

BARRETT DAM

Miscellaneous,

FRANCO

W17

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.92	74.01	67.24	73.73	67.57	73.43	67.88	47
43	73.14	68.20	72.82	68.52	72.54	68.87	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
DEGREES.	¾ DEGREE.		½ DEGREE.		¾ DEGREE.		¾ DEGREE.		

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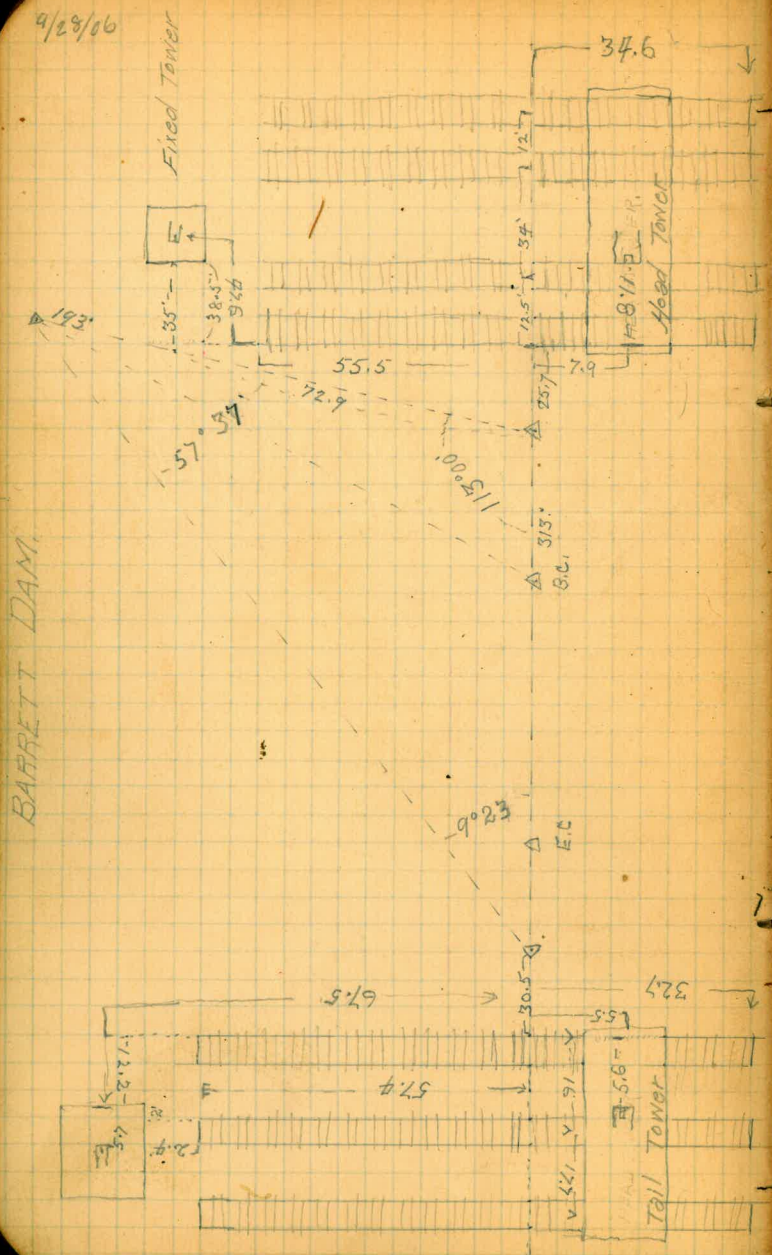
G. B. Harris
Alvyn Conchoe
Stewart Conchoe
Harry Edwards
Bushnell.

