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Dulzuara Conduit.

From New Tunnel to Flume Nº 15.

B.M. – Iron Rod 8' Lt. 342+30 – At foot of big Boulder at NW Cor. of old Blacksmith Shop.

1479.46 B.M.

+4.60 1484.06 H.I.

Sta.	Pavement & Grade
341+25 West Portal of New Tunnel. Tunnel Nº 5 1/4	1475.16
+50	1475.14
+75 End Pavement	1475.12
342+00	1475.10
+25	75.08
+50	75.06
+75	75.04
	−4.60 1479.46 B.M.
	+4.55 1484.01 H.I.
343+00	75.02
+25	75.00

(Continued from Page 19 This Book.)

−0.08 % Grade

1484.06 H.I.

Top Lt Wall	℄	Top Rt Wall
19.09 4.97	15.09 8.97 ℄ Conc. Pavement.	19.08 4.98
19.03 5.03	15.20 8.86 ℄	19.13 4.93
19.24 4.82	15.14 8.92 ℄ Pave.	19.18 4.88
19.19 4.87	15.0 9.1 ℄	19.09 4.97
19.23 4.83	14.9 9.2 ℄	19.16 4.90
19.20 4.86	14.8 9.3 ℄	19.32 4.84
19.18 4.88	14.9 9.2 ℄	19.15 4.91

1484.01 H.I.

19.17 4.84	14.8 9.2 ℄	19.20 4.81
19.07 4.94	14.7 9.3 ℄	19.03 4.98

Feb. 3–'28
Ward – chf.
Duermit – Ler.
Mc Bain – Pod

②	+	H.I.	−	Elev.	Pavement ℄ Grade
		1484.01			
	+50				1474.98
	+75				74.96
	344+00				74.94
	+25				74.92
	+50				74.90
	+75				74.88
	345+00				1474.86
	+25				74.84
			5.05	1478.96	T.P.
	4.56	1483.52			
	+50				74.82
	+75				74.80
	346+00				74.78
	+25				74.76

Lt	1484.01 H.I.	Rt
79.11 4.90	79.8 9.2 ℄	79.09 4.92
79.03 4.98	79.7 9.3 ℄	79.05 4.96
79.04 4.97	79.6 9.4 ℄	79.03 4.98
79.01 5.00	79.7 9.3 ℄	78.94 5.07
79.07 4.94	79.6 9.4 ℄	78.91 5.10
78.93 5.08	79.5 9.5 ℄	78.95 5.06
78.84 5.17	79.5 9.5 ℄	78.93 5.08
78.93 5.18	79.6 9.4 ℄	78.75 5.26
	1483.52 H.I.	
78.74 4.78	79.6 8.9 ℄	78.93 4.59
78.85 4.67	79.6 8.9 ℄	78.72 4.80
78.82 4.70	79.5 9.0 ℄	78.80 4.72
79.04 4.48	79.6 8.9 ℄	78.70 4.82

(3)

	+	H.I.	−	Elev.
		1483.52		
+50				1474.74
+75				74.72
347+00				74.70
+25				74.68
+40 Beg. Top Slab				74.67
+50				74.66
+75				74.64
348+00				74.62
+01 End Slab				74.62
+25				74.60
+50				74.58
+75				74.56
			5.09	1478.43 TP
	4.72	1483.15		
349+00				74.54
+25				74.52

No Pave.

Lt 1483.52 H.I. Rt

18.78 4.74	14.5 9.0 ℄	18.86 4.66
18.62 4.90	14.5 9.0 ℄	18.62 4.90
18.52 5.00	14.5 9.0 ℄	18.62 4.90
18.65 4.87	14.5 9.0 ℄	18.69 4.83
18.69 4.83	14.4 9.1 ℄	18.63 4.89
18.69 4.83	14.4 9.1 ℄	18.63 4.89
18.56 4.96	14.3 9.2 ℄	18.71 4.81
18.57 4.95	14.3 9.2 ℄	18.66 4.86
18.46 5.06	14.3 9.2 ℄	18.56 4.96

1483.15 H.I.

18.57 4.58	14.4 8.8 ℄	18.55 4.60
18.53 4.62	14.1 9.1 ℄	18.41 4.74

④ + H.I. − Elev.

1483.15

+50		1474.50
+75		74.48
350+00		1474.46
	4.56	1478.59
		1478.60 B.M.

BM – Spk. in Hub – 12' Lt. 350+20

6.06 1484.66

+25		74.44
+50		74.42
+75		74.40
351+00		74.38
+25		74.36
+50		74.34
+75		74.32
352+00		74.30

1483.15 H.I.

Lt		RH
78.38 4.77	79.3 8.9 ℄	78.33 4.82
78.38 4.77	79.2 9.0 ℄	78.40 4.75
78.43 4.72	79.1 9.1 ℄	78.36 4.79

1484.66 H.I.

78.45 6.21	79.2 10.5 ℄	78.23 6.43
78.52 6.14	79.2 10.5 ℄	78.48 6.18
78.46 6.20	79.0 10.7 ℄	78.49 6.17
78.32 6.34	79.2 10.5 ℄	78.48 6.18
78.42 6.24	79.2 10.5 ℄	78.43 6.23
78.49 6.22	79.0 10.7 ℄	78.47 6.19
78.32 6.34	79.1 10.6 ℄	78.48 6.18
78.28 6.38	79.1 10.6 ℄	78.38 6.28

⑤	+	H.I.	−	Elev.
+25				1474.28
+50				74.26
+75				74.24
			6.35	1478.31 TP
	4.36	1482.67		
353+00				74.22
+25				74.20
+50				74.18
+75				74.16
354+00 Beg. Pavement				74.14
+25				74.12
+50				74.10
+70 End Pavement				74.08
+75				74.08

Lt 1484.66 H.I. Rt

18.28 6.38	14.3 10.4 ℄	18.36 6.30
18.25 6.41	14.1 10.6 ℄	18.23 6.43
18.19 6.17	14.1 10.6 ℄	18.24 6.42

1482.67 H.I.

18.13 4.49	13.9 8.8 ℄	18.30 4.37
18.23 4.54	14.0 8.7 ℄	18.37 4.30
18.14 4.53	13.9 8.8 ℄	18.20 4.47
18.16 4.51	13.8 8.9 ℄	18.30 4.37
18.10 4.57	14.26 8.41 ℄	18.30 4.37
18.04 4.63	14.29 8.38 ℄	18.30 4.37
18.21 4.46	14.31 8.36 ℄	18.23 4.44
18.19 4.48	14.27 8.40 ℄	18.13 4.54
18.17 4.50	13.9 8.8 ℄	18.12 4.55

⑥

	+	H.I. 1482.67	−	Elev.	
355+00					1474.06
+25					74.04
			4.55	1478.12	T.P.
	4.95	1483.07			
+50					74.02
+75					74.00
356+00					73.98
+25					73.96
+50					73.94
+75					73.92
357+00					73.90
+25					73.88
			4.43	1478.64	T.P.
	4.15	1482.79			
+50					73.86

−0.08% Grade

Lt	1482.67 H.I.	Rt
78.25 4.42	73.7 9.0 ℄	78.13 4.54
78.21 4.46	73.9 8.8 ℄	78.21 4.46
	1483.07 H.I.	
77.88 5.19	73.5 9.6 ℄	78.03 5.04
78.08 4.99	74.0 9.1 ℄	78.16 4.91
78.17 4.90	73.9 9.2 ℄	77.99 5.08
78.03 5.04	73.8 9.3 ℄	78.04 5.03
78.03 5.04	73.7 9.4 ℄	77.74 5.33
77.81 5.26	73.6 9.5 ℄	77.85 5.22
Under Plank	73.6 9.5 ℄	77.92 5.15
Under Plank	73.9 9.2 ℄	77.91 5.16
	1482.79 H.I.	
78.03 4.76	73.5 9.3 ℄	78.02 4.77

(2)

+	H.I. 1482.79 −	Elev.
+75		1473.84
358+00		73.82
+25		73.80
+50		73.78
+75		73.76
359+00		73.74
+25		73.72
+50		73.70
+75		73.68
	4.36	1478.43
		1478.44 B.M.

BM – Spk. in Hub – 12' Lt 359+70
7.18 1485.62

360+00		1473.66
+25		73.64

−0.08% Grade

1482.79 H.I.

Lt		Rt
77.93 4.86	73.8 9.1 ℄	78.01 4.75
77.97 4.82	73.5 9.3 ℄	77.86 4.93
77.98 5.01	73.6 9.2 ℄	77.82 4.97
77.99 4.90	73.6 9.2 ℄	77.99 4.85
77.98 4.81	73.4 9.4 ℄	77.98 4.81
77.89 4.95	73.9 9.4 ℄	77.96 4.83
77.85 4.94	73.6 9.2 ℄	77.97 4.82
77.69 5.10	73.5 9.3 ℄	77.80 4.99
77.67 5.12	73.4 9.4 ℄	77.77 5.02

1485.62 H.I.

77.80 8.02	73.4 12.2 ℄	77.82 7.80	73.53 12.09 ℄
77.69 7.93	73.4 12.2 ℄	77.68 7.94	

(7) (8)	+	H.I. 1485.62	−	Elev.
	+50			1473.62
3.	+75			73.60
	361+00			73.58
	+25			73.56
	+50			73.54
3.	+75			73.52
	362+00			73.50
	+25			73.48
	+50			73.46
	+75			73.44
	363+00			73.42
36	+25			73.40
	+50			73.38

LT 1485.62 H.I. RT

77.61 8.01	73.3 12.3 ℄	77.62 8.00
77.57 8.05	73.4 12.2 ℄	77.69 7.98
77.38 8.24	73.3 12.3 ℄	77.72 7.90
77.50 8.12	73.1 12.5 ℄	77.55 8.07
77.73 7.89	73.3 12.3 ℄	77.58 8.04
77.80 7.82	73.1 12.5 ℄	77.69 7.98
77.59 8.08	73.3 12.3 ℄	77.56 8.06
77.59 8.03	73.2 12.4 ℄	77.50 8.12
77.49 8.13	73.2 12.4 ℄	77.56 8.06
77.46 8.16	73.2 12.4 ℄	77.54 8.08
77.53 8.09	73.2 12.4 ℄	77.59 8.03
77.35 8.27	73.2 12.4 ℄	77.56 8.06
77.30 8.32	73.2 12.4 ℄	77.48 8.14

(9)

+	H.I.	−	Elev.	
	1485.62			
363+63 Beg. Pavement			1473.37	−0.08% Grade
+75			73.36	
364+00			1473.34	
		8.04	1477.58	T.P.
	4.95	1482.53		
+25				
+50				
+75				
365+00				
+25				
+50				
+75				
366+00				
+25				
		5.20	1477.33	T.P.

Existing Pavement
To Flume #15

1485.62 H.I.

Lt		Rt
77.26	73.36	77.61
8.36	12.26 ℄	8.01
77.34	73.31	77.90
8.28	12.31 ℄	8.22
77.50	73.31	77.25
8.12	12.31 ℄	8.37

1482.53 H.I.

77.40	73.14	76.39
5.13	9.39 ℄	6.14 O.K.
77.15	73.18	77.31
5.38	9.35 ℄	5.22
77.51	73.31	77.31
5.02	9.22 ℄	5.22
77.35	73.20	77.35
5.18	9.33 ℄	5.18
77.02	73.15	77.19
5.51	9.38 ℄	5.34
77.30	73.25	77.26
5.23	9.28 ℄	5.26
77.34	73.27	77.42
5.19	9.26 ℄	5.11
77.37	73.29	77.14
5.16	9.29 ℄	5.39
77.25	73.13	77.26
5.28	9.40 ℄	5.27

(10)

	+	H.I.	−	Elev.
				1477.33 TP
	5.00	1482.33		
+50				
+75				
367+00				
+25				
+50				
+75				
			4.53	1477.80
				1477.80 B.M.

