285

Final Cross Sections

LEVEL BOOK

No. 380 F

0+00 — 77+88.2

W 285

285

285

Our Leather Bound Engineers Note Books are carried in the following rulings:

No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.

No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.

No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.

No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

We also carry the Note Books listed above, bound in extra strong Fabri-Hide (otherwise the same quality of book), which can be furnished at a somewhat lower price.

In ordering Fabri-Hide covered books, add the letter *"F"* to catalog number.

O.R.- S.D. 2nd. Main Pipe Line.
U.S.G.S. Datum.

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Final Cross Sections - Trench Excavation - Schedule I.

Page	Description

T0

Reference.
Transit Book #270.
Level Book #275.

O.R.-S.D. 2nd Main Pipe Line
"A" Line - Final Cross Sections
Sta. 0+00 to Sta.

Jan. 2, 1930. Clear + Warm.
Converse - Notes
Hill - Grades
Elliott - ⊼
Simpson
Walton

Endareas calc. by Z.K.B. from 0+00 to 70+94.

Sta.	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
0+00	395.66	395.66			0.0		0.0		
0+03	395.66	395.66			0.0		0.0		
			1.0					14.49	0.54
0+04	395.66	401.7			6.0		28.98		
			5.6					28.98	6.01
+09.6	395.66	401.7		6.0 / ~~2.4~~ / 1.75	6.0	6.0 / ~~2.4~~ / 1.75	21.00 / ~~28.98~~		
			15.4					23.91 / ~~32.87~~	13.64 / ~~18.73~~
+25	395.7 / ~~395.66~~	403.3		7.7 / ~~2.8~~ / 2.18	7.6	7.1 / ~~2.7~~ / 2.03	26.82 / ~~36.75~~		
			50.0					20.24 / ~~33.85~~	37.48 / ~~62.69~~
+75	395.7 / ~~393.22~~	399.6		~~6.4~~ / 2.5	3.9 / ~~6.4~~	~~6.4~~ / 2.51	13.65 / ~~30.95~~		
			2.0					12.78 / ~~29.97~~	0.95 / ~~2.22~~
+77	395.7 / ~~393.1~~	399.1		6.6 / ~~2.4~~	3.4 / ~~6.0~~	6.6 / ~~2.4~~	11.90 / ~~28.98~~		
			13.0 / ~~23.0~~					5.95 / ~~15.94~~	2.86 / ~~13.58~~
0+90	395.7	395.7			0.0		Chd. T.M.M. 0.00 ✓A.L.L.		

92" trench

(figured for 58" trench) (Not figured)

Moved by City Forces.

Schedule II Structure Exc.

Schedule I Trench Exc.

Sta. Grade Elev Dist. L.C. ℄ R.C.

Sta.	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
1+00	395.7 ✓ ~~392.00~~	392.6			0.0 ~~0.6~~		0.0 ~~2.89~~		
			40.0					0.0 ~~1.45~~	0.0 ~~0.21~~
+04	395.7 ✓ ~~392.00~~	392.00			0.0		0.0		
1+33 50			53.4					0.0	
1+57.4	395.7 ✓ ~~392.00~~	392.00			0.0		0.0		
			12.6					~~8.70~~	0.0 ~~4.06~~
1+70	395.7 ✓ ~~392.00~~	395.6			0.0 ~~3.6~~		0.0 ~~17.39~~		
			15.0					14.11 ~~24.74~~	2.28 ~~12.08~~
1+85	395.7 ✓ ~~392.00~~	397.4			1.7 ~~5.4~~		8.21 ~~26.08~~		
			15.0					9.66 ~~27.53~~	5.37 ~~16.29~~
2+00	395.7 ✓ ~~392.00~~	398.00		~~6.6 / 2.4~~	2.3 6.0	~~6.0 / 2.4~~	11.11 ~~28.98~~		
			30.0				Chd. T.M.M.	12.07 ~~29.97~~	13.41 ~~33.30~~
			✓ Pl.						

for 58 trench

yes to state them in for grade. Leading

Sta.	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
2+30	395.7 ~~397.00~~	398.4		6.4 ~~2.1~~	2.7 ~~6.4~~	~~6.4~~ ~~2.5~~	13.07 ~~32.96~~		
			20.0					22.00 ~~38.30~~	16.30 ~~28.32~~
+ 50	394.6 ~~397.00~~	401.0		~~3.7~~ ~~3.1~~	6.4 ~~9.0~~	9.6 ~~3.2~~	30.95 ~~46.06~~		
			25.0					29.97 ~~40.87~~	27.75 ~~37.84~~
+75	393.3 ~~397.00~~	399.3		3.3 ~~2.7~~	6.0 ~~7.3~~	3.3 ~~2.7~~	28.98 ~~35.67~~		
			25.0					28.98 ~~32.32~~	26.83 ~~29.93~~
3+00	o.k. 392.00	398.00		6.0 ~~2.4~~	6.0	6.0 ~~2.4~~	28.98		
			25.0					24.88	23.07
3+25	390.70	395.0			4.3		20.77		
			15.0					24.87	13.82
+40	389.9	395.9		6.0 ~~2.4~~	6.0	6.0 ~~2.4~~	28.98		
			10.0				Chd. TW. M.	28.98	10.73
			℄ A.L.						

Sta.	Grade	Elev.	Dist.	L.C.	E	R.C.	End. Area	Av. End Area	C.Y.
									389.9
3+50	389.4	395.4		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			25.0					25.36	23.48
+75	388.1	392.6			4.5		21.74		
			25.0					24.64	22.81
4+00	386.8	392.5			5.7		27.53		
			50.0					27.77	51.43
+50	384.70	390.0			5.8		28.01		
			50.0					28.50	52.78
5+00	383.85	389.9		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			35.0					32.20	41.74
+35	383.6	390.8		7.2 / 2.7	7.2	7.4 / 2.8	35.42		
			55.0			Chd. T.M.M.		35.64	72.40
			P.L.						

Sta.	Grade			L.C.	℄	R.C.	End Area	Av End Area	C.Y.
5+90	383.2	390.5		7.3 / 2.7	7.3	7.3 / 2.7	35.67		
			10.0					33.83 / 0	12.53 / 0
6+00	383.15	389.8		6.6 / 2.6	6.6	6.6 / 2.6	31.98		
			10.0					30.48 / 0	11.29 / 0
+10	383.1	389.1		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			10.0					26.81 / 0	9.93 / 0
+20	383.0	388.1			5.1		24.63		
			60.0					25.84 / 0	57.72 / 0
+80	382.6	388.2			5.6		27.05		
			10.0					28.02 / 0	10.38 / 0
+90	382.5	388.5		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			10.0				Chd. T. M. M.		
			VAL.					28.98 / 0	10.73 / 0

Sta.	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. End Area	C.V.
							28.98		
7+00	382.45	388.5			6.0				
			50.0					27.53	50.98
							26.08		
+50	382.10	387.5			5.4				
			15.0					26.81	14.89
							27.53		
+65	381.4	387.1			5.7				
			35.0					24.63	31.93
							21.74		
8	379.7	384.2			4.5				
			25.0					22.95	21.25
							24.15		
+25	378.5	383.5			5.0				
			20.0					26.56	19.67
							28.98		
+45	377.6	383.6		6.0 / 2.4	6.0	6.0 / 2.4			
			9.9			Chd. T.M.M.		29.97	10.99
			R.C.						

			L.C.	℄
8+54.9	377.07	383.5	6.4 / 2.5	6.4
			15.1	
+70	375.8	383.4	7.6 / 2.8	7.6
			10.0	
+80	374.9	382.4	7.5 / 2.8	7.5
			4.75	
+84.75	374.55	381.5	6.9 / 2.6	6.9
			15.25	
9+00	372.2	378.2	6.0 / 2.4	6.0
			14.38	
+14.38	369.9	374.8		4.9
			29.22	
			℄ Rd.	

R.C.	End Area	Av. End Area	C.Y.
6.4 / 2.5	30.95		
		34.30	19.18
7.8 / 2.9	37.64		
		37.21	13.78
7.5 / 2.8	36.78		
		35.15	6.18
6.9 / 2.6	33.52		
		31.25	17.65
6.0 / 2.4	28.98		
		26.33	14.02
	23.67		
Chd. T.M.M.		23.91	25.88

			L.C.	E	R.C.	End Area	Ar. End Area	Q.V.
9+43.60	363.05	368.0		5.0		24.15		
			21.12				26.08	20.67
+65	357.2	363.0		5.8		28.01		
			26.65				26.08	25.74
+91.65	349.97	355.0		5.0		24.15		
			29.22				24.39	26.40
10+20.87	343.19	348.3		5.1		24.63		
			29.65				19.32	21.22
10+50.52	338.63	341.5		2.9		14.01		
			25.28				7.01	6.56
10+75.80	336.32	336.3		0.0		0.0		
			26.6		Chd. T.M.M.		0.0	0.0
			A.L.					

			L.C.	E
11+02.4	336.28	336.3		0.0
			8.03	
+10.43	336.27	337.3		1.0
			29.57	
+40	337.3	339.5		2.2
			35.0	
+75	338.6	343.6		5.0
			25.0	
12+00	339.5	345.5		6.0
			27.0	
+27	340.5	345.7		5.2
			17.83	
			R.C.	

R.C.		
End Area	End Area	C.Y.
0.0		
	2.41	0.72
4.83		
	7.73	8.47
10.63		
	17.39	22.57
24.15		
	26.86	24.59
28.98		
	27.05	27.05
25.12		
Chd. T.M.M.	20.77	13.72

Sta.	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
12+44.83	341.1	344.5			3.4		16.42		
			2.17					11.59	0.93
+47	341.3	342.7			1.4		6.76		
			12.79					13.53	6.41
+59.79	342.16	346.4			4.2		20.29		
			14.86					24.64	13.56
+74.65	344.21	350.2		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			14.69					37.97	20.66
+89.34	347.26	356.5		9.2 / 3.2	9.2	9.2 / 3.2	46.96		
			5.66					51.33	10.76
+95	348.5	359.0		10.5 / 3.5	10.5	10.5 / 3.5	55.75		
			8.79 R.L.				Chd. T.M.M.	49.48	16.11

6.55 cu yds. schedule II incl.

Total to here ~~1083.89~~ 1090.44 A.L.L.

