

FIELD BOOK

360

N<sup>o</sup> 160

Cass S.A.R. #7 Job #2801

Data	Pg
Transit Notes	1-5
Levels & X-Sec.	5-18
Check Levels & Slope Stakes	
Sta 338 to 360	20-22
" 324 " 338	23-24
" 307 " 324	25-26
" P229572089 " 307	26-28
" 278 to 295	28-30
Check Levels & X-Sec.	
Sta 324 to 337	23-24
Finish Stakes	
Sta 279 to 360	Pg 31 to 39
Re-X-Sec. Notes	Pg 38-39
<hr/>	
S.A.R. #7 Job #2902	
Transit Notes	40-41
Level & X-Sec. Notes	42-45

S.A.R #7 Job # 2801

Transit Notes Betw. Sec's 17 & 20, 16 & 21-

Sta	Defl	Angle	Bearing	C+G
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P.O.T.  
297+52

Revised Pg 6

286+37

{ 33'  
38'

284+88

{ 33'  
18'

280+00

L 0°38' N82°45'E

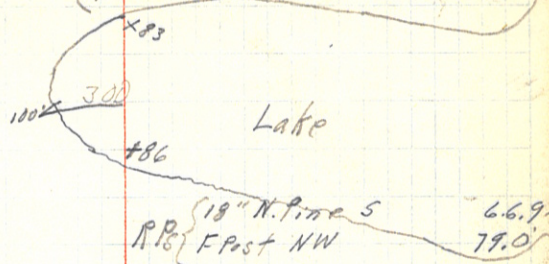
18'

10-17-1927

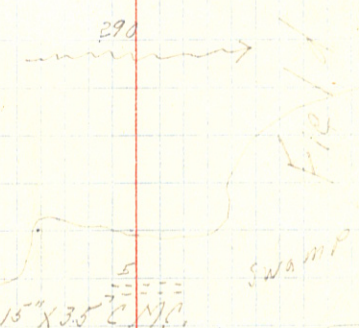
T139N R29W

Weather  
Clear & Warm

Party { A.R. Tavbman - Asst Engr.  
F. French - Rod  
Leon Jarry - Chain



Woods!



Cont. to Secs 17, 18, 19, 20-139-29 R.P.s { 14" N. Pine S.E. 83.7'  
Tel. Pole S.W. 39.9'

Sta	Defl.	Angl	Bearing	C+G
PT 328+0.56				
R1. 326+58 Back			(N52°57'23")	
= 326+52.7 Fwd	L	30°15'	N64°E	
POT. 325	D=18°			328+0.56=15°08'
PC 325+0.51	T=154.9			+50=12°23'
	L=302.5'	Defls		327=9°51'
	E=20.56			+50=7°21'
				326=4°51'
				+50=2°21'

Revised From Sta. 324+22.54  
Pg 5

306+20.5 R 0°25' N84°E N83°12'E

RR { 3" Birch S 20.6'  
6" Poplar SE 33.6



1/4 Cor. Bet. Sec's 17+20-  
139-29

RR { Pine stump SE 53.9'  
5" Oak NE 51.5'

315

352  
351+30

349

PT 336+40.07 Back = 335+58 Fnd (N 82° 37' E)  
 P. 1335+56.7 L 42° 00' N 82° 30' E  
 D = 15°  
 T = 146.63  
 L = 280.00  
 E = 27.2  
 PC 333+60.07  
 PT 333+29.44  
 P. 1331+78 Back = 331+22.53 Fnd R  
 D = 20°  
 T = 206.89  
 L = 358.33  
 E

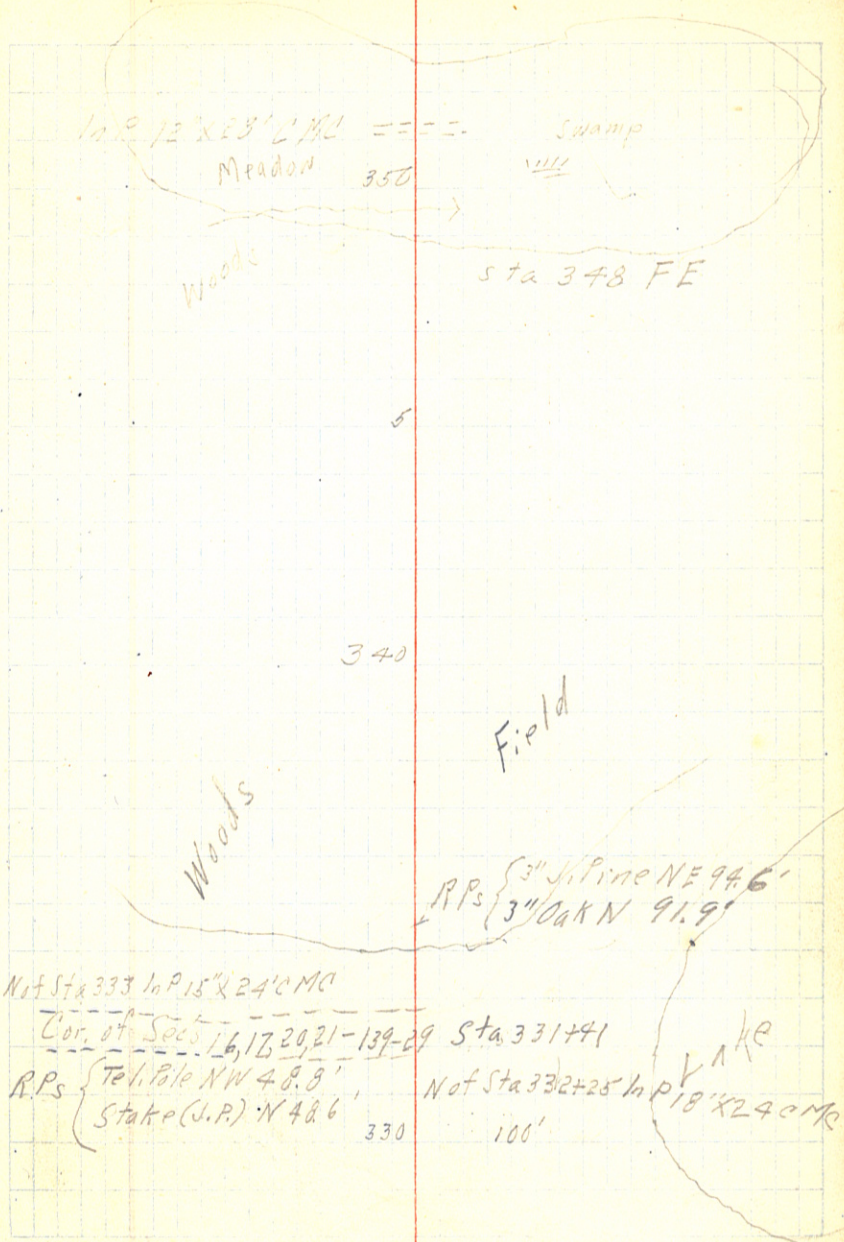
Defls  
 (S 55° 23' E)  
 5.56° E  
 Defls  
 Defls  
 Defls

+40.07 = 21°  
 336 = 18° 00'  
 +50 = 14° 15'  
 335 = 10° 30'  
 780 = 9°  
 +50 = 6° 45'  
 330 = 3° 00'  
 +50 = 10° 52'  
 429.44 = 38° 50'  
 333 = 32° 53'  
 +50 = 27° 53'  
 332 = 22° 53'  
 +50 = 17° 53'  
 331 = 12° 53'  
 +50 = 7° 53'  
 330 = 2° 53'

Revised Pg 5

C 45  
C 10  
C 10  
C 6 20

23'



360+60

☒ of S.A.R.#1

PT 359+33.4 Fwd = 359+57.67 Back

P.I. 359+00.7 R 89°46' 57°15'E

PC 358+43.73 □ 100°

T 56.97'

L 89.67'

E 23.5'

Def'l's

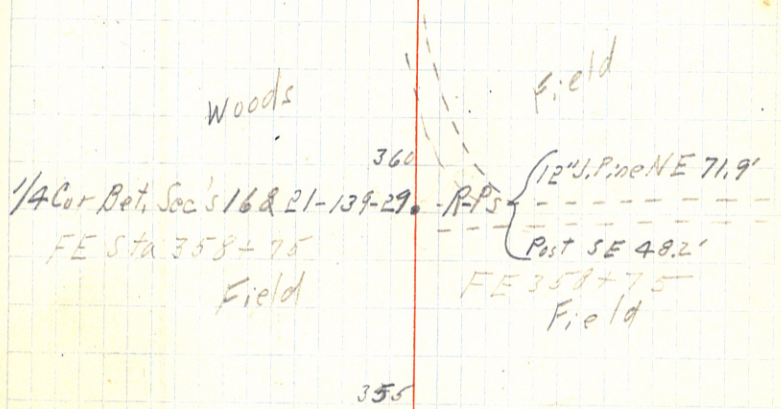
+33.4 = 44.00
+20 = 38.08
+10 = 33.08
+35.9 = 28.08
+90 = 23.08
+80 = 18.08
+70 = 13.08
+60 = 8.08
+50 = 3.08

Revised Pgs

361

☒ of S.A.R.#1

359+00.7. R 0°15' (N 83°20'E) N 83°E



1/4 Cor Bet. Sec's 16 & 21-139-29.

FE Sta 358+75

Field

(12" U.P. ne NE 71.9'

Post SE 48.2'

FE 358+75  
Field

355

334+73.6  
 1 41.73  
 336+15.33

Comp. Bearings  
 PT 336+80.93 B = 336+00 F  
 334+60.13 Fwd  
 P.I. 336+42.8 = L 34°25' N83°05'E  
 D 120  
 T 147.87  
 PC 333+94.13 L 286.80  
 PT 333+43.1 E 22.38  
 331+00.41 Fwd  
 P.I. 331+47.69 Back = R 61°20' S62°30'E  
 D 140  
 T 242.69  
 PC 329+05.0 L 438.1  
 E 66.57

Defls  
 PT - 17°12'  
 336 - 12°21'  
 335 - 6°21'  
 334 - 0°21'  
 PT - 30°40'  
 333 - 27°39'  
 130 - 24°09'  
 332 - 20°39'  
 150 - 17°09'  
 331 - 13°39'  
 150 - 10°09'  
 330 - 6°39'

PT 327+70.45 Back = 327+77.46 Fwd  
 P.I. 326+00 L 27°50' (N56°10'E)  
 D 80  
 T 177.46  
 PC 324+22.64 L 347.91  
 E 21.66

Comp  
 PT 13°55'  
 150 - 13°06'  
 327 - 11°06'  
 150 9°06'  
 326 - 7°06'  
 150 5°06'  
 325 - 3°06'

29° Curve Revision

PT 360+13.46 Back = 360+97.14 Fwd  
 P.I. 359+00.7 R 89°40' S7°15'E  
 D = 29°  
 T = 196.44  
 L = 309.20  
 E = 81.03

Defls  
 12.46 - 44°50'  
 360 - 42°53'  
 150 - 36°38'  
 359 - 28°23'  
 150 - 21°08'  
 358 - 13°53'  
 357+50 - 6°38'

P.T. 337+02.22 Back = 336+15.33

P.I. 335+68.4 Back Δ 33°04' L  
 = 334+73.6 Fwd D = 12°  
 PC 334+26.67 T = 141.73  
 L = 275.55  
 E = 20.57

Defls  
 102.22 = 16°32'  
 337 - 16°24'  
 150 13°24'  
 336 - 10°24'  
 150 7°24'  
 335 - 4°24'  
 160 2°24'

Defl Angle Mag. Bearing

Revision

PT 305+44.19 Back = 305+06.64 Fwd

P.I. 304+442 Back  
= 304+01.5 L

(N 82° 47' E)  
20° 30' N 82° 45' E  
D = 100  
T = 105.34  
L = 208.33  
E = 9.6  
Defls  
+44.19 = 10° 25'  
305 = 8° 12'  
+50 = 5° 42'  
304 = 3° 12'  
+50 = 2° 42'

PC 303+35.86

∩ = 15°  
T 158.23  
L 300.00  
E 31.47

PT 301+77.47

P.I. 300+35.7 Back  
= 300+19.24 Fwd R

(S 76° 23' E)  
45° 00' S 77° 15' E  
Defl  
+77.47 = 22° 30'  
+50 = 20° 26'  
301 = 16° 41'  
+50 = 12° 56'  
300 = 9° 11'  
+50 = 5° 26'  
299 = 1° 41'