B.M. - Spk. in Hub - 12' Lt. 367+75

	4.05	1481.85		
368+00				
+25				
+50				
+75				
369+00				

Lt — 1482.33 H.I. — Rt

Lt		Rt
77.33	13.17	77.48
5.00	9.16 ℄	4.85
77.61	13.16	77.45
4.72	9.17 ℄	4.88
77.22	13.05	77.29
5.11	9.28 ℄	5.04
77.06	13.12	77.33
5.27	9.21 ℄	5.00
77.18	13.05	77.15
5.15	9.28 ℄	5.18
77.03	13.04	77.19
5.30	9.29 ℄	5.19

1481.85 H.I.

77.07	13.05	77.15
4.78	8.80 ℄	4.70
77.10	13.09	76.99
4.75	8.81 ℄	4.86
77.31	13.02	77.17
4.54	8.83 ℄	4.68
77.18	12.94	77.01
4.67	8.91 ℄	4.84
77.09	12.90	77.05
4.81	8.95 ℄	4.80

(11)

	+	H.I.	−	Elev.
		1481.85		
+25				
+50				
+75				
370+00				
+25				
+50				
+75				
			4.68	1477.17 T.P.
	5.26	1482.43		
371+00				
+25				
+50				
+75				
372+00				

Lt

1481.85 H.I.

Rt

16.87 4.98	12.81 9.04 ℄	17.05 4.80
16.83 5.02	12.78 9.07 ℄	16.91 4.94
16.82 5.03	12.77 9.08 ℄	17.09 4.81
16.88 4.97	12.80 9.05 ℄	16.85 5.00
16.92 4.93	12.87 8.98 ℄	17.06 4.79
17.05 4.80	12.80 9.05 ℄	16.98 4.87
17.01 4.84	12.72 9.13 ℄	17.08 4.78

1482.43 H.I.

16.99 5.44	12.71 9.72 ℄	17.00 5.43
16.85 5.58	12.71 9.72 ℄	16.91 5.52
16.93 5.50	12.75 9.68 ℄	16.88 5.55
16.99 5.44	12.79 9.64 ℄	16.78 5.65
16.82 5.61	12.73 9.70 ℄	16.85 5.58

(12)

+	H.I.	−	Elev.
	1482.43		
+25			
+50			
+75			
373+00			
+25			
+50			

373+63 ± Equation.
373+51 ±

Beginning Flume No 15

2.93 1479.50 B.M.

B.M.-On Boulder -8' Lt. 373+50

Lt 1482.43 H.I. Rt

16.72 5.71	12.75 9.68 ±	16.97 5.47
16.75 5.68	12.73 9.70 ±	17.08 5.35
16.68 5.75	12.69 9.79 ±	16.99 5.44
16.81 5.62	12.59 9.84 ±	16.89 5.54
16.85 5.58	12.63 9.80 ±	16.72 5.71
16.87 5.56	12.71 9.72	16.92 5.51
16.67 5.76	12.62 9.81 ±	16.64 5.79

(14)

(21)

Flume No 16 (Original Flume)

Dilzura Conduit.

Alignment

394+10 — X — Angle Rt.

↑ Conduit ↓

12.1

393+97.9 — X — Δ 10° 30' Rt.

End Flume No 16

↑ Flume No 16 ↓

Water Way

10.4

393+57.5 — X — Δ 23° 40' Lt.

Beg. Flume No 16

↑ Conduit ↓

10.5

393+47 — X — Angle Lt.

2/7/28

Cross Section (Ground)

	Lt					Rt			
End					10.40				
393+97.9	1.1	0.6	9.6	4.6	4.60	4.6	0.6	0.6	1.3
	10	4	2.2	2.2	℄	2.2	2.2	4.5	10
+89			8.9	8.9	9.5	8.5	7.3		
			10	5	℄	5	10		
+80			10.8	10.2	9.3	9.2	8.4		
			10	5	℄	5	10		
+67			8.2	8.7	9.1	8.0	6.1		
			10	5	℄	5	10		
					10.48				
373+57.5 Beg. #16	3.4	0.6	0.5	4.5	4.52	4.5	0.4	0.5	0.0
	10	4.5	2.2	2.2	℄	2.2	2.2	4	6

1475.00 H.I.

Flume No 17 (original Flume)

Dulzura Conduit.

Alignment.

403+40	X	Angle Lt.
↓ Conduit →	10.4	
403+29.6	X	Δ 49° 30' Lt.
End Flume No 17		
↓ Flume 17 → Water Way	33.9	
402+95.7	X	Δ 19° 10' Lt.
Beg. Flume No 17		
↓ Conduit →	10.7	
402+85	X	Angle Lt.

2/7/28

Cross Sections (Ground)

	Lt						Rt			
End.										
403+29.6	3.0 10	4.2 5.5	0.4 4.5	0.4 2.2	4.3 2.2	69.67 4.33 ℄	4.3 2.2	0.4 2.2	0.4 4	0.1 8
+25			3.9 10	5.5 5		5.8 ℄	5.2 5	4.6 8	3.4 10	
+18			6.3 10	6.2 5		6.1 ℄	5.1 5	4.5 10		
+10			6.3 10	6.2 5		5.5 ℄	4.7 5	4.5 10		
403+00			3.5 10	5.2 5		5.1 ℄	3.8 5	3.6 8.5	+0.5 11	
402+95.7 Beginning	2.0 10	0.4 4	0.4 2.2	4.3 2.2		69.70 4.30 ℄	4.3 2.2	0.4 2.2	0.4 4	0.0 10

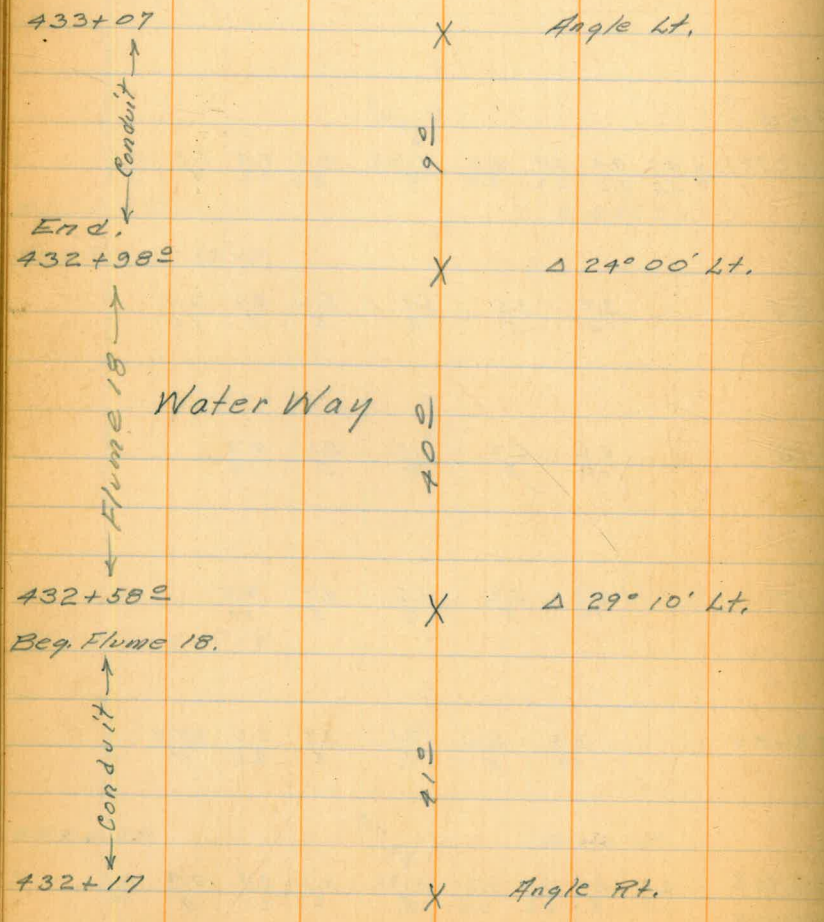
1474.00 H.I.

(23)

Flume No 18. (Original)

Dulzura Conduit

Alignment



2/7/28

Cross Sections (Ground)

	Lt					Rt			
End					67.0A				
432+98±	0.8	0.9	0.9	4.9	4.96	4.9	0.9	0.9	3.6
	10	4	2.3	2.3	℄	2.3	2.3	4	12
+95		1.9	6.0		6.5	6.6	5.3		
		10	4		℄	5	10		
+87		5.3	6.4		7.2	7.8	7.7		
		10	5		℄	5	10		
+79		9.3	9.2		9.0	8.9	8.5		
		10	5		℄	5	10		
+72		9.0	8.9		8.9	8.4	7.8		
		10	5		℄	5	10		
+68		6.6	7.7		8.0	7.5	6.6		
		10	5		℄	5	10		
+60	3.2	3.7	6.0		6.4	6.5	4.0	3.9	
	10	6	4		℄	4	7	10	
432+58±	1.7	0.8	0.8	4.9	67.07 4.93	4.9	0.8	0.8	3.0	3.0
Beginning	10	4	2.3	2.3	℄	2.3	2.3	4	8	12

1472.00 H.I.

Flume No 20 – Dulzura Conduit.

Alignment.

467+25	X	Angle Lt.
↓ Conduit ↑	8.0	
End Flume 467+17°	X	Δ 15° 00′ Lt.
↓ Flume No 20 ↑ Water Way	52.0	
466+65°	X	Δ 17° 00′ Lt.
Beg. Flume		
↓ Conduit ↑	5.0	
466+60	X	Angle Lt.

2/7/28

Ground Cross Sections

	Lt					Rt			
End 467+17°	1.4 10	0.6 4.5	0.6 2.3	4.7 2.3	64.26 4.74 ℄	4.7 2.3	0.6 2.3	0.6 4	0.7 10
+15	2.3 13	2.4 10	5.8 3		6.0 ℄	4.8 4	2.0 8	1.7 12	
467+05		7.2 10	7.8 5		7.8 ℄	7.6 5	7.1 10		
+95		12.0 10	11.5 5		11.4 ℄	11.2 5	10.2 10		
+85		11.0 10	11.0 5		10.8 ℄	10.2 5	10.2 10		
+76	4.5 12	4.5 9	7.0 4		7.2 ℄	7.8 5	9.3 10		
+67	0.4 12	0.4 10	5.8 3		6.4 ℄	5.9 4	4.3 5	4.5 10	
466+65° Beginning	0.4 10	0.6 4	0.6 2.3	4.6 2.3	64.35 4.65 ℄	4.6 2.3	0.6 2.3	0.6 4	2.2 5	3.5 10

1469.00 H.I.

(25)

Flume № 21 – Dulzura Conduit

Alignment

476+28 — Angle Lt.

← Conduit →

8.2

End Flume

476+19.8 — Δ 16° 00' Lt.

← Flume № 21 →

Water Way

Flume 27.3

31.8

475+92.5 — P.O.T.

Beg. Flume

← Conduit →

475+88.2 — Δ 24° 00' Lt.

← Conduit →

5.0

475+83 — Angle Lt.