Sept. 06.
Transit 14
Chain 15
" 15
Level.
Rod. 14

Index =

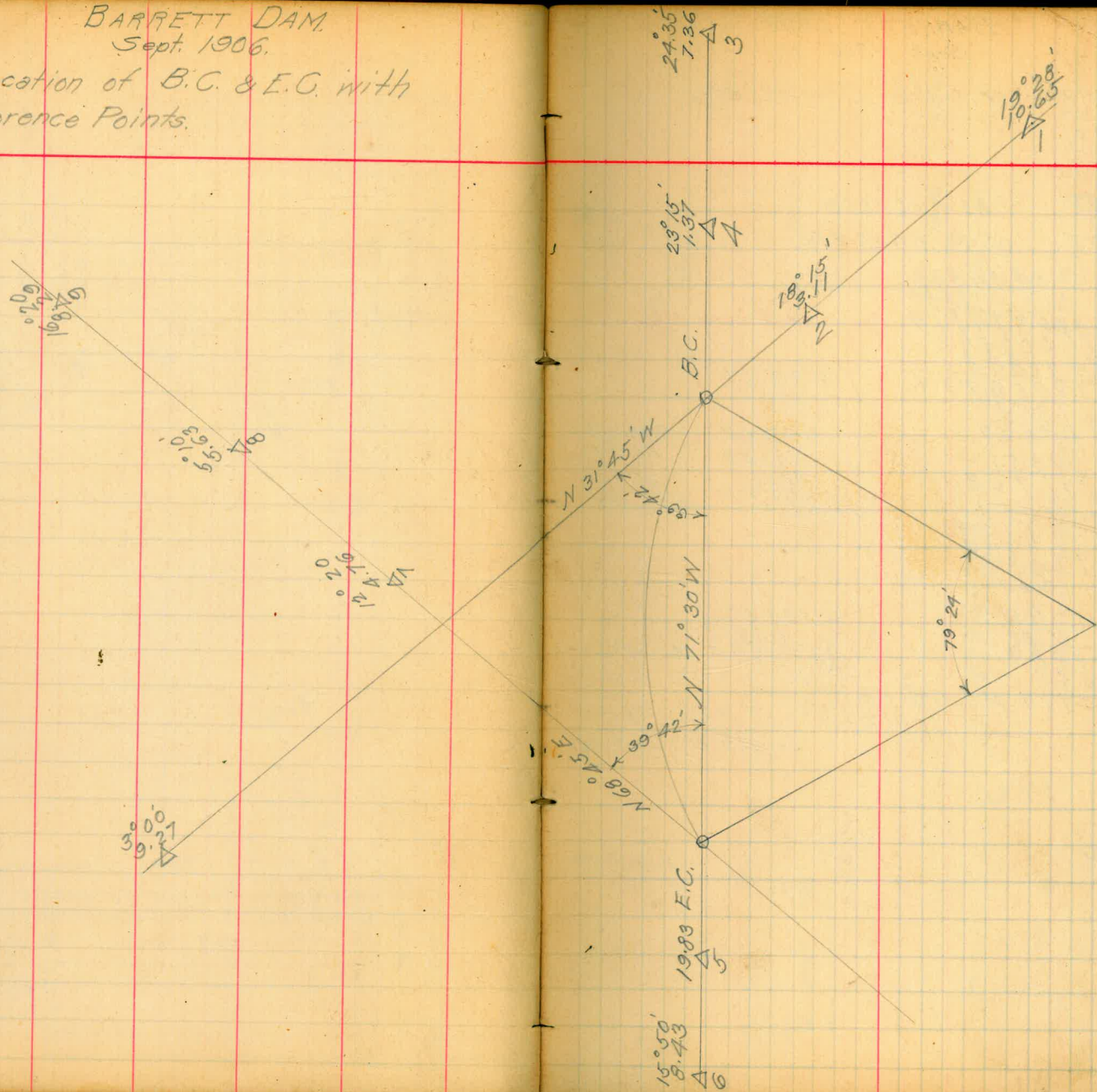
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9/29/06



BARRETT DAM.
Sept. 1906.

Location of B.C. & E.C. with
Reference Points.



2
 BARRETT DAM.
 Sept. 1906.

Length of Cable Chords, etc.