PC 298+77.47

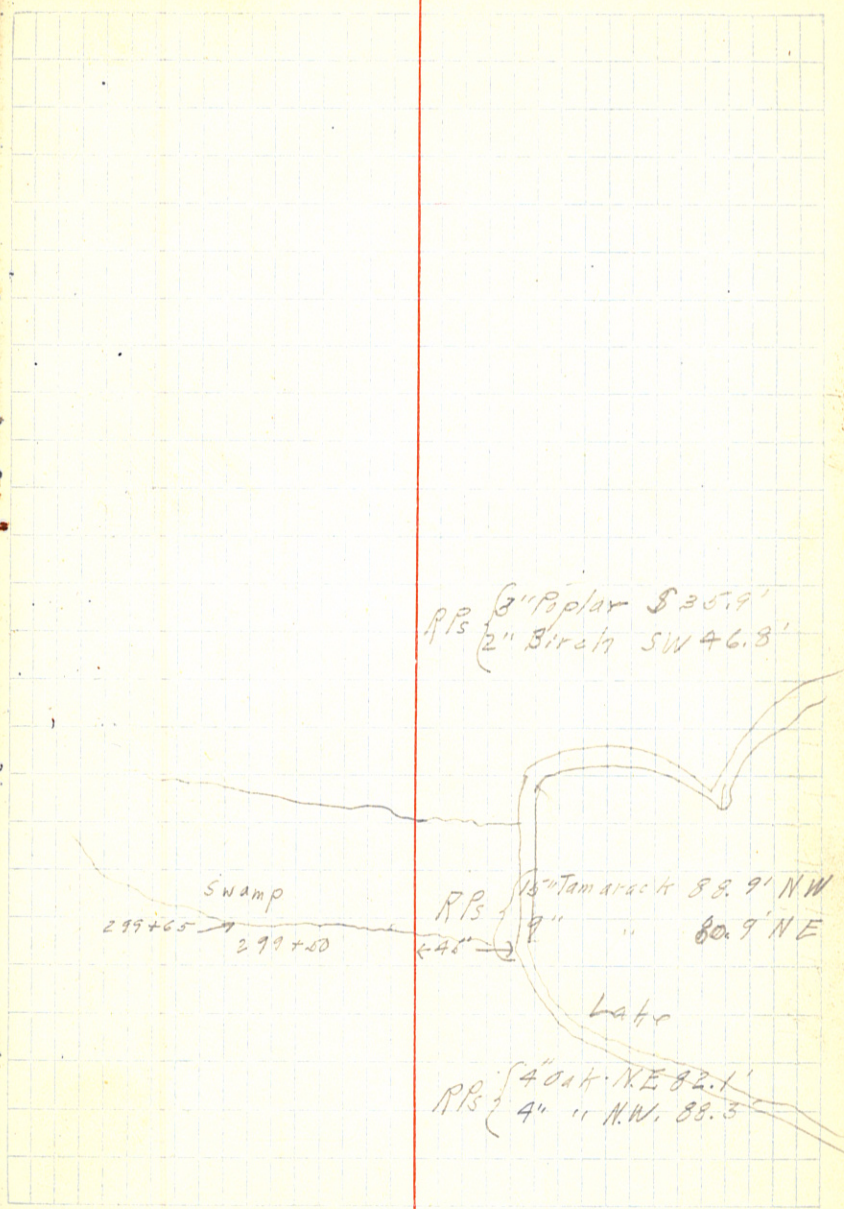
PT 298+22.56

P.I. 296+74.0 Back  
= 296+59.45 Fwd L

(N 58° 37' E)  
29° 08' N 58° 30' E  
Defls  
+22.56 = 2° 04'  
298 = 11° 10'  
+60 = 9° 34'  
297 = 7° 10'  
+75 = 6° 10'  
296 = 3° 10'

PC 295+20.89

∩ = 8°  
T = 153.41  
L = 301.67  
E = 16.3'



RP 3 { 3" Poplar S 30.9'  
2" Birch SW 46.8'

RP 4 { 15" Tamarack 88.9' NW  
9" " 80.9' NE

RP 5 { 4" Oak NE 82.1'  
4" " NW 88.3'





+75	3.8	1334.52		30.7	
289	3.8			30.7	
+35	3.4			31.1	
+73	2.1			32.4	
TP	2.09			1332.43	→
+		1343.08	10.65		
290	9.4			33.7	
#65	6.6			36.5	
291	6.0			37.1	
292	9.9			38.2	
293	5.0			38.1	
BM	4.93			1338.15	
294	9.9			38.2	
295	4.3			38.8	
296	4.3			38.8	
297	6.5			36.6	
+32	8.9			34.2	
+52	9.2			33.9	
TP	11.57			1331.51	
+		1332.02	0.51		
+84	6.2			25.8	
288	9.0			23.0	Soundings
+32	12.2			19.8	
+86	13.4			18.6	0.0
Lake Level	13.4			18.6	

L	7.3	6.0	6.0	6.6	8.0	8.2	
	11	13	10.6	10	13	23	
L	10.8	9.0	6.2	6.3	7.0	10.5	CS
	2.4	1.4	11	8	12	23	
L	6.1	6.0	5.8	6.4	5.9	6.0	6.8
	2.7	17	13	11	10	5.6	10
L	9.2	8.7	6.2	6.2	8.4	9.8	10.0
	2.8	14	10.6	7	14	21	30
							CS
L	6.8	10.2	10.3	9.8	13.1	10.7	10.8
	10	16	13	12	9.4	9	14
L	5.9	8.1	7.5	7.2	7.9	8.1	6.2
	18	15	13	6.6	10	12	14
L	6.0	7.3	7.7	6.4	6.4	6.5	6.2
	11	18	16	11	10.6	9	10
L	5.7	5.2	7.0	6.2	5.4	5.6	5.5
	26	19	18	16	13.4	9	11
L	5.3	6.5	5.7	5.6	7.1	5.3	5.8
	18	15	12.5	11	15	16	27
							L
Dn 10° J. Pine N.E. of Sta 293							
CS	5.1	5.7	6.8	5.3	5.2	6.6	5.3
	30	18	16	11.4	12	15	17
L	4.6	6.1	4.6	4.4	5.9	4.8	4.7
	17	16	14	4.3	12	16	13
L	6.3	6.4	5.0	4.7	6.0	4.9	4.5
	23	20	15	4.3	12	15	17
							CS

← Revised Pg 16

CS	12.9		13.4		14.4		CS
	25				25		

		1332.02		☐ Soundings
299	14.2		17.8	1.9
300	14.9		17.1	12.5
-301	15.4		16.6	12.5
301493	13.4		18.6	3.5
302	12.6		19.4	2.0
+74	7.6		24.4	
303	3.6		28.4	
+15	2.9		29.1	
+28	1.4		30.6	
FP	0.17		1331.85	
+		1342.54	10.69	+60
304	8.0		34.5	
305	6.1		36.4	
306	5.1		37.4	
+205	5.0		37.5	
307	4.7		37.8	
+90	4.5		38.0	
BM	3.66		1338.88	
308	4.9		37.6	
309	5.4		37.1	
310	5.5		37.0	
+50	5.1		37.4	
311	5.4		37.1	
312	4.1		38.4	
TP	4.11		1338.43	+50
+		1340.98	2.55	

Revised 1916

Note: Soundings as noted are from the Late Level

Soundings 25' L	13.5	14.2	15.1	Soundings 25' R
0.0	2.5	14.2	2.5	3.4
7.1	14.9	14.9	14.9	16.0
7.3	14.9	15.4	14.4	14.2
3.8	13.1	13.4	2.5	3.0
4.0	12.2	12.6	12.5	2.0

H.I. = 6.6

L	5.9	7.6	7.4	6.3	6.3	7.7	7.6	5.8	6.0	
	16	17	13	10	56	11	14	15	16	38
L	5.6	7.3	7.3	6.2	6.2	7.4	7.5	6.0		
	17	15	13	11	56	10	14	16	17	
L	5.8	7.5	7.4	6.1	6.4	7.6	7.6	6.2	5.9	
	17	15	13	10	56	11	14	16	18	36
L	5.9	7.4	7.3	6.2	6.0	7.1	7.2	6.0		
	15	14	13	10	54	11	14	16	18	
On 7" Oak NE of Sta 307										
L	6.3	7.5	7.4	6.3	56	6.4	7.5	7.6	6.0	5.7
	17	15	13	12	56	11	13	15	16	29
L	5.6	6.0	7.6	7.2	6.3	6.1	7.7	5.9	6.2	CS
	30	16	15	14	10	56	11	14	16	28
	5.7	5.9	7.3	6.9	5.9	6.0	7.1	7.7	5.7	
	33	17	15	14	10	56	11	14	16	17
V	5.7	7.2	6.9	6.0	56	6.0	7.1	7.2	5.6	5.9
	15	15	13	12	56	11	14	16	18	27
L	5.6	5.9	7.1	7.2	6.2	6.0	7.3	7.2	5.3	
	28	15	14	12	10	56	12	15	16	18
CS	6.5	6.5	7.6	7.4	6.4	6.3	7.5	7.7	6.0	
	24	18	16	14	11	56	11	14	16	17

313 2.2  
 +45 2.5  
 314 3.6  
 315 4.7  
 +65 5.7  
 316 5.8  
 317 4.8  
 BM 4.60  
 318 5.6  
 +50 6.1  
 319 7.3  
 +32 7.6  
 320 5.4  
 +64 3.7  
 321 3.9  
 322 5.3  
 TP 5.30  
 +  
 +47 2.1  
 323 3.6  
 +52 4.7  
 324 3.8  
 +30 2.6  
 +74 1.3  
 325 1.5  
 +40 2.3

1340.98

38.8  
 38.5  
 37.4  
 36.3  
 35.3  
 35.2  
 34.2  
 1336.38  
 35.4  
 34.9  
 33.7  
 33.4  
 35.6  
 37.3  
 37.1  
 35.7  
 1335.68 → +50  
 → +30  
 35.0  
 33.5  
 32.4  
 33.3  
 34.5  
 35.8  
 35.6  
 34.8

1337.10 -1.42

Revised  
 12/17

H.I. = 5.6

10

56	58	75	71	5.9	5.6	6.1	7.4	7.5	5.6	6.0	
17	15	13	10			13	16	18	19	34	
L	6.0	7.6	7.3	6.1	5.6	6.1	7.3	7.3	5.6	5.4	
	17	15	13	10	5.6	13	15	17	18	32	
L	5.6	5.8	6.7	6.7	5.9	5.6	6.0	7.0	7.1	5.6	5.4
	22	16	15	13	10	5.6	13	16	18	19	36
L	5.7	7.0	7.1	6.0			6.2	7.4	7.6	6.4	6.6
	16	14	12	10	5.6		11	14	17	18	34
L	5.0	5.4	7.1	6.8	6.1	5.6	6.2	7.2	7.3	6.1	6.1
	34	17	16	13	11	5.6	10	13	15	17	25
CS	5.2	5.7	7.3	6.8	5.6	5.6	6.3	7.4	6.1	6.4	
	30	18	15	10	5.6		11	15	18	29	CS
L	6.2	7.4	7.4	6.0	5.6		5.9	7.0	6.6	5.9	
	16	14	12	9	5.6		12	15	17	32	CS
On 7" Dip NW of Sta 317											
L	6.1	6.3	7.5	7.5	6.4	5.6	5.8	7.0	7.3	5.6	5.1
	25	14	13	12	9	5.6	11	14	15	16	31
	7.2	7.0	7.9	6.2			5.8	7.0	5.0	4.7	
	33	19	15	8	5.6		11	15	16	31	CS
	7.5	7.3	8.0	6.7	5.6		5.8	6.9	5.4	4.7	
	32	15	14	9	5.6		11	15	16	30	CS
CS	6.3	6.1	7.8	6.0	5.6		5.8	6.7	5.1	5.3	
	31	14	13	8	5.6		12	15	18	33	
	6.6	6.4	7.4	6.2	5.6		6.0	7.3	7.7	5.9	
	34	14	13	9	5.6		12	14	17	18	L
	6.7	6.4	7.9	7.6	6.4	5.6	5.9	7.1	7.4	5.6	
	32	16	15	13	10	5.6	12	14	17	18	L
	6.2	6.0	7.6	6.1	5.6		5.8	7.7	5.5		
	31	17	15	10	5.6		12	16	18		L
CS	6.6	6.1	8.1	8.1	6.1	5.6	5.9	7.7	7.5	5.8	5.2
	26	16	14	13	9	5.6	11	14	16	17	33
		5.8	7.4	7.4	5.6	5.6	5.9	7.3	7.3	5.0	4.9
		17	15	13	10		14	16	18	20	30
L		5.9	7.4	7.3	5.9		5.9	7.6	5.2	6.0	CS
		16	15	13	10	5.6	12	17	19	33	CS
CS	5.0	5.4	7.0	6.8	5.8	5.6	5.8	7.5	7.7	6.2	6.9
	28	16	14	13	10	5.6	12	14	17	18	31
CS	5.0	5.6	6.8	6.4	6.1	5.6	6.0	7.3	7.2	7.1	5.0
	29	15	13	12	9		12	14	17	18	30
L		5.4	7.0	6.7	5.7	5.6	6.0	7.5	7.6	6.4	6.9
		15	13	11	9	5.6	13	16	18	20	35
	6.6	6.5	7.8	7.7	6.0	5.6	5.6	6.7	4.0	3.0	CS
	31	17	15	13	9		15	18	21	31	CS

