

284A

MONTHLY ESTIMATES

SCHEDULE I.

W284A

Schedule I.
Monthly Estimates.

284-A

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.
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THE FREDERICK POST CO.
ENGINEERING and DRAFTING SUPPLIES
IRVING PARK STATION

CHICAGO, ILL.
MICROFILMED

JAN 11 1965

INDEX			Pages
Monthly Est.-	February		1-13
"	"	March	14-20
"	"	April	21

MICROFILMED

JAN 1 1985

O.R.-S.D. 2nd. Main Pipe Line.
 Monthly Estimates - Cross Sections
 Excavation to Feb. 25, 1930, Schedule I.

Feb. 25, 1930
 Weather - Clear + Cool.

Converser - Notes
 Hill - Tape
 Elliott - π
 Simpson - Rod.

1

Sta.	Grade Elev.	Dist.	L.C.	¢	R.C.	End Area	Av. E. Area	Cu. Yds.	Total Cu. Yds.	Estimate Cu. Yds.
		7° Bottom - 1/2:1 Slopes								
297+95.7		11.8							81.48 ±	81.48
298+07.5	385.8		$\frac{0.0}{3.5}$	0.0	$\frac{0.0}{3.5}$	0.0				
		42.5				0.0	0.0		387.22	387.22
+50	385.7		$\frac{0.0}{3.5}$	0.0	$\frac{0.0}{3.5}$	0.0				
		30.0				0.0	0.0		125.10	125.10
+80	384.5		$\frac{0.0}{3.5}$	0.0	$\frac{0.0}{3.5}$	0.0				
		20.0				8.0	5.93		47.53	41.60
299	382.0		$\frac{2.0}{4.5}$	2.0	$\frac{2.0}{4.5}$	16.0				
		9.7				14.52	5.22		15.35	10.13
										645.53

kw
 M.D.E.

kw
 M.D.E.

Sta.	Grade	Elev.	Dist.	L.C.	±	R.C.	End Area	Ax. End Area	Cur. Yds
4.82 Bottom - Standard Trench									
299+09.7	380.7	383.4		$\frac{2.7}{2.41}$	2.7	$\frac{2.7}{2.41}$	13.04		
			17.3				19.32	12.38	18.89
+27	377.8	383.1		$\frac{5.3}{2.41}$	5.3	$\frac{5.3}{2.41}$	25.60		
			13.0				28.79	13.86	16.04
+40	375.6	382.2		$\frac{6.6}{2.56}$	6.6	$\frac{6.6}{2.56}$	31.98		
			10.3				31.72	12.10	12.80
+50.3	373.9	380.4		$\frac{6.5}{2.54}$	6.5	$\frac{6.5}{2.54}$	31.45		

654.92

Kwb M.D.C. Kwb M.D.C.

O.R.S.D. 2nd. Main Pipe Line
 Monthly Estimates - Cross Sections
 Excavation to Feb. 25, 1930. Schedule I.
 7° Bottom - 1/2:1 Slopes.

Feb. 25, 1930. Converse - Notes
 Clear + Cool. Hill - Tape
 Elliott - ~~X~~
 Simpson - Rod.

3

Sta.	Grade Elev.	Elev.	Dist.	L.C.	£	R.C.	End Area	Av. End Area	Cur. Yds	
285+44	382.2	390.1		$\frac{7.9}{7.45}$	7.9	$\frac{7.9}{7.45}$	86.52			
			19.0				86.52	60.88	101.77	40.89
+63	382.6	390.5		$\frac{7.9}{7.45}$	7.9	$\frac{7.9}{7.45}$	86.52			
			12.0				82.85	36.82	74.14	37.32
+75	383.0	390.4		$\frac{7.4}{7.2}$	7.4	$\frac{7.4}{7.2}$	79.18			
			25.0				77.75	71.99	135.44	63.45
286	383.8	391.0		$\frac{7.2}{7.1}$	7.2	$\frac{7.2}{7.1}$	76.32			
			25.0				76.32	70.67	106.91	36.24
+25	384.6	391.8		$\frac{7.2}{7.1}$	7.2	$\frac{7.2}{7.1}$	76.32			
			16.0				75.61	44.81	82.71	37.90
										215.80

kwlo
 M.D.E. M.D.E.