$9^{\circ}23'$ sine = .163039
 $57^{\circ}37'$ " = .8444838

8444838
 193

25334514 For check see Page 3.

76003542
 8444838
 163039 | 1629858734 | 999.67

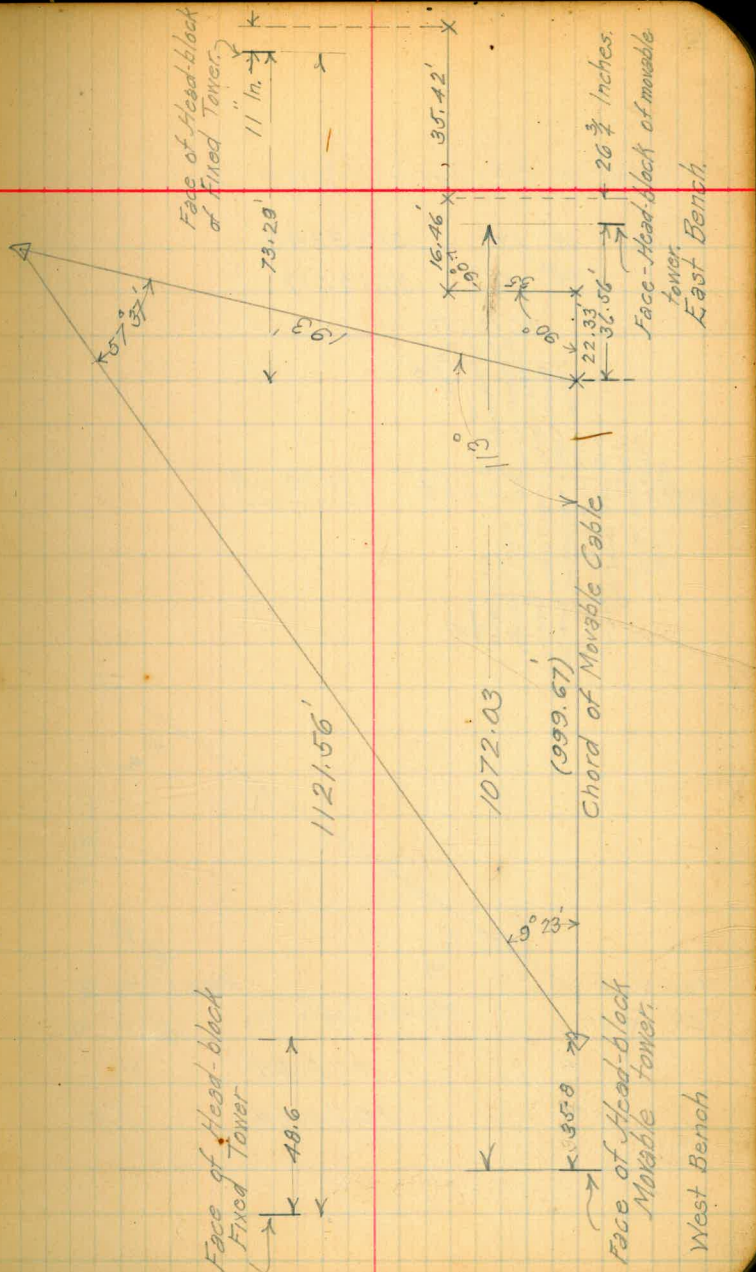
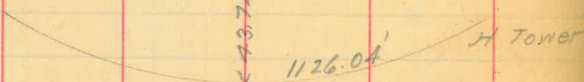
1467351
 1625827 999.67 999.67
 1467351 73.29 36.56
 1577763 48.6 35.80
 1467351 1121.56 1072.03

1097124
 978234
 115898

1121.56
 39
 1009404
 336468
 43.74084

Mid. Ord. $\frac{1121.56}{1121.046} = 1126.04'$
 Length of Cableway

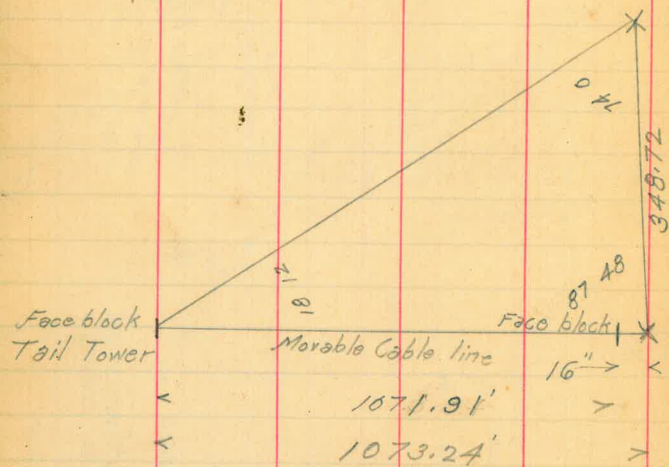
T. Tower



CHECK OF TRI- PAGE 2.