326	4.4	1337.10
+25	5.6	
BM	6.40	
+58	7.1	
327	11.1	
328	14.0	
F80	15.4	
TP	9.66	

+		1332.38
Lake Level	10.7	
329		
330	12.7	
331		
332		
+41	11.2	
+60	10.6	
333	9.5	
+30	7.4	
+47	7.8	
+70	3.8	
+87	1.5	
334	1.1	
TP +22	0.25	

+		1341.63
		9.50

Soundings

32.7	
31.5	
1330.70	
30.0	
26.0	2.4 Res
23.1	0.0
21.7	3.0 6.5' 14'
1327.44	

21.7	
21.0	
21.0	
21.0	
21.2	6.0
21.8	3.0 3.0 3.0
22.9	
25.0	
24.6	
28.6	
30.9	
31.3	
1332.13	

Note: Soundings as noted figured from Lake Level

On 6" Poplar S.E. of Sta 326

Revised Pg 17-18

No Bottom

335	6.0	1341.63	35.6
+45	4.6		37.0
+80	4.8		36.8
336	5.2		36.4
+30	5.5		36.1
<del>455</del>	<del>5.7</del>		<del>35.9</del>
337	5.4		36.2
338	4.9		36.7
BM	4.11		1337.52
339	5.4		36.2
340	6.3		35.3
+75	5.5		36.1
341	5.6		36.0
342	5.3		36.3
TP	5.28		1336.35 → +55
+		1341.55	5.20
343	5.6		36.0
344	4.5		37.1
345	4.7		36.9
+63	5.4		36.2
346	5.5		36.1
+20	5.5		36.1
347	7.0		34.6
+37	7.9		33.7

Revised  
 9/17/18

4.4	4.5	6.1	5.7	5.6	5.5	5.7	6.9	6.7	6.6	5.8
34	14	11	8	5.6	4	14	18	22	30	38.25
5.4	5.6	7.0	6.1	5.4	5.9	7.3	6.8	7.2	6.6	
35	13	11	7	5.6	4	15	20	23	31	41
L	5.6	7.1	5.9	5.6	5.6	5.9	7.0	6.7	6.8	6.2
	13	11	7	5.6	4	16	20	22	31	37
5.3	5.6	7.0	5.7	5.4	5.8	7.0	6.6			
35	12	11	6	5.6	4	17	20	22	L	

On 3" Birch Map of Sta 338

5.6	5.8	7.3	5.7	5.5	5.7	6.8	6.4	6.1		
35	11	10	6	5.6	6	16	20	22	35	L
5.4	5.6	7.0	5.9	5.3	6.1	6.9	6.3			
34	11	10	5	5.6	5	16	20	23	L	
5.2	5.8	7.4	5.9	5.3	5.8	6.9	5.8	6.0		
34	11	10	5	5.6	6	17	20	23	36	
5.6	6.0	7.4	5.7	5.2	5.7	6.7	5.7	6.2		
34	11	10	6	5.6	6	16	20	23	34	
5.3	5.2	7.1	5.7	5.3	5.7	6.9	6.2			
33	10	9	5	5.6	5	17	21	23	L	
6.1	6.3	6.9	5.9	5.4	5.7	7.0	6.6	7.0	6.4	
34	12	11	7	6.6	4	15	19	22	30	37

5.2	5.8	6.9	6.0	5.1	5.6	6.4	5.3	5.3	5.0	
34	11	9	6	5.6	5	12	19	23	29	38
6.0	5.8	7.0	7.0	5.8	5.4	5.6	6.8	6.8	6.6	5.6
34	12	10	8	6	6.6	6	17	20	22	24.71
L	5.7	7.2	7.2	5.7	5.7	5.6	6.8	6.8	6.5	6.4
	12	10	8	5	5.6	7	18	20	22	24
L	6.0	7.3	7.1	5.6	5.2	5.6	6.5	6.5	6.4	5.4
	11	10	8	5	5.6	7	17	22	23	26
L	5.8	7.0	6.7	6.0	5.2	5.9	6.1	5.8	5.1	4
	12	11	9	5	5.6	6	19	22	24	33
5.8	5.4	6.9	7.2	5.8	5.3	5.4	6.2	4.8	3.9	
34	17	15	9	6	5.1	8	19	23	25	38
L	4.0	3.3	6.5	7.0	6.1	5.7	5.6	6.8	6.9	5.2
	33	30	16	9	7	5.6	5	19	22	25
5.6	3.8	6.7	7.0	6.1	5.7	5.9	7.3	7.1	6.1	5.8
33	19	17	9	7	5.6	6	19	23	25	28

		HI		Elev	Soonth. rgs
+52	8.5	1341.55		33.1	
+61	8.8			32.8	
349	10.3			31.3	
+46	12.20			29.4	
TP BM	11.75			1329.80	
+		1336.36	6.56		
349	8.4			28.0	4.0 1.0
358	9.0			27.4	1.5 4.5
351	9.2			27.2	3.5 11.0
352	9.2			27.2	4.0 7.0
+80	8.12			28.3	0.0 0.0
353	7.5			28.9	
+52	5.5			30.9	
354	3.9			32.5	
+26	3.7			33.0	
+62	2.5			33.9	
TP	2.04			1334.32	
+		1342.68	8.36		
355	8.4			34.3	
+23	7.9			34.8	
+73	6.5			36.2	
356	6.1			36.6	

L	3.4	6.4	7.0	5.6	5.4	5.9	7.0	7.0	6.4	6.4
CS	3.3	3.2	6.2	6.9	5.5	5.4	5.7	7.3	7.0	6.4
CS	3.6	4.4	6.6	6.9	5.7	5.4	5.9	7.1	7.7	6.4
CS	4.6	6.2	5.9	6.3	5.9	5.3	5.8	7.3	7.8	6.4

On Tel. Pole NW of Sta 349

L	8.7	9.0	8.7	8.0	8.8	8.6	10.1		
L	9.9	9.8	9.4	8.6	9.2	10.3	10.0		
L	10.0	9.1	9.0	8.8	9.6	10.1			
L	10.1	9.9	9.1	9.2	9.7	10.1			
L	9.2	8.5	8.1	7.9	8.5	9.5	9.7		
L	8.4	8.0	7.7	7.5	7.9	8.4	8.9		
L	5.3	5.2	6.0	6.8	5.8	5.2	5.9	6.1	4.9
L	3.3	4.1	5.2	5.5	4.2	3.6	4.2	4.7	4.5
L	2.7	3.9	5.0	4.7	3.9	3.1	3.5	4.2	3.7
L	2.3	3.4	4.0	4.2	2.8	2.3	2.6	3.6	3.9

L	8.5	8.7	9.3	9.6	8.7	8.3	8.7	9.2	8.7
L	8.6	8.5	8.4	8.8	9.2	7.8	8.2	8.6	8.3
L	6.9	6.7	7.1	7.5	7.3	6.4	6.9	7.5	7.2
L	6.3	7.0	7.4	6.1	5.9	6.5	7.1	7.0	6.2

	1342.68	
357	5.2	37.5
358	4.6	38.1
359	5.4	37.3
	5.48	1337.20
+72	5.5	37.2
361	5.1	37.6
+35	4.5	38.2
361	4.7	38.0
358		
P.C. +43.23	4.7	38.1
+50		
+60		
+70	4.8	37.9
+80		
+90	6.0	36.7
359		
+10	5.6	37.1
+20		
PT+33.4	5.3	37.4
+70	5.1	37.6
360	4.0	38.7
361	4.2	38.5
B.M	4.95	1337.70

100 CURP

Not Planted

L	5.4	5.1	6.1	6.5	5.3	4.9	5.3	5.9	5.1	5.2
L	26	16	14	11	7	5.2	6	17	20	25
L	4.8	5.2	5.6	5.7	4.6	4.3	4.8	5.6	5.3	4.8
L	27	17	14	11	7	4.1	5	17	20	24
L	5.4	6.4	5.7	5.2	5.7	6.1	5.3	5.1		
	14	15	6	5.4	6	17	19	23	41	
Top of Van Measurement										
L	5.6	7.0	6.9	5.0	5.2	5.9	6.5	6.2	4.2	
L	20	17	7	8	5.1	5	17	20	28	32
L	5.7	7.0	4.9	5.8	5.1	4.9	4.5			
L	19	17	11	6	6	6.1				
L	6.0	7.2	7.1	5.1	4.5	4.4	5.5			Old Road
L	19	17	13	6.1	4.5	5.5	2.5			
L	5.6	6.0	4.8	4.4	4.9	5.5	5.1	4.7		
L	16	11	7	4.1	5	18	21	25	35	
						5.3	4.8	5.4	5.5	5.2
						16	14	19	24	37
						5.6	5.1	5.1	4.7	4.7
						47	25	6.0	4	13
						5.9	5.1	5.1	5.6	4.8
						25	16	8	5.6	7
Top of										
						4.2	5.4	5.4	4.9	
						28	17	18	25	L
						4.0	5.8	5.0	4.8	5.4
						17	13	8	5.1	4
						5.3	4.1	4.1	4.5	6.2
						27	9	4.1	9	16
On Root of J.Pine (RP) NE of Sta 359										





Revision

See Page 9

Sundays

BM		1342.63	4.48	1338.15	
PC226+21.89	3.9			38.7	
296	3.9			38.7	
+75	5.6			37.0	
297	6.7			35.9	
+60	8.8			33.8	
298	9.9			32.7	
PT+2206	10.8			31.8	
+50	12.0			30.6	
TP	11.88			1330.75	
+		1331.22	0.47		
PC+7747	2.1			29.1	
299	3.5			27.7	
+50	6.8			24.9	
300	10.6			20.6	
+50	11.5			19.7	
301	10.6			20.6	
+50	11.4			19.8	± 25R
PT+7747	11.4			19.8	0.0 1.0'
302	11.3			19.9	0.0 4.0
+45	10.1			21.1	0.0 3.0
+65	6.9			24.3	
303	4.8			26.4	

On 10" V. Pine NE of Sta 293

L	5.8	7.1	7.1	6.1	6.3	7.2	7.3	5.9	5.8
	18	17	14	12	5.6	12	14	16	17
	5.4	5.7	6.5	7.7	7.6	6.2	6.3	7.2	7.3
CS	23	19	16	14	11	5.6	16	19	20
L	4.2	6.6	6.7	6.1	5.2	6.8	6.9	6.7	4.5
	12	9	7	6	5.6	8	24	26	29
L	3.1	3.4	6.3	5.8		4.9	5.8	6.5	6.8
	28	11	6	3	5.6	9	25	29	32
	1.5	17	16	6.1	5.6	4.9	5.3	4.6	4.9
L	26	18	12	8	4	9	20	21	23
	0.5	0.8	4.6	4.7	6.4	5.9	5.4	5.8	5.7
L	34	20	13	11	9	8	5.6	4	16
	2.0	2.2	5.5	6.0	8.0	8.1	7.6	7.9	7.5
L	28	22	19	16	13	12	9	13	15
	1.4	2.2	5.4	5.9	8.8	8.9	8.4	9.1	8.7
L	39	24	23	20	16	15	13	10	17
	1.4	3.5	9.4	9.4	9.1	8.7	9.5	14.2	15.8
CS	42	26	19	16	13	8.7	8	15	24
	0.6	3.0	7.5	7.1		7.8	8.0	14.4	13.4
CS	42	28	22	5	7.3	4	9	12	26
	4.5	5.0	4.2	4.7	4.4	7.4	9.1	10.2	
CS	45	35	22	20	11	5.6	3	14	28
L	39	32	2.9	3.6	4.7	6.3	6.5	7.6	
	31	29	17	9	5.6	7	16	35	Edge of Lake
	2.9	2.3	3.1	3.9	5.1	6.2	6.7		
	37	25	16	14	5	5.6	12	36	" " "
	4.0	3.3	4.1	6.6		6.3	7.0	7.4	
	42	33	22	17	5.6	2	19	41	" " "
	2.7	3.5	4.9		6.1	6.6			
	37	26	22	5.6	15	37	49	" " "	" " "
	3.1	2.7	3.6	5.1		6.2	6.4		
	39	30	20	16	5.6	19	39	54	" " "
	3.0	2.5	3.3	4.9		5.8	6.3		
	37	25	16	11	5.6	17	35	52	" " "
	3.5		2.6	3.3		6.3	6.5	7.2	
	26		13	3	5.6	6	26	39	65
	6.4	6.2	6.0	5.2		5.9	8.7	9.3	9.3
	29	25	22	9	5.6	3	9	22	37
	0.9	3.3	4.1	6.3		6.1	8.2	9.4	
	42	28	20	16	5.6	13	20	27	CS