Sta.	Grade	Elev.	Dist	L.C.	℄	R.C.	End Area	Ave. End Area	C.Y.
13+03.79	351.30	359.9		8.6 / 3.1	8.6	8.6 / 3.1	43.20		
			6.21					38.36	8.82
+10	353.3	360.2		6.9 / 2.6	6.9	6.9 / 2.6	33.52		
			50.0					37.46	69.37
+60	369.1	377.4		8.3 / 3.0	8.3	8.3 / 3.0	41.40		
			25.42					37.20	35.02
+85.42	377.1	383.9		6.8 / 2.6	6.8	6.8 / 2.6	33.00		
			29.16					30.99	33.47
14+14.58	384.17	390.1		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			17.67					28.30	13.32
+27.25	386.30	394.1			5.8		28.01		
			14.88					27.05	14.91
			A.L.				Chd. T.M.M.		

				L.C.	E.	R.C.	End Area	End Area	C.V.
14+42.08	388.22	393.6			5.4		26.08		
			14.98				25.11	13.93	
+57.06	389.05	394.0			5.0		24.13		
			15.0				23.91	13.28	
+72.06	388.80	393.7			4.9		23.67		
			27.94 ~~27.96~~				25.36	26.29 ~~26.26~~	
15+00	387.3	392.9			5.6		27.05		
			50.0				28.02	51.89	
+50	384.5	390.5		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			50.0				30.73	56.91	
16+00	381.8	388.5		6.7 / 2.6	6.7	6.7 / 2.6	32.48		
			50.0				30.73	56.91	
			A.L.				Chd. Tm. M.		

Sta.				L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
16+50	379.1	385.1		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			50.0					30.22	5-5-96
17+00	376.4	382.9		6.5 / 2.5	6.5	6.5 / 2.5	31.45		
			25.0					30.21	27.97
+25	375.0	381.0		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			59.41					26.33	5-7.94
+84.41	371.76	376.7			4.9		23.67		
			14.94					25.60	14.17
+99.35	370.45	376.1			5.7		27.53		
			14.82					28.26	15.51
18+14.17	368.14	374.1		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			14.63					32.87	17.81
			P.L.				Chd. T.M.M.		

Sta.				L.C.	℄	R.C.	End Area	Adj. End Area	C.V.
18+28.80	364.8	372.3		7.2 / 2.7	7.5	7.8 / 2.9	36.77		
			9.20					39.70	13.53
+38	362.1	370.6		8.2 / 3.0	8.5	8.8 / 3.1	42.63		
			5.18					40.54	7.78
+43.18	360.6	368.4		7.6 / 2.8	7.8	8.0 / 2.9	38.45		
			14.06					41.78	21.76
+57.24	355.3	364.2		8.6 / 3.1	8.9	9.2 / 3.2	45.11		
			13.72					46.33	23.51
+70.96	349.1	358.4		9.0 / 3.2	9.3	9.5 / 3.3	47.54		
			16.04					38.26	22.73
+87	341.3	347.3		5.8 / 2.4	6.0	6.2 / 2.5	28.98		
			13.0						
			A.L.			Cld. M.M.	27.77	13.37	

Sta.	Grade	Elev.	L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
	334.9							
19+00	~~336.0~~	340.4		5.5		26.57		
			30.0				25.12 / 27.91	
+30	320.3	325.2		4.9		23.67		
			20.0				26.57 / ~~26.33~~ 19.68 / ~~19.50~~	
+50	~~310.5~~	316.5	6.1 / ~~6.0~~ 2.4	6.1 / ~~6.0~~	6.1 / ~~6.0~~ 2.1	29.46 / ~~28.98~~		
			25.0				27.83 / ~~33.38~~ 25.77 / ~~32.76~~	
+75	301.1 / ~~298.2~~	306.5	4.9 / ~~4.8~~ 2.9 2.41	5.4 / ~~5.3~~	6.0 / ~~9.0~~ 2.91	26.20 / ~~41.78~~		
			29.09				30.46 / ~~38.39~~ 32.82 / ~~37.80~~	
20+04.09	288.9 / ~~284.0~~	295.8	6.3 / ~~11.6~~ 5.3 2.49	7.1 / ~~11.8~~	8.0 / ~~11.0~~ 4.1 2.91	34.72 / ~~65.70~~		
			25.91				33.03 / ~~48.52~~ 31.70 / ~~46.56~~	
+30	284.0	290.5	6.3 / 2.5	6.5	6.6 / 2.6	31.34		
			32.0					
			A.L.			Chd. T. M.M.	30.16	35.75

Grade Change
See finish state book for grades

Sta.	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Ar. End Area	C.V.
20+62	284.0	290.0		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			5.0					26.08 / 4.83	
+67	284.0	288.8			4.8		23.18		
			12.0					24.39 / 10.84	
+79	284.0	289.3			5.3		25.60		
			1.0					29.82 / 1.10	
+80	284.0	291.0		7.2 / 2.7	7.0	6.8 / 2.6	34.04		
			15.56					32.00 / 18.44	
+95.56	289.6 ~~284.0~~	295.8		7.0 ~~+2.6~~ / 4.1 / 2.66	6.2 ~~+1.8~~	5.4 ~~11.0~~ ~~3.7~~ 2.41	29.96 ~~25.58~~		
			19.44					29.84 / 29.91 ~~28.84~~ / 21.49 / 21.54 ~~12.36~~	
21+15	296.6 ~~292.75~~	302.8		6.6 ~~10.4~~ / 3.5 / 2.56	6.2 10.0	5.7 ~~9.5~~ ~~3.3~~ 2.41	29.86 ~~22.10~~		
			15.0					24.05 ~~11.46~~ / 13.96 / 13.91 / 23.03	
			R.L.				Chd. T.M.M.		

Grade change

Grade Change →

				L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
21+30	302.1 ~~299.5~~	305.9		4.1 ~~6.7~~ 2.6	3.8 ~~6.4~~	3.1 ~~6.0~~ 2.4	18.24 ~~30.82~~		
			20.0					23.35 ~~31.65~~	17.30 ~~23.11~~
+50	309.2 ~~308.5~~	315.2		6.2 ~~7.0~~ 2.7 2.46	5.9 ~~6.1~~	5.6 ~~6.4~~ 2.5 2.41	28.46 ~~32.49~~		
			50.0					31.72 ~~35.73~~	58.74 ~~62.46~~
22+00	331.00	338.1		7.6 2.8	7.1	6.9 2.6	34.97		
			18.0					32.71	21.81
+18	339.10	345.3		6.6 2.6	6.3	6.0 2.4	30.45		
			32.0					34.25	40.59
+50	353.5	361.2		7.9 2.9	7.7	7.6 2.8	38.05		
			12.0					34.37	15.28
+62	358.9	365.2		6.8 2.6	6.3	6.0 2.4	30.69		
			10.0					39.07	14.47
			A.L.				Chd. T.M.M.		

				L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
22+72	363.4	372.8		9.7 / 3.3	9.4	8.6 / 3.1	17.45		
			8.0				12.89	12.71	
+80	367.0	374.8		8.5 / 3.0	7.8	7.0 / 2.7	38.33		
			4.0				33.66	4.99	
+84	368.8	374.8		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			16.0				21.23	12.59	
23	376.0	378.8			2.8		13.52		
			30.0				19.08	21.20	
+30	377.5	382.6			5.1		24.63		
			15.0				23.43	13.02	
+45	378.25	382.8			4.6		22.22		
			15.0			Chd. T.M.M.	23.60	14.22	
			A.L.						

				L.C.	℄	R.C.	End Area	End Area	C.V.
2	23+60	379.0	385.0			6.0 / 2.4	28.98		
			40.0		6.0			31.60	46.81
	24+00	381.0	388.0			7.4 / 2.85	34.21		
			25.0	6.7 / 2.6	7.0			34.70	32.13
	+25	382.25	389.4			7.4 / 2.8	35.18		
			25.0	7.0 / 2.7	7.2			34.15	31.62
	+50	383.5	390.3			7.2 / 2.7	33.11		
			20.0	6.5 / 2.5	6.8			34.80	25.78
	+70	384.5	391.0			7.6 / 2.8	36.48		
			20.0	7.2 / 2.7	7.5			32.73	24.24
	+90	385.5	391.5			6.0 / 2.4	28.98		
			10.0	6.0 / 2.4	6.0			27.05	10.02
			A.L.				Cnd. T.M.M.		

Sta.	Grade			L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
25+00	386.00	391.2			5.2		25.12		
			18.0					27.05	18.03
+18	385.6	391.6		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			17.0					32.63	20.54
+35	385.3	392.7		7.0 / 2.7	7.4	7.8 / 2.9	36.28		
			15.0					36.18	20.10
+50	385.0	392.4		6.8 / 2.6	7.4	7.9 / 2.9	36.08		
			10.0					33.83	12.53
+60	384.8	391.2		6.7 / 2.4	6.4	7.2 / 2.7	31.57		
			40.0					30.28	44.86
26+00	384.1	390.1		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			40.0					28.98	42.93

A.L.

Chd. T.M.M.

Total to here ~~2590.82~~ 2596.83 A.C.L.

~~7/9/30 Total to here 2805.80 A.C.L.~~

			L.C.	℄
26+40	383.2	389.2	6.0 / 2.4	6.0
			14.81	
+54.81	383.0	387.6		4.6
			29.95	
+84.76	381.3	386.1		4.8
			15.24	
27+00	379.2	384.1		4.9
			14.49	
+14.49	377.3	381.2		3.9
			29.35	
+43.84	371.05	375.5		4.5
			16.16	
			A.L.	

R.C.	End Area	End Area	C.Y.
6.0 / 2.4	28.98		
		25.60	14.04
	22.22		
		22.70	23.18
	23.18		
		23.43	13.22
	23.67		
		21.26	11.41
	18.84		
		20.29	22.06
	21.74		
		25.36	15.18
Chd. T.M.M.			

Sta.	Grade	Elev.	Dist	L.C.	℄	R.C.	End Area	Av. End Area	C.V.
27+60	366.8	372.8		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			25.0					29.72 / 0	27.52 / 0
+85	360.2	366.5		6.3 / 2.5	6.3	6.3 / 2.5	30.45		
			15.0					29.72 / 0	16.51 / 0
28+00	356.2	362.2		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			24.0					28.26 / 0	25.12 / 0
+24	350.9	356.6			5.7		27.53		
			11.0 / 9.0					28.26 / 0	11.51 / 9.42
+35	348.5	354.5		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			15.0					32.88 / 0	18.27 / 0
+50	345.2	352.7		7.5 / 2.8	7.5	7.5 / 2.8	36.78		
			10.44 / 17.1					34.38 / 0	13.29 / 0
							Chd. T.m.m.		