Sta.	Grade	Elev.	Dist	L.C.	±	P.C.	End Area	Av. End Area	Cu. Yds.
286+41	385.1	392.2		$\frac{7.1}{7.05}$	7.1	$\frac{7.1}{7.05}$	74.90		215.80
			19.0				64.26	45.22	178.19
+60	385.7	391.2		$\frac{5.5}{6.25}$	5.5	$\frac{5.5}{6.25}$	53.62		
			14.0				41.08	21.30	192.72
+74	386.1	389.4		$\frac{3.3}{5.15}$	3.3	$\frac{3.3}{5.15}$	28.54		
			21.0				17.62	13.70	357.32
+95	386.8	387.7		$\frac{0.9}{3.95}$	0.9	$\frac{0.9}{3.95}$	6.70		
			13.8				3.35	1.71	258.00
287+08.8	386.9	386.9		$\frac{0.0}{3.5}$	0.0	$\frac{0.0}{3.5}$	0.0		
287+12.95 = 287+08.42			18.53						170.37
287+22.8									170.37

1284.47

kwk
-M.R.E. kwk
-M.R.E.

O.R. - S.D. 2nd. Main Pipe Line
 Monthly Estimates - Cross Sections

Excavation to Feb. 25, 1930. Schedule I.

7° Bottom - 1/2:1 Slope.

Feb. 25, 1930
 Clear + Cool.

Converse - Notes
 Hill - Tape
 Elliott - π
 Simpson - Rod.

5

Sta.	Grade Elev.	Dist.	L.C.	$\frac{L.C.}{R.C.}$	R.C.	End Area	Av. End Area	Cu. Yds.	Total Cu. Yds.	Estimate Cu. Yds.
204 +34	382.9	392.6	$\frac{8.9}{8.0}$	9.7	$\frac{12.3}{9.7}$	122.94				
		16.0				124.91	74.02	87.75	13.73	
+50	383.9	394.3	$\frac{10.4}{8.7}$	10.4	$\frac{10.4}{8.7}$	126.88				
		10.0				130.40	48.30	67.09	18.79	
+60	384.5	395.3	$\frac{10.8}{8.9}$	10.8	$\frac{10.8}{8.9}$	133.92				
		30.0				156.72	174.13	298.93	124.80	
+90	386.3	399.5	$\frac{13.2}{10.1}$	13.2	$\frac{13.2}{10.1}$	179.52				
		7.0				189.87	49.23	91.50	43.27	
									200.59	

W. H. S. - M. H. S.

M. H. S.

Sta.	Grade	Elev.	Dist.	L.G.	£
+97	386.7	400.9		$\frac{14.2}{10.6}$	14.2
			17.6		
205+14.6	386.9	404.5		$\frac{17.6}{12.3}$	17.6
			14.0		
+28.6					

6

R.G.	End Area	Av. End Area	Cu. Yds	Total Cu. Yds.	Estimate Cu. Yds
$\frac{14.2}{10.6}$	200.22				200.59
		229.15	155.79	279.62	123.83
$\frac{17.6}{12.3}$	278.08				
			100.0	189.87 155.55	55.55
				Total	379.97

Istwb
 M.R.?
 Istwb
 M.R.

on. D.E.

O.R. - S.D. 2nd. Main Pipe Line
 Monthly Estimates - Cross Sections
 Excavation to Feb. 25, 1930. Schedule I.

7° Bottom - 1/2:1 Slopes.

Sta.	Grade	Elev.	Dist.	L.C.	£
192+12			12.6		
+24.6	388.3	407.8	$\frac{19.6}{13.3}$	19.5	
			11.4		
+36	388.2	403.3	$\frac{16.2}{11.6}$	15.1	
			12.0		
+48	388.0	399.6	$\frac{14.3}{10.65}$	11.6	
			18.0		
+66	387.6				

Feb. 25, 1930.
 Clear + Cool.