Revision

PC+35.86	2.9	1331.22		28.3
+50	2.3			28.9
+80	0.6			30.6
TP	0.42			1330.80
+		1342.23	11.43	
304	10.6			31.6
+50	7.7			34.5
305	6.2			36.0
PT+44.19	3.7			36.5
306+20.5	4.7			37.5
BM	3.37			1338.86 (1338.88)

BM		1337.39	6.69	1330.70
PC325+03	1.9			35.5
+50	2.8			34.6
326	5.7			31.7
+50	8.0			29.4
327	8.7			28.7
+50	9.2			28.2
+70	10.6			26.8
PT328+05.6	11.3			26.1
329	12.7			24.7
TP	10.07			1327.32
+		1329.51	2.19	

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CS	11.7	2.3	7.4	7.8	7.2	6.3	6.7	6.2	6.6	7.1
L	29	16	9	7	5	6.9	9	20	21	30
L	3.0	3.5	9.1	9.2	8.7	8.6	7.8	7.7	8.7	8.9
L	23	13	7	3	2	0.6	8	22	31	43
L	1.8	2.0	6.7	6.1			5.3	5.5	7.0	1.7
L	20	8	3	1	6.1		15	27	33	43

L	2.4	2.3	6.1		4.8	5.2	6.2	6.2	1.8
L	23	9	5	5.6	10	25	29	31	36
L	4.4	4.5	7.5	6.0	5.2	5.6	7.4	5.1	5.2
L	27	13	9	6	5.6	7	17	21	23
L	5.6	7.5	6.2		6.1	7.2	7.4	5.8	
L	16	13	10	5.6	11	14	17	19	
L	5.5	5.7	7.3	7.3	6.2	6.3	7.4	6.0	6.2
L	28	16	15	13	10.5	6	11	14	17

On T "SARNE" of Sta 307.

On 6" Poplar SE. of Sta 326

CS	6.5	6.1	8.0	6.2	5.4	5.6	6.3	3.6	3.1
L	34	17	14	9	5.6	8	15	18	21
CS	6.2	5.9	7.6	5.9	5.3	5.9	6.6	3.1	2.3
L	25	14	11	6	5.6	7	20	23	27
CS	6.3	5.7	4.8	6.3	6.3	6.0	4.6	4.7	5.9
L	36	25	8	5	3	5.7	3	14	25
CS	7.8	7.8	7.8	8.4	8.4	7.8	7.1	7.3	8.4
L	24	19	3	2	1	8.0	16	24	29
CS	9.4	6.1	10.2	10.6	9.2	9.4	8.7	9.2	11.8
L	34	25	19	15	11	9	8.7	12	16
CS	8.3	10.2	11.0	9.2	9.4	8.7	10.4	11.0	12.0
L	40	33	31	23	21	11	9.2	4	15
CS	10.4	10.6	11.3	9.3	9.6	9.0	9.7		11.1
L	41	36	35	25	24	14	5	10.6	6
CS	11.3	9.6	9.9	9.4	10.7	11.2		12.7	13.6
L	38	29	27	20	6	2	11.3	21	40
CS	11.8	10.7	11.6	10.1	10.7	11.7		12.8	13.6
L	37	34	32	22	14	9	12.7	19	34

PC 329+7.11	4.9	1329.57	24.6
330	4.6		24.9
+50	4.8		24.7
331	5.8		23.7
+50	6.1		23.4
332	7.3		22.2
+50	7.8		21.7
333	7.6		21.9
PT+29.44	7.3		22.2
PC+60.07	6.4		23.1
+85	5.1		24.4
334	3.6		26.0
TP	0.74		1328.77
+		1340.81	12.04
+50	13.3		27.5
+80	7.3		33.5
335	9.7		31.1
+50	7.6		33.2
336	4.5		36.3
PT+40.07	3.7		37.1
335+30	4.0		36.8
TP <sup>336</sup>	4.4		36.4
+		1341.27	4.81
BM	3.64		1337.63
			1337.52

0.0 3.0  
 2.0 2.0  
 4.0 5.0 11.5  
 2.5 0.0 2.5  
 14.0 2.0 20.0  
 2.5 0.0 2.5  
 11.0 14.0 21.0  
 2.5 0.0 2.5  
 4.0 7.0 8.0  
 2.5 0.0 2.5  
 2.0  
 2.5

7.10	5.1	7.6	7.1	2.8	4.2	5.3	6.2
48	4.4	38	26	17	12	4.9	1.8
3.5	2.5	1.7	2.7	3.9		5.1	6.2
48	4.1	30	21	17	4.6	1.8	4.2
	2.2	1.8	2.5	7.8	4.3	5.8	6.4
	5.4	4.1	3.2	2.7	1.4	4.8	2.3
2.5	2.4	3.5	4.1	4.4	4.6	6.3	6.9
73	6.1	5.2	4.8	4.0	2.1	5.9	1.4
	4.2	5.0	5.1	5.7			4.9
	6.5	6.1	4.0	1.7	6.1		1.4
	5.1	5.4	6.4	7.0		7.6	7.7
	7.0	6.5	4.0	1.5	7.3	2.4	3.7
	6.8	6.8	7.5				7.7
	6.0	3.4	2.2	7.8			2.4
	5.5	6.5	7.3		7.8		
	5.0	4.6	1.6	7.6	1.9		
	5.1	6.1	6.7		7.5		
	3.5	3.2	1.2	7.3	2.4		
5.1	4.9	4.1	4.7	5.9	6.8	7.7	
4.0	3.8	2.7	1.7	1.2	6.7	2.0	4.5
4.8	4.2	3.5	3.9	4.8	5.1	6.0	6.9
2.8	2.5	1.5	2	2	5.1	1.2	3.3
4.4	4.3	3.6	2.1		3.4	5.3	6.3
3.2	2.0	1.8	9	3.5	3.5	1.6	4.0

CS	9.9	14.5	14.5	13.8	12.6	12.3	13.9	15.8
	2.5	2.7	1.9	2.3	1.2	3.0	3.5	4.9
CS	5.6	6.6	7.3	12.0	12.0	11.2	10.0	11.9
	4.7	4.9	4.9	4	7	12	37	4.7
CS	3.7	2.5	4	9.7	11.3	11.3	9.8	8.7
	4.5	3.0	6.3	8.5	8.8	7.6	6.8	6.4
CS	3.6	1.7	1.1	8	5	7.6	3	1.3
	2.8	2.4	6.6	7.5	4.6	5.1	6.1	4.0
	4.6	2.8	2.4	1.6	5	4.4	1.7	2.2
	2.9	2.4	6.7	4.1	3.7	4.4	5.9	4.0
	4.4	2.0	1.6	4	3.7	1.5	2.1	3.8
	3.0	2.6	4.9	4.2	3.9	4.5	6.0	5.3
	4.8	1.5	1.1	6	4.0	5	1.5	2.0

On 3" Birch No of Sta 338  
Turn to Page 12

SAR#7 Job# 2901

## Slope Stakes

Sta	-	H.I.	+	Elev.
BM		1341.95	4.43	1337.52
338	5.2			36.3 37.0
339	5.8			36.2 37.0
340	6.7			35.3 37.0
+76	5.9			36.1 37.0
341	6.0			36.0 37.0
342	5.8			36.2 37.0
TP	5.78			1336.17
+		1340.41	4.24	
343	4.5			35.9 37.0
344	3.5			36.9 37.0
345	3.5			36.9 36.1
+63	4.2			36.2 35.2
346	4.4			36.0 35.0
+20	4.4			36.0 34.8
347	5.9			34.5 33.6
+37	6.8			33.6 32.8
+52	7.4			33.0 32.4
+61	7.7			32.7 32.2
348	9.2			31.2 31.3
TP	9.21			1331.20
+		1332.80	1.60	

5-17-20  
Clear & WarmParty { Tawaman Asst. Engr. 20  
F Shepard Rod  
Preston Siltman Chain

L	R
On 3" Birch Not Sta 338	
DC 1.9	DC 0.4
22.9	20.6
-4.2	-1.2
DC 1.8	13.8
21.5	-2.0
-0.8	15.0
DC 0.3	
20.5	
-1.7	
-0.9	
DC 0.9	DC 0.0
21.4	20.0
-1.0	DC 0.0
DC 1.5	20.0
22.3	20.0
-0.8	
DC 1.2	DC 0.0
21.3	20.0
-1.1	
DC 1.6	DC 0.6
22.4	20.9
-0.1	DC 1.4
RP 33'	22.1
23.9	
+0.8	
+1.0	
+1.0	+0.6
+1.0	23.9
+1.2	1
+0.9	DC 1.5
+0.9	22.3
+0.8	
+0.6	DC 1.0
+0.6	21.5
+0.5	
RP 33'	DC 0.5
+1.3	20.8
25.0	
-0.1	

		H.I.			
		1332.80			
+46	3.5			29.3	30.3
349	5.0			27.8	29.6
BM	3.11	1332.91		13 29.69 13 29.80	
350	5.4			27.5	29.0
351	5.5			27.4	29.0
352	5.6			27.3	29.0
+80	4.5			28.4	29.4
353	3.9			29.0	29.6
+52	1.9			31.0	30.4
TP	1.88			1331.03	
+		1341.56	10.53		
354	9.0			32.6	31.5
+26	8.4			33.2	32.1
+62	7.6			34.0	32.9
355	7.1			34.5	33.8
+23	6.7			34.9	34.3
+73	5.2			36.4	35.2
356	4.8			36.8	35.7
357	3.9			37.7	37.1
358	3.3			38.3	38.0
TP	32.9			1338.27	
+		1342.80	4.53		
359	5.3			37.5	38.1

DC1.1		-1.2
21.7	-1.0	13.8
-2.5		-2.1
15.8	-1.8	15.2
On Telpole NW of Sta 3+9		
-2.5	P18' x 32'	-1.9
15.8	-1.5	14.9
-2.6		-2.0
15.9	-1.6	15.0
-2.69		-2.8
15.9	-1.7	15.0
-2.4		-1.3
15.6	-1.0	14.0
DC0.3		DC0.8
20.5	-0.6	21.2
+1.0		+0.1
24.5	+0.6	23.2
RP33'		
+1.7		+0.5
25.6	+1.1	23.8
+1.6		1
25.4	+1.1	+0.0
+0.6		23.0
23.9	+0.7	+0.1
	+0.6	23.2
	+1.2	
+0.7		+0.1
24.1	+1.1	23.2
+0.2		+0.0
23.3	+0.6	23.0
DC1.9		RP33'
22.9	+0.3	
DC1.4		DC1.0
22.1	-0.6	21.5

		1342.80		
BM	5.03	1342.73	1337.77	
+72	5.5		1337.0	
360	5.2		37.2	38.2
+35	4.5		37.5	38.2
361	4.7		38.2	38.2
			38.0	
Pc 357+04	5.1		37.6	37.1
+50	4.5		38.2	37.7
358	5.3		37.4	38.1
+50	4.9		37.8	38.1
359	5.2		37.5	38.3
+50	4.7		38.0	38.4
360	4.2		38.5	38.6
PT+134X	4.3		38.4	

