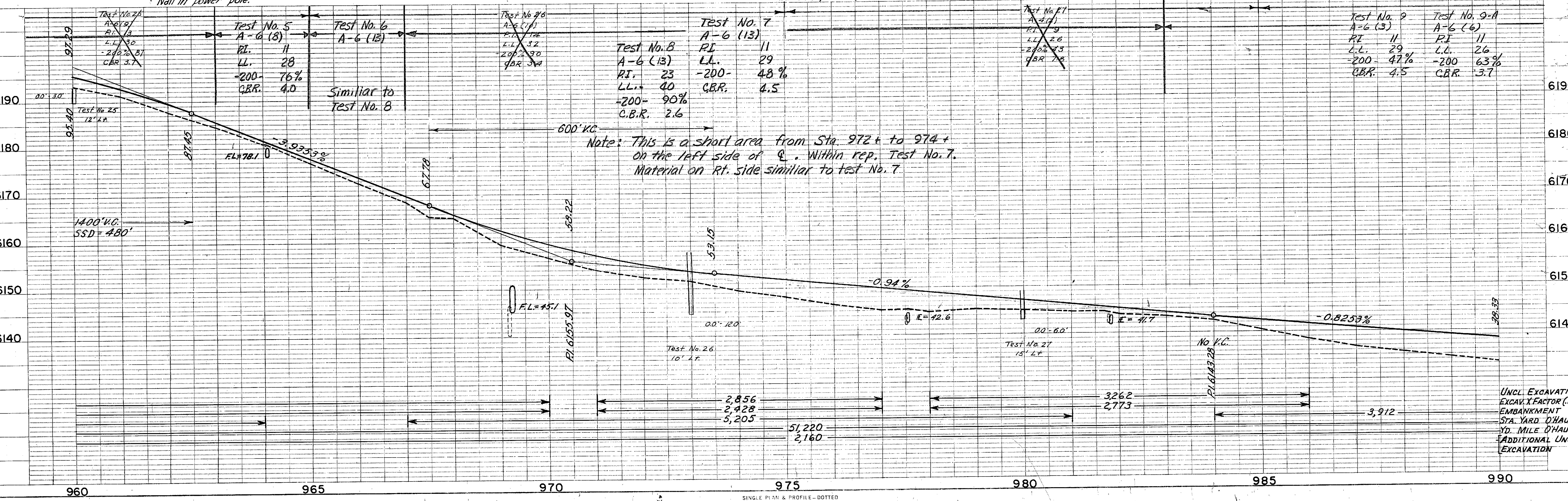
Lot 25 Sec.3
T.32N.,R.13W.,N.M.P.M.

Lot 32 Sec.3
T.32N.,R.13W.,N.M.P.M.

B.M. #68 ~ Elev. 6192.21, 60' Rt. 962+25
Nail in power pole.

B.M. #69 ~ Elev. 6147.52, 65' Rt. Sta. 975+40.
Nail in power pole.