			L.C.	℄	R.C.	End Area	Adv End Area	C.Y.
28+60.44	342.9	349.5	6.6 / 2.6	6.6	6.6 / 2.6	31.98		
			14.75				30.48	16.65
+75.19	340.17	346.7	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			14.91				25.84	14.27
+90.10	338.50	343.7		4.7		22.70		
			14.99				15.70	8.72
29+05.09	338.0	339.8		1.8		8.69		
			9.01				4.35	1.75
+14.1	338.0	338.0		0.0		0.0		
			31.1				0.0	0.0
+45.2	338.0	338.0		0.0		0.0		
			4.75					
			A.L.			Chd. T.M.M.	0.73	0.11

Sta.	Grade	Elev.	Dist.	L.C.	℄	R.G.	End Area	Av. End Area	C.V.
29+49.45	338.0	338.3			0.3		1.45		
			29.96					8.94	9.92
+79.41	339.2	342.6			3.4		16.42		
			14.59					16.91	9.14
+94	341.0	344.6			3.6		17.39		
			15.18					21.50	12.09
30 +09.18	342.94	348.2			5.3		25.60		
			5.82					27.29	5.88
+15	344.1	350.1		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			5.0					28.74	5.32
+20	345.1	351.0			5.9		28.50		
			6.0					27.53	6.12
			℄ A L.				Chd. T.M.M.		

Sta.	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. End Area	C.V.
30+26	346.3	351.8			5.5		26.57		
			17.53					26.33	12.22
+38.53	349.1	354.5			5.4		26.08		
			28.77					27.53	29.33
+67.30	357.6	363.6		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			17.7					30.09	19.73
+85	361.9	368.3		5.7 / 2.4	6.4	7.3 / 2.7	31.20		
			15.0					30.65	17.03
31	365.5	371.8		5.4 / 2.4	6.3	6.9 / 2.6	30.10		
			25.63					31.11	29.53
+25.63	371.7	378.2		5.5 / 2.4	6.5	8.0 / 2.9	32.11		
			14.37					34.40	18.31
			A.L.				Chd. T.M.M.		

			L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
31+40	372.8	380.3	6.2 / 2.5	7.5	8.7 / 3.1	36.68		
			15.53				35.24	20.27
+55.53	374.1	381.1	5.8 / 2.4	7.0	8.0 / 2.9	33.80		
			30.0				31.39	34.88
+85.53	374.1	380.1	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			29.90				25.36	28.08
32 +15.43	371.7	376.2		4.5		21.74		
			9.57				23.19	8.22
+25	369.3	374.4		5.1		24.63		
			10.0				26.81	9.93
+35	366.9	372.9	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			5.0				30.06	5.57
			A. L.			Chd. T.M.M.		

				L.C.	℄
32+40	365.7	372.2		5.2 / 2.4	6.5
			10.0		
+50	363.2	369.2		6.0 / 2.4	6.0
			6.0		
+56	361.7	367.7		6.0 / 2.4	6.0
			17.0		
+68	358.8	364.8			6.0
			19.5		
+87.50	354.0	360.0			6.0
			17.5		
33+00	354.0	356.4			2.4
			5.90		
			D.L.		

R.C. Jan. 3. 1930
Clear + Warm.

Converse - Notes
Hill
Elliott - Grades
Simpson
Walton

27

	End. Area	End Area	C.V.
7.5 / 2.8	31.13		
		30.06	11.13
6.0 / 2.4	28.98		
		28.98	6.47
6.0 / 2.4	28.98		
		28.98	12.88
	28.98		
		28.98	20.93
	28.98		
		20.29	9.39
	11.59		
		5.80	1.27

Chd. T.M.M.

			L.C.	℄	R.C.	End Area	Av. End Area	C.V.
33+05.90	354.0	354.0		0.0		0.0		
			17.10				0.0	0.0
+23.0	354.0	354.0		0.0		0.0		
			25.0				14.49	13.42
+48	354.0	360.0	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			2.0				30.48	2.26
+50	354.0	360.6	6.6 / 2.6	6.6	6.6 / 2.6	31.98		
			33.0				35.30	43.14
+83	364.6	372.3	6.8 / 2.6	7.7	9.1 / 3.2	38.61		
			5.0				30.66	5.68
+88	366.2	370.9		4.7		22.70		
			9.0				30.86	10.29
			A.C.			Chd. Tim. M.		

				L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
33+97	369.0	377.0		6.9 / 2.6	8.0	8.7 / 3.1	39.02		
			13.0					37.08	17.85
34+10	373.2	380.5		6.7 / 2.6	7.3	7.5 / 2.8	35.14		
			7.38					32.06	8.76
+17.38	375.6	381.6		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			28.9					26.81	28.70
+46.28	383.6	388.7			5.1		24.63		
			13.72					26.81	13.62
+60	386.2	392.2		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			10.0					33.88	12.55
+70	388.2	396.2		6.6 / 2.6	8.0	8.8 / 3.1	38.77		
			5.72					37.80	8.01
			%A.L.				Chd. T.M.M.		

A.C.L.
3359.23
~~3353.22~~
Total to here

~~7/9/30~~
~~Total to here~~
~~3568.20 A.C.L.~~

			L.C.	E	R.C.	End Area	Adv. End Area	C.V.
34+75.72	389.4	397.0	6.6 / 2.6	7.6	8.2 / 3.0	36.83		
			19.28			32.91	23.50	
+95	391.6	397.6	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			10.52			28.26	11.01	
35+05.52	392.8	398.5		5.7		27.53		
			4.48			28.26	4.69	
+10	393.0	399.0	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			5.0			32.88	6.09	
+15	393.2	400.7	7.5 / 2.8	7.5	7.5 / 2.8	36.78		
			20.5			37.78	28.68	
+35.5	394.0	401.8	7.6 / 2.8	7.8	8.2 / 3.0	38.78		
			9.5			42.60	14.99	
			A.L.		Chd. TM.M.			

				L.C.	E	R.C.	End Area	End Area	C.V.
35+45	394.0	403.0		8.9 / 3.1	9.0	9.6 / 3.3	16.41		
			18.0				44.40	D 29.60	D
+63	394.0	402.5		7.6 / 2.8	8.5	9.3 / 3.2	42.39		
			27.0				35.63	D 35.63	
+90	394.0	400.0		5.4 / 2.4	6.0	6.5 / 2.5	28.86		
			20.0				28.86	D 21.38	D
36+10	394.0	400.0		5.7 / 2.4	6.0	6.7 / 2.5	28.86		
			10.0				31.20	D 11.56	
+20	394.0	400.9		6.7 / 2.5	6.9	7.6 / 2.8	33.54		
			15.0				37.07	D 20.39	D
+35	394.0	402.3		7.3 / 2.7	8.3	8.8 / 3.1	40.59		
			19.8				45.84	D 33.62	D
			A.L.			Chd. T.M.M.			

				L.C.	℄
36+54.8	394.0	403.9		8.5 / 5.0	9.9
			29.98		
+84.78	392.9	401.2		7.7 / 2.8	8.3
			15.22		
37+00	391.2	400.6		9.0 / 3.2	9.4
			14.59		
+14.59	389.5	398.1		7.9 / 2.9	8.6
			7.41		
+22	388.1	394.1		6.0 / 2.4	6.0
			12.0	2.41	
+34	385.9	389.5			3.6
			10.07		
			A.L.		

R.C.	End Area	End Area	C.V.
11.0 / 3.7	5-1.08		
	46.91	D	5-2.09 D
9.8 / 3.4	42.73		
	45.37	D	25.69 D
9.8 / 3.4	48.40		
	45.96 ~~45.98~~		24.84 ~~24.85~~
9.5 / 3.3	43.51 ~~43.55~~		
	36.24 ~~36.27~~		9.94 ~~9.95~~
6.0 / 2.4	28.98		
	23.18 ~~23.19~~		10.30 ~~10.31~~
	17.39		
	20.53		7.66
	A.C.L.		

				L.C.	℄
37+44.07	384.0	388.9			4.9
			5.93		
+50	381.6	387.6		5.5 / 2.4	6.0
			5.0		
+55	379.6	387.8		7.2 / 2.7	8.2
			20.0		
+75	371.6	380.0		7.4 / 2.8	8.4
			25.0		
38+00	361.6	367.6		6.0 / 2.4	6.0
			50.0		
+50	343.6	349.6		6.0 / 2.4	6.0
			33.0		

R.C.	End Area	Av. End Area	C.Y.
	23.67		
		26.57	5.84
6.9 / 2.6	29.47		
		35.36	6.55
9.5 / 3.3	41.25		
		41.32 ~~41.37~~	30.61 ~~30.64~~
9.0 / 3.2	41.39 41.49		
		35.18 ~~35.24~~	32.57 ~~32.63~~
6.0 / 2.4	28.98		
		28.98	53.67
6.0 / 2.4	28.98		
		28.02	34.25

R.C.L.

Sta.	Grade	Elev.	Dist	L.C.	℄
38+83	333.3	338.9			5.6
			17.0		
39+00	328.0	334.0			6.0
			50.0		
+50	315.2	321.2			6.0
			10.0		
+60	313.1	319.1			6.0
			10.0		
+70	311.1	317.5			1.4
			8.0		
+78	309.4	315.4		6.0 2.4	6.0
			22.0		

R.C.	End Area	End Area	C.V.
	27.05		
		28.02	17.64
	28.98		
		28.98	53.67
	28.98		
		28.98	10.73
	28.98		
		17.87	6.62
	6.76		
		17.87	5.29
6.0 2.4	28.98		
		29.71	24.21
	P.C.L.		

				L.C.	℄	R.C.	End Area	Av. End Area	C.V.
40+00	304.9	311.1		6.0 / 2.4	6.2	6.8 / 2.6	30.47		
			50.0					29.89	5.35
+50	294.6	300.6		5.7 / 2.4	6.0	6.6 / 2.6	29.37		
			25.0					30.67	28.40
+75	289.4	296.0		6.2 / 2.5	6.6	7.0 / 2.7	32.00		
			15.0					30.61	17.01
+90	286.4	292.4		5.8 / 2.4	6.0	6.4 / 2.5	29.22		
			10.0					28.14	10.42
41+00	284.3	289.9			5.6		27.05		
			25.0					26.33	24.38
+25	279.15	284.5			5.3		25.60		
			5.0					27.29	5.05
							R.C.L.		