On Root of J. Pine NE of Sta 459

RP33'	DC11	-1.0
	21.7	-0.7
	DC0.6	0.0
	20.9	

	SE-	+0.6	SE+0.3	+0.5	RP33'
		-0.6	SE+0.5	23.8	
				+0.2	"
DC0.8				23.3	
21.2	SE-1.0	-0.3	" +1.0	+0.4	"
-2.5				23.6	
15.8	" "	-0.8	" "	+0.0	"
				23.0	
	" -0.5	-0.4	" +0.5	DC1.7	"
				22.6	
		-0.1		DC0.7	"
				21.1	

BM		1337.30	6.60	1330.70	
324	4.2			33.1	33.1
PC+22.54	3.2			34.1	33.6
+50	1.9			35.4	33.1
325	1.9			35.4	32.3
+50	4.3			33.0	31.5
326	4.8			32.6	30.7
+50	8.4			28.9	30.0
+75	10.3			27.0	29.6
327	10.7			26.6	29.2
+50	9.4			27.9	28.4
PT+70.45	9.3			28.0	28.1
328	9.5			27.8	27.5
329	10.5			26.8	26.4
TP	10.46			1326.84	
+		1330.66	3.78		
PC+66.0	3.8			26.9	26.4
+50	4.6			26.1	26.1
330	5.6			25.1	26.0
+50	6.2			24.5	26.0
331	7.2			23.5	26.0
+50	8.0			22.7	26.0
332	8.5			22.2	26.0
+50	8.9			21.8	26.0

5-30-20 Party } Taubman - Asst. Engr. 23  
 Weather - Clear & Warm } 6. Townsend - Rod  
 Russel Tyrrell - Chain

On 6" Poplar SE of Sta 326

	DC1.3			DC0.4	
	22.0			20.6	
	+0.4 5.7 7.4 5.6 5.9			5.8 7.4 5.2	+0.8
PP	23.6 16.13 9.7	SE+0.2	+0.5	SE-0.2	13 18 20 24.2
40	+2.0 6.0 7.7 5.6 5.9			5.9 7.0 4.3	+3.3
"	26.0 15.14 8.6	SE+0.4	+2.3	"-0.4	15 19 21 28.0
"	+2.8 5.8 7.6 5.7			8.2 5.5 5.9 3.4	+5.3
"	27.2 12.9 4		+3.1	"	9 20 23 25 31.0
"	+2.5 4.0 5.9			3.9 3.7	+2.5
"	26.8 4.1		+1.5	"	5 16 26.8
"	DC1.8 7.6 6.7			5.4 6.9 5.6	+1.7
"	22.7 21 14		+1.8	"	6 10 17 25.6
"	DC0.3 6.6 5.5			5.0 5.8 5.0	DC1.1
"	20.5 21 5		-1.1	"	12 14 18 21.7
"	DC1.6 3.6 2.5 5.0 5.0			4.0 4.0 3.4	DC1.1
"	22.4 14 7 5 1		-2.6	"	7 9 13 21.7
"	+1.4 4.3 6.2 6.7 2.5 4			5.0 5.6 5.4 6.0	DC1.1
"	25.1 19 17 13 11 2		-0.5	"	9 18 20 23 21.7
"	+1.2 5.6 6.7 6 5.5 5.8			5.3 6.8 7.2	DC0.2
"	24.8 24 18 14 5 3	+0.2	-0.1	-0.2	7 15 20 20.3
"	+1.4 4.7 6.6 7.3 6.6 5.8			5.7 6.3 7.4	DC0.5
"	24.8 25 21 17 12		+0.3	7 14 21	20.8
			+0.4		
			5.3	4.9 4.9 3.9 3.4	
			5	-2.6 5 11 13 22	
	DC1.7 5.2 5.6 5.1			5.6 6.8 7.4	DC0.1
	22.6 18 16 5	+0.3		4 7 13 20.2	RP40
	+0.3 4.2 4.7			6.3	DC1.3
	23.5 14 4.3	SE-0.7	0.0	SE+0.7	3 22.0
	+1.0 3.5 4.7				
	24.5 16 13		-0.9		DC1.2
	DC0.6				21.8
	20.9		-1.5		DC0.5
	DC0.0				20.8
	22.0		-2.5		-2.3
	-3.0				17.5
	18.5		-3.3		-2.8
	-4.1				18.2
RP40	20.2		-3.8		-3.3
RP40	-4.9				19.0
	21.4		-4.2		-3.5
					19.5



333	8.7	1330.66	22.0	26.2
PT+43.1	7.6		23.1	26.6
334	4.7		26.0	27.7
PC+26.67	5.6		25.1	28.6
TP	4.55		1326.11	
+		1337.92	11.81	
+60	11.6		26.3	29.3
+80	5.1		32.8	29.9
335	2.7		35.2	30.5
+40	0.4		37.5	
TP	3.41		1334.51	
+		1341.26	6.75	
+50	6.0		35.3	31.9
+75	8.7		32.6	
336	6.1		35.2	33.1
+50	4.3		37.0	34.0
PT337+02.2	5.0		36.3	34.9
336+30	5.2		36.1	35.1
+50	5.4		35.9	35.5
337	4.9		36.4	36.2
BM	3.67		1337.59	
			1337.52	

R 24

L H1 = 5.6

RP40'	-4.2	20.3	SE-0.7	-4.2	14'	SE+0.7	-3.5	19.3
	-2.5	17.8	-3.5	14'	-4.0	20.0	RP40'	
	-2.9	16.4	-1.7		-1.8	14.7		
RP33'	-3.3	17.0	-3.5	5.1	4.5	4.1	-2.0	15.8
				3	5	19		
RP33'	+3.0	1.6	5.4			6.4	10.1	DC0.0
33'	27.5	18	10	SE+0.6	-3.0	SE-0.6	14	20
	+5.7							20.0
RP40'	31.6		11	+2.9				20.0
	+5.9					5.7	11.7	DC0.2
	31.9		11	+4.7		11	19	20.3
RP40'	+5.5	3.1				9.0	7.0	+1.5
	31.3	4	11	+3.4		7	16	25.3
RP40'	+5.8	2.7	5.7			4.7	5.1	+2.0
	31.7	19	9	3		3	25	26.0
RP33'	+4.6	4.9	6.6	0		6.2		+0.4
	29.9	17	12	5	11	17		23.6
RP33'	+2.8	5.0	7.0	5.7		5.7	1.1	DC1.6
	27.2	13	10	7	11	15	19	22.4
	+0.1							
	23.2							DC1.4
	+0.0							22.1
	23.0							DC0.9
								21.4

On 3" Birch No of Sta 338



+ 32	7.5	1340.75		33.3	35.5
320	5.3			35.5	35.5
+ 64	3.8			37.0	35.5
321	4.0			36.8	35.5
TP	3.97			1336.78	
7		1345.67	3.79		
322	5.2			35.4	35.5
+ 47	5.7			34.9	35.4
323	7.4			33.2	35.1
+ 52	8.3			32.3	34.6
324	7.5			33.1	33.9
B.M.	9.97			1330.60	
				1336.70	
B.M.		1343.39	5.24	1338.15	
B+2089	4.6			33.8	33.0
296	4.6			33.8	33.0
+ 75	6.3			37.1	36.1
297	7.2			26.2	35.3
+ 60	9.5			33.9	33.0
TP	12.03			1331.36	
+		1334.26	2.90		
298	1.5			32.8	31.5
PT+2256	2.3			32.0	31.6

	-3.7		000.2
	17.6	-2.2	20.3
	001.5		+0.3
	22.3	0.0	230 FFP 12" (24)
	+0.8		+1.5
	24.2	+1.5	25.3
	+0.5		+1.6
	23.8	+1.3	26.4
	001.5		001.9
	22.3	-0.1	22.9
	001.4		001.3
	22.1	-0.5	22.0
	000.5		-3.7
	20.8	-1.9	17.6
	-3.5		-4.6
	17.3	-2.3	15.8
On 6" Poplar SE of Sta 326			
On 10" S. Pine NE of Sta 293			
	SE+0.4	+0.8	SE-0.4
RP40'	+1.2		+0.0
	24.8	"	23.0
	"	+0.8	"
	"	+1.0	"
RP40'	3.3	"	+0.8
	28.0	"	24.2
	+5.2	"	+0.8
	30.8	"	24.2 RP40'
RP40'	+6.6		001.3
	32.9	"	22.0
RP40'	+6.8		000.1
	33.2	"	20.2

	133924				
+58	3.6		30.7	29.6	
PT+7747	5.2		29.1	28.6	
299	6.5		27.8	27.8	
+58	9.9		27.4	26.1	
300	13.8		20.7	24.9	
+50	14.5		19.8	24.2	
301	13.8		20.7	24.0	
+50	14.4		19.9	24.2	
PT+7747	14.6		19.7	24.5	
302	14.5		19.8	24.8	
+45	13.4		20.9	25.6	
+65	10.0		24.3	26.2	
TP	10.08		1324.18		
+		1335.49	11.26		
303	9.1		26.3	27.2	
PT+3686	7.3		28.1	28.4	
+58	6.5		28.9	28.8	
+80	5.0		30.4	29.8	
304	4.0		31.9	30.4	
+50	1.0		34.4	32.0	
TP	0.45		1334.49		
+		1342.22	7.23		
305	6.2		36.0	33.6	

	+7.0	+1.1		
RP40'	33.5	+0.5	14'	-6.7
RP40'	21.8	SE-0.8	14'	24.1
RP40'	18.0	"	14'	-4.2
RP40'	17.6	"	14'	20.3
RP40'	-2.4	"	14'	-5.5
RP40'	17.6	"	14'	22.3
RP40'	-2.5	"	14'	-4.8
RP40'	17.8	"	14'	21.2
RP45'	-3.5	"	14'	-4.4
RP45'	19.3	"	14'	20.6
RP45'	-4.3	"	14'	-3.8
RP45'	20.5	"	14'	19.7
RP45'	-3.4	"	14'	-4.2
RP45'	19.1	"	14'	20.3
RP45'	-2.7	"	14'	-4.6
RP45'	16.1	"	14'	20.9
RP45'	000.0	"	14'	-5.4
RP45'	20.0	"	14'	22.1
RP45'	+1.4	"	14'	-1.4
RP45'	25.1	"	14'	14.1
RP45'	+8.1	"	14'	22.4
RP45'	32.2	SE+0.6	14'	23.6
RP45'	+6.1	"	14'	+0.4
RP45'	32.2	"	14'	23.6
RP45'	+	"	14'	+
RP45'	+5.1	"	14'	+1.0
RP45'	30.7	"	14'	24.5
RP45'	+4.2	"	14'	+2.6
RP45'	29.3	"	14'	26.9
RP45'	+	"	14'	+
RP45'	+2.8	"	14'	+1.7
RP45'	27.2	"	14'	25.6

134222  
 PT+44.19 5.8  
 306 4.9  
 +20.5 4.7  
 BM 3.38

BM 1339.95 2.00  
 278 1.8  
 279 1.8  
 280 2.5  
 +33 3.3  
 +82 5.8  
 281 6.9  
 +49 10.0  
 +68 11.4  
 TP 12.44  
 + 1327.24 0.23  
 282 1.2  
 +40 3.0  
 283 4.1  
 +60 4.4  
 284 5.2  
 +25 5.5  
 295 5.3

36.4 34.8  
 37.3 36.8  
 37.5  
 1339.94  
 1339.98

1337.95  
 37.7 37.7  
 37.7 36.9  
 37.0 35.2  
 36.2 34.4  
 33.7 33.1  
 32.6 32.5  
 29.5 30.9  
 28.1 30.2  
 1327.01  
 26.0 29.0  
 24.2 27.6  
 23.1 26.0  
 22.8 25.3  
 22.0 25.0  
 21.7 25.0  
 21.9 25.1

7-17-28

28

+2.1  
 26.2 SE+0.5 +1.6 SE-0.5 +0.6 RP40  
 +0.5  
 23.8 +0.6 +0.2  
 23.3

RP40'

On 7" Oak NE of Sta 307

On 14" S. Pine (RP) in Root SE of 295

201.5  
 22.3 0.0 DC 1.2 0.0 RP35'  
 +0.6  
 23.9 +0.8 +0.2  
 23.3  
 +2.3  
 26.5  
 1  
 +3.6 +1.3 +4.0  
 28.4 +0.6 29.0  
 +2.2 +5.0  
 26.3 +0.1 30.5  
 -8.9 14' +4.3  
 27.4 -1.4 29.6  
 14' +3.1  
 27.7  
 -7.7 14' -4.6  
 25.6 -3.0 18.9  
 -6.2 14' 14' -6.0  
 23.3 -3.4 23.0  
 -9.7 -4.9  
 19.1 -2.9 18.4  
 -4.1 -4.1  
 18.2 18.2  
 -4.0 -2.5 -3.7  
 18.0 -3.0 17.6  
 -4.6 -3.3 -4.6  
 18.9 -3.2 18.9