Sine $18^{\circ} 12'$.3123349
 " $74^{\circ} 0'$.9612617

.9612617
 .348.72
 1922.5334
 67288319
 76700936
 38450468
 28837851
 3123349 | 335.21 | 11800.24 | 1073.24
 3123349
 12871280
 21863443
 10128370
 730047
 7383232
 6246678
 13315344



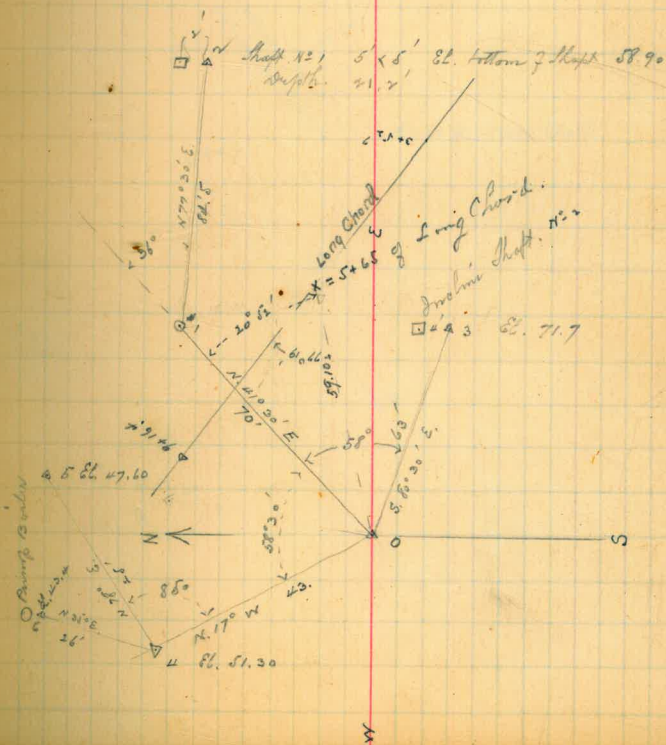
4

"Barrett's."

Connections and Elev. of Shafts at Upper Dam Site Feb. 7, 1907
King.

	3.67	53.67		50.00
NO 4			2.4	51.3
5			6.1	47.6
6			10.3	43.4
	6.50	70.50		70.0
3			3.8	71.7
	3.5	63.5		80.0
2			3.4	80.1

NO 3. Shaft. 8' Let. of 1+40 of curv. elev. 110.
 " 4 " 5' " " 0+70 " elev. 146'
 Elev. 175' " 5 " " " North. " B.C. = 5+50' of 2 Base.



0 —
 vert. ang. 19° 20' —
 129' down to slope.