2/8/28

Ground Cross Sections

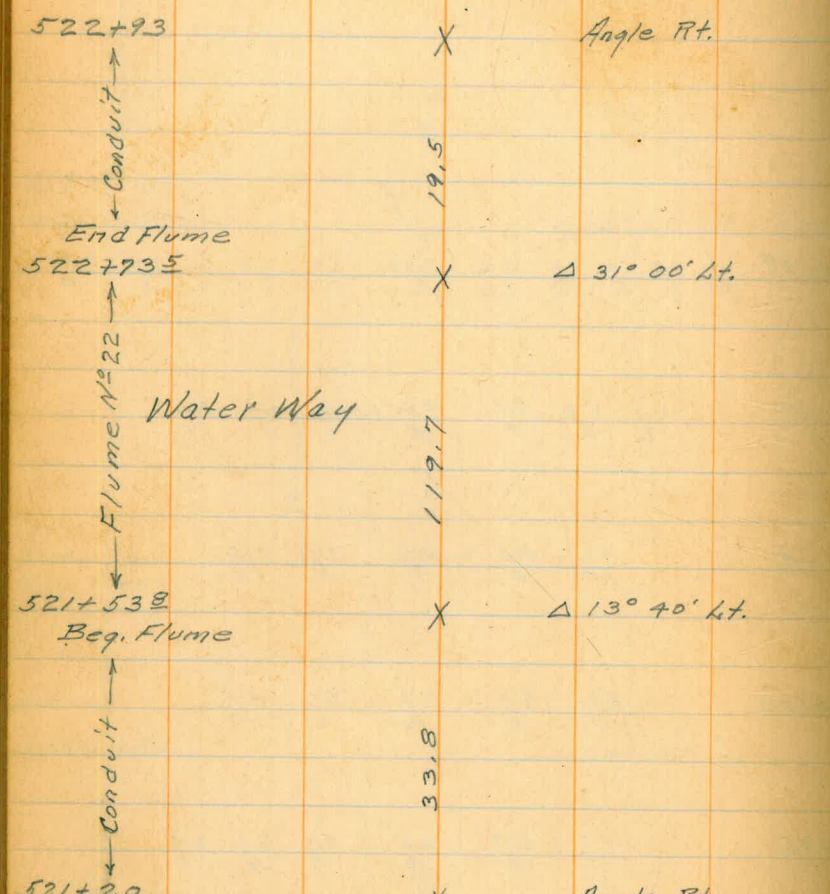
	Lt				℄				Rt	
End					3.5					
476+19.8	1.7	4.8	1.2	1.2	5.2	5.2	5.2	1.2	1.2	3.8	3.8
	10	6	5	2.3	2.3	℄	2.3	2.3	4	5	10
+17		2.3	6.3	7.2		7.5	6.2	5.0	5.1		
		12	8	4		℄	5	7	10		
+08			9.2	8.4		8.1	7.5	6.5			
			10	5		℄	5	10			
476+00			8.8	8.0		7.3	6.3	4.5			
			10	5		℄	5	10			
+95			6.3	6.0		6.6	6.1	3.1	2.4		
			10	4		℄	5	6	10		
475+92.5					3.55						
Beginning	3.7	3.2	1.2	1.2	5.1	5.15	5.1	1.2	1.2	2.6	1.3
	10	5	4	2.3	2.3	℄	2.3	2.3	4	5	10

1468.70 H.I.

(26)

Flume Nº 22 – Dulzura Conduit.

Alignment



2/8/28.

Ground Cross Sections (2 Pages)

	Lt				Rt			
+03	19.4	18.1	15.3	14.9	16.5	16.2		
	15	1	℄	3	8	15		
522+00	19.2	18.5	13.6	11.8	15.3	15.3	16.2	16.0
	15	8	6	℄	3	6	10	15
			Boulder					
+90	13.3	10.8	10.2	12.1	12.9	13.7	6.1	5.3
	10	4	2	1	℄	6	7	10
	sec. all Solid Rock							
+95	11.4	7.9	11.8	10.6	6.4	5.9	4.8	
	10	4	℄	5	5	8	13	
	Sec. all Solid Rock							
+75	12.4	9.1	9.0	7.7	7.4	4.1	4.9	
	15	10	5	℄	4	5	9	
	Sec. all Solid Rock							
+65	7.1	5.6	6.8	6.5	6.4	4.7	3.3	
	12	8	4	℄	4	6	10	
						Solid Rock		
+55	4.6	3.4	6.0	6.4	4.8	2.0	0.1	
	12	8	3	℄	5	5	9	
						Solid Rock		
521+53.8	3.2	3.0	0.3	0.3	4.35	5 9.85	4.35	0.3	0.3	1.5	0.3
	10	5	4	2.3	2.3	℄	2.3	2.3	4	5	9
Beginning										Solid Rock	

1464.20 H.I.

(27)

Flume No 22

<Continued> →

Flume No 22.

Ground Cross Sections

	Lt						Rt				
End						59.5?					
522+73.5	+3.3	+2.2	0.4	0.4	4.6	4.63	4.6	0.4	0.4	1.7	2.2
	10	6	4	2.2	2.2	℄	2.2	2.2	3.5	4	10
	Boulder										
+72	+3.5	+2.6	0.2	6.8	7.0		6.0	2.3	1.8	3.9	
	10	6	3	3	℄		5	6	8	9	
	Boulder										
+62			10.2	10.8	10.1		10.0	6.6	8.2		
			15	6	℄		5	6	10		
+54	12.0	11.0	8.3		8.3	13.7	13.3	11.9			
	15	8	4		1	℄	5	10			
			Boulder								
+50	13.1	10.6	8.7	10.6		8.8	14.7	14.0	14.0		
	15	10	4	2		℄	1	5	15		
		Boulder									
+42			15.5	15.6	15.7		15.9	15.6			
			15	6	℄		7	15			
+25			19.0	18.5	19.0		18.7	18.4			
			15	9	℄		5	15			
522+18			19.5	20.7	20.7		20.5	18.7	18.3		
			17	12	℄		7	10	15		

1464.20 M.L.

(28)

Flume No. 6. — Dulzura Conduit

1st Flume below Barrett Dam.

Alignment

16+22.00 X Δ 14° 57' Rt.

136.50

14+85.50 X Δ 11° 00' Rt.

31.50

14+54.00 X Δ 4° 28' Rt.

62.80

13+91.20 X Δ 12° 38' Lt.

← Flume #6

10.50

13+80.70 X' Δ 4° 30' Lt.
Beg. Flume

Conduit →

72.70

13+08 ℄ X Angle Lt.

Feb.-9-'28
Ward — 1st.
Duermit — Chn
McBain — "

Cross Sections

3-Pages

	Lt			℄		Rt.	
+54.00 Δ →	21.7	19.0	14.9		14.4	8.6	6.1
	11	3	℄		7	12	15
+41 →	23.0	20.0	16.6		15.2	10.1	
	10	6	℄		7	14	
+27 →	22.2	19.8	16.6		14.4	8.0	
	11	4	℄		5	14	
+07 →	19.9	17.5	17.3	16.3	13.9	10.3	8.2
	12	9	5	℄	6	9	13
14+00 →	18.4	15.8	15.6	13.6	11.6	9.6	6.8
	12	9	5	℄	4	9	14
+91.20 Δ →		12.9	12.7	11.8	10.0	6.7	4.4
		10	6	℄	5	10	14
+83 →	14.0	7.9	7.1	10.3	10.6	10.0	8.6	4.6
	16	10	3	3	℄	3	7	8
			Boulder					
13+80.70 →	8.4	4.8	4.55	8.5	8.53	8.5	4.55	4.3	2.3
	10	No. 9	2.4	2.4	℄	2.4	2.4	8	12

1502.80

Approx. Finish Grade = 1502.80

+10.27 1511.33 4.1.

B.M. — Nail in Hub — 15' Lt 16+37 → 1501.06 B.M.

This Elev. is Approx. — Assumed Elev.

Flume No 6.

Alignment.

End Culvert
16+77 ℄

End Culvert under Road
16+56.88

End Flume
16+56.25

20.75

Angle Lt.

P.O.T.

11.25

16+45.00

Δ 18° 00' Rt.

8.00

16+37.00

Δ 15° 05' Rt.

7.50

16+29.50

Δ 14° 17' Rt.

7.50

Cross Sections

		Lt.		℄	Rt.		
+68	→	29.2	26.8	25.3	24.0	18.5	5.0
		14	8	℄	5	11	15
+52	→	29.7	26.0	23.4	21.2	16.2	11.1
		12	7	℄	5	12	16
+36	→	29.3	28.0	25.5	21.6	10.4	
		14	5	℄	7	15	
					Solid R.		
+29	→	29.5	27.2	25.5	25.6	19.2	5.0
		12	6	℄	2	4	14
						Solid R.	
+19	→	30.0	29.4	26.7	26.3	13.2	5.0
		14	8	℄	4	6	13
					Solid R.		
15+00	→	27.3	26.1	23.5	20.5	8.0	5.0
		12	7	℄	8	9	12
					Solid R		
+85.50	Δ →	27.6	23.3	19.0	7.0		
		13	8	℄	16		
+70	→	25.6	22.0	21.6	18.3	16.5	12.6	5.3
		14	11	6	℄	5	7	15
14+60	→	24.5	20.8	15.8	14.3	12.0	7.5	4.3
		12	5	4	℄	6	12	16
				Bottom				

1.5 11.33 H.1

Flume No. 6.

Dulzura Conduit.

Approx. Finish Grade = 1502.58

End Flume #6

Cross Sections — End Flume 6

		Lt			℄ 1502.48	Rt			
16+56.25	→	5.1	5.7	4.8	4.81	8.8	8.85	8.8	4.88
		10	4.5	4.5	2.4	2.4	℄	2.4	2.4
+55	→	5.9	6.6	9.1	9.6	8.9	7.0	0.9	
		10	5	4.	℄	5	6	7	
+45.00	△ →	10.7	10.6	13.2	11.2	10.4	7.2	5.5	1.7
		13	9	5	℄	4	5	8	10
+37.00	△ →	15.8	14.4	15.5	14.6	10.5	11.0	5.2	3.8	+0.4
		14	10	6	℄	1	5	7	11	16
+29.50	△ →		17.2	16.5	14.8	11.6	8.0	2.0	
			9	4	℄	6	8	15	
+22.00	△ →		17.0	16.3	14.1	10.9	9.4	3.0	
			8	2	℄	4	7	14	
+10	→		15.4	15.3	13.2	13.2	7.6	2.7	
			12	4	℄	3	6	13	
16+00	→		17.5	17.8	16.3	13.6	4.3		
			11	5	℄	6	14		
15+84	→		18.6	18.0	15.6	12.4	9.0	5.5	
			9	2	℄	6	14	17	

Flush with Culv. H.W. Crossing on Skew.

Solid R.

1511.33 H.I.

Flume No 7.

Dulzura Conduit.

Alignment

Station	Flume No 7	Conduit	Angle
34+14.50	X		Δ 3°07' Lt.
		80.20	
33+34.30	X		Δ 5° 38' Lt.
		48.90	
32+85.40	X		Δ 12° 18' Rt.
		7.60	
32+77.80	X		Δ 19° 50' Rt.
		81.80	
31+96.00 Beg. Flume	X		Δ 3° 00' Lt.
		18.0	
31+78.0	X		Angle Lt.