+25	4.8	1327.29	22.4	25.3
286	0.2		27.0	26.1
TP	0.35		1326.89	
+		1337.93	11.04	
+37	86		29.3	26.7
+57	7.5		30.4	27.1
+73	6.8		31.1	27.5
287	6.0		31.9	28.0
+77	5.2		32.7	29.5
288	5.4		32.5	30.0
+30	5.9		32.0	30.6
+75	6.9		31.0	31.5
289	7.2		30.7	32.0
+35	6.8		31.1	32.7
+73	5.5		32.4	33.5
290	4.3		33.6	34.0
+65	1.4		36.5	35.3
291	0.8		37.1	36.0
TP	1.11		1326.82	
+		1343.14	6.32	
292	5.0		38.1	37.6
293	5.0		38.1	38.2
BM	4.85	1343.00	1329.89	1325.15

RP40'	-2.7	-2.9	-2.3
	16.1	+0.9	15.5
	+0.2		+4.6
	23.3	+2.6	29.9
		+3.3	
	+8.4		+9.9
	35.6	+3.6	37.9
	+9.3		+9.7
	37.0	+3.9	37.6
	+7.8		+7.8
	34.7	+3.2	34.7
	+6.8		+7.1
	33.2	+2.5	33.7
	+2.8		+3.5
	27.2	+1.4	28.3
		-0.5	
	-6.3	14'	-6.2
	23.5	-1.3	23.3
	-5.3	14'	-6.2
	22.0	-1.6	23.3
		-1.1	
	+0.7		1100.6
	24.1	-0.4	20.9
	+1.9		+1.1
	25.9	+1.2	26.3
RP40'	+1.1		+1.4
	24.7	+1.1	25.1
	+0.1		+0.0
	23.2	+0.5	23.0
	001.9		001.5
	22.9	-0.1	22.3

On 10" V.P. E of Sta 293

294 4.8  
295 4.2  
PC+20.89 4.3

1343.00

38.2 38.5  
38.8 38.7  
38.7 38.7

DC 1.4  
22.1 -0.3  
DC 1.7  
22.6 +0.1  
+0.4  
R.P.40' 23.6 SE +0.4 0.0

30  
AC 1.5  
22.3  
DC 1.7  
22.6  
DC 1.3  
SE -0.4 22.0

# Finish Stake

BM		1336.77	6.07	1330.70
PC+22.54	3.2			
+50	3.7			
325	4.5			
+50	5.3			
326	6.1			
+50	6.8			
327	7.6			
PT+70.45	8.7			
328	9.3			
PC329405	18.4			
TP	10.42			
+		1330.16	3.81	1326.35
+50	4.1			
330	4.2			
+50	4.2			
331	4.2			
+50	4.2			
332	4.2			
+50	4.2			
333	4.0			
PT+43.1	3.6			

33.6
33.1
32.3
31.5
30.7
30.0
29.2
28.1
27.5
26.4
26.1
26.0
26.0
26.0
26.0
26.0
26.0
26.0
26.2
26.6

SE+0.2
" 0.4
" "
" "
" "
" "
" "
" "
" "
" "
SE-0.7
SE+0.7



TP	11.8	1330.16		1328.98
+		1338.13	9.15	
334	10.5			27.6
Pc+26.67	10.2			27.9
+60	9.7			28.4
335	9.1			29.0
+50	7.9			30.2
336	6.7			31.4
+60	5.5			32.6
337+022	4.3			33.8
TP	4.58			1333.55
+		1341.91	8.36	
336+50	6.5			35.4
337	5.7			36.2
338	4.9			37.0
BM	4.30	1341.82		1337.61 1337.52
339	4.8			37.0
340	4.8			37.0
341	4.8			37.0
342	4.8			37.0
TP	4.81			1337.01
+		134682	3.81	
343	3.5			37.0
344	3.8			37.0

8-27-28 AP. Taubman - Instr 32  
G. Townsend Rod  
Mike Kleich Chair

SE+0.6	SE-0.6
"	"
"	"
"	"
"	"
"	"
"	"
"	"
"	"

On N Hub at PT.

On 3" Birch N. of Sta 338

		1340.82		
345	4.7			36.1
346	5.8			35.0
347	7.2			33.6
348	9.5			31.3
TP	9.54		1331.28	
+		1333.51	2.23	
349	3.9			29.6
B M	3.72	1333.52	1329.79	
			1329.80	
350	4.5			29.0
351	4.5			29.0
352	4.5			29.0
353	3.9			29.6
354	2.0			31.5
TP	2.02		1331.50	
+		1342.83	11.33	
355	9.0			33.8
356	7.1			35.7
357	5.7			37.1
358	4.8			38.0
359	4.7			38.1
360	4.6			38.2
		On Curve		
357+60	5.1			37.7
358	4.8			38.0
+ 50	4.7			38.1

On Tel Pole N. W. of Sta 349

SE -

SE + 0.3

+ 0.5

+ 1.0

-1.0

359 4.5  
+50 4.4  
BM 5.03

BM  
307 5.0  
308 4.9  
309 4.9  
310 4.9  
311 4.9  
TP 4.89

+  
312 3.7  
313 4.2  
314 4.7  
315 5.2  
316 5.5  
317 6.2  
318 6.2  
TP 6.23

+  
319 5.1  
320 5.1  
321 5.1

1342.83

1342.89 4.07

1341.69 3.69

1340.59 5.13

1337.81  
1337.70

1338.88

1338.00

1335.46

38.7  
38.4

37.9  
38.0  
38.0  
38.0  
38.0

38.0  
37.5  
37.0  
36.5  
36.2  
35.5  
35.5

35.5  
35.5  
35.5

8-28-28

SE-1.0 SE+1.0  
"-1.5 "+0.5

On T"Oak NE of Sta 307

		1340.59			
322	5.1				35.5
323	5.5				35.1
324	6.7				33.9
BM					
		1343.91	57.6	1338.15	
PC+20.89	5.2				32.7
296	5.9				32.0
297	8.6				35.3
+66	10.9				33.0
TP	11.27			1332.64	
+		1335.70	3.06		
298	4.2				31.5
PT+22.66	5.1				30.6
PC+77.47	7.1				28.6
299	7.9				27.8
+58	9.6				26.1
300	10.8				24.9
+50	11.5				24.2
301	11.7				24.0
PT+77.47	11.2				24.5
302	10.9				24.8
303	8.5				27.2
TP	8.50			1327.20	
+		1339.52	12.32		

On 10" V. Pine NE of Sta 293

SE +0.4

SE -0.4

"

"

"

"

"

"

"

"

SE -0.4

SE +0.4

" 0.8

" 0.8

"

"

"

"

"

"

" 0.4

" +0.4

1339.52

PC+35.86	11.1
304	9.1
+50	7.5
305	5.9
PT+44.19	4.7
306	2.7
307	1.6

28.4
30.4
32.0
33.6
34.8
36.8
37.9

SE+05

SE-X0

"

"

"

"

"

"

"

"

BM

1338.81

1.36

1337.45

279	1.9
280	3.6
281	6.3
282	9.8
TP	9.81

36.9
35.2
32.5
29.0

Dn. 1.4" J. Pine

SE of Sta 280

14'

+	
283	8.6
284	9.6
285	9.5
286	8.5
287	6.6
288	4.6
289	2.6

1334.51

5.57

1329.00

26.0
25.0
25.1
26.1
28.0
30.0
32.0

290 0.6 1339.57

TP 0.60

+

291 7.4

292 5.8

293 5.2

294 4.9

BM 5.23

1343.44 9.47

1333.97

34.0

36.0

37.6

38.2

38.5

1338.21  
1338.15

Re-X-Sec. Notes

BM		1337.57
PC26.67	11.6	29.2
+60	11.1	28.7
335	10.3	29.5
+50	9.4	30.4
336	8.3	31.5
+50	7.0	32.8
PT337+02.2	5.8	34.0
336+55	4.8	35.0
337	3.7	36.1
338	2.8	37.0

Twp Road Approaches

- 0+00
- 0+40
- 0+60

South Side

- 0+00
- 0+37
- 0+47

H.I. = 5.6

5.7	5.4	8.4	8.9	7.6
12	13	22	28.8	33.5
1.6	7.6	7.5	5.7	5.1
29.3	22	16	12	20
40.8	8.0	7.8	6.2	5.1
30.0	21	16	12	11.2
+0.6	7.9	7.9	5.9	5.1
32.6	23	18	12	12
+1.0	7.8	7.9	6.1	5.3
32.0	21.5	18	12	12
0.2	7.8	7.7	6.0	5.4
29.8	22	17	12	11
3.1	7.6	7.7	5.8	5.5
27.5	21	17.8	12	11
5.4	7.7	7.6	5.8	5.2
3.6	20.7	16	12	12
5.3	7.6	7.5	5.6	5.4
22.2	20	17	12	12
8.3	6.4	6.8	5.5	6.2
3	6	28	31	34
6.5	6.3	5.6	5.3	5.6
1	3	6	12	18
				21
				24
8.3	6.9	7.0	8.4	5.1
3	6	30	34	38
6.0	5.3	5.5	5.5	5.9
1	8	12	17	23
				26

8.3	6.4	6.8	5.5	6.2
3	6	28	31	34
6.5	6.3	5.6	5.3	5.6
1	3	6	12	18
				21
				24

8.3	6.9	7.0	8.4	5.1
3	6	30	34	38
6.0	5.3	5.5	5.5	5.9
1	8	12	17	23
				26

Re-X-sec Notes

BM

286+37	14.1
+57	13.9
+73	13.8
287	13.2
+77	11.6
288	11.0
+30	10.4

1341.26 3.11

1328.15

27.2	26.7
27.4	27.1
27.5	27.5
28.1	28.0
29.7	29.5
30.3	30.0
30.9	30.6

Planned  
Grade

9-25-28

39

On 10" V. Pipe E of Sta 293

5.9	8.0	8.0	5.6	7.3	7.5	2.0		
23.0	19	16	12	18	21	29.8		
9.4	15.9	15.9	13.7	15.4	15.3	5.8		
31.5	20	17	12	13.9	18.5	22	35.6	
5.3	15.6	16.7	13.8	13.8	15.8	15.2	4.2	
36.0	20	17	12	13.8	12	18.5	22	38.4
4.3	16.3	15.2	13.2	13.2	13.2	14.7	14.8	4.0
38.2	20	17	12	13.2	12	17.7	21.4	37.2
4.3	13.6	13.6	11.6	11.6	13.2	13.6	4.3	
35.7	21.6	18	13	11.6	13	18	3.4	34.1
4.8	11.5	13.4	11.0	11.0	11.0	13.0	13.0	4.5
33.2	25	20.5	13	11.0	12.5	17.4	21.4	34.0
8.8	12.7	12.6	10.4	10.4	10.3	12.4	12.4	7.5
27.7	22	20	13	10.4	12	17	21	29.0