Converse - Notes
 Hill - Tape
 Elliott - K
 Simpson - Rod

7

R.C.	End Area	Av. End Area	Cu. Yds.	Total Cu. Yds.	Estimate Cu. Yds.
				$\frac{105.50}{107.21 \pm}$	7.21 ±
	$\frac{16.3}{11.65}$	299.81			
			254.36	107.40	126.87
	$\frac{12.4}{9.7}$	208.91			
			188.65	83.84	97.22
	$\frac{12.0}{9.5}$	168.39			
			151.16	100.77	101.27
			133.97		

35.56

Sub M.D.E. - Sub M.D.E.

O.R.-S.D. 2nd. Main Pipe Line
 Monthly Estimate - Cross Sections
 Excavation to noon Feb. 25, 1930. Schedule I.

Feb. 25, 1930. Converse - Notes
 Clear & Cool. Hill - Tape
 Elliott - π
 Simpson - Rod

8

Sta.	Grade	Elev.	Dist.	L.C.	\pm	R.C.	End Area	Av. End Area	Cu. Yds.	Total Cu. Yds.	Estimate Cu. Yds.
171+14							37.42				
			20.0					48.06	35.60	54.96	19.36
+34	390.3	396.2		$\frac{5.9}{6.45}$	5.9	$\frac{5.9}{6.45}$	58.70				
			14.0					64.71	33.55	57.88	24.33
+48	390.3	397.1		$\frac{6.8}{6.9}$	6.8	$\frac{6.8}{6.9}$	70.72				
			18.0					74.95	49.97	97.39	47.42
+66	390.3	397.7		$\frac{7.4}{7.2}$	7.4	$\frac{7.4}{7.2}$	79.18				
			15.0					88.96	49.42	109.42	60.00
+81	390.3	399.0		$\frac{8.7}{7.85}$	8.7	$\frac{8.7}{7.85}$	98.74				
			23.9					137.12	121.38	230.25	108.87
											259.98

hwb
m.s.e

hwb
m.s.e

Sta.	Grade	Elev.	Dist.	L.C.	±	R.C.	End Area	Av. End Area	Cu. Yds.	Total Cu. Yds.	Estimate Cu. Yds.
172+04.9	390.3	403.3		$\frac{13.0}{10.0}$	✓ 13.0		175.5 ✓				259.98
172+08.97 = 172+05.50			✓ 10.67						40.07±	$\frac{75.24}{74.07±}$	34.00
+12.1											

293.98

S.W.C.
M.D.C.

O.R. - 5 D. 2nd. Main Pipe Line
 Monthly Estimate - Cross Sections.
 Excavation to Feb. 25, 1930. Schedule I.

Feb. 25, 1930
 Clear & Cool.

Converse - Notes
 Hill - Tape
 Elliott - " "
 Simpson - Rod.

10

7° Bottom - 1/2:1 Slopes.

Sta.	Grade Elev.	Dist	L.C.	±	R.C.	End Area	Av. End Area	Cu. Yds	Total Cu. Yds	Estimate Cu. Yds
224+12		10.8						0.0	92.59±	92.59±
+22.8	388.8		$\frac{0.0}{3.5}$	0.0	$\frac{0.0}{3.5}$	0.0				
		8.2					0.0	0.0	104.98	104.98
+31	388.8		$\frac{0.0}{3.5}$	0.0	$\frac{0.0}{3.5}$	0.0				
		13.0					1.44	0.69	157.53	156.84
+44	388.5		$\frac{0.4}{3.7}$	0.4	$\frac{0.4}{3.7}$	2.88				
		21.0					4.40	3.42	230.89	227.47
+65	387.8		$\frac{0.8}{3.9}$	0.8	$\frac{0.8}{3.9}$	5.92				
		12.0					26.71	12.32	119.32	107.00

kwls
 M.P.E.