				L.C.	℄	R.C.	End Area	Δ End Area	C.V.
41+30	277.7	283.7		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			20.0					35.79	26.51
41+50	271.6	280.1		8.5 / 3.0	8.5	8.5 / 3.0	42.60		
			15.0					49.18	27.33
+65	267.0	277.5		10.5 / 3.5	10.5	10.5 / 3.5	55.75		
			15.0					57.19	31.77
+80	262.5	273.4		10.9 / 3.6	10.9	10.9 / 3.6	58.62		
			5.0					53.44	9.90
+85	261.0	270.4		9.4 / 3.3	9.4	9.4 / 3.3	48.26		
			5.0					38.62	7.15
+90	261.0	267.0		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			35.0					28.26	36.63

A.C.L.

				L.C.	℄	R.C.	End Area	A.Y. End Area	C.V.
42+25	261.0	266.7			5.7		27.53		
			5.0					26.08 / 4.83	
+30	261.1	266.2			5.1		24.63		
			10.0					26.81 / 9.93	
+40	261.3	267.3		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			10.0					34.60 / 12.81	
+50	261.5	269.6		8.1 / 2.9	8.1	8.1 / 2.9	40.21		
			50.0					39.34 / 72.85	
43+00	262.5	270.3		7.8 / 2.9	7.8	7.8 / 2.9	38.47		
			50.0					36.26 / 67.15	
+50	263.5	270.5		7.0 / 2.7	7.0	7.0 / 2.7	34.05		
			50.0					32.30 / 60.19	

			L.C.	℄	R.C.	End Area	End Area	C.V.
44+00	264.5	270.9		6.4	6.4	30.95		
			6.4 / 2.5		6.4 / 2.5		29.97	53.50
			50.0					
+50	265.5	271.5		6.0	6.0	28.98		
			6.0 / 2.4		6.0 / 2.4		28.98	26.83
			25.0					
+75	266.0	272.0		6.0	6.0	28.98		
			6.0 / 2.4		6.0 / 2.4		27.78	25.72
			25.0					
45	268.5	274.0		5.5		26.57		
			25.0				27.78	25.72
+25	271.0	277.1		6.0		28.98		
			25.0				28.74	26.61
+50	273.5	279.4		5.9		28.05		
			50.0				26.81	49.65
						A.C.L.		

			L.C.	E	R.C.	End Area	Av. End Area	C.Y.
46+00	278.5	283.7		5.2		25.12		
			10.03				26.33	9.78
+10.03	279.5	285.2		5.7		27.53		
			29.52				25.36	27.73
+39.55	284.8	289.6		4.8		23.18		
			14.35				23.43	12.45
+53.9	288.4	293.3		4.9		23.67		
			6.1				26.33	3.95
+60	289.8	295.8	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			7.0				31.79	8.24
+67	291.3	298.4	7.1 / 2.7	7.1	7.1 / 2.7	34.59		
			16.19				31.79	19.06

A.C.L. 4813.64 4807.63

Total to here

7/9/30

Total to here 5022.61 A.C.L.

			L.C.	℄	R.C.	Av. End Area	End Area	C.Y.
46 +83.19	294.8	300.8	6.0 / 2.4	6.0	6.0 / 2.4		28.98	
			16.81			27.78	17.30	
47	297.1	302.6		5.5			26.57	
			12.93			27.05	12.95	
+12.93	298.8	304.5		5.7			27.53	
			4.07			28.26	4.26	
+17	299.0	305.0	6.0 / 2.4	6.0	6.0 / 2.4		28.98	
			8.0			32.33	9.58	
+25	299.4	306.7	7.3 / 2.7	7.3	7.3 / 2.7		35.67	
			17.9			36.79	24.39	
+42.9	300.3	308.0	7.7 / 2.8	7.7	7.7 / 2.8		37.90	
			17.1			40.55	25.68	

A.C.L.

			L.C.	℄	R.C.	Av. End Area	C.V.
						End Area	
47+60	299.7	308.3	8.6 / 3.1	8.6	8.6 / 3.1	43.20	
			17.9			40.38	19.37
+72.9	299.3	307.0	7.7 / 2.8	7.7	7.7 / 2.8	37.90	
			17.1			33.98	22.79
+90	297.3	304.3	7.0 / 2.7	7.0	7.0 / 2.7	34.05	
			12.7			34.59	16.27
48+02.7	295.8	303.0	7.2 / 2.7	7.2	7.2 / 2.7	35.12	
			12.3			32.03	14.60
+15	293.8	299.8	6.0 / 2.4	6.0	6.0 / 2.4	28.98	
			7.0			27.29	7.08
+22	292.7	298.0		5.3		25.60	
			13.16			23.84	12.39

A.C.L.

			L.C.	℄	R.C.	End Area	Av End Area	C.V.
48+35.16	290.6	296.0		5.4		26.08		
			19.84				27.33	20.23
+55	288.7	294.7	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			10.0				29.72	11.00
+65.0	287.7	294.0	6.3 / 2.5	6.3	6.3 / 2.5	30.45		
			49.6				30.95	56.86
49+14.6	286.1	292.6	6.5 / 2.5	6.5	6.5 / 2.5	31.45		
			10.4				30.22 / ~~28.22~~	11.64 / ~~9.71~~
+25	286.1	292.1	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			19.6				22.22	16.13
+44.6	286.1	289.3		3.2		13.46		
			5.4				22.22	4.44
						R.C.L.		

			L.C.	℄
49+50	286.5	292.5		6.0
			24.5	
+74.5	288.3	293.8		5.5
			17.5	
+97	290.9	295.3		4.4
			12.2	
50+04.2	292.7	298.0		5.3
			29.3	
+33.5	299.2	305.2	6.0 / 2.4	6.0
			16.5	
+50	303.5	310.6	7.1 / 2.7	7.1
			6.0	

	R.C.	End Area	At End Area	C.V.
		28.98		
			27.78	25.21
		26.57		
			23.91	15.50
		21.25		
			23.73	10.59
		25.60		
			27.29	29.61
	6.0 / 2.4	28.98		
			31.79	19.43
	7.1 / 2.7	34.59		
			37.69	8.38

V A.C.L.

				L.C.	℄	R.C.	End Area	Ar. End Area	C.F.
50 + 56	304.6	312.8		8.2 / 3.0	8.2	8.2 / 3.0	40.79		
			11.0					41.39 / 0	16.86 / 0
+67	306.6	315.0		8.4 / 3.0	8.4	8.4 / 3.0	41.99		
			18.0					35.49 / 0	23.66 / 0
+85 ×	309.8	315.8		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			15.0					27.29 / 0	15.16 / 0
51 +00 ×	312.5	317.8			5.3		25.60		
			15.0					27.29 / 0	15.16 / 0
+15	315.2	321.2		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			10.0					30.99 / 0	11.48 / 0
+25	317.0	323.8		6.8 / 2.6	6.8	6.8 / 2.6	33.00		
			17.0					30.99 / 0	19.57 / 0
							0 A.C.L.		

			L.C.	℄
51 +42	320.4	326.4	6.0 / 2.4	6.0
			8.0	
+50	322.0	327.1		5.1
			10.0	
+60	324.0	330.0	6.0 / 2.4	6.0
			30.0	
+90	330.0	336.6	6.2 / 2.5	6.6
			10.0	
52+00	332.0	339.7	7.0 / 2.7	7.7
			10.0	
+10	334.8	342.7	7.3 / 2.7	7.9
			18.0	

	R.C.	End Area	Av End Area	C.V.
	6.0 / 2.4	28.98		
			26.81	7.94
		24.63		
			26.81	9.93
	6.0 / 2.4	28.98		
			30.48	33.87
	7.0 / 2.7	31.98		
			34.73	12.86
	8.1 / 2.9	37.48		
			38.31	14.20
	8.6 / 3.1	39.19		
			39.70	26.47
			~~39.74~~	~~26.49~~

P.C.L.

				L.C.	℄	R.C.	End Area	Adv. End Area	C.V.
52+28	339.8	348.0		7.4 / 2.8	8.2	8.6 / 3.1	40.29	40.20	
			10.0					35.08 / 35.12	12.99 / ~~13.01~~
+38	342.6	348.8		6.2 / 2.5	6.2	6.2 / 2.5	29.95		
			12.0					29.47	13.10
+50	346.0	352.0		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			40.0					31.12	16.10
+90	357.2	364.1		6.0 / 2.4	6.9	7.6 / 2.8	33.25		
			10.0					31.12	11.53
53+00	360.0	366.0		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			5.0					26.81	7.96
+05	361.2	366.3			5.1		24.63		
			26.12					24.63	23.83

			L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
53+31.12	367.5	372.6		5.1		24.63		
			6.88				26.81	6.83
+38	369.0	375.0	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			8.0				33.87 / 33.78	10.04 / 10.07
+46	370.6	378.6	7.0 / 2.7	8.0	8.4 / 3.0	38.75 / 38.77		
			14.49				37.34 / 37.45	20.04 / 20.10
+60.49	373.6	380.9	6.7 / 2.6	7.3	8.1 / 2.9	35.93		
			14.51				32.46	17.44
+75	375.8	381.8	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			15.1				26.81	15.09
+90.1	378.0	383.1		5.1		24.63		
			29.8				25.12	27.73
						℄ A.C.L.		

			L.C.	℄	R.C.	End. Area	Av. End Area	C.V.
54+20.0	380.7	386.0		5.3		25.60		
			10.0				27.29	10.11
+30	381.3	387.3		6.0		28.98		
			20.0				27.78	20.58
+50	382.5	388.0		5.5		26.57		
			25.0				25.12	23.26
+75	384.0	388.9		4.9		23.67		
			15.0				23.91	13.28
+90	384.0	389.0		5.0		24.16		
			10.0				26.57	9.84
55+00	384.0	390.0		6.0		28.98		
			20.0				27.53	20.39

℄ A.C.L.

			L.C.	E	R.C.	End Area	Av. End Area	C.V.
55+20	384.0	389.4		5.4		26.08		
			30.0				26.08	28.98
+50	384.1	389.5		5.4		26.08		
			50.0				25.12	46.52
56+00	384.2	389.2		5.0		24.15		
			30.0				24.15	26.83
+30	384.2	389.2		5.0		24.15		
			10.0				26.57	9.84
+40	384.2	390.2	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			10.0				30.87	11.43
+50	384.2	391.0	6.0 / 2.4	6.8	7.4 / 2.8	32.75		
			15.0				30.87	17.15

A.C.L.

A.C.L.
5884.51
5870.28

Total to here

7/9/30

Total to here
6093.48 A.C.L.