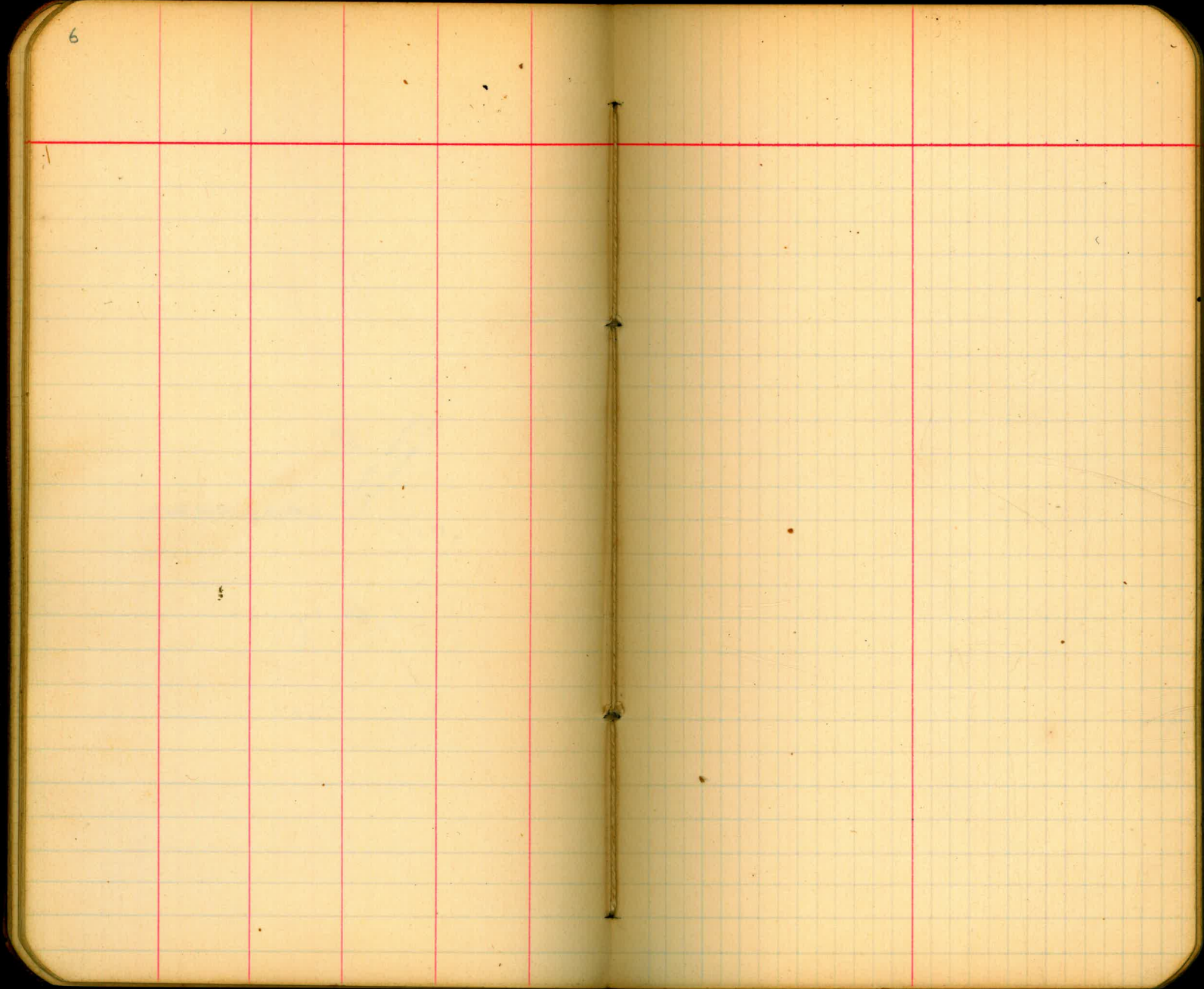
448.54'