Feb-10-28
Ward - Inst
Duermit - Clin
McBain - "

Cross Sections

Station	Lt					Rt
32+77.80 Δ →	23.5 / 10	17.5 / 7	12.5 / ℄	7.5 / 11	5.5 / 15	
+64 →	23.0 / 10	18.6 / 5	13.5 / ℄	14.4 / 8	7.7 / 15	
+50 →	21.5 / 10	18.6 / 7	14.4 / ℄	14.1 / 8	9.0 / 8	4.0 / 13
+34 →	25.0 / 10	21.8 / 6	17.8 / ℄	14.5 / 8	4.4 / 8	0.0 / 9
+26 →	19.1 / 8	16.1 / 5	12.4 / ℄	9.6 / 4	6.4 / 12	
+14 →	21.7 / 10	14.8 / 5	10.7 / ℄	9.7 / 3	6.1 / 4	2.8 / 10
32+02 →	24.0 / 12	18.8 / 5	11.0 / ℄	8.1 / 5	1.8 / 10	
31+96.0 Beginning →	7.0 / 7	4.2 / 6	4.3 / 2.2	7.9 / 2.2	7.93 / ℄ (1501.50) On Conc. Apron	8.09 / ℄ (1501.34) On Flume Floor.	7.9 / 2.2	4.2 / 2.2	4.5 / 7

Approx. Finish Grade = 1501.35

+ 2.93 1509.43 H.I.

1506.50 B.M.

(33)

Flume № 7 — Dulzura Conduit.

Alignment

+24

31.70

36+79.80 X Δ 20° 00' Rt. 34+14.50 Δ

63.30

34+00

36+16.50 X Δ 16° 16' Lt.

+83

22.50

+67

35+94.00 X Δ 18° 54' Rt.

33+34.3 Δ

44.70

35+49.30 X Δ 9° 28' Rt.

33+00

40.30

35+09.00 X Δ 7° 18' Rt.

94.50

32+85.40 Δ →

Cross Sections

23.6	15.3	12.6	4.0		
10	℄	4	12		
21.0	18.3	14.7	4.1	1.0	
10	6	℄	10	14	
21.8	16.4	13.5	10.6	7.5	4.0
10	4	℄	4	7	12
19.5	17.2	14.0	12.3	9.8	6.3
12	6	℄	4	10	14
22.0	18.0	16.2	14.3	9.6	4.8
10	5	℄	4	9	13
20.0	15.0	12.3	10.3	1.0	
11	3	℄	3	13	
19.2	11.8	10.4	8.7	+1.4	
10	℄	3	4	14	

+3.25 1508.51 H.I.

−4.17 1505.26 TP

22.2	18.2	13.2	4.8	3.8
9	5	℄	9	14

1509.43 H.I.

(34)

Flume No. 7 — Dulzura Conduit.

Alignment

+65

37+44.0 — Angle Lt. +33

+09.00

End Flume

37+34.80 — Δ 13°00' Lt.

+77

+62

37+11.50 — Δ 6°48' Rt.

34+46

Flume No. 7 — Conduit

9.20

23.30

Cross Sections

	24.8 / 12	23.5 / 7	19.3 / ℄	18.5 / 3	15.0 / 6	12.6 / 11	10.0 / 13

+8.67 — 1513.45 H.I.

− 3.73 — 1504.78 T.P.

35+49.30 Δ

25.0 / 10	19.7 / 4	19.0 / ℄	17.7 / 3	2.5 / 14	

22.5 / 10	20.6 / 4	17.6 / ℄	+1.7 / 17		

+09.00 Δ

24.0 / 11	21.2 / 5	16.4 / ℄	10.4 / 5	4.7 / 10	2.7 / 14

35+00

15.8 / 12	13.6 / 4	10.7 / ℄	8.4 / 6	2.5 / 13	

+77

24.4 / 11	19.0 / 7	16.2 / ℄	15.0 / 4	2.8 / 11	

+62

25.6 / 12	22.2 / 7	21.3 / 3	19.5 / ℄	16.4 / 3	11.6 / 4	0.4 / 11

34+46

24.7 / 11	21.7 / 9	21.5 / 1	16.0 / ℄	10.0 / 3	2.0 / 12

1508.51 H.I.

Flume No 7 — Dulzura Conduit.

Cross Sections

		Lt				Rt.	
+90		21.0 / 10	16.8 / 6	15.3 / ℄	15.0 / 6	9.9 / 15	
36+79.80	△	25.0 / 10	20.8 / 6	16.8 / ℄	16.2 / 7	4.4 / 7	3.3 / 13
+68		27.9 / 9	24.4 / 6	19.5 / ℄	17.7 / 2	17.7 / 6	15.5 / 12
+57		33.4 / 11	28.7 / 5	27.5 / ℄	25.1 / 8	23.7 / 8	14.8 / 12
+35		36.6 / 12	33.1 / 11	31.6 / 2	27.5 / ℄	18.0 / 17	
+28		37.7 / 12	32.8 / 7	30.8 / ℄	27.2 / 9	23.5 / 14	16.4 / 16
36+16.50	△	42.6 / 12	39.0 / 7	32.7 / 3	32.8 / ℄	30.2 / 10	25.1 / 12
36+00		40.5 / 15	37.5 / 6	25.1 / ℄	26.0 / 7	18.0 / 9	
35+94.00	△	37.0 / 15	36.2 / 8	23.4 / ℄	19.0 / 4	16.5 / 10	9.4 / 12

1513.45 M.1.

Flume № 7 — Dulzura Conduit.

Cross Sections

Approx. Finish Grade at end = 1500.92

B.M. - Spk. in Hub 13' Lt. and 20' South of End Flume "7".

-8.02 1505.43 B.M.

		Lt			℄			Rt		
End Flume					1500.83					
37+34.80	Δ	10.9	9.8	8.7	8.7	12.6	12.62	12.6	8.7	8.5	6.0
		12	5	4	2.1	2.1	℄	2.1	2.1	6	8
+30					13.2	14.4	14.3	14.2	9.5	8.5	
					12	3	℄	3.5	4.5	9	
37+11.50	Δ				19.4	16.7	15.2	15.2	11.5	5.7	4.2
					11	8	℄	5	8	8	10
37+00			19.2	18.4	15.4		15.1	14.9	9.4	8.0	
			10	7	5		℄	4	4	12	

1513.45 H.I.

(37)

Flume No 8 — Dulzura Conduit,

Alignment

41+13.00 △ — Δ 12° 08' Lt.

32.40 — Mag. S18°20'W

40+80.60 △ — Δ 6° 16' Lt.

46.70 — Mag. S23°40'W

40+33.90 △ — Δ 9° 14' Rt.

15.50 — Mag. S14°30'W

40+18.40 △ — Δ 8° 39' Rt.

23.40 — Mag. S6°00'W

39+95.00 △ Beg. Flume — Δ 9° 15' Lt.

30.0

39+65 ± — Angle Rt.

Flume No 8.

Conduit

Feb.-14-28
Ward — Inst
Duermit — Chn.
McBain — "

Cross Sections

	Lt				Rt		
41+00 →	28.0	25.5	22.8	17.8	13.9	7.7	5.2
	12	9	2	℄	5	10	13
40+80.60 △ →	23.7	19.3	18.5	16.0	13.6	9.3	4.9
	12	6	2	℄	3	8	14
+65 →	24.2	20.9	19.4	16.1	13.0	10.3	4.4
	14	9	5	℄	4	5	14
+48 →	24.1	20.8	18.7	15.0	10.8	4.4	
	15	9	5	℄	5	14	
40+33.90 △ →		20.5	18.2	13.4	12.5	10.5	5.8
		13	5	℄	3	5	13
40+18.40 △ →	18.3	14.6	16.1	14.5	11.7	8.2	5.1
	14	9	3	℄	4	8	13
40+00 →	12.0	11.0	12.5	11.3	10.2	7.1	2.8
	14	10	3	℄	3	5	12
39+95 △ →	9.3	5.2	5.2	9.0	8.97	9.0	5.1	5.1	5.4	0.1
	10	4	2.1	2.1	℄	2.1	2.1	4	6.5	13

1500.71

Finish Flow Grade = 1500.71 (This is carrying -0.08% from Beginning of Flume No 6.)

Beginning Flume.

℄ Flow Line

+4.25 — 1509.68 H.I.

1505.43 B.M.

B.M. at South End Flume No 7.

(38)

Flume No 8 — Dulzura Conduit.

Alignment

Flume No 8.

44+55.30 △		X	Δ 9° 18' Rt.	
	35.30			Mag. S 40° 30' W
44+20.00 △		X	Δ 9° 23' Rt.	
	13.00			Mag. S 32° 10' W
44+07.00 △		X	Δ 7° 20' Rt.	
	152.40			Mag. S 22° 30' W
42+54.60 △		X	Δ 12° 48' Lt.	
	63.10			Mag. S 35° 40' W
41+91.50 △		X	Δ 15° 00' Rt.	
	16.30			Mag. S 20° 45' W
41+75.20 △		X	Δ 14° 52' Rt.	
	62.20			Mag. S 6° 30' W

Cross Sections

41+91.50 △ →
26.0 (15) 23.7 (13) 23.0 (6) 22.3 ℄ 20.4 (11) +4.0 (10) overhangs

+1.41

1505.95 H.I.

−5.14 1504.54 T.P.

41+75.20 △ →
30.8 (15) 30.9 (8) 26.0 ℄ 24.7 (3) 15.0 (3) 12.7 (7) 5.3 (11)

+69 →
41.0 (18) 32.8 (12) 32.0 (9) 25.3 ℄ 13.0 (2) 9.8 (8) 5.0 (12)

+59 →
41.0 (10) 31.7 (8) 29.4 (2) 17.0 ℄ 14.3 (2) 11.4 (9) 0.0 (10)

+51 →
45.0 (12) 32.0 (10) 26.6 ℄ 25.7 (2) 20.8 (4) 2.8 (7) 0.0 (9)

+41 →
41.5 (8) 40.0 (6) 30.5 (5) 28.0 ℄ 22.0 (1) 20.2 (5) 17.6 (7) 3.8 (7) 0.0 (9)

+25 →
42.2 (12) 37.4 (6) 23.4 (2) 20.5 ℄ 15.7 (6) 6.2 (8) 1.6 (12)

41+13.00 △ →
35.0 (13) 33.1 (8) 25.4 ℄ 20.7 ℄ 14.8 (5) 12.0 (6) 7.8 (10) 4.0 (14)

1509.68

Flume No 8 – Dulzura Conduit.