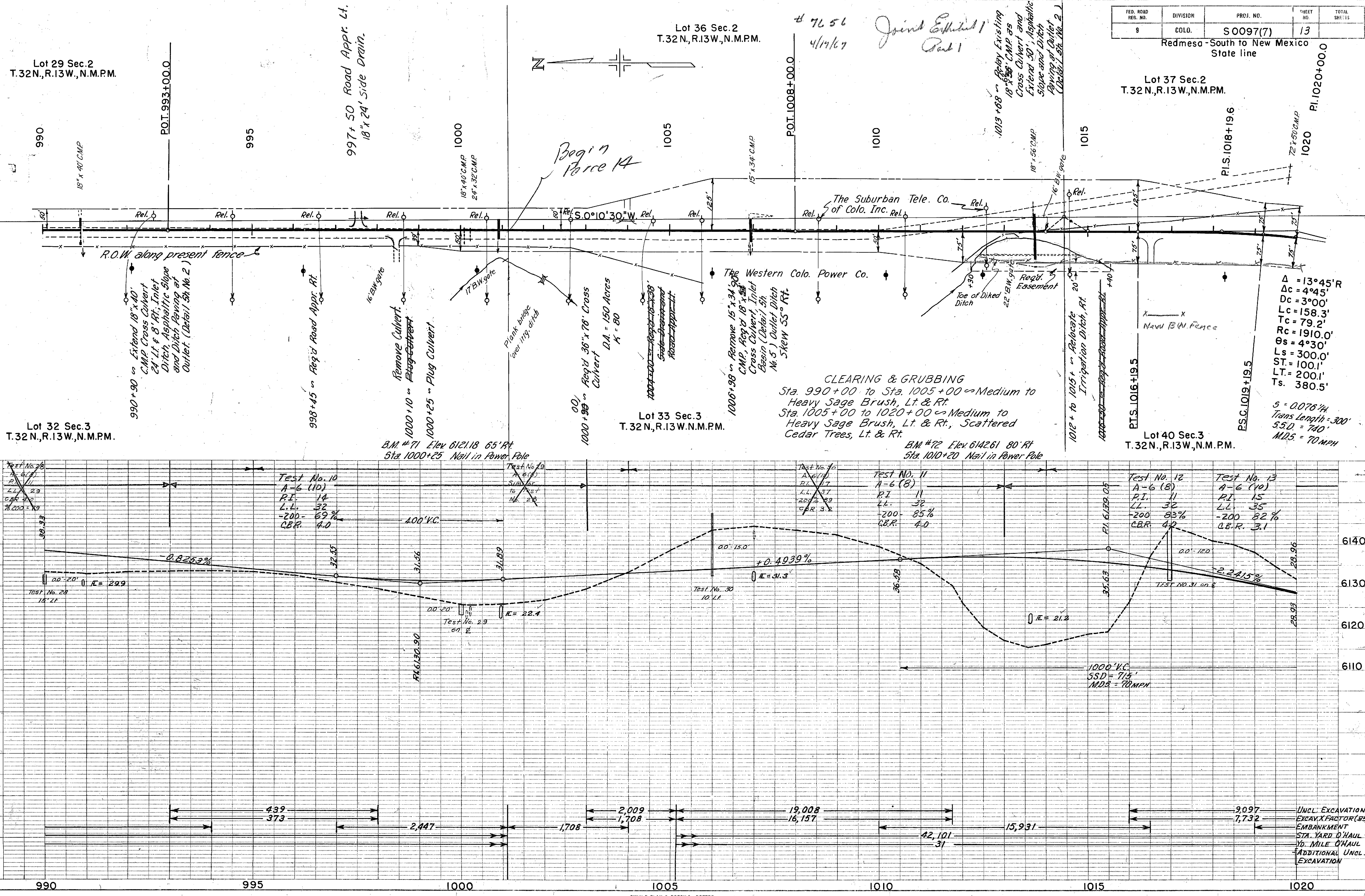
B.M. #70 ~ Elev. 6130.84, 65' Rt. Sta. 987+80.
Nail in power pole.



UNCL. EXCAVATION
EXCAV. X FACTOR (85)
EMBANKMENT
STA. YARD D'HAUL
YD. MILE D'HAUL
ADDITIONAL UNCL.
EXCAVATION

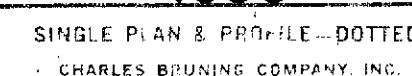
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SURVEYED PLOTTED NOTED NO. 24657		