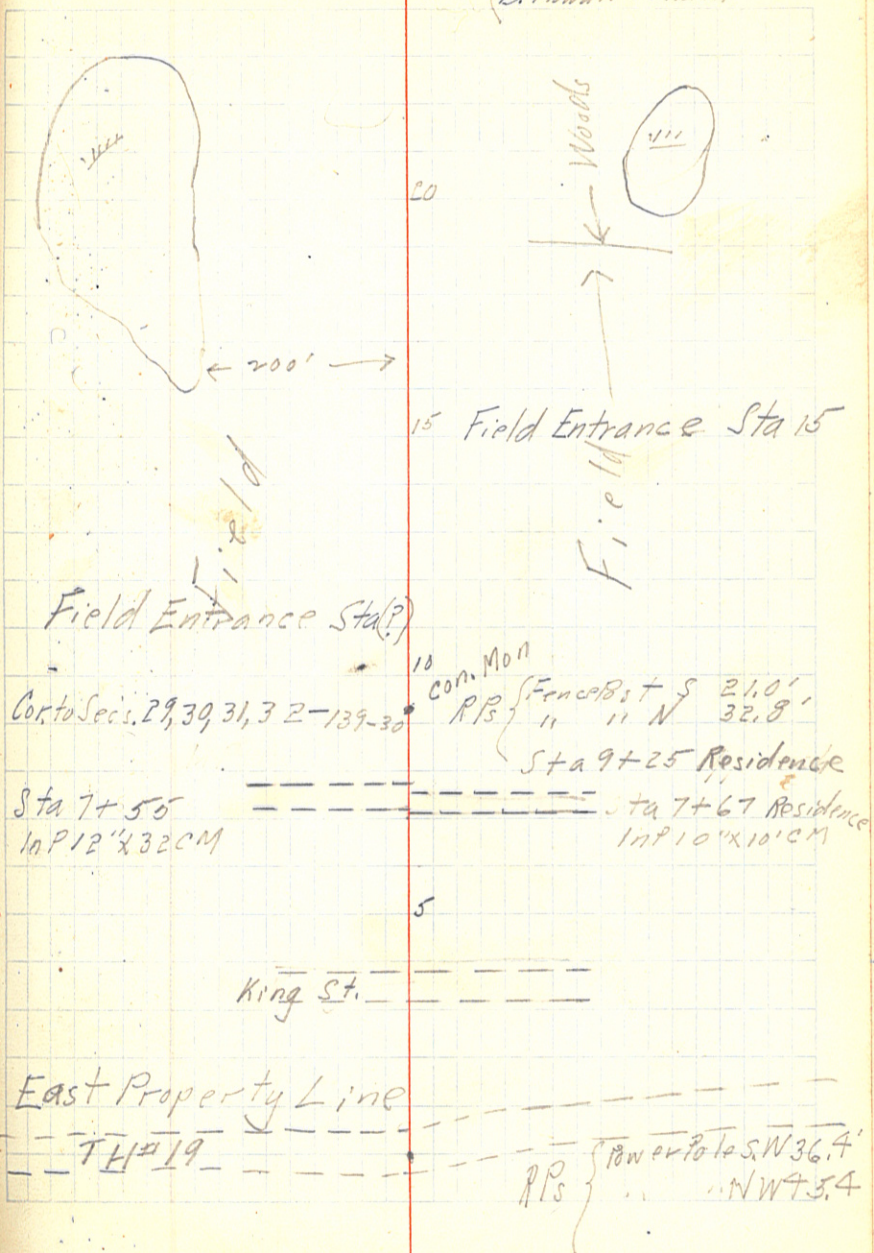


Transit Notes SAR #7062904  
From Backus East

Oct. 19 1928

Party { A.R. Teubman - T  
L. French - Chain  
B. Mowatt - Chain } 40

Sta	Defl	Angle	Mag. Bearing
P. 9+31	L	1°04'	N82°45'E N82°41'E
7+38			
7+23			
3+54			
0+71			
0+00.			N83°45'E



PT 88+95.83

Pi. 87+32.35 R 89°10' N 82°E

N=20  
T=282.35  
L=445.83  
E=115.76

Def's

+95.83=44.35  
+50=40  
88=35  
+50=30  
87=25  
+50=20  
86=15  
+50=10  
85=5

PC 84+50

N 7°W

PT 37+46.51

Pi. 35+83 L 89°40' N 7°W

N 20°  
T 294.82  
L 448.33  
E 167.49

Def's

+46.51=44.30  
37=40 11'  
+50=35 11'  
36=30 11'  
+50=25 11'  
35=20 11'  
+50=15 11'  
34=10 11'  
+50=5 11'

PC 32+98.15

1/4 Cor. Bet. Secs. 20, 29-138-32

RP's { Tell. Pole NW 42.0'  
Cor. Fence Post W 33.4

1/4 Cor. Bet. Secs. 29, 32  
-139-30

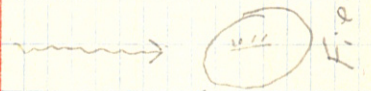
Con. Mon.  
35 RP's { 7 1/2" Pine NE 86.6'  
Fence Post NE 70.2'  
Tell. Pole SW 42.9'

Sta 33+50 Cemetery Ent.

Sta 31+71 Begin. of Cemetery

Sta 30 FE

30



FE Sta 27+08

25

Woods

S.A.P. # 7 Job # 2904  
Level Notes

B.M.		1331.98	6.28	1325.70
0+00	5.3			26.7
1+00	5.0			27.0
2	5.6			26.4
3	5.8			26.2
4	6.0			26.0
TP	5.98			1326.00
+		1331.15	5.15	
5	4.9			26.3
6	5.2			26.0
7	5.1			26.1
B.M.	4.03			1327.12
8	5.1			26.1
9	4.9			26.3
+ 31	4.9			26.3
10	4.9			26.3
11	5.0			26.2
TP	5.10			1326.05
+		1329.42	3.37	
12	3.6			25.8
13	3.7			25.7
14	4.5			24.9

From Backus East  
10-20-28

Party { A. Taubman T 42  
L. French Rod  
B. Howatt - Chain

Top of Rail in front of Depot, Backus

H.I. = 5.6

Inside of sidewalk  
27 23 20 16

Or Tel. Pole NE of Sta 7+00

5.1 5.3 6.5 5.8  
32 22 20 17  
5.3 5.3 6.7 5.7  
33 21 20 16  
L 5.2 6.7 5.6  
22 20 17  
5.9 6.2 5.7  
33 19 16  
6.0 6.1 6.4 5.6  
33 28 20 16

5.6 6.2 5.3 5.0  
13 17 19 20

5.6 6.4 5.0 4.9  
12 16 18 27  
5.8 6.6 5.4 5.2  
12 16 19 23  
5.8 6.2 5.0 5.4  
12 15 18 29  
5.6 6.9 5.8 5.6  
13 17 18 24  
5.6 6.8 5.8 5.5  
13 16 18 25

6.0 6.4 7.0 5.7  
39 28 21 16  
5.7 6.6 5.8  
29 20 16  
5.6 5.7 6.7 5.7  
35 26 20 16

5.7 5.9 5.9  
13 16 18  
5.7 7.0 5.9 5.6  
13 17 18 25  
5.6 6.7 5.3 5.0  
13 17 19 25

15	5.8	1329.42	23.6
16	6.2		23.2
17	6.2		23.2
18	7.9		21.5
TP	7.95		1321.47 → +50
+		1322.31 0.84	
+35	1.8		20.5
19	4.0		18.3
20	5.3		17.0
+45	5.5		16.8
21	5.6		16.7
+50	5.8		16.5
22	5.7		16.6
+35	5.7		16.6
BM	6.67		1316.74
23	5.8		16.5
TP +50	5.8		16.5
+	5.78		1316.53 →
		1328.03 11.50	
24	10.6		17.4
25	6.9		21.1
+67	4.4		23.6
26	3.5		24.5
27	3.8		24.2
28	4.0		24.0
29	3.3		24.7

→ +50

→

940  
No 206

Sta. 21  
20' clearing

20'C  
32'C

32' clearing

5.4	5.6	6.5	5.6	5.6	6.5	5.3	5.3					
32	23	19	15			13	16	18	27			
5.2	6.1	6.6	5.7			6.0	6.8	6.1	6.0			
32	23	20	16			13	17	19	27			
5.2	5.6	7.6	5.7			6.0	7.9	6.2	6.2			
32	23	20	16			12	17	20	28			
4.8	5.2	8.1	5.8			6.0	8.3	6.3	5.2	5.0		
31	23	20	15			12	16	19	25	29		
8.0	9.1	9.0	6.1			5.9	5.5	11.0	12.2	11.4	8.5	
24	22	17	11			7	9	16	20	28	32	
8.1	9.3	9.0	6.0			5.7	5.2	10.7	12.1	11.3	8.6	7.8
23	20	16	12			7	8	17	23	27	30	34
5.0	7.5	5.6	5.9			5.7	5.9	7.6	5.8	4.9	4.7	
23	19	15	13			12	17	19	22	29		
6.6	6.6	5.8				5.7	6.5	6.0				
30	18	14				12	15	19				
5.5	6.4	5.7				5.7	5.4	6.5	5.8	6.0		
31	21	11				5	13	19	24	34		
7.0	6.9	5.8				5.7	5.3	8.2	8.6	5.1		
32	15	12				5	7	15	21	32		
8.3	8.5	9.2	5.9			5.7	5.2	10.0	11.7	11.3	8.1	
32	21	19	12			6	8	14	18	28	33	
8.4	9.6	9.2	6.1			6.8	6.3	10.1	10.7	10.2	8.0	
25	20	17	12			5	8	16	23	27	31	
7.4	7.8	8.3	8.2	5.8		5.7	5.1	10.7	11.0	10.7	7.8	7.0
31	29	28	21	13		6	8	17	26	28	30	33
6.4	7.8	7.5	5.7					5.6	7.4	8.0	6.9	
33	26	17	12					16	17	27	31	
4.4	6.6	6.2	7.0	6.0		5.7	6.9	5.9	6.3	4.5		
32	24	19	17	12		12	15	19	28	31		
5.3	7.6	7.1	7.3	7.0	5.7	5.6	6.4	7.6	5.8			
32	26	20	19	16	13	9	15	25	30			
4.8	5.0	6.4	6.6	6.9	6.9	5.9	7.2	7.0	7.5	5.7	5.0	
32	27	25	20	19	17	11	15	17	24	28	31	
4.6	4.9	6.3	6.4	6.9	6.2	5.9	6.8	5.8	6.2	4.8	4.6	
32	27	23	19	17	13	12	16	18	27	30	33	
5.7	5.9	6.7	6.6	7.0	5.8	5.7	5.1	6.1	5.0			
30	24	22	17	15	11	15	18	30				
6.5	6.6	7.6	5.8			5.9	7.9	7.0				
30	17	16	10			14	17	22	2			
5.9	6.4	6.8	5.7			5.8	8.2	8.5				
20	17	14	11			12	19	31				

On Tel Pole NE of Sta

22

		1328.03		27.9
30	0.1			
TP	0.10			1327.93
+		1335.57	7.64	
720	6.7			28.9
31	4.0			31.6
32	3.3			32.3
PT+92.18	4.5			31.1
33+50	5.6			30.0
34	6.0			29.6
+50	7.0			28.6
35	7.1			28.5
+50	6.7			28.9
36	5.9			29.7
+50	7.3			28.3
37	6.0			29.6
PT+46.51	6.1			29.5
TPBM	4.50			1331.07
+		1333.57	2.50	
TP	5.74			1327.83
+		1337.16	6.33	
TP	2.79			1331.37
+		1338.01	6.64	
TP	5.04			1332.97
+		1339.43	6.46	
TP	3.83			1335.60
+		1340.78	5.18	

32' clearing  
Sta 32

No C46

H.I. = 5.6

44

4.6	4.9	5.7				5.7	6.2	5.8	5.9	5.3
30	16	13				13	16	17	24	32
	4.2	4.3	5.7	5.8		5.7	6.4	4.3	5.4	4.8
	33	16	14	9		14	16	18	24	33

	4.7	5.0	6.2	5.5		5.8	6.5	5.2	5.3	4.8
	30	18	14	10		14	16	18	26	32
	6.0	5.8	6.3	5.8		5.8	6.3	5.5	5.9	5.1
	32	18	14	10		14	18	20	27	32
CS	6.2	6.0	6.5	5.9		5.7	5.9	5.3	5.3	4.4
	28	18	14	11		16	18	20	25	33
CS	6.0	5.9	6.1	5.8		5.2	5.4	4.9	4.9	
	30	11	10	8		5.8	20	27	37	
	5.8					6.2	5.8	5.4	5.7	
	31					5	9	22	36	
CS		5.4				5.6	5.3	6.0		
		3.2				12	29	33		
CS		5.3				5.6				
		3.3				3.3				
CS		5.2								
		3.1								

	6.0					5.3	6.0	6.9	5.7	5.9
	36					9	21	23	27	46
	4.4	3.8	4.4	5.8		4.3	3.8	4.2	5.5	4.1
	35	18	3	1		3	28	34	38	43
	5.6	5.4	6.2	7.3	5.7	5.7	6.9	5.5		
	33	29	15	13	9	21	25	27		
	5.6	6.1	7.2	6.0		5.6	6.5	5.5	5.3	
	32	17	15	12		18	21	24	33	

On Tel. Pole N.W. of Sta 36 + 50



S.A.R. No 7, Lob (2904) 3202.

1/25/32

Inst. S.S. Walker 46  
 Red. R.A. Dahms

Sta. +9 H.I. -5 Elev.