Cross Sections

		Lt					Rt		
	+58 →	21.0 12	18.2 4	17.5 1	12.4 ℄	10.2 1	8.7 6	3.3 14	
	+30 →		12.8 16	11.6 5	9.5 ℄	6.4 5	3.5 9	0.3 13	
	+14 →	17.5 17	14.0 7	15.2 3	11.7 ℄	9.0 6	3.2 12	2.0 15	
	43+00 →	21.7 12	17.8 2	10.8 2	12.0 ℄	9.1 3	7.3 6	3.4 13	
	+86 →		19.1 14	14.4 5	11.3 ℄	5.7 7	3.2 10	1.2 13	
	+66 →	19.6 14	18.1 9	13.3 8	9.8 ℄	6.1 7	1.5 13		
45+55.0	42+54.60 Δ →		22.7 16	18.6 9	13.2 ℄	7.5 10	+3.0 12		
	+43 →	23.5 15	20.6 8	18.2 1	16.7 ℄	13.3 3	12.0 8	+3.0 10	
45+16.80 End Flume.	+25 →		25.2 15	23.3 7	19.0 ℄	14.8 6	11.4 6	3.8 7	+4.0 12
	+14 →	27.0 15	25.2 10	16.2 8	12.1 3	11.7 ℄	11.8 8	1.8 9	+4.0 13
	42+00 →		27.6 15	22.6 7	21.2 ℄	20.0 9	+0.8 9	+4.0 11	

Flume No 8 Conduit

38.20 X Angle Rt.

61.50 X Δ 1° 40' Lt.

Mag. S 46°10' W

Mag. S 49°15' W

1505.95 H.I.

Flume No 8 – Dulzura Conduit,

Cross Sections

Lt — Rt

End Flume

Station	Lt										Rt
45+16.80 △	8.3 / 10	6.8 / 4	5.1 / 4	5.1 / 2.1	8.9 / 2.1	8.96 / ℄ (1500.17) Flow Line	8.9 / 2.1	5.0 / 2.1	5.0 / 4	0.0 / 7	
+13		12.2 / 12	8.4 / 7	10.3 / 4	11.5 / ℄	9.6 / 4	0.6 / 7				
45+00		16.2 / 10	15.3 / 5	11.3 / 4	10.8 / ℄	10.9 / 4	4.0 / 5	1.6 / 9			
+87			22.7 / 10	21.3 / 5	14.0 / ℄	11.9 / 4	6.5 / 4	2.9 / 7	0.6 / 10		
+83			27.6 / 11	24.0 / 9	20.7 / ℄	19.8 / 2	16.4 / 4	2.8 / 6	0.7 / 11		
+71			27.3 / 16	27.7 / 6	20.8 / ℄	18.6 / 3	5.7 / 5	5.0 / 6	1.4 / 12		
44+55.30 △		20.2 / 14	18.7 / 10	19.6 / 6	18.6 / ℄	15.0 / 5	9.8 / 6	1.5 / 14			
+39			21.8 / 12	18.3 / 3	15.5 / ℄	15.4 / 4	15.4 / 5	10.2 / 7	7.9 / 9	5.4 / 11	
		+4.61			1509.13 H.I.						
44+20.00 △			23.0 / 12	19.8 / 4	19.2 / ℄	19.5 / 4	13.5 / 5	10.0 / 10	8.2 / 15		
44+07.00 △			15.4 / 12	13.1 / 4	10.0 / ℄	10.7 / 6	7.7 / 8	5.1 / 12			
44+00		16.6 / 12	14.7 / 7	10.0 / 5	8.0 / ℄	8.8 / 3	8.0 / 5	7.0 / 11	3.4 / 14		
+93		18.8 / 14	18.8 / 9	14.6 / 4	11.1 / ℄	10.4 / 5	7.5 / 6	5.3 / 12			
43+75			22.0 / 14	19.2 / 7	15.2 / ℄	11.2 / 2	9.6 / 7	6.0 / 10	0.8 / 11		

1505.61 T.P.

1500.29 – End Gr. Flow Line

1509.13 H.I.

−1.43 1504.52 T.P.

1505.95 H.I.

(41)

Flume No 9. - Dulzura Conduit.

Alignment.

Portal of Tunnel.
51+13 ℄ — Angle Rt.

Conduit — 8.10 — Mag. S 55° 30' W

51+04.90 △ End Flume — △ 20° 00' Rt.

Flume No 9 — 67.30 — Mag. S 37° 40' W

50+37.60 △ — △ 11° 50' Lt.

96.30 — Mag. S 46° 30' W

49+41.30 △ Beg. Flume — △ 4° 55' Rt.

Conduit — 17.30

49+24 ℄ — Angle Rt.

Feb. 16-28
Ward - Chf
Duermit - Chn.
McBain - "

Cross Sections

	Lt					Rt				
+97 →	28.7 / 15	25.6 / 9	19.8 / 9	14.0 / 6	12.1 / 4	12.2 / ℄	12.2 / 5	6.3 / 6	2.4 / 15	
+81 →	27.6 / 13	20.4 / 7	20.2 / 3	13.8 / ℄	11.3 / 2	11.2 / 6	8.9 / 7	6.6 / 12		
+69 →	24.1 / 14	23.5 / 8	22.2 / 5	17.8 / ℄	17.0 / 3	15.6 / 5	14.6 / 7	6.3 / 7	4.0 / 12	
+61 →	20.5 / 15	19.1 / 7	17.2 / 3	13.5 / ℄	11.5 / 3	11.1 / 6	8.4 / 10	1.4 / 10		
+53 →	15.0 / 14	16.8 / 7	16.5 / 3	13.6 / ℄	10.7 / 4	9.5 / 6	5.7 / 6	1.7 / 9		
+45 →	10.8 / 13	10.2 / 9	12.1 / 4	10.5 / ℄	10.1 / 3	3.3 / 3	0.6 / 5			
49+41.30 △ Beginning →	6.8 / 11	5.0 / 5	5.1 / 2.2	8.9 / 2.2	8.91 / ℄ Flow Line	8.9 / 2.2	5.0 / 2.2	5.0 / 4	1.9 / 4	+0.4 / 7

Beg. Gr = 1499.95

+3.69 — 1508.76 H.I.

B.M. - On Top SE Cor. of Conc. Top Slab - 30' N. Flume No 9.

-4.09 — 1505.07 B.M.

+3.55 — 1509.16 H.I.

1505.61 T.P.

Flume No 9 — Dulzura Conduit.

Lt Cross Sections Rt

-5.22 1503.54 T.P.

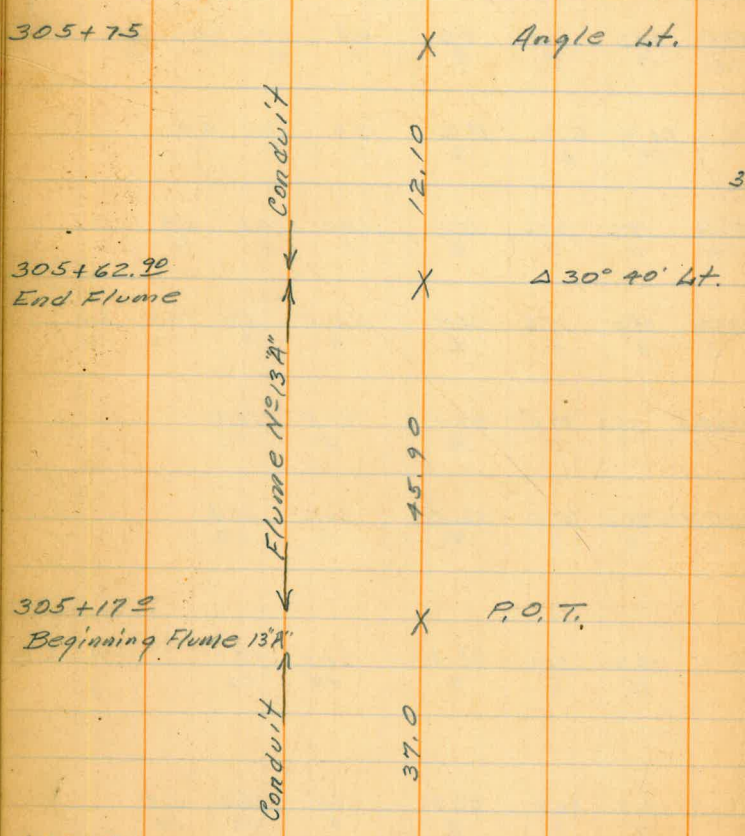
End Gr = 1498.32

End Flume 51+04.90 Δ. →	8.1	6.3	5.2	5.2	9.0	9.05	9.0	5.2	4.7	1.4	0.0
	12	4	4	2.2	2.2	℄ Flow Line	2.2	2.2	5	6	8
51+00 →			12.6	11.1		10.2	9.2	4.7	1.0		
			11	4		℄	3	4	7		
+86 →		21.5	14.3	14.0		11.6	9.8	6.0	1.4	0.0	
		15	7	4		℄	4	4	9	10	
+80 →			26.0	21.7		19.2	15.8	5.0	0.0		
			14	6		℄	6	8	11		
+70 →		23.3	18.6	16.2		15.4	14.1	10.0	5.9		
		14	6	3		℄	3	6	11		
+55 →		35.0	35.0	17.5		14.8	13.5	11.7	13.9	7.4	
		13	8	4		℄	4	9	12	14	
+46 →		36.5	35.2	27.6		25.1	21.5	19.2			
		15	7	3		℄	5	12			
50+37.60 Δ →		32.4	28.3	27.5		23.5	20.6	19.0			
		11	8	6		℄	6	14			
+33 →			29.3	26.2		22.4	20.0	17.1			
			15	6		℄	10	16			
+23 →			28.5	24.7		21.7	19.8	16.0	11.8		
			17	6		℄	7	13	14		
50+07 →		27.0	24.8	23.1		21.4	20.8	5.6	3.1		
		14	10	2		℄	5	6	14		

1508.76 H.I.

Flume No 13 "A" – Dulzura Conduit.

(Orig. No 13 Replaced by Tunnel #5 1/4)



Cross Sec's

	Lt									Rt
305+62.90 End	12.2 14	8.6 8	9.1 4	5.1 4	5.1 2.2	9.7 2.2	9.7 ℄	9.7 2.2	5.1 2.2	5.1 5	0.0 12
+55		10.3 13	8.0 10	7.6 5	10.3 3	10.3 ℄	14.4 3	9.7 5	0.0 11	
+50		8.0 14	6.1 10	10.8 6	11.6 3	11.4 ℄	11.3 3	10.8 5	0.0 10	
+33			16.3 15	15.0 11	15.8 6	11.7 ℄	10.4 3	9.2 6	0.0 8.5	
+20			23.6 18	20.8 13	18.2 10	11.7 3	10.7 ℄	9.8 5	0.0 7.5	
305+17.9 Beginning		13.3 8	12.8 6	5.1 4.5	5.1 2.2	9.2 2.2	9.2 ℄	9.2 2.2	5.1 2.2	5.1 4.5	0.0 7.5

+5.28 1487.33 H.I.

1482.05 T.P.

Flume No. 14 "A" — Dulzura Conduit

(Orig. No. 14 Replaced by Tunnel #5 1/4)

308+25		X	Angle Lt.
3	Conduit	15.20	308+09.80 End
308+09.80 End of Flume		X	Δ12° 10' Lt.
3 E	Flume No. 14 "A"	92.20	308+00
			+94
307+17.60		X	Δ30° 15' Rt.
			+70
		32.60	+50
3 306+85.0 Beginning Flume		X	P.O.T.
			+30
	Conduit	60.0	+17.60
			307+00
3 306+25		X	Angle Lt.
			306+85.0 Beginning