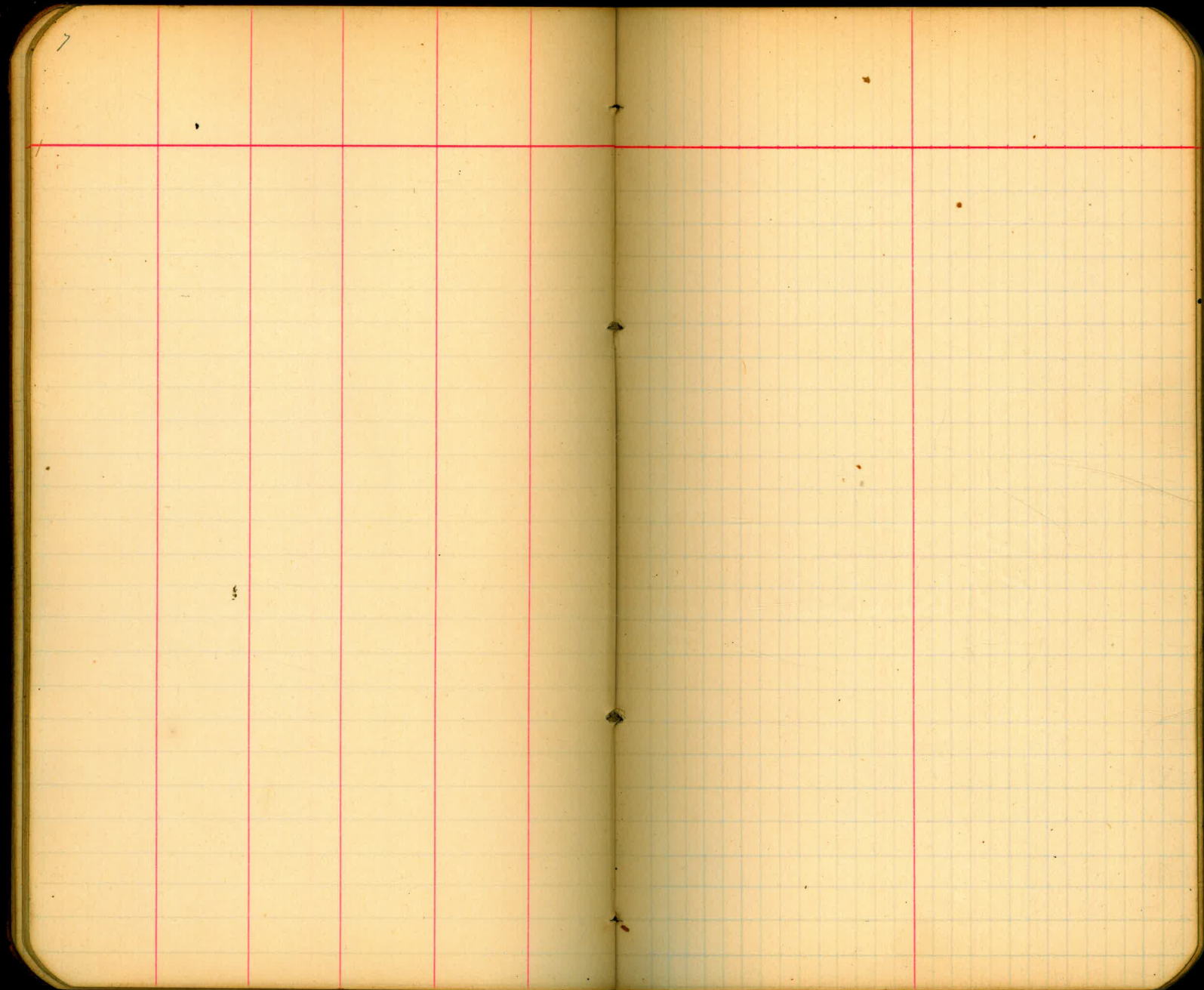
Mouth of Incine Shaft.