				L.C.	℄	R.C.	End. Area	Av. End Area	C.V.
56+65	383.9	389.9		6.0 2.4	6.0	6.0 2.4	28.98		
			10.0					27.78	10.29
+75	383.7	389.2			5.5		26.57		
			10.0					27.78	10.29
+85	383.5	389.5			6.0		28.98		
			15.0					28.98	16.10
57+00	383.2	389.2			6.0		28.98		
			25.0					27.78	25.72
+25	382.7	388.2			5.5		26.57		
			25.0					26.57	24.60
+50	382.2	387.7			5.5		26.57		
			25.0					27.78	25.72
								A.C.L.	

			L.C.	℄	R.C.	End Area	Av. End Area	C.V.
57+75	381.6	387.6		6.0		28.98		
			25.0			28.02	23.94	
58+00	381.1	386.7		5.6		27.05		
			50.0			26.57	49.20	
+50	380.0	385.4		5.4		26.08		
			19.9			26.08	19.22	
+69.9	379.6	385.0		5.4		26.08		
			18.1			27.53	18.76	
+88	378.5	384.5	6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			11.1			31.79	13.07	
+99.9	377.8	384.9	6.8 / 2.6	7.1	7.4 / 2.8	34.60		
			15.1			40.60	40.63 / 22.71	

A.C.L.

				L.C.	℄	R.C.	End Area	Av. End Area	C.V.
59+15	375.6	384.9		8.5 / 3.0	9.3	9.5 / 3.3	46.65 / 46.60		
			14.6					43.80 / 43.75	23.68 / 23.66
+29.6	373.7	381.9		7.7 / 2.8	8.2	8.8 / 3.1	40.94 / 40.90		
			10.6					34.96 / 34.94	13.47 / 13.46
+40	371.8	377.8		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			10.0					26.57	9.84
+50	370.0	375.0			5.0		24.16		
			15.0					26.57	14.76
+65	363.1	369.1		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			35.0					31.52	40.86
60+00	346.9	353.9		7.0 / 2.7	7.0	7.0 / 2.7	34.05		
			15.0					36.55	20.31

A.C.L

				L.C.	℄
60+15.0	340.0	347.9		7.9 / 2.9	7.9
			5.0		
+20	340.0	346.0		6.0 / 2.4	6.0
			19.2		
+39.2	340.0	340.0			0.0
			29.5		
+68.7	340.0	340.0			0.0
			8.9		
+77.6	340.0	343.8			3.8
			22.4		
61+00	347.4	351.9			4.8
			20.0		

	R.C.		Av. End Area	C.V.
		End Area		
	7.9 / 2.9	39.05		
			34.02	6.30
	6.0 / 2.4	28.98		
			14.49	10.30
		0.0		
			0.0	0.0
		0.0		
			9.18	3.03
		18.35		
			20.03	16.63
		21.71		
	A.C.L.		25.36	18.79

			L.C.	℄
61+20	354.1	360.1		6.0
			15.7	
+35.7	359.3	364.0		4.7
			23.3	
+59	365.4	371.4		6.0
			5.8	
+64.8	366.9	372.9		6.0
			18.2	
+83	370.5	375.5		5.0
			17.0	
62	373.9	379.9	6.0 / 2.4	6.0
			18.16	

R.C.	End Area	Av. End Area	C.V.
	28.98		
		25.84	15.03
	22.70		
		25.84	22.30
	28.98		
		28.98	6.23
	28.98		
		26.57	17.91
	24.16		
		26.57	16.73
6.0 / 2.4	28.98		
A.C.L.		33.08 / 33.07	22.25 / ~~22.24~~

				L.C.	E
62+18.16	377.5	385.2		2.2 / 2.7	7.7
			21.84		
+40	381.0	387.0		6.0 / 2.4	6.0
			7.8		
+47.8	382.2	387.8			5.6
			17.2		
+65	383.8	389.3			5.5
			12.7		
+77.7	385.0	390.2			5.2
			30.0		
63+07.7	385.8	391.5			5.7
			15.3		

	R.C.	End Area	Av. End Area	C.Y.
	7.7 / 2.8	37.19		
		37.15		
			33.08	26.72
			33.07	26.75
	6.0 / 2.4	28.98		
			28.02	8.09
		27.05		
			26.81	17.08
		26.57		
			25.85	12.16
		25.12		
			26.33	29.26
		27.53		
	A.C.L.	28.26		16.01

				L.C.	E	R.C.	End Area	End Area	C.V.
63+23	385.7	391.7		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			9.0				31.79	10.60	
+32	385.7	392.8		6.8 / 2.6	7.1	7.4 / 2.8	34.60		
			18.0				33.80	22.53	
+50	385.6	392.4		6.4 / 2.5	6.8	7.2 / 2.7	32.99		
			45.2				30.99	51.88	
+95.2	385.4	391.4		5.6 / 2.4	6.0	6.4 / 2.5	28.98		
			8.8				32.05	10.45	
64+04	384.7	391.9		6.8 / 2.6	7.2	7.6 / 2.8	35.11		
			26.0				34.65	33.37	
+30	382.6	389.5		6.7 / 2.6	6.9	7.6 / 2.8	34.18		
			25.0			A.C.L.	32.15	29.77	

				L.C.	℄
64 + 55	380.6	387.2		6.3 / 2.5	6.6
			29.8		
+ 84.8	377.2	384.2		6.6 / 2.6	7.0
			15.2		
65 + 00	374.2	380.7		6.0 / 2.4	6.5
			7.0		
+ 07	372.9	378.9		6.0 / 2.4	6.0
			7.2		
+ 14.2	371.6	377.0			5.4
			29.1		
+ 43.3	364.0	369.4			5.4
			42.3		

R.C.	End Area	Av. End Area	C.Y.
7.0 / 2.7	32.12		
		33.23	36.68
7.6 / 2.8	34.33		
		32.90	18.52
7.0 / 2.7	31.46		
		30.22	7.83
6.0 / 2.4	28.98		
		27.53	7.34
	26.08		
		26.08	28.11
	26.08		
R.C.L.		27.53	43.13

				L.C.	℄	R.C.	End Area	Av End Area	C.V.
65+85.6	351.3	357.3		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			28.3					32.87	34.45
66+13.9	341.3	348.9		7.2 / 2.7	7.6	7.6 / 2.8	36.76		
			15.1					37.61	21.03
+29	335.1	342.9		7.6 / 2.8	7.8	8.0 / 2.9	38.45		
			10.0					33.72	12.49
+39	331.0	337.0		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			14.0					25.60	13.27
+53	325.2	329.8			4.6		22.22		
			17.0					25.60	16.12
+70	318.2	324.2		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			15.0			F.C.L.	33.22 / 33.21	18.46	18.45

				L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
66+85	312.0	319.6		6.8 / 2.6	7.6	8.5 / 3.0	37.47		
			8.0				37.13	33.22 / 33.21	9.84
+93	312.0	318.0		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			32.0					18.60	22.07
67+25	312.0	313.7			1.7		8.21		
			16.7					4.11	2.54
+41.7	312.0	312.0			0.0		0.0		
			22.7					0.0	0.0
+64.4	312.0	312.0			0.0		0.0		
			5.6					1.35	9.02
+70	312.0	313.8			1.8		8.69		
			10.0					16.18	5.99

A.C.L.

A.C.L.
6999.07
6993.06

Total to here: 6993.06
7/9/30

Total to here
7208.04 A.C.L.

				L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
67+80	316.4	321.3			4.9		23.67		
			20.0					22.46	16.64
68+00	325.3	329.7			4.4		21.25		
			16.0					25.12	14.89
+16	332.3	338.3		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			10.0					30.93	11.46
+26	336.8	343.6		6.9 / 2.6	6.8	6.6 / 2.6	32.87		
			12.0					36.68	16.30
+38	342.0	350.1		8.5 / 3.0	8.1	7.9 / 2.9	40.48		
			23.2					37.20 / 37.21	31.97
+61.2	352.2	359.2		7.5 / 2.8	6.9	6.6 / 2.6	33.91 / 33.94		
			13.8					31.09 / 31.46	16.08
							A.C.L.		

				L.C.	℄	R.C.	Av. End Area	End Area	C.Y.
68+75	357.2	363.7		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			16.5				25.36	13.62	
+89.5	362.4	366.9			4.5		21.74		
			35.5				23.43	30.81	
69+25	372.4	377.6			5.2		25.12		
			28.6				22.22	23.54	
+53.6	380.4	384.4			4.0		19.32		
			16.4				24.15	14.67	
+70	382.7	388.7		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			15.0				30.22	16.79	
+85	384.8	391.3		6.5 / 2.5	6.5	6.5 / 2.5	31.45		
			19.7				30.22	22.05	
							R.C.L.		

				L.C.	℄	R.C.	End Area	Av. End Area	C.Y.
70+04.7	387.6	393.6		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			15.3					31.79	18.01
+20	388.2	395.3		7.1 / 2.7	7.1	7.1 / 2.7	34.59		
			14.7					33.80	18.70
+34.7	388.7	395.5		6.8 / 2.6	6.8	6.8 / 2.6	33.00		
			15.3					33.80	19.15
+50	388.1	395.2		7.1 / 2.7	7.1	7.1 / 2.7	34.59		
			14.7					32.52	17.71
+64.7	387.6	393.9		6.3 / 2.5	6.3	6.3 / 2.5	30.15		
			10.3					30.15	11.62
+75	385.7	392.0		6.3 / 2.5	6.3	6.3 / 2.5	30.15		
			19.2					29.72	21.13

R.C.L.

Clear + Harm - Feb. 4. 1930
Converse - Notes
Hill - Grades
Elliott - ⊼
Walton
Simpson

				L.C.	E	R.C.	End Area		
70+94.2	382.1	388.1		6.0 / 2.4	6.0	6.0 / 2.4	28.98		
			15.8					34.89	20.42
71+10	374.2	382.4		8.2 / 2.96	8.2	8.2 / 2.96	40.79		
			18.0					37.96	25.31
+28	365.1	372.3		7.2 / 2.71	7.2	7.2 / 2.71	35.12		
			22.0					41.04	33.44
+50	354.1	363.3		9.2 / 3.21	9.2	9.2 / 3.21	46.96		
			14.0					46.02	23.86
+64	347.0	355.9		8.9 / 3.14	8.9	8.9 / 3.14	45.07		
			16.0					42.35	25.10
+80	339.0	347.0		8.0 / 2.91	8.0	8.0 / 2.91	39.62		
			16.8					19.81	12.33

A.C.L.

calc. AH
W.H.S.