Cross Sec's

Lt — Rt

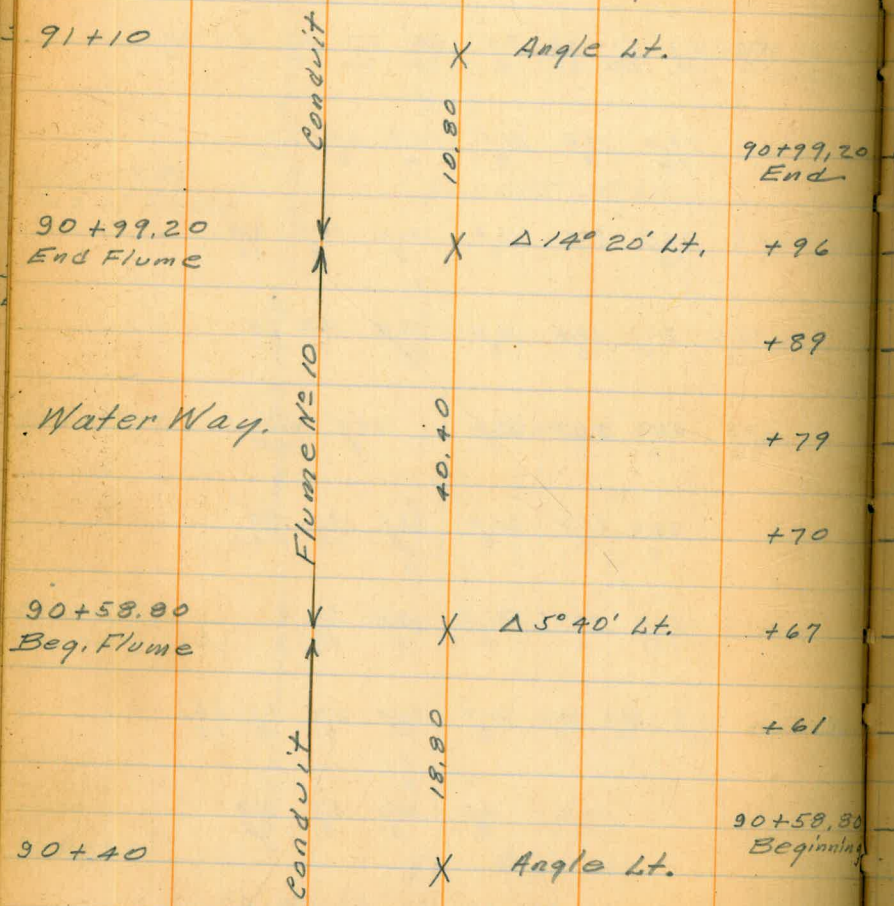
308+09.80 End	8.0	5.7	5.7	9.8	9.8	9.8	5.7	5.7	5.2	0.0
	12	4	2.2	2.2	℄	2.2	2.2	4	7	10
+06			19.0	19.0	16.5	14.7	6.0	5.2		
			18	9	℄	4	8	10		
308+00			26.8	21.5	16.4	13.2	12.0	2.4		
			13	11	℄	5	6	12		
+94	26.2	21.3	20.6	16.2	14.0	11.2	2.6			
	13	10	6	℄	3	7	11			
+70	29.5	27.3	25.3	23.6		16.8	5.0			
	16	12	5	℄		8	14.5			
+50			26.2	25.3	24.0	22.1	18.2	5.0		
			16	8	℄	5	12	14.5		
+30			26.0	22.8	21.5	18.8	5.0			
			15	6	℄	5	14			
Δ +17.60		22.8	20.3	20.3	20.7	20.0	11.2	8.1	5.5	
		16	12	5	℄	5	9	13	15	
307+00				14.2	16.0	15.1	5.5	0.0		
				13	℄	3	8	15		
306+85.0 Beginning	9.5	7.3	5.5	5.7	9.7	9.7	9.7	5.7	5.2	0.0
	14	10	4	2.2	2.2	℄	2.2	2.2	5	8.5

+5.28 1487.33 H.I. 1482.05 T.P.

(45)

Flume № 10 — Dulzura Conduit

Alignment



Cross Section

	Lt				℄		Rt.			
90+99.20 End →	4.9	4.4	1.4	1.4	5.3	5.36	5.3	1.4	1.4	1.0
	14	5.5	4	2.1	2.1	℄	2.1	2.1	4	14
+96 →			7.0	7.2	8.2		6.6	4.9	2.9	
			14	5	℄		3	9	13	
+89 →			12.3	11.6	11.2		10.8	8.3	7.0	
			16	4	℄		4	7	14	
+79 →			14.0	12.7	12.3		9.9	9.5		
			14	5	℄		11	14		
+70 →	12.1	10.8		10.8	8.6		10.3	7.6		
	14	10		3	℄		4	15		
+67 →	10.0	8.1	7.5		7.4		7.3	6.3	6.4	
	14	8	3		℄		4	10	15	
+61 →	6.9	6.2	6.7		6.7		6.7	3.6	3.0	
	16	10	3		℄		3	8	14	
90+58.80 Beginning →	5.1	3.6	1.3	1.3	5.3	5.33	5.3	1.3	1.3	2.0	1.4
	15	8	4	2.2	2.2	℄	2.2	2.2	4	9	13

1501.00 H.I.

H.I. = Approx. Elev. at Flume 10.

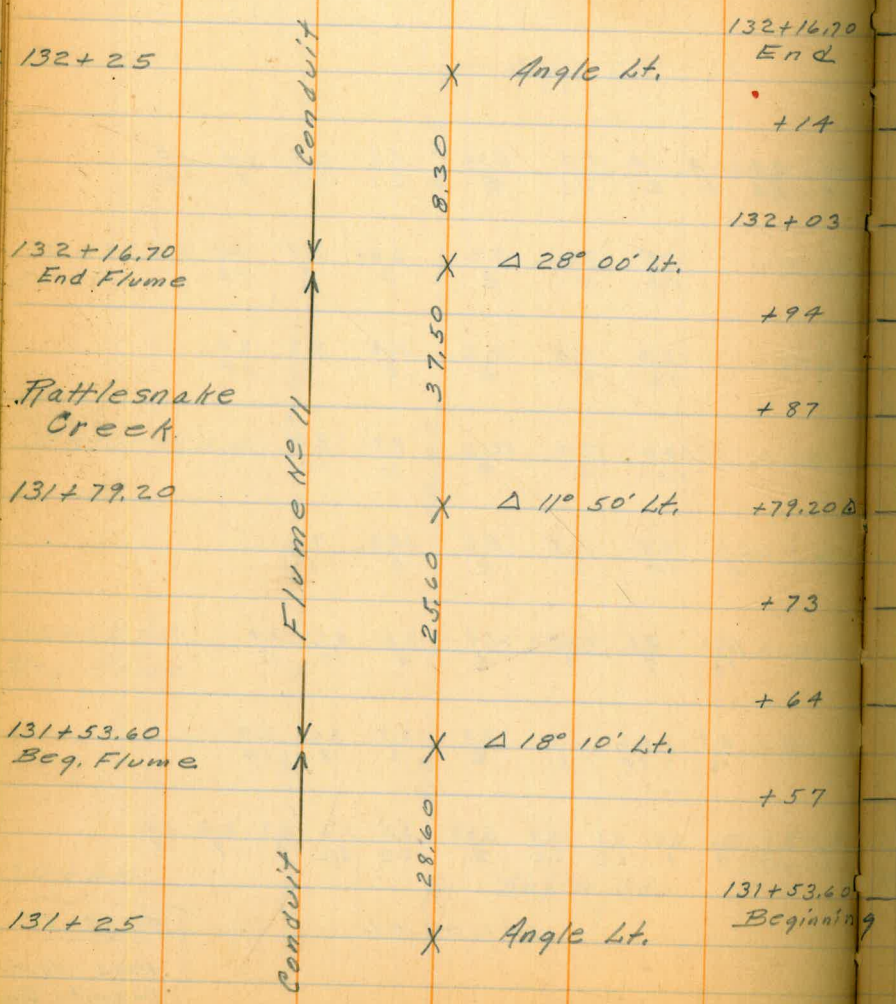
Mch. 28 – 28

Ward – last.
Duermit – Rod
McBain – Elev

(46)

Flume No. 11 — Dulzura Conduit.

Alignment



Cross Section.

132+16.70 End →
1.5 1.6 1.6 6.1 6.1 6.1 1.7 1.7 0.3
10 3.5 2.1 2.1 ℄ 2.1 2.1 3 10

+14 →
1.5 4.6 6.8 6.8 6.8 2.7 2.6
10 4 3 ℄ 3 6 14

132+03 →
6.5 7.2 8.7 9.4 9.7 9.5 8.2
14 9 4, ℄ 4 9 16

+94 →
15.0 14.3 14.3 15.0 15.0
15 6 ℄ 6 15

+87 →
14.5 14.4 16.2 16.0 15.0
14 8 ℄ 6 16

+79.20 ℄ →
14.0 13.4 12.2 13.3 10.4 8.9
16 8 ℄ 5 9 14

+73 →
6.7 9.6 10.0 9.2 8.8 7.3
14 5 ℄ 5 12 15

+64 →
8.7 8.0 9.4 8.4 8.5 7.3 4.5 2.5
16 10 5 ℄ 3 7 9 15

+57 →
2.9 1.7 7.1 7.2 7.2 7.3 4.6 1.8
12 5 5 3 ℄ 3 6 14

131+53.60 Beginning →
1.6 1.7 1.7 5.9 5.9 5.9 1.7 1.7 1.2 1.0
14 4 2.2 2.2 ℄ 2.2 2.2 3.5 9 14

1499.00 H.I.

H.I. = Approx. Elev. at Flume 11.

Mch-28-28
Ward-Inst
Ducmit-Chm.
McBain-Chm.

Flume No. 12 — Dulzura Conduit.

Alignment

148+68 — Angle Lt.

148+58.60 P.O.T. End Flume — P.O.T.

148+21.80 Δ — Δ 27° 24' Lt.

Water Way 12

147+85.50 Δ — Δ 28° 37' Lt

147+41.50 Δ — Δ 16° 30' Lt.

147+16.80 P.O.T. Beginning Flume — P.O.T.

147+00 — Angle Rt.

Conduit

9.40

36.80

36.30

Flume No. 12

44.00

24.70

16.80

Conduit

Cross Section

147+85.50 Δ →
45.2 (30) 39.3 (12) 21.8 (℄) 18.5 (3) 12.8 (9) 9.4 (12) Vert.

+65 →
35.4 (16) 27.2 (4) 24.3 (℄) 21.6 (5) 19.5 (8) 12.5 (8) 9.0 (14)

+58 →
33.5 (20) 20.2 (6) 20.1 (℄) 17.1 (3) 13.6 (6) 9.6 (6) 5.8 (10) 0.0 (11)

+50 →
30.4 (20) 22.0 (7) 21.0 (℄) 19.4 (4) 5.8 (6) 0.0 (7.5)

+41.50 Δ →
29.6 (20) 24.1 (10) 14.1 (5) 12.4 (℄) 12.5 (5) 9.6 (9) 5.4 (7) 0.0 (10)

+33 →
24.1 (13) 18.2 (5) 15.2 (℄) 14.6 (3) 11.2 (5) 6.3 (12) 0.0 (16)

+18 →
9.5 (11) 9.7 (3) 9.5 (℄) 9.0 (3) 8.5 (5) 3.4 (5) 0.0 (8)

147+16.80 Beginning →
9.0 (11) 5.2 (8) 5.1 (4) 5.1 (2.2) 9.0 (2.2) 9.0 (℄) 9.0 (2.2) 5.1 (2.2) 5.0 (4) 0.0 (7)

1500.00 H.I.

H.I. = Approx. Elev. at Flume 12.