688.88

Sta.	Grade	Elev.	Dist.	L.C.	£	R.G.	End Area	Av. End Area	Cur. Yds.	Total Cur. Yds.	Estimate Cur. Yds.
+77	387.4	392.4		$\frac{5.0}{6.0}$	5.0	$\frac{5.0}{6.0}$	47.50				688.88
			16.0					70.02	41.49	153.94	112.45
+93	386.9	395.2		$\frac{8.3}{7.65}$	8.3	$\frac{8.3}{7.65}$	92.54				
			17.0					92.54	58.27	166.61	108.34
225+10	386.3	394.6		$\frac{8.3}{7.65}$	8.3	$\frac{8.3}{7.65}$	92.54				
			25.0					114.12	105.67	218.60	112.93
+35	385.5	396.4		$\frac{10.9}{8.95}$	10.9	$\frac{10.9}{8.95}$	135.70				
			12.0					148.72	66.10	95.17	29.07
+47	385.1	397.4		$\frac{12.3}{9.65}$	12.3	$\frac{12.3}{9.65}$	161.74				
			9.0					176.78	58.93	71.23	17.30
+56	384.8	398.6		$\frac{13.8}{10.4}$	13.8	$\frac{13.8}{10.4}$	191.82				
			16.39					196.02	118.99	125.85	6.86
225+63.25 =											
225+44.86 =											

hwb
M.R.E.

hwb
M.R.E.

1070.83

Sta.	Grade	Elev.	Dist.	L.C.	±	R.C.	End Area	Av. End Area	Cu. Yds.	Total Cu. Yds.	Estimate Cu. Yds.
225+54	384.3	398.5		$\frac{14.2}{10.6}$	14.2	$\frac{14.2}{10.6}$	200.22				1070.83
			9.0					195.87	65.29	67.80	2.51
+63	384.0						191.52				
+82											1073.34

February Monthly Estimate
Schedule I. Division I.

Sta. to Sta.	Cu. Yds.
171+14 - 172+12.1	293.98
192+12 - 192+66	35.56
204+34 - 205+28.6	379.97
224+12 - 225+82	1073.34
285+44 - 287+22.8	
297+95.7 - 299+50.3	

O.R. - S.D. 2nd. Main Pipe Line
 Monthly Estimate - March - Cross Sections
 Excavation to March 25, 1930. Schedule 1

Grade Elev. Dist. \$

172+12.13

172+05.50 =
 172+08.97

172+04.9 390.3 390.3 0.0

171+01 390.3 390.3 0.0

171+
 170+95.3 390.3 390.3 0.0

170+87 393.4 +3.1

170+38 394.5 +4.2

170+07 396.5 +6.2

March 24, 1930. Converse
 Clear + Warm. Hill
 Elliott
 Simpson

19

End Area Cu. Yds total Feb. March
 (of remain, Cu. Yds. Est. Est.
 portion)

2012.18 CF

75.64 34.00 41.64

560.73 259.98 300.75

1.33 5.56 1.33

26.50

92.73 151.46 92.73

38.22

117.93 175.83 117.93

62.62

374.87 501.58 374.87

929.25

				(remaining) per foot End Area	C.V.	total C.V.	Feb. Est.	March Est.
169+50	390.4	396.2	+5.8	57.92				total 929.25
					245.30	353.12		245.30
169+06		397.5	+7.1	74.90				
					264.46	399.02		264.46
168+61.8		398.5	+8.1	89.50				
					328.19	604.74		328.19
168	390.4	390.4	0.0	0.0				
						311.45		311.45
167+69.2	390.4	390.4	0.0	0.0				
					2463.29 CF	91.23		91.23
167+58.2								

Monthly Estimate - March. (Contd.)
 Sta. 144+18 - Sta. 145+38.4

March 24, 1930.

16

				End Area (remain- portion)	C.Y.	total C.Y.	Feb. Est.	March Est.
144+18	387.5	394.8		100.74				
						8.96	132.74	8.96
+48	387.7	395.4	+7.7	83.54				
						74.46	164.98	74.46
+77	387.8	395.6	+7.8	85.02				
						75.66	148.08	75.66
145	387.9	395.7	+7.8	85.02				
						49.75	102.36	49.75
+16	388.0	396.3	+8.3	92.54				
						28.89	132.89	28.89
+38.4	388.1	398.8	+10.7	158.18				

237.72

Monthly Estimate - March - (Contd.)

Sta. 192+12 - Sta. 193+06

Grade Elev

192+12.0

2848.71 C.F.

192+24.6 388.3 388.3

0.0

193+06.1 385.7 385.7

0.0

End Area C.Y. total C.Y. Feb. Est. March Est.