71+96.8	339.0	339.0			0.0		0.0			
			43.0					0.00	0.00	
72+39.8	339.0	339.0			0.0		0.0			
			15.2					12.80	7.21	
+55	339.0	344.3			5.3		25.60			
			26.0					28.77	27.70	
+81	344.7	351.2		5.4/2.41	6.5	8.0/2.91	31.94			
			12.0					26.60	11.82	
+93	347.4	351.8		4.4/2.41	4.4	4.4/2.41	21.25			
			7.0					31.07 ~~34.01~~	8.06 ~~8.82~~	
73	349.0	357.7		6.8/2.61	8.7	8.7/3.09	40.89 ~~46.76~~			
			13.0					36.69 39.12	17.67 ~~+8.83~~	
							A.C.L.		72.46	

Calc. By W.H.S.

73+13	351.8	358.4		6.4 / 2.51	6.6	7.2 / 2.71	32.49 / 31.47	32.74 / 32.24	14.55 / 14.33
			12.0						
+25	354.5	361.3		6.8 / 2.61	6.8	6.8 / 2.61	33.00	30.27	11.21
			10.0						
+35	357.5	363.2		5.7 / 2.41	5.7	5.7 / 2.41	27.53	30.27	16.82
			15.0						
+50	362.0	368.8		6.8 / 2.61	6.8	6.8 / 2.61	33.00	36.31	16.14
			12.0						
+67	365.6	373.6		8.0 / 2.91	8.0	8.0 / 2.91	39.62	36.31	24.21
			18.0						
~~Hold from here See page 71~~									
+80	371.0	377.8		6.8 / 2.61	6.8	6.8 / 2.61	33.00	30.51	13.67
			12.1						

A.C.L.

96.60

Calc. by W.H.S.

Sta	Grade	Elev	Dist	Lft. Cut	℄	Rt. Cut		
				Lt.		Rt.		
73 +92.1	374.6	380.4		5.8 / 2.41	5.8	5.8 / 2.41	28.01	
			29.1				27.17 / ~~28.50~~	8.39 / ~~30.72~~
Standard Trench 74+00	377.1 / ~~382.2~~	382.7 / ~~388.2~~		5.3 / 2.41	5.6	5.3 / 2.41	26.32 / ~~28.98~~	

Continued on page 75 this book.

May 28, 1930

Elliott π Notes
Jacobszen ¢ Bailey Tape

12' trench Vertical cuts. (Note: all cuts shown are to O.R.S.D 2nd M.T.D grade)

Total to here ~~7645.81~~ 7651.82 A.C.L. 10/19/20

m.D.E. 10/1/30 checked my figures

~~7883.12~~ N.G. Sept 1815 Total to here A.C.L. 7/9/30

Additional sections taken out from 3' on the left and 9' on the right July 2, 1930
Elliott
Soper
Bailey

29.4

Cut to pipe Grade — Top pipe

Begin 12' trench.
74 + 50.6 | 387.7 | 393.4 | 394.8 / 19° | 6.0 / 3° | ~~3.7~~ 3 / ℄ | 5.5 / 1° | 1.2 / 2.5 | 4.4 / 5.5 | 1.5 / 8° | 2.4 / 9° | 395.6 / 13° | 399.2 / 20° | 401.5 / 29°

29.9

~~75~~ 74 + 80.5 | 391.1 | 392.5 | 404.6 / 19° | 401.4 / 7° | 5.9 / 3° | 4.7 / 1.5 | F0.6 ~~1.4~~ / ℄ | Pipe 4.3 / 3 | 1.6 / 7 | 5.4 / 9° | 403.8 / 18° | 405.7 / 25°

29.9

75 + 10.9 | 392.3 | 392.9 | 411.2 / 40° | 412.2 / 22° | 410.0 / 17° | 410.0 / 11° | 5.5 / 3° | 3.6 / 1.5 | 1.1 / 1° | F1.4 0.6 / ℄ | Pipe 3.5 / 3.5 | 0.6 / 4.5 | 1.5 / 7° | 5.5 / 9° | 408.5 / 16° | 413.0 / 43°

40.0 ?

✓ A.C.L.

Calc. By W.H.S.

				Lt.						Rt.					
7. 75+50	4 392.5	393.4	420.2	418.3	415.0	414.8	4.9	1.3	0.9	3.7 Pipe	3.8	6.9	416.0	417.7	419.6	421.5
			40°	24°	18°	12°	3°	1°	℄	2°	7°	9°	20°	27°	30°	50
				49.6												
76+00	4 392.5	395.3	422.6	418.2	416.7		7.0	3.7	2.8	3.5 Top pipe	4.0	8.1	418.9	421.0	420.7	
			45°	34°	15°	3°	1°		℄	2°	6°	9°	22°	32°	50°	
76+07	4 392.5	396.0	421.5	412.0	405.0		6.0	3.7	3.4	2.5 Pipe	3.9	7.5	412.0	416.4	421.8	
			50°	22°	9°	3°	1°		℄		6°	9°	20°	46°	60°	
76+15	4 392.5	396.6	421.5	417.2	416.5		5.0		4.1	3.6	3.8	7.0	419.1	421.0	421.8	
			50°	40°	15°	3°			℄	2°	6°	9°	22°	33°	50	
				10.												
76+25	4 392.5	394.3	421.7	417.9	417.0	417.0				Pipe	3.0	5.0	7.4	418.9	421.5	422.2
			48°	39°	22°	16°	3°		℄	2°	4	8	9°	22°	30°	50°
				25.												
76+50	4 392.5	394.1	421.8	417.1	416.7		6.9	1.8	1.6	3.5 Pipe	2.7	3.1	8.3	417.9	420.0	422.8
			32°	23°	15°	3°	1°		℄	2°	5°	6°	9°	20°	30°	60°
				50												
77+00	4 392.5	395.2	417.2	413.0	410.4		7.9	6.5	3.0	Pipe	2.3	2.8	10.1	403.5	409.7	409.3
			32°	20°	8°	3°	1°	1°	℄	2°	5°	6°	9°	15°	19°	30°
				14.9												

Station				Lt.							Rt.					
$77 + 14^{\underline{9}}$	$\overset{4}{392.5}$	393.0	$\frac{413.0}{37^{0}}$	$\frac{409.1}{12^{0}}$	$\frac{7.2}{3^{0}}$	$\frac{6.4}{1^{\underline{5}}}$	$\frac{0.5}{℄}$		Pipe $\frac{3.6}{2^{\underline{5}}}$		$\frac{1.2}{4^{\underline{5}}}$	$\frac{1.5}{6^{0}}$	$\frac{4.5}{6^{\underline{5}}}$	$\frac{7.2}{9^{0}}$	$\frac{404.2}{15^{0}}$	$\frac{403.2}{31^{0}}$
			15.													
$77+29^{\underline{9}}$	$\overset{3}{391.9}$ 1.6	393.5		$\frac{409.4}{24^{0}}$	$\frac{6.6}{3^{0}}$	$\frac{4.8}{1^{0}}$	$\frac{1.6}{℄}$		Pipe $\frac{4.2}{3^{\underline{5}}}$		$\frac{1.0}{5^{0}}$	$\frac{1.2}{6^{\underline{5}}}$	$\frac{5.5}{7^{\underline{5}}}$	$\frac{5.9}{9^{0}}$	$\frac{399.4}{15^{0}}$	$\frac{399.7}{22^{0}}$
			14.9													
Vertical Cut. $77+44^{\underline{8}}$	390.2 ✓	394.1	$\frac{405.7}{27.}$	$\frac{405.0}{15^{0}}$	$\frac{8.0}{3^{0}}$	$\frac{6.7}{1^{\underline{5}}}$	$\frac{3.9}{℄}$	$\frac{2.4}{2^{0}}$	Pipe $\frac{5.7}{4^{\underline{5}}}$		$\frac{2.5}{6^{0}}$	$\frac{2.8}{7^{\underline{5}}}$	$\frac{4.7}{9^{0}}$		$\frac{396.5}{15^{0}}$	$\frac{397.2}{23^{0}}$
			14.7													
standard trench $77+59^{\underline{5}}$	387.4	392.4	$\frac{403.4}{18^{0}}$	$\frac{397.0}{7^{0}}$	$\frac{8.8}{3.16}$	$\frac{8.5}{1^{0}}$	$\frac{5.0}{℄}$	$\frac{5.0}{2.41}$	$\frac{390.6}{12.}$		$\frac{387.1}{14^{0}}$	$\frac{392.8}{19^{0}}$				
			13.7													
$77+83^{\underline{2}}$	381.9	388.1			$\frac{8.0}{2.91}$			$\frac{6.2}{℄}$			$\frac{5.0}{2.41}$					

Continued in Book #286 page 2

				399.14 - B.M. # 19
	11.76	410.90		
	New Pipe Grade			
75+03 06	393.92	15 2 / 12 3		
	10.35	421.25 T.P.	0.00	410.90
75+18 77	394.49	16 8 / 12 7		
75+50	394.50	20 1 / 13 6		
76+00	394.50	20 8 / 13 7		
76+09	394.50	12 4 / 11 6		
76+18	394.50	17 6 / 12 9		
76+50	394.50	22 0 / 14 3		
77+00		17 5 / 12 9		