PROFILE	DATE	BY
SURVEYED PLOTTED NOTED NO. 24657		



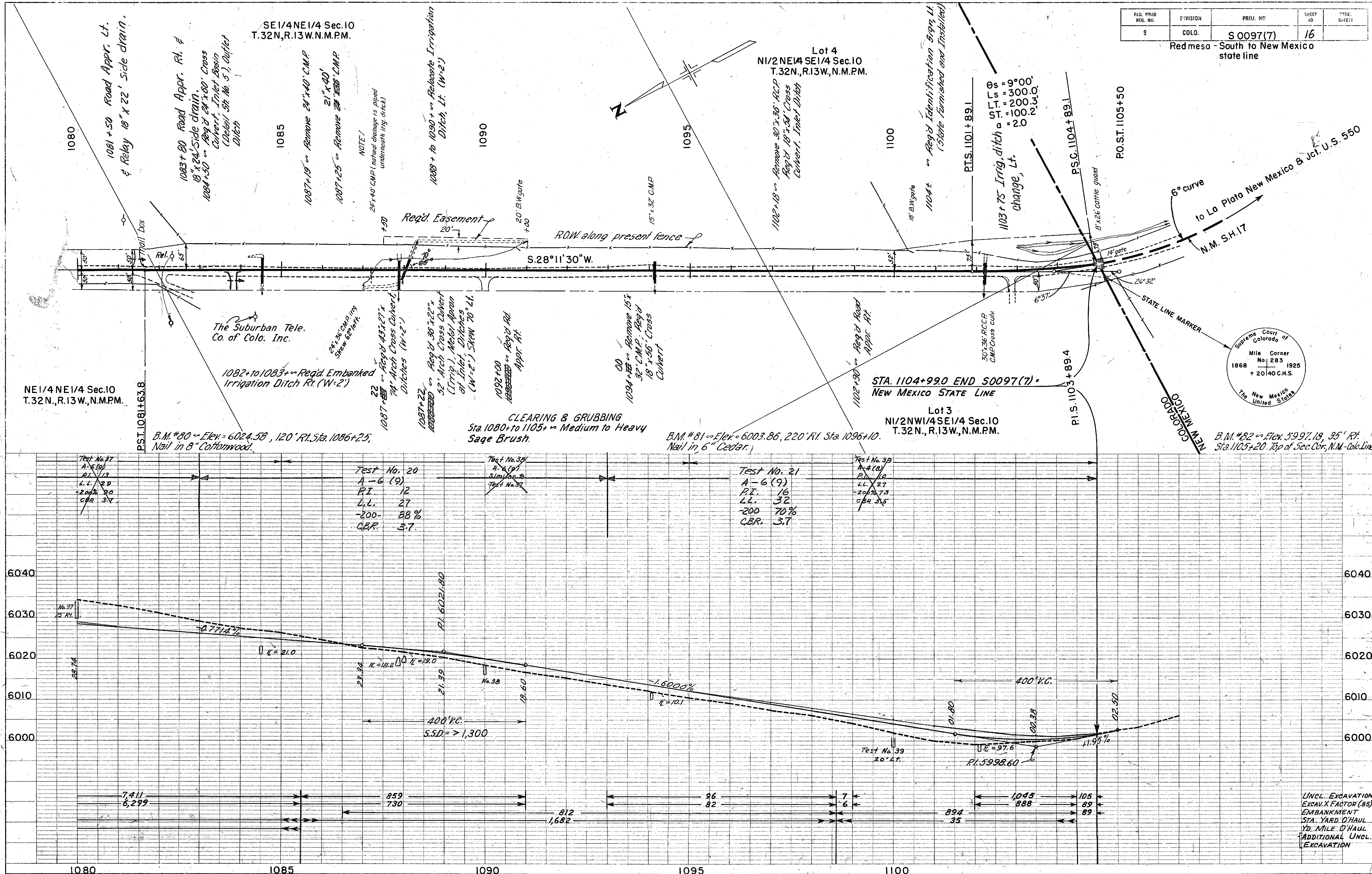
PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	GRADES CHECKED		
NO 24609	B-M-3 NOTED		
	STRUCTURE NOTATION: CHIKO		

CLEARING & GRUBBING
Sta. 1020+ to 1050+ ~ Medium to Heavy
Sage Brush. B.M. #76 ~ Elev. = 6059.91, 150' Lf.
Sta. 1050+50 Nail in 4" Cedar.





B.M. #82 - Elev. 5997.18, 35' Rt.
Sta. 1105+20. Top of Sec. Cor., N.M.-Colo. Line



M-4

FILE M-4