105.50

7.21

98.29

387.40

28.36

359.05

457.34

Monthly Estimate - March - (Contd.)

Sta. 204+34 - Sta. 205+35.5

204+34 382.9 382.9 0.0

205+20.5 386.9 386.9 0.0

205+35.5

<u>c.v.</u>	<u>total</u> <u>c.v.</u>	<u>Feb.</u> <u>Est.</u>	<u>March</u> <u>Est.</u>
-------------	-----------------------------	----------------------------	-----------------------------

939.16 324.42 614.74

5125.74 CF

189.84 55.55 134.29

749.03

Monthly Estimate - March - (Contd.)

Sta. 224+12 - Sta. 225+92

2 224+12

2355.51 CF

87.24

92.59

5.35

E 224+22.8 388.8 388.8

0.0

1151.89

10.22.60

129.29

2225+35 385.5 385.5

0.0

71.89

95.18

71.37

30.52

< +56 384.8 390.0

5.2

76.87

71.23

9.37

37.50

225+92 383.6 391.4

7.8

191.96

March Estimate Schedule "1"

C.Y.

Sta. 167+58.2 to 172+12.1	-	2169.88
" 174+18 " 175+38.4	-	237.72
" 192+12 " 193+06.1	-	457.34
" 204+34 " 205+38.5	-	749.03
" 224+12 " 225+92		191.96
Bench		
" 248+75 to 251+10 Arc. cut. 10	-	40.25
" 251+80 " 254+75 " " 1.0	-	52.80
" 257+75 " 259+85 " " 1.0		37.60
" 279+00 " 285+35 " " 0.5		56.70
" 301+00 " 306+00 " " 1.0		89.40

 7082.68

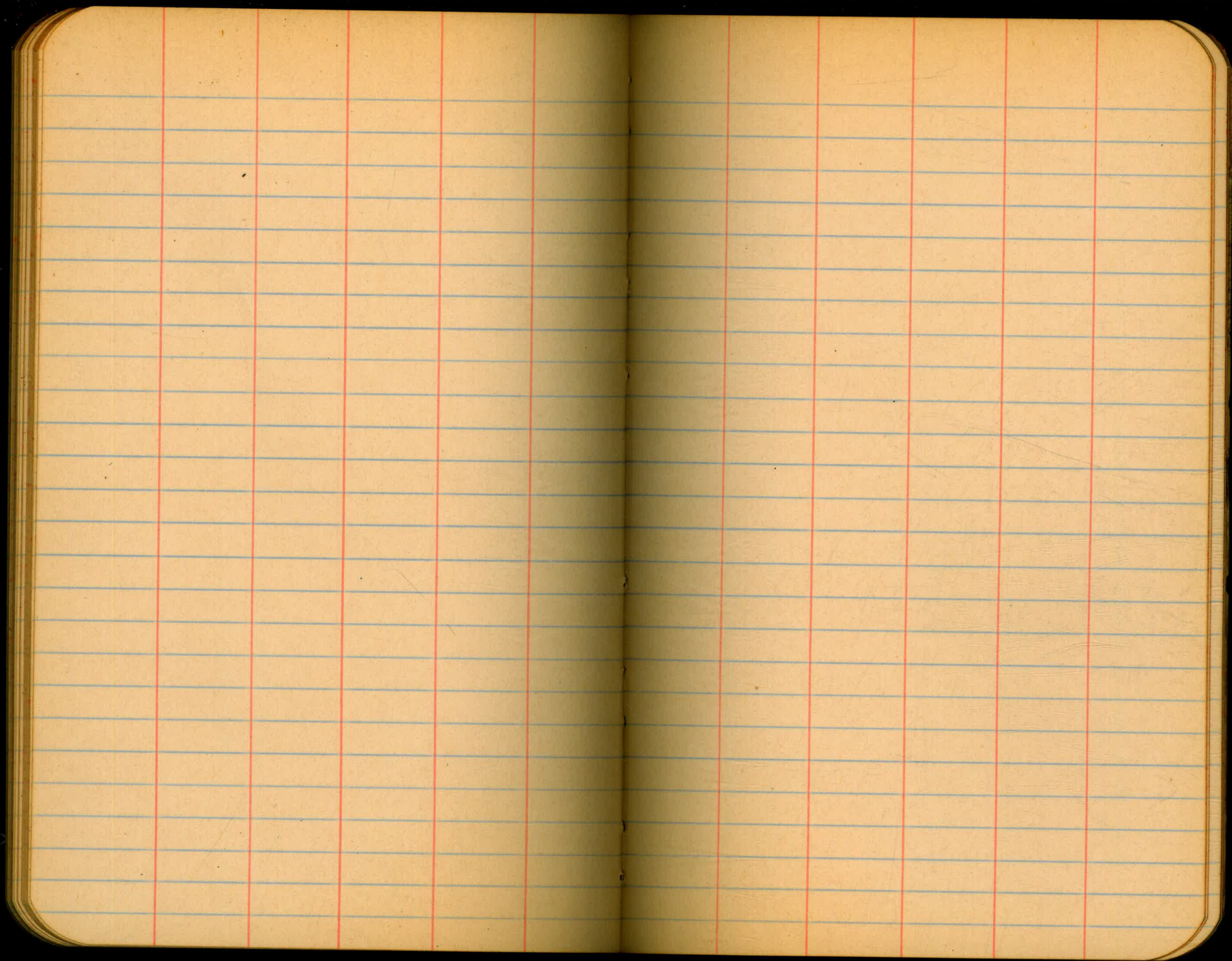
Otay-S.D. 2nd. Main Pipe Line
Monthly Estimate for April
Schedule "I"