Aug 19, 1930

Elliott
Soper
Bailey

9/22/30

Simpson
Soper
Remmen

Final Cross sections

Station	Elev.	Lt.		℄	Rt			Final Cross sections: Lt cut			℄	Rt. cut
73+67^40	367.2		7.6 / 2.81	8.0	8.4 / 3.01							
(Standard Trench) 74+00^44	377.1		5.0 / 5.0, S.I. 5.3 / 2.41	5.6	S.I. 5.3 / 2.41	3.6 / 7.0						
Pay for Ydg Moved (10' bottom 6' Vert. + ½ to 1) 74+29^47	384.7	9.3 / 20, 9.3 / 14.	S.I. 5.0 / 5.0, 4.5 / 4.0	6.3	5.3 / 5.0	0.0 / 5.0		$\frac{8^0}{10^0}$	$\frac{0^9}{9^5}$	$\frac{0^0}{4^0}$		$\frac{0^0}{3^5}$ $\frac{0^8}{5^0}$ $\frac{3^0}{9^0}$
74+44^2	387.4	8.5 / 25	7.6 / 14., S.I. 6.6 / 5.2	6.0	5.6 / 2.0	0.0 / 6.0			$\frac{5^8}{10^0}$	$\frac{0^0}{8^5}$	Fine Graded	$\frac{0^0}{2^5}$ $\frac{1^3}{5^0}$ $\frac{3^0}{8^0}$
74+58^97	390.13	12.7 / 25	10.0 / 14, Slope Intersects 9.2 / 7.3	5.2	3.6 / 3.0	0.3 / 5.0	0.0 / 6.7	$\frac{12^5}{19^5}$	$\frac{3^3}{14^0}$	$\frac{2^5}{8^5}$ $\frac{0^0}{3^0}$		$\frac{0^0 \; 1^2 \; 2^4}{2^5 \; 4^5 \; 6^5}$
74+66^98	391.0	14.7 / 20., 14.5 / 18.	11.5 / 13., S.I. 9.0 / 5.8	6.5		0.4 / 5.5	0.0 / 6.5	$\frac{15^2}{18^5}$	$\frac{2^4}{12^0}$	$\frac{2^0}{7^0}$ $\frac{0^0}{3^0}$		$\frac{0^0}{3^0}$ $\frac{1^2}{4^7}$ $\frac{2^6}{6^5}$

9/22/30

Final Cross sections

		Lt.			℄			Rt.			Lt. cut	℄	Rt. cut
74+73	391.7 ✓	14.7	15.1	12.0	S.I. 9.8	9.6	7.2	0.0	0.0		14.4 / 16.5	1.8 / 12.5	0.0 / 3.5	0.0 / 4.0	2.2 / 6.5
		20.	12.	10.	6.0	2.		5.0	6.3						
+83	392.8 ✓				S.I. 9.8	7.6	5.7	3.2	0.0	0.0	9.0 / 12.5	0.0 / 12.0		0.0 / 3.0	1.0 / 6.0
					20.	5.4		3.0	5.0	6.0					
+88.8	393.4 ✓				S.I. 11.5	9.6	6.0	2.5	0.0		10.3 / 12.5	1.2 / 12.0	0.0 / 7.0	0.0 / 5.0	0.8 / 5.5
					20	5.9		3.5	4.5						
75+00	393.8 ✓	15.5	16.0	14.8	S.I. 14.8	14.7	8.2	3.0	0.0	0.0	15.6 / 13.5	2.0 / 13.0	0.0 / 7.5	0.0 / 5.0	0.5 / 5.5
		30.	20.	12.	7.2	5.	4.	2.5	3.7	5.7					
75+18.8	394.5	19.6	19.4	19.4	S.I. 17.1	16.7	15.0	7.6	2.4	0.0	19.6 / 15.5	2.7 / 15.5	1.8 / 9.5	0.0 / 6.0	0.0 / 5.5
		30.	20.	18.	10.	7.8	5.5		2.5	4.0					
75+50	394.5	25.6	23.7	23.0	20.6	S.I. 20.6	18.7	7.4		0.0	21.7 / 14.5	2.9 / 14.5	1.7 / 10.0	0.0 / 4.0	0.0 / 3.5	1.8 / 7.0
		30.	20.	16.	12.	8.6	6.0			4.0					
~~75+88~~	~~394.5~~										23.5 / 15.5	3.8 / 15.5	2.9 / 10.0	1.3 / 8.5	0.0 / 2.5	0.0 / 3.5	1.0 / 5.0

Line eroded

Slope Intersection

Final Cross Sections

											Lft. Cut.				Rt. cut.
76+00	394.5	23.7	22.2	22.1	20.9	8.4	7.3	1.3	0.8		22.1	3.4	2.6	0.0	0.0 1.0 1.9
		30.	20.	9.	8.7		1.5	3.0	5.5		13.0	12.0	6.5	6.0	4.0 5.0 6.0
+09	394.5	17.3	16.3	S.I. 12.2	10.0	7.5		1.4	0.0		14.2	3.8	2.4	0.0	0.0 1.9
		25.	20.	6.6	2.0			3.0	5.5		11.5	11.5	6.5	5.0	5.0 6.0
+18	394.5	22.4	22.2	22.0 S.I.	17.7	15.0	7.3	2.3	1.8	1.8	22.3	4.7	2.1	0.0	Graded 0.0
		30.	20.	9.5	7.9	5.0		2.0	5.5	7.0	11.0	11.0	5.5	4.5	6.0
+50	394.5	28.2	25.1	24.0	22.2	S.I. 22.0	7.6	5.0	0.4	0.0	22.2	3.2	2.1	0.0	Fine 0.0
		30.	22.	20.	15.	9.0		2.0	4.0	5.7	10.5	11.0	6.5	6.0	6.0
76+75	394.5	26.2	24.6	21.0	S.I. 20.4	20.1	8.6		1.2	0.0	20.7	2.5	2.3	0.0	0.0
		30.	20.	15.	8.6	7.5			2.7	5.7	13.0	13.0	7.0	5.0	6.0
77+06.25	394.5	19.7	18.7		S.I. 16.2	15.7	8.8	5.8	4.2	0.0	17.1	2.8	2.2	0.0	0.0
		25	20		7.6	5.0		1.0	2.0	4.5	12.0	12.0	8.5	7.5	6.0

9/24/30

Slope Intersection

77+13	394.2								
			17.5	15.0	8.4	4.4	0.0		
			20	7.2		3.0	4.0		
77+21	393.9			S.I.					
		16.3	15.3	10.4	7.4	4.9	0.0		
		20.	12.0	6.1		2.0	4.0		
77+86	392.2			S.I.					
		14.0	13.0	12.2	6.9	5.7	0.9	0.9	
		20.	15.	6.6		2.5	4.8	5.5	
+50	389.4			S.I.					
		15.9	14.3	10.6	7.8	7.6	6.7	3.0	3.0
		20.	11.5	6.2	2.0		3.0	4.7	5.9
77+61	387.1			S.I.					
			13.9	10.0	8.7	5.7	5.6	4.5	
			15	6.0		1.0	4.5	6.5	
Standard trench									
77+82.2	381.9								
			8.0	6	5				
			2.91	0	241				

16.5 / 13.5	3.5 / 12.5	2.0 / 8.0	0.0 / 7.0	0.0 / 5.5	
15.3 / 15.0	3.9 / 13.2	2.5 / 9.0	0.0 / 6.5	0.0 / 5.5	
13.0 / 15.0	3.0 / 14.5	2.7 / 9.5	1.1 / 9.0	0.0 / 3.0	0.0 / 2.5 / 1.3 / 4.0 / 1.6 / 6.0
15.8 / 19.0	6.9 / 19.0	4.2 / 14.0	4.8 / 9.0	0.0 / 2.5	0.0 / 2.5 / 3.8 / 3.5 / 3.9 / 4.2
16.7 / 20.0	7.2 / 18.5	7.2 / 10.0	2.8 / 3.5	0.0 / 3.0	0.0 / 2.0 / 4.3 / 3.0 / 5.1 / 6.0

X Sections thru cut from Sta 74+00.44 to 77+83.2

Complete Sections taken from originals in this book page 71 to 74

Pay for all dirt moved.

Continued from page 67

Standard Trench	Dist	Lt.	Ct.	Rt.	End Area	Ave. Area	Cu. Yds
74+00.44		0.0 5.3 5.6 2.41 2.41		5.3 0.0 2.41 2.41	26.32		
	29.03					54.44	58.53
74+29.47		0.0 0.9 8.0 5.0 4.5 6.3 4.0 9.5 10. 5. 4.		5.3 0.8 0.0 5. 5. 3.5	82.55		
	14.73					80.53	43.93
74+44.2		0.0 5.8 6.6 6.0 8.5 10. 5.2		5.6 1.3 0.2 2. 5. 2.5	78.50		
	14.77					103.29	56.50
74+58.97		0.0 2.5 3.3 12.5 10.0 9.2 5.2 3.0 8.5 14. 19.5 14. 7.3		3.6 1.2 0.0 3.0 4.5 2.5	128.08		
	8.01					132.07	39.18
74+66.98		0.0 2.0 2.9 15.3 14.5 11.5 9.0 6.5 3. 7. 12. 18.5 18. 13. 5.8		1.2 0.0 4.7 3.0	136.05		
	6.02					146.62	32.69
74+73		0.0 1.8 14.9 11.1 12.0 9.8 9.6 7.2 3.5 12.5 16.5 12. 10. 6. 2.		0.0 5.0	157.18		
						133.16	49.32
74+83		0.0 9.0 7.6 5.7 12.0 12.5 8.4		3.2 0.0 3. 5.	109.14		
						115.54	24.82
74+88.8		0.0 1.2 10.3 9.6 6.0 7. 12.0 12.5 5.9		2.5 0.0 3.5 4.5	121.94		
						155.69	64.58

Compld. M.D.E.

75+00	0° 2° 15⁶ 14⁸ 14⁸ 14⁷ 8²	3° 0°	189.44	
	7⁵ 12 13⁵ 12. 7.2 5.	2⁵ 3⁷	212.69	148.10
75+18⁸	0° 18 2⁷ 19⁶ 19⁴ 17¹ 16⁷ 15° 7⁶	2⁹ 0°	235.94	
	6° 9⁵ 15⁵ 15⁵ 15. 10. 7⁸ 5⁵	2⁵ 4°	244.81	282.89
75+50	0° 17 2° 21⁷ 20⁶ 20⁶ 18⁷ 7⁴	0°	253.68	
	4° 10° 14⁵ 14⁵ 12. 8⁶ 6.	4°	233.06	431.59
76+00	cut 0° 2⁶ 3⁴ 22¹ 22¹ 20⁹ 8⁴ (b)	7³ 1³ 1° 0°	212.43	
	6° 6⁵ 12° 13° 9° 8⁷	1⁵ 3° 5° 4°	171.74	57.25
76+09	0° 2⁴ 3⁸ 14² 12² 10° 7⁵	1⁴ 0°	131.04	
	5° 6⁵ 11⁵ 11⁵ 6⁶ 2.	3° 5⁵	148.56	49.52
76+18	0° 2¹ 4⁷ 22³ 22° 17⁷ 15° 7³	2³ 1⁸ 1⁸ 0°	166.08	
	4⁵ 5⁵ 11. 11. 9⁵ 7⁹ 5.	2. 5⁵ 6° 6°	172.34	204.25
76+50	0° 2¹ 3⁷ 22² 22° 7⁶	5² 0⁴ 0.0	178.59	
	6° 6⁵ 11. 10⁵ 9.	2. 4. 5⁷	(198.95) 198.62	(184.21) 183.91

Compted M.D.E. 11.5.11.