32495 5.58 1336.68 1331.1

33 5.58 1331.1

34 6.9 29.78

35 6.2 30.48

36 5.15 31.53

31+23.0 P.O.T.

Ref Pts. used in construction  
 of STAR #7 (3202 Job #)

9+31

70 6.9 73 76 74 69 70 72 64 64  
 30 20 15 14 12 12 16 20 35

9.2 6.7 6.2 6.4 8.6 8.2  
 20 13 13 18 22

⊕ T.H. #19, 17.0' E of N. Cor. Int. Secs. 29 & 32 - 139-30

N.E. Cr. Fe. Post

55.2

5' J.P. 5E

64.0

N

FF.P.

226'

135'

135'

Tel. Pole

SAR #7 Job (2904) 5202  
Construction Stake Notes.

sta	+5	H.I.	-5	Ground	Grade
BM	320	30.89			27.69
9+31			4.5	26.4	1327.0
10			4.6	26.3	27.0
11			4.9	26.0	27.0
12			5.1	25.8	1327.0
13			5.2	25.7	26.3
T.P.	274	27.80	6.01	24.86	
14			2.9	24.86	25.5
15			4.1	23.7	24.8
16			4.1	23.1	1324.0

Party: S.S. Walker & M. Duncan  
Bill Bailey  
April 18 - 1932 - started at 12:00 47

L	R	GR
DC = 24.0' Cut = 23.5'		
DC. on Fills of 3.0' or less.		
+0.3 29.0	-0.6	BC 2.5 27.8
BC 2.1 27.1	-0.7	BC 2.1 27.6
BC 1.6 26.4	-1.0	BC 2.2 27.3
BC 1.1 25.7	-1.2	BC 1.7 26.6
BC 2.2 27.3	-0.6	BC 2.5 27.8
BC 2.3 27.5	-0.6	1.01 28.7
BC 1.9 26.9	-1.1	BC 2.4 27.6
BC 2.3 27.5	-0.9	BC 1.8 26.7

2 STA



Sta	+5	H.I.	-5	Ground	Grade
		27.80			
17			1.5	13.3	22.5
18			6.4	21.4	21.0
18+35			7.5	20.3	21.5
19	151	21.84	7.47	20.33	21.95
			3.6	18.7	1319.5
20			5.0	16.8	18.4
20+45			5.3	16.5	18.1
21			5.4	16.4	18.0
21+50			5.5	16.3	18.0
22			5.5	16.3	18.0
			6.07	15.77	

C 28.5  
BC 24.0

sh	L	E	D	GR
	$\frac{+1.1}{30.2}$	+0.8	$\frac{+0.1}{28.7}$	5.5
	$\frac{-1.4}{30.6}$	+0.4	$\frac{+1.1}{32.0}$	6.8
	$\frac{BC 2.6}{37.9}$	-1.2	$\frac{BC 2.8}{28.2}$	6.3
	$\frac{BC 0.8}{35.2}$	-1.3	$\frac{BC 1.4}{30.1}$	7.3
	$\frac{BC 1.3}{26.0}$	-1.4	$\frac{BC 1.5}{26.3}$	8.1
	$\frac{BC 0.1}{24.2}$	-1.6	$\frac{-3.7}{17.9}$	3.7
GR (38) 14'	$\frac{-1.4}{20.6}$	-1.6		14'
3.8	$\frac{-4.8}{21.2}$	-1.7		
3.8 14'	$\frac{-4.8}{21.2}$	-1.7		14'
BR ck.	(5.75) (0.2)			

PC. 242 April 1932  
cut 28.5

Sto	+5	H.I.	-5	Ground	Grade	sh.	L	£	R	sh	G.R.
22+35			5.5		18.0	(30) 14'	-4.7 21.1	-1.7		14'	
	9.35	25.09		1815.74		61 7/16 22"					
23			8.9	16.2	18.1	14'	-4.4 20.6	-1.7		14'	7.0
23+50			8.6	16.5	18.4		-3.6 17.4	-0.9	-3.7 17.5		6.7
24			7.7	17.4	19.0		-3.1 16.7	-1.6	-2.4 15.6		6.1
25			4.2	20.9	20.6		+1.1 30.2	+0.3	+0.6 29.4		4.5
25+67			1.6	23.5	21.7	6.7	+3.4 33.6	+1.8	+3.7 33.3		3.4
T.P.	5.30	28.35	2.04	23.05		No. 1.					
26			4.1	24.3	22.3		+3.3 33.4	+2.0	+3.1 33.2		6.1
27			1.4	24.0	24.0		+0.3 29.0	0.0	+0.4 29.1		4.4
28			4.6	23.8	25.7		PC 0.3 24.5	-1.9	-3.8 17.7		2.7

50 24.0  
at 8.5

Sta	+5	H.I.	-5	Ground	Grade	L	R	G.R.	
		28.25							
29			3.9	24.5	27.5	$\frac{-3.5}{17.3}$	-3.0	$\frac{-5.3}{21.9}$	6.9
T.P.	11.25	35.75	3.85	24.50	27.5				
30			7.9	27.1	29.2	$\frac{DC 2.0}{27.0}$	-4.3	$\frac{DC 2.8}{28.2}$	6.55
30+20			7.0	28.8	29.5	$\frac{+1.1}{30.2}$	-0.7	$\frac{+0.3}{29.2}$	6.3
31			4.3	31.4	30.9	$\frac{+1.9}{31.4}$	+0.6	$\frac{+1.4}{30.6}$	4.9
32			3.7	32.1	31.9	$\frac{+0.1}{28.6}$	+0.2	$\frac{+0.6}{29.4}$	3.9
BY	288	36.54	2.05	23.70	33.66				
33			5.7	30.8	31.1	$\frac{DC 1.7}{26.6}$	-0.9	$\frac{0.0}{25.5}$	4.8
34			7.0	29.5	31.1	$\frac{DC 1.3}{26.0}$	-1.6	$\frac{DC 1.8}{26.7}$	5.4
35			6.4	30.1	30.5	$\frac{-3.0}{16.5}$	-0.4	$\frac{DC 0.3}{24.5}$	6.0
36					31.5				

5h  
1.4'

sto	5	43	5	BM
T.P.	515	30.85		132.5
T.P.	259	30.74	370	27.15
T.P.	474	30.99	149	26.25
BM			332	27.67 BM
T.P.	260	28.07	552	25.47
T.P.	233	21.15	225	18.82
BM			540	15.75
T.P.	746	28.42	0.19	20.96
T.P.	999	36.27	1.24	27.18
BM			3.21	33.66 E.M.

Farm Entr	L	10400	12' x 24' C.M.C	✓
Farm Entr	R	11000	12' x 24' C.M.C	✓
Farm Entr	R	15100	12' x 24' C.M.C	✓
Farm Entr	L	27005	12' x 24' C.M.C	
Conductor Entr	R	30700	12' x 24' C.M.C	

Party S.S. Walker Jr  
M. O. Quinn Jr.  
Bill Bally etc.

April 19, 1930  
cloudy cool

Top of Rail in front of Depot

cm. tank near pump

Nail in Rd.

25' L. of sto 8 - 5 p head in tel pole

Nail in Rd.

nail in Rd.

BM. on tel. pole N.E. of sto 2200 Elev. 1315.74

Nail

Nail

R. 15 p. H. 33 R. 3170 <sup>hd.</sup> Cr. Post of Corn.



sta	TS	M.I.	-5	glund.	glade
		31.89			22.66
31+00				0.5	30.9
32+00	4.76	35.65	0.50	30.89	
33+00		35.75	0.09	27.0	31.9
34+00				41.1	31.7
35+00				49.1	31.1
36+00				53	30.5
					31.5

18+35  
 18+65 Begin Barrow R.  
 19  
 20  
 20+45 End Barrow R.

Ditch: 8' 4' 4.5' 4' 8'  
 S. S. Kletzel \* dead water  
 M. D. ...  
 5-13-32 Ditch 1  
 31+70 R, Sp. 33' R NW of Post of Camp.  
 H. of H. of 0.8 0.6 0.5 H. of 0.1  
 0.0 H. of 4.3 4.2 4.5 H. of 4.0  
 H. of H. of 4.3 4.2 4.3 H. of 4.0  
 0.0 0.0 5.1 4.8 4.7 H. of 4.0  
 - Fill 5.2 4.1 4.7 H. of 4.0

4.5	8.1	21	5.4
7.9	7.0	4	5.8
6.0	8.0	7.9	6.9
16	12	8	4
7.5	7.2	9.0	7.4
18	15	12	4
6.6	7.6	9.2	6.7
7.2	18	12	2
8.1	9.7	9.3	7.1
7.1	7.9	12	4
			4 15 feet.
			0.0

	25' L Sounding	Ground Below Label.	Ground 5	R 25' Sounding	Ground Below Label.
298+86	0.0	0.0	0.0 0.0	0.0	0.0
299	0.0	0.0	0.8 1.9	3.4	1.7
300	7.1	1.5	1.5 12.5	16.0	1.5
301	7.3	1.5	2.0 12.5	14.2	9.0
+ 83	3.8	0.0	0.0 3.5	3.0	0.0
302	4.0	0.0	0.0 2.0	2.0	0.0

# KEITH'S RAILROAD CURVE TABLES.

Published by KEUFFEL & ESSER CO., New York.

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## HOW TO USE KEITH'S TABLES.

### EXAMPLE.

Wanted a Curve with an Ext. of about 12 ft. Angle  
of Intersection or I. P.=23° 20' to the R. at Station  
542+72.

Ext. in Tab. IV opposite 23° 20'=120.87  
120.87÷12=10.07. Say a 10° Curve.

Tan. in Tab. IV opp. 23° 20'=1183.1  
1183.1÷10=118.31.

Tab. V. correction for A. 23° 20' for a 10° Cur.=0.16  
118.31+0.16=118.47=corrected Tangent.

(If corrected Ext. is required find in same way)  
Ang. 23° 20'=23.33°÷10=2.3333=L. C.

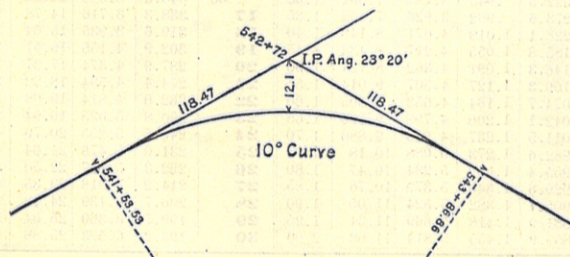
2° 19½' = def. for sta. 542	I. P. = sta.	542+72
4° 49½' = " " " +50	Tan. =	1.18.47
7° 19½' = " " " 543	B. C. = sta.	541+53.53
9° 49½' = " " " +50	L. C. =	2.33.33
11° 40' = " " " 543+	E. C. = sta.	543+86.86
86.86		

100-53.53=46.47×3'(def. for 1 ft. of 10° Cur.)=139.41'=  
2° 19½' = def. for sta. 542.

Def. for 50 ft.=2° 30' for a 10° Curve.

Def. for 36.86 ft.=1° 50½' for a 10° Curve

(These tables are published in Field Books of  
KEUFFEL & ESSER Co., New York, N. Y.)



$$\begin{array}{r} 1403 \\ 16690 \\ \hline 1403 \\ 2660 \\ \hline 1403 \end{array}$$

$$\begin{array}{r} 4574 \\ 145 \\ \hline 22870 \\ 18296 \\ \hline 4574 \\ 663230 \\ \hline 60 \\ 379280 \end{array}$$

$$\begin{array}{r} 6.38 \\ 7.15 \\ \hline 13.53 \\ \hline 21.08 \\ \hline 28.23 \\ \hline 35.38 \\ \hline 42.53 \\ 1.67 \\ \hline 44.50 \end{array}$$

$$\begin{array}{r} 420.53 \\ 1.52 \\ \hline 422.05 \\ 07.26 \\ \hline 09.20 \\ \hline 13.26 \\ 145 \\ \hline 6730 \\ 5384 \\ \hline 1346 \\ 195170 \\ \hline 19660 \\ 371020 \end{array}$$

$$\begin{array}{r} 50 \\ 4.26 \\ \hline 4.74 \end{array}$$

6038

$$\begin{array}{r} 4.5 \\ 1.7 \\ \hline 2.8 - 0824 \\ 85 \text{ etc} \end{array}$$

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.  
 ROADWAY 14 FEET WIDE. SIDE SLOPES 1 1/2 TO 1.  
 FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MADE IN GERMANY.  
R.