Sta. 145+38.4 to sta. 146+04.7 - - 721. C.Y.

" 797+00	" " 800+50	62	"
" 801+26	" " 804+50	96	"
" 806+25	" " 816+70	877	"
" 817+00	" " 825+75	815	"
" 825+75	" " 829+30	89	"
" 829+30	" " 833+50	160	"
" 833+50	" " 835+60	35	"
" 835+60	" " 855+12	2990	"

Total 5895 "

21
Total excavation called 75% complete.



204+40 to Portal. Grade
 193+00 to Portal. Grade
 225+25 to Portal Grade
 225+25 to 225+50 $\pm 1\frac{1}{2}$ ' Below W.S. Pipe
 225+50 to 226 top W.S. Pipe

Benchred

248+75 - 251+10 Av. ± 1.0
 251+80 - 254+75 " "
 257+75 - 259+85 " "
 279+00 to W.S.P. Av. ± 0.5
 301+00 to 306+00 Av. ± 1.0

DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder
 stake for any width roadway slope 1:1 to 1:
 If ground is nearly level, the cut or fill on side
 stake is located by the double entry method in
 left column and top row. The number in both

of table in same row and column gives distance

the side stake and the stake, lower tangent by the

amount if cut, else amount to fill. Add this amount

to cut or fill and find distance in table. Set up

rod at stake and find distance in table. Set up

rod at stake and find distance in table. Set up

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rod at stake and find distance in table. Set up

rod at stake and find distance in table. Set up

IMPROVED TABLES

AND

INFORMATION

TABLE No. 2.

To find Tangent and External for curve of

any other degree, divide by degree of curve and

add connection found in column of connection.

Degree of curve with a given T may be found

by dividing tangent (or external) opposite it by

given tangent (or external).

The distance from a point on the tangent to

the curve is very nearly the square of the tangent

length divided by twice the radius.

388.77

2.01

390.78 HI

388.77

2.01 - 224+33.76

390.8

387.9

2.9 224+60.0

390.8

387.1

3.7

224+85

390.8

386.6

4.2

225+00

390.8

385.8

5.0

225+25

390.8

385.32

5.5

225+40

3.24
.08
2.592

.4

3.24
.9
2.916
383.6
386.52
0.81
3 .33

.81
4/3.24

.263
3.24
10.52
526
789
.85212

388.77

.85

387.92

.81

387.11

.49

386.62

.81

385.81

.49

385.32

13
390.3
403.3

225+63.25
224+33.66
60