Station	Left readings	Right readings			
			(219.31) A.C.L.		
76+75	0^{0} 2^{3} 2^{5} 20^{7} 20^{4} 20^{1} 8^{6} 5. 7. 13. 13. 8.6 7.5	1^{2} 0^{0} 2.7 5.7	218.65	(201.60) 201.17	(233.33) 232.84
$77+06^{25}$	0^{0} 2^{2} 2^{8} 17^{1} 16^{2} 15^{7} 8^{8} 7^{5} 8^{5} 12^{0} 12^{0} 7^{6} 5^{0}	5^{8} 4^{2} 0^{0} 1^{0} 2^{0} 4^{5}	(183.90) 183.68	(182.69) 182.59	(45.67) 45.65
77+13	0^{0} 2^{0} 3^{5} 16^{5} 15^{0} 8^{4} 7^{0} 8^{0} 12^{5} 13^{5} 7^{2}	4^{4} 0^{0} 3^{0} 4^{0}	181.49 ✓	170.24 ✓	51.70 ✓
$77+21^{2}$	0^{0} 2^{5} 3^{6} 15^{3} 15^{3} 10^{4} 7^{4} 6^{5} 9. 13. 15. 12. 6^{1}	4^{9} 0^{0} 2. 4.	158.98 ✓	162.69 ✓	89.78 ✓
$77+36^{1}$	0^{0} 1^{1} 2^{7} 3^{0} 13^{0} 12^{2} 6^{9} 3^{0} 9^{0} 9^{5} 14^{5} 15. 6^{6}	5^{7} 1^{2} 0^{0} 2^{5} 4. 2^{5}	166.40 ✓	176.84 ✓	96.93 ✓
$77+50^{9}$	0^{0} 4^{8} 4^{8} 6^{9} 15^{8} 14^{3} 10^{0} 7^{9} 7^{6} 2^{5} 9^{0} 14^{0} 19^{0} 19^{0} 11^{5} 6^{2} 2.	6^{7} 3^{9} 3^{8} 0^{0} 3^{0} 4^{2} 3^{5} 2^{5}	187.27 ✓	168.69 ✓	63.10 ✓
77+61	0^{0} 2^{8} 7^{2} 7^{2} 16^{9} 13^{9} 10^{0} 8^{7} 3^{0} 3^{5} 10^{0} 18^{5} 20^{0} 15^{0} 6^{0}	5^{7} 5^{6} 4^{5} 3^{1} 4^{3} 0^{0} 1^{0} 4^{5} 6^{5} 6^{0} 3^{0} 2^{0}	150.10 ✓	90.40 ✓	74.33 ✓
Standard Trench $77+83^{2}$	0^{0} 6^{0} 8^{0} 6^{2} 2^{41} 2^{41} 2^{91}	5^{0} 0^{0} 2.41 2.41	30.71 ✓		

Continued in Book 286

Total from $74+00^{44}$ to $77+83^{2}$ → 2381.40 / 7645.81 / 10,027.21
Comptd. M.D.E.

2382.20
7651.82
Total this book 10,034.02 A.C.L.
10/19/30

Otay Res. to San Diego Second Main Pipe Line
Back Fill Cross Sections

	Grade	Lft. cut.	℄	Rt. cut.
74+29 27	384.7	8.0 / 10.0	7.3	7.2 / 1.0 — 3.0 / 8.0 (no slope)
74+44 20	387.4	7.2 / 10.0	7.2	7.2 / 1.5 — 3.7 / 8.0 (no slope)
74+58 27	390.13	N.G. 9.4 / 20.0 — 8.8 / 17.5 — 7.5 / 10.0	6.3	6.3 / 1.0 — 3.0 / 7.0
74+66 28	391.0	9.6 / 20.0	7.2 / 10.0	6.4 — 3.0 / 7.0
74+73	391.7	8.2 / 14.5 — N.G. 9.8 / 20.0	7.0 / 10.0	6.6 — 3.1 / 7.0
74+83	392.8	8.3 / 15.0	6.5 / 10	5.8 — 2.9 / 5.0
74+88 8	393.4	8.6 / 12.5	6.7 / 2.0	5.2 — 2.1 / 6.0
75+00	393.8	11.3 / 13.5	9.1 / 6.0	5.3 — 1.6 / 6.0
75+18 8	394.5	14.6 / 15.5		4.9 — 1.4 / 6.0
75+50	394.5	14.7 / 14.7		5.5 — 1.8 / 5.0
76+00	394.5	15.2 / 13.5		6.0 — 2.4 / 5.0

11/12/30
Simpson
Super
Rammer

	Grade	Lft. cut.	℄	Rt. cut.
76+09	394.5	18.0 / 15.0	7.3	2.4 / 6.0
76+18	394.5	12.8 / 11.0	6.8	2.4 / 6.0
76+50	394.5	11.8 / 10.5	5.5	1.5 / 6.0
76+75	394.5	14.7 / 12.5	6.1	1.8 / 7.5
77+06 25	394.5	12.7 / 12.0	5.7	1.9 / 7.0
77+13	394.2	12.8 / 13.0	5.1	2.1 / 5.5
77+21 2	393.9	12.9 / 15.0	5.0	1.9 / 6.0
77+36 1	392.2	11.0 / 15.0 — 9.3 / 10.0	5.6	1.9 / 6.0
77+50 9	389.4	12.4 / 20.0 — 10.9 / 15.0	6.9	4.0 / 6.0
77+61	387.1	12.9 / 20.0	6.5	2.7 / 6.0

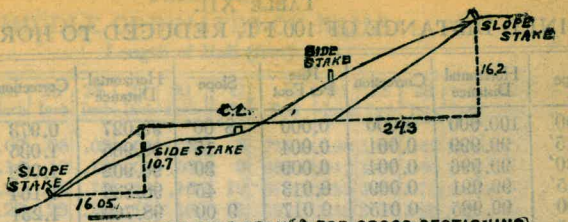
Standard Trench
77+83

399.14 = B.M. = 19

4.30	403.44		
		4.30	399.14
5.05	404.19		
		0.51	403.68
12.00	415.68		

95
21.2
8.5
12.7

IMPROVED TABLES AND INFORMATION



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1½ TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0 00	0 15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1 65	1 80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3 45	3.60	3 75	3.90	4.05	4.20	4 35	2
3	4.50	4 65	4.80	4.95	5 10	5 25	5 40	5.55	5.70	5.85	3
4	6.00	6 15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7 50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9 00	9 15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10 65	10.80	10.95	11.10	11.25	11.40	11.55	11 70	11.85	7
8	12.00	12 15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13 50	13.65	13 80	13 95	14.10	14.25	14.40	14 55	14.70	14.85	9
10	15.00	15 15	15 30	15 45	15.60	15.75	15.90	16.05	16.20	16 35	10
11	16 50	16 65	16 80	16.95	17 10	17.25	17.40	17.55	17.70	17.85	11
12	18 00	18.15	18.30	18 45	18.60	18 75	18.90	19.05	19.20	19 35	12
13	19 50	19 65	19.80	19.95	20.10	20.25	20 40	20.55	20.70	20.85	13
14	21.00	21 15	21.30	21.45	21 60	21.75	21.90	22 05	22 20	22 35	14
15	22 50	22 65	22 80	22 95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24 15	24 30	24 45	24.60	24.75	24 90	25 05	25.20	25.35	16
17	25.50	25 65	25.80	25 95	26.10	26 25	26 40	26.55	26.70	26.85	17
18	27.00	27 15	27.30	27 45	27.60	27.75	27.90	28.05	28 20	28.35	18
19	28 50	28 65	28 80	28.95	29.10	29.25	29.40	29.55	29.70	29.85	19
20	30 00	30 15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31 50	31 65	31.80	31.95	32 10	32 25	32.40	32.55	32 70	32 85	21
22	33 00	33 15	33 30	33 45	33.60	33 75	33.90	34.05	34.20	34.35	22
23	34 50	34 65	34.80	34.95	35.10	35 25	35 40	35.55	35.70	35 85	23
24	36.00	36 15	36.30	36 45	36.60	36.75	36.90	37.05	37 20	37.35	24
25	37.50	37.65	37 80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39 00	39 15	39.30	39 45	39 60	39.75	39.90	40.05	40.20	40.35	26
27	40 50	40 65	40 80	40.95	41.10	41.25	41 40	41.55	41.70	41.85	27
28	42 00	42 15	42.30	42.45	42.60	42 75	42.90	43.05	43.20	43.35	28
29	43 50	43 65	43.80	43 95	44.10	44 25	44 40	44.55	44.70	44 85	29
30	45 00	45 15	45.30	45 45	45.60	45.75	45 90	46.05	46 20	46.35	30
31	46.50	46.65	46.80	46 95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48 00	48.15	48.30	48 45	48.60	48 75	48.90	49.05	49 20	49.35	32
33	49.50	49 65	49.80	49.95	50.10	50.25	50.40	50.55	50 70	50.85	33
34	51 00	51.15	51.30	51.45	51.60	51.75	51.90	52.05	52.20	52.35	34
35	52 50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54 00	54 15	54.30	54 45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55 50	55 65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57 45	57.60	57 75	57.90	58.05	58.20	58 35	38
39	58 50	58.65	58 80	58 95	59.10	59 25	59.40	59 55	59.70	59.85	39
40	60 00	60 15	60 30	60 45	60 60	60.75	60 90	61.05	61 20	61.35	40
41	61.50	61 65	61 80	61 95	62 10	62 25	62.40	62 55	62 70	62.85	41
42	63 00	63.15	63 30	63 45	63 60	63 75	63 90	64 05	64 20	64.35	42
43	64.50	64 65	64 80	64.95	65.10	65 25	65 40	65.55	65.70	65.85	43
44	66 00	66 15	66 30	66.45	66.60	66 75	66.90	67.05	67.20	67.35	44
45	67 50	67 65	67 80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69 00	69 15	69 30	69.45	69.60	69 75	69.90	70.05	70.20	70.35	46
47	70 50	70 65	70 80	70 95	71.10	71.25	71 40	71.55	71.70	71.85	47
48	72.00	72 15	72.30	72.45	72.60	72.75	72.90	73 05	73.20	73 35	48
49	73 50	73 65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

Computed by L. Leland Locke.

29.04
30
59.04

395.66
4
401.66

18+70.96 = 349.04

40
18
58 4.83
10 2.41
12

Check 28.50
" 17.99
19.50