Mch.-28-28
Ward — Inst.
Duermit — Rod
McBain — Obn

Flume No 12 – Dulzura Conduit

Cross Section

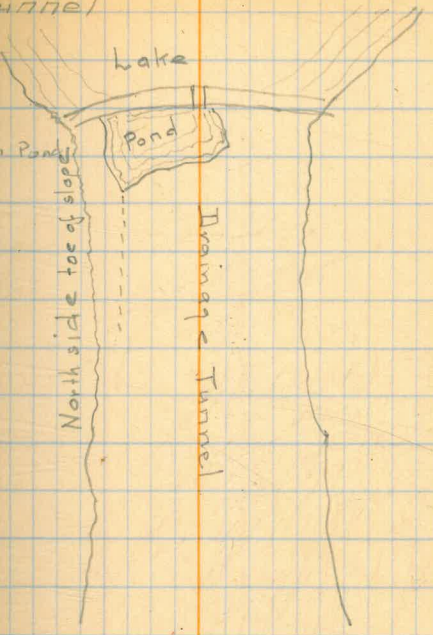
148+58.60 End Flume →	12.0 9	5.5 6	5.3 4	5.3 2.2	9.2 2.2	9.2 ℄	9.2 2.2	5.2 2.2	5.2 4.5	0.0 10
+57 →	5.4 20	13.0 11	12.3 7	10.0 3	9.6 ℄	9.3 4	3.0 8	0.7 11		
+50 →	13.0 19	18.3 14	17.3 8	12.3 4	11.3 ℄	10.4 4	4.6 9	0.0 11		
+35 →	31.0 22	28.0 8	26.8 3	24.2 ℄	16.8 6	11.2 8	3.0 11			
+21.80 Δ →	36.5 24	32.8 11	24.3 7	18.0 ℄	11.4 6	0.0 14				
+10 →	39.5 23	34.7 11	26.5 8	20.7 4	17.8 ℄	12.2 4	11.0 7	3.0 16		
148+00 →	41.7 26	39.0 14	18.0 ℄	10.1 7	3.3 17					

1500.00 H.I.

(49)

Levels for Drainage cut below Barrett Dam

		Elev.	Grade	
	5.15 105.15	100.00	Top of	debris in Tunnel
0+00	65 ft from Mouth of Tunnel in Pond		97.0	8.15
0+15	5.5		96.85	8.3	C 2.8 = W.S. in Pond
0+30	3.3		96.70	8.45	C 5.1
0+45	4.4		96.55	8.6	C 4.2
0+60	4.5		96.40	8.75	C 4.2
0+61 Boulder	0.75				C 8.0
0+75	6.5		96.25	8.9	C 2.4
0+90	5.4		96.10	9.0	C 3.6
0+95 End of ditch	9.05		96.10	9.05	grade



(51)

(58)

(60)

+	H.I.	−	Elev.

West End Tunnel No 4 To E. End Tunnel @ 5¼

(61)

	4.45	1484.90		
			4.56	1480.34 TP
	4.21	1484.55		
			2.52	1482.03 T.P.
	6.50	1488.53		

1480.45 T.P. - ℄ Tunnel

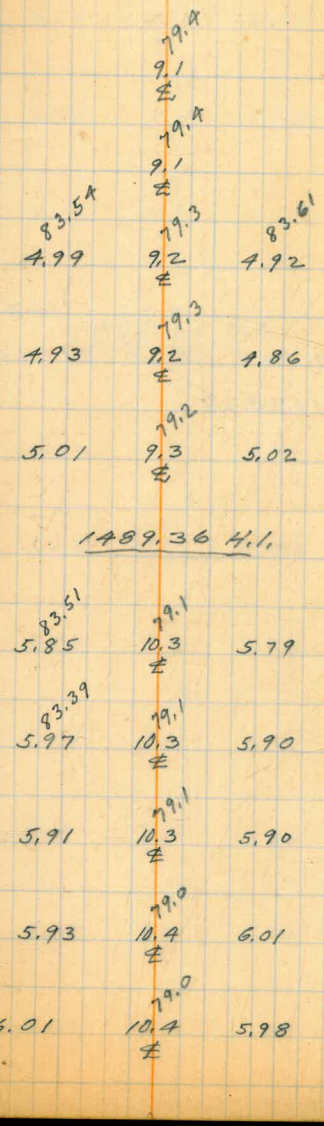
#4 - Approx 800' in. Mkd. on Walls.

1488.53 H.I.

Finish Pavement Gr.

287+72 West End Tunnel No 4.		1479.52
+75		79.52
288+00		79.50
+25		79.48
+50		79.46
	5.07	1483.46 T.P.
	5.90	1489.36
+75		79.44
289+00		79.42
+25		79.40
+50		79.38
+75		79.36

- 0.08 ft. Grade



1489.36 H.I.

(62)

	+	H.I. 1489.36	−	Elev.	℄ Grade
290+00					1479.34
+25					79.32
+50					79.30
+75					79.28
			6.22	1483.14	B.M.

B.M. - Spk. in Hub 10' Lt. 291+05

5.14 1488.28

291+00					79.26
+25					79.24
+50					79.22
+75					79.20
292+00					79.18
+25					79.16
+50					79.14

−0.08% Grade

1489.36 H.I.

6.02	79.0 10.4 ℄		5.98
6.10	78.9 10.5 ℄		6.09
6.05	79.0 10.4 ℄		6.08
6.13	78.9 10.5 ℄		6.17

1488.28 H.I.

5.03	79.0 9.3 ℄		5.02
5.03	78.9 9.4 ℄		5.03
5.04	79.0 9.3 ℄		4.93
5.09	78.8 9.5 ℄		5.14
5.03	79.0 9.3 ℄		5.15
5.08	78.9 9.4 ℄		5.16
5.05	79.0 9.3 ℄		5.20

(63)

	+	H.I. 1488.28	−	Elev.	
+75					1479.12
293+00					79.10
+25					79.08
+50					79.06
East End Tunnel No 5			5.30	1482.98	TP.
	0.43	1483.41			
+75					79.04
294+00					79.02
+25					79.00
+50					78.98
+75					78.96
295+00					78.94
+25					78.92
+50					78.90

Grade 0.00 %

1488.28 H.I.

78.8
5.12 9.5 5.16
℄

78.8
5.16 9.5 5.17
℄

78.8
5.22 9.5 5.14
℄

78.8
9.5
℄

1483.41

78.6
4.8
℄

78.6
4.8
℄

(64)

	+	H.I. 1483.41	−	Elev.
+75				1478.88
296+00				78.86
+25				78.84
+50				78.82
+75				78.80
297+00				78.78
+25				78.76
+50				78.74
+75				78.72
298+00				78.70
+25				78.68
+50				78.66
+75				78.64

-0.08% Grade

1483.41 H.I.

78.5
4.9
℄

78.5
4.9
℄

78.4
5.0
℄

	+	H.I.	−	Elev.	
		1483.41			
			0.71	1482.70	T.P.
	7.82	1490.52			
299+00 West End Tunnel No 5.				1478.62	
+25				78.60	
+50				78.58	
+75				78.56	
300+00				1478.54	
+25				78.52	
+50				78.50	
+75				78.48	
301+00				78.46	
			7.99	1482.53	T.P.
	4.57	1487.10			
+25				78.44	

−0.08% Grade

1490.52 H.I.

82.87 7.65	78.3 12.2 ℄	7.80
7.79	78.4 12.1 ℄	7.81
7.84	78.4 12.1 ℄	7.86
7.98	78.4 12.1 ℄	7.99
8.02	78.2 12.3 ℄	82.51 8.01
8.02	78.2 12.3 ℄	8.08
8.16	78.3 12.2 ℄	8.06
8.03	78.2 12.3 ℄	8.07
8.04	78.3 12.2 ℄	8.09

1487.10 H.I.

4.66	78.0 9.1 ℄	4.67

(66)

	+	H.I.	−	Elev.	
		1487.10			
+50				1478.42	
+75				78.40	
302+00				78.38	
+25				78.36	
+50				78.34	
+75				78.32	
303+00				78.30	
+25				78.28	
B.M. – Spk. in Hub –10' Lt. 304+50					
			5.22	1481.88	B.M.
	5.55	1487.43			
+50				78.26	
+75				78.24	
304+00 Beg Pavement				78.22	
+25				78.20	

-0.08% grade

1487.10 H.I.

4.67	78.0 9.1 ℄	4.68
4.71	78.0 9.1 ℄	4.72
4.71	78.0 9.1 ℄	4.75
4.71	78.1 9.0 ℄	4.76
4.81	78.0 9.1 ℄	4.76
4.80	77.9 9.2 ℄	4.75
4.75	77.9 9.2 ℄	4.81
4.90	78.0 9.1 ℄	4.88

1487.43 H.I.

5.14	78.2 9.2 ℄	5.15
5.16	77.8 9.6 ℄	5.15
5.16	78.22 9.21 ℄ Conc.	5.16
5.14	78.26 9.17 ℄ Conc.	5.20

	+	H.I. 1487.43	−	Elev.
+50				1478.18
+75				78.16
305+00				1478.14
305+17.2 Beg. Flume No 13"A" End Pavement				78.13
+25				78.12
+50				78.10
+62.9 End Flume No 13"A"				78.09
+75				78.08
306+00				78.06
+25				78.04
+50				78.02
+75				78.00
306+85.2 Beg. Flume No 14"A"				79.99

−0.80 % Grade

1487.43 H.I.

	78.33		
5.33	9.10 ℄ Conc.	5.27	
	78.15		
4.90	9.28 ℄ Conc,	5.22	
	78.14		
5.20	9.29 ℄ Conc.	5.27	
	78.16		
	9.27 ℄ Conc,		
	77.5		
	9.9 ℄		
	77.5		
	9.9 ℄		
	77.64		
	9.79 ℄		
	77.6		82.09
5.34	9.8 ℄	5.34	
82.09	77.8		82.02
5.34	9.6 ℄	5.41	
	77.8		
5.22	9.6 ℄	5.44	
	77.8		
5.21	9.6 ℄	5.23	
	77.8		81.98
5.18	9.6 ℄	5.45	
	77.63		
	9.80 ℄		

(68)

	+	H.I.	−	Elev.	
		1487.43			
307+00					1477.98
+25					77.96
+50					77.94
+75					77.90
308+00					77.90
308+09.8 End Flume 14"A"					1477.89
			5.38	1482.05 T.P.	
	4.54	1486.59			
+25					77.88
+50					77.86
+75					77.84
309+00					77.82
+25					77.80
+50					77.78

-0.08% Grade

1487.43 H.I.

77.5
9.9 ℄
77.6
9.8 ℄
77.5
9.9 ℄
77.5
9.9 ℄
77.4
10.0 ℄
77.63
9.80 ℄

1486.59 H.I.

	77.4	
4.74	9.2 ℄	4.72
	77.5	
4.83	9.1 ℄	4.80
81.84	77.4	
4.75	9.2 ℄	4.71
81.86	77.4	
4.73	9.2 ℄	4.63
	77.3	
4.68	9.3 ℄	4.63
	77.4	
4.75	9.2 ℄	4.66

(69)

	+	H.I.	−	Elev.
		1486.59		
+75				1477.76
310+00				1477.74
+25				77.72
+50				77.70
310+61 Beg. Top Slab.				77.69
B.M. – Spk. in Hub – N.E. Cor Top Slab at 310+61			4.68	1481.91 B.M.
	5.73	1487.64		
+75				77.68
311+00				77.66
+25				77.64
+50				77.62
+75				77.60
312+00				77.58
+25				77.56

-0.08 ft Grade

1486.59 H.I.

4.68	9.0 ℄ (77.6)	4.71
4.73	9.0 ℄ (77.6)	4.83
4.82 (81.77)	9.0 ℄ (77.6)	4.83 (81.76)
4.92	9.2 ℄ (77.4)	4.79
4.86	9.3 ℄ (77.3)	4.78

Under Slab

(70)

	+	H.I.	−	Elev.	
		1487.64			
+50					1477.54
+75					77.52
313+00					77.50
			5.65	1481.99	T.P.
	4.36	1486.35			
313+13 End Top Slab					77.49
+25					77.48
+29 Beg. Top Slab					77.48
+49 End Top Slab					77.46
+50					77.46
+75					77.44
314+00					77.42
+25					77.40
+50					77.38

-0.08% Grade

Under Slab

1486.35 H.I.

	77.1 9.0 ℄	
4.82	77.2 9.2 ℄	4.30
	77.2 9.2 ℄	
	77.2 9.2 ℄	
4.82	77.2 9.2 ℄	4.87
4.85	77.1 9.3 ℄	4.94
4.86	77.2 9.2 ℄	4.91
4.82	77.2 9.2 ℄	4.78
5.00	77.2 9.2 ℄	5.01

(71)

	+	H.I. 1486.35	−	Elev.	
+75					1477.36
315+00					77.34
+25					77.32
+50					77.30
+72 Beg. Top Slab					77.28
			5.01	1481.34	T.P.
	5.10	1486.44			
+75					77.28
+97 End Top Slab					77.26
316+00					77.26
+25					77.24
+50					77.22
+75					77.20
317+00					77.18

-0.08% Grade

1486.35 H.I.

4.99	77.1 9.3 ℄	4.94
4.87	77.1 9.3 ℄	4.84
5.01	77.1 9.3 ℄	81.38 4.97
5.08	77.0 9.4 ℄	5.06
5.05	77.3 9.1 ℄	5.02

1486.44 H.I.

	77.0 9.4 ℄	
81.27 5.17	76.8 9.6 ℄	81.29 5.15
81.19 5.25	76.8 9.6 ℄	81.25 5.19
81.26 5.18	76.8 9.6 ℄	5.21
5.31	76.9 9.5 ℄	5.20
planked	77.0 9.4 ℄	81.26 5.18

(72)

	+	H.I.	—	Elev.	
		1486.44			
317+17 Beg. Top Slab.					1477.17
+25					77.16
+50					77.14
+64 End Top Slab					77.13
+75					77.12
318+00					77.10
			5.30	1481.14	T.P.
	4.74	1485.88			
+25					77.08
+50					77.06
+75					77.04
319+00					77.02
+25					1477.00
+50					1476.98

-0.08% Grade

1486.44 H.I.

76.9
5.28 9.5 ℄ 5.29

℄

77.0
9.4 ℄

81.11 76.9 81.18
5.33 9.5 ℄ 5.26

81.12 76.7 81.10
5.32 9.7 ℄ 5.34

1485.88 H.I.

81.09 76.8 81.10
4.79 9.1 ℄ 4.78

76.9
4.87 9.0 ℄ 4.78

76.9
4.82 9.0 ℄ 4.85

76.8
4.86 9.1 ℄ 4.85

81.01 76.8 81.00
4.87 9.1 ℄ 4.88

80.96 76.7 81.00
4.92 9.2 ℄ 4.88

	+	H.I.	−	Elev.	
		1485.88			
+75					1476.96
320+00					1476.94
+25					76.92
			7.66	1478.22	B.M.
B.M. – Spk. in Hub			15' Lt.	320+25	
	7.76	1485.98			
+50					76.90
+75					76.88
321+00					76.86
+25					76.84
+50					76.82
+75					76.80
322+00					76.78
+25					76.76

−0.08 % Grade

1485.88 H.I.

81.00	76.6	80.94
4.88	9.3 ℄	4.94
80.97	76.6	80.93
4.91	9.3 ℄	4.95
80.94	76.7	80.93
4.94	9.2 ℄	4.95

1485.98 H.I.

	76.6	
5.08	9.4 ℄	5.12
	76.6	
5.09	9.4 ℄	5.07
	76.6	
5.04	9.4 ℄	5.03
80.91	76.5	80.91
5.07	9.5 ℄	5.07
80.89	76.5	80.92
5.09	9.5 ℄	5.06
	76.6	
5.03	9.4 ℄	5.05
	76.6	
5.14	9.4 ℄	5.15
	76.4	
5.19	9.6 ℄	5.17

	+	H.I. 1485.98	−	Elev.	
+50					1476.74
+75					76.72
323+00					76.70
+25					76.68
+50					76.66
			5.31	1480.67	T.P.
	5.51	1486.18			
+75					76.64
324+00					76.62
+25					76.60
+50					76.58
+75					76.56
325+00					76.54
+25					76.52

Grade −0.08 %

1485.98 H.I.

80.78 5.20	76.5 9.5 ℄	80.79 5.19
5.23	76.4 9.6 ℄	5.18
80.75 5.23	76.4 9.6 ℄	80.76 5.22
5.28	76.4 9.6 ℄	5.28
5.34	76.3 9.7 ℄	5.30

1486.18 H.I.

5.51	76.4 9.8 ℄	5.48
5.53	76.3 9.9 ℄	5.44
5.56	76.3 9.9 ℄	5.55
5.52	76.3 9.9 ℄	5.54
5.54	76.2 10.0 ℄	5.52
80.58 5.60	76.2 10.0 ℄	80.59 5.59
80.50 5.68	76.1 10.1 ℄	80.57 5.61

	+	H.I.	−	Elev.	
		1486.18			
+46 Beg. Top Slab				1476.50	
+50				76.50	
+75				76.48	
326+00				76.46	
+23 End Top Slab				76.44	
+25				76.44	
+50				76.42	
+75				76.40	
			5.71	1480.47	T.P.
	4.90	1485.37			
327+00				76.38	
+25				76.36	
+50				76.34	
+75				76.32	

10.0 Grade

1486.18 H.I.

5.61	76.2 10.0 ℄	5.60
	76.3 9.9 ℄	
80.47 5.71	76.3 9.9 ℄	80.50 5.68
80.44 5.74	76.1 10.1 ℄	80.47 5.71
5.83	76.1 10.1 ℄	5.75

1485.37 H.I.

4.99	76.2 9.2 ℄	4.93
4.94	76.1 9.3 ℄	5.01
5.00	76.1 9.3 ℄	5.08
5.00	76.1 9.3 ℄	4.96

(76)

	+	H.I.	−	Elev.	
		1485.37			
328+00				1476.30	
+25				76.28	
+50				76.26	
+60 Beg. Top Slab				76.25	
+75				76.24	
329+00 End Top Slab.				76.22	
+25				76,20	
+50				76.18	
+75				76.16	
			5,15	1480.22	B.M.

BM – Spk. in Hub – 10' Lt 330+00

4.84 1485.06

330+00			1476.14	
+25 Beg. Pavement			76.12	

-0.08% Grade

1485.37 H.I.

	76.0		
5.00	9.4 ℄	5.03	
80.36 5.01	76.0 9.4 ℄	5.06	80.31
	75.9		
5,05	9.5 ℄	5.05	
	76.1 9.3 ℄		
	75.9		
5.09	9.5 ℄	5.19	
80.22 5.15	75.9 9.5 ℄	5.11	80.26
	76.0		
5.18	9.4 ℄	5.12	
80.25 5.12	75.8 9.6 ℄	5.12	80.25

1485.06 H.I.

	76.0		
4.89	9.1 ℄	4.84	
	76.1		
4.88	9.00 ℄	4.89	

+	H.I. 1485.06 −	Elev.
+50		1476.10
+65 End Pavement		76.09
+75		76.08
331+00		76.06
+25		76.04
+50		76.02
+75		76.00
332+00		75.98
+25		75.96
+50		75.94
+75		75.92
333+00		75.90
+25		75.88

-0.08 % Grade

1485.06 H.I.

4.97	76.04 9.02 ℄	4.87
	76.06 9.00 ℄	
5.03	75.7 9.4 ℄	80.05 5.01
80.11 4.95	75.8 9.3 ℄	4.89
80.08 4.98	75.8 9.3 ℄	80.05 5.01
5.00	75.8 9.3 ℄	5.09
5.03	75.7 9.4 ℄	5.05
5.03	75.8 9.3 ℄	4.98
5.08	75.7 9.4 ℄	80.02 5.04
79.92 5.14	75.7 9.4 ℄	79.95 5.11
5.10	75.7 9.4 ℄	5.07
5.10	75.6 9.6 ℄	5.08
5.10	75.7 9.4 ℄	79.89 5.17

	+	H.I.	−	Elev.		
		1485.06				
+50					1475.86	
+75					75.84	
			5.11	1479.95	T.P.	
	4.56	1484.51				
334+00					75.82	−0.08 % Grade
+25					75.80	
+50					75.78	
+75					75.76	
335+00					75.74	
+25					75.72	
+50					75.70	
			4.69	1479.82	T.P.	
	4.81	1484.63				
+75					75.68	
336+00					75.66	

1485.06 H.I.

79.90 5.16	75.6 9.5 ℄	79.94 5.12
5.22	75.5 9.6 ℄	5.19

1484.51 H.I.

79.87 4.64	75.5 9.0 ℄	79.90 4.60
4.70	75.5 9.0 ℄	4.62
4.65	75.6 8.9 ℄	4.69
4.74	75.4 9.1 ℄	4.68
4.66	75.5 9.0 ℄	4.71
4.74	75.5 9.0 ℄	4.68
79.75 4.76	75.5 9.0 ℄	79.76 4.75

1484.63 H.I.

4.91	75.3 9.3 ℄	4.85
4.97	75.2 9.4 ℄	4.93

+	H.I.	−	Elev.	
	1484.63			
+25			1475.64	
+50			75.62	
+75			75.60	
337+00			75.58	
+25			75.56	
+35 Beg. Pavement			75.55	
+50			75.54	
+75			75.52	
338+00			1475.50	
338+09 East Portal of Tunnel #5¼ (New Tunnel)			1475.49	
		12.19	1472.44	T.P.
	11.69		1484.13	
		4.67	1479.46	B.M.

Paved

B.M. - Iron Rod 8' Lt. 342+30

(Continued Page 1 – This Book)

−0.08% Grade

−0.10% Gr.

1484.63 H.I.

79.66 4.97	75.3 9.3 ℄	79.67 4.96
4.92	75.2 9.4 ℄	4.97
5.00	75.3 9.3 ℄	4.99
79.54 5.09	75.4 9.2 ℄	79.66 4.97
5.05	75.1 9.5 ℄	5.08
5.14	75.46 9.18 ℄	5.11
5.15	75.50 9.13 ℄	5.12
5.17	75.47 9.16 ℄	5.17
5.15	75.55 9.08 ℄	5.14
5.16	75.50 9.13 ℄	5.13

Tunnel Paved.

B.M. = On Top of S.E. Cor. of Conc. Slab - 80' N. Flume #7

		3.80	1506.50 B.M.
11.48	1510.30 H.I.		
		0.91	1498.82 T.P.
12.37	1499.73 H.I.		
		0.93	1487.36 T.P.
12.79	1488.29 H.I.		
		3.75	1475.50 T.P.
6.57	1479.25 H.I.		
		2.14	1472.68 T.P.
1.48	1474.82 H.I.		
		12.24	1473.34 T.P.
0.84	1485.58		
		12.86	1484.74 T.P.
1.97	1497.60 H.I.		
		12.33	1495.63 T.P.
0.96	1507.96 H.I.		
			1507.00 B.M.

B.M. = Approx. Assumed Elev.

B.M. on Concrete E. side wall Conduit 100' below road crossing at Flume No 6.

IMPROVED TABLES AND INFORMATION

77.34
.90
78.24 H.1.
73.42
4.82 -343

77.72
0.67
78.39
73.58 -361
4.81

77.86
072
78.58
73.82
4.76 -358

77.74
1.16
78.84
73.94
4.90 6456

78.93
071
79.64

78.60
0.84
79.44 H.1
74.46
4.98 -350

78.63
0.83
79.46
74.02
4.84

78.52
1.14
79.66
74.70
4.96

79.07
0.57
79.64
74.86
4.78

79.23
0.92
80.15
75.06
5.09