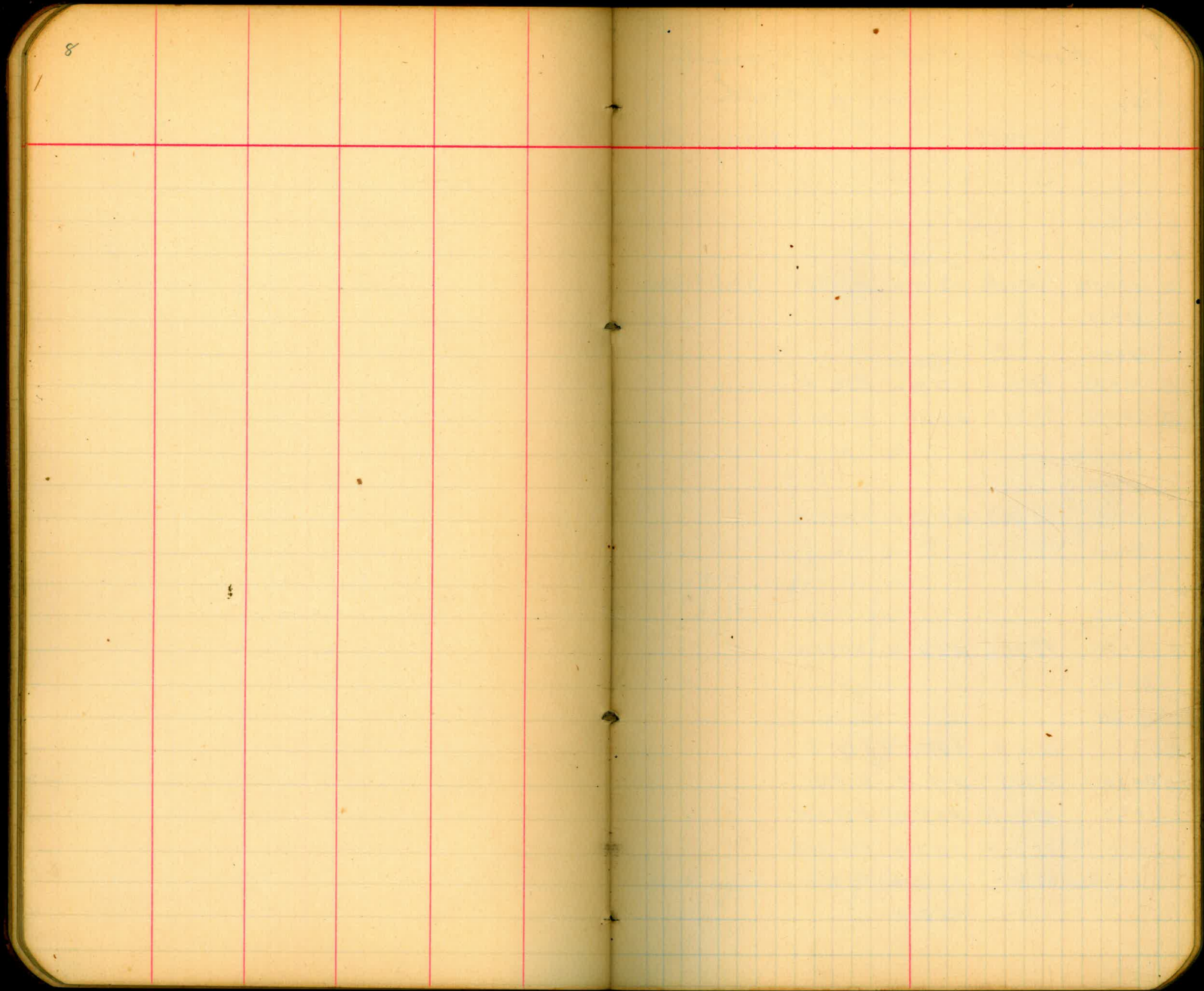


5610'

57.57'







9

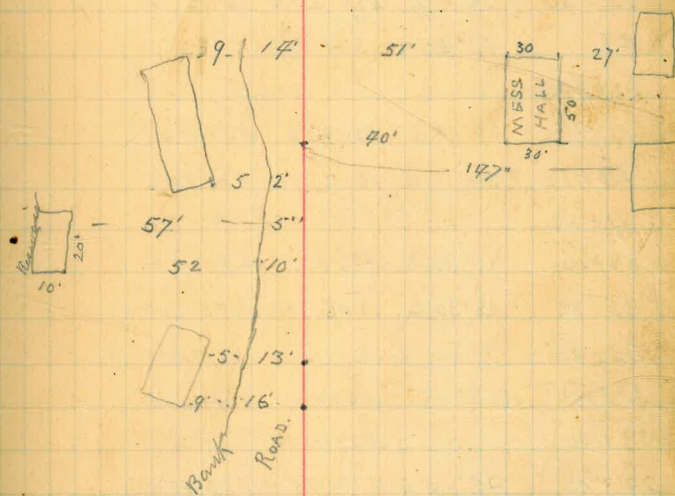
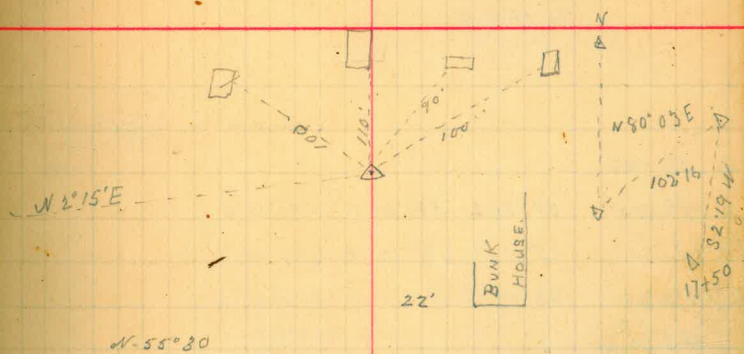
Road on West side of Banette's
running North.

7/19/06

N 13° 45' E

Vert Ang. Road.

△					
△	17+50	58° 00' R.	N 2° 15' E	N 2° 15' E	13° 00' 7.00
△	17+50				
	17+30				
△	16+95	75° 00' L.	N 55° 45' W	N 56° W	
△	14+90	50° 30' R.	N 11° 00' W	N 10° 45' W	
	14+70				
	14+70				
△	13+90	39° 30' L.	N 71° 15' W	N 71° 15' W	
	13+60				
	12+82				
	12+62				
△	12+70	49° 00' L.	N 1° 45' W	N 1° 45' W	
	12+15				
	11+60				
△	11	28° 00' R.	N 47° 15' E	N 47° E	
△	9+70	34° 30' L.	N 19° E	N 19° E	
△	6+60	40° 00' R.	N 53° 30' E	N 53° 30' E	
△	3+20	25° 00' R.	N 13° 30' E	N 13° 45' E	
○	= E.C. of Dam	62° 30' R.	N 9° 15' W	N 9° 15' W	
○			N 71° 45' W		



Back sight on B.C. of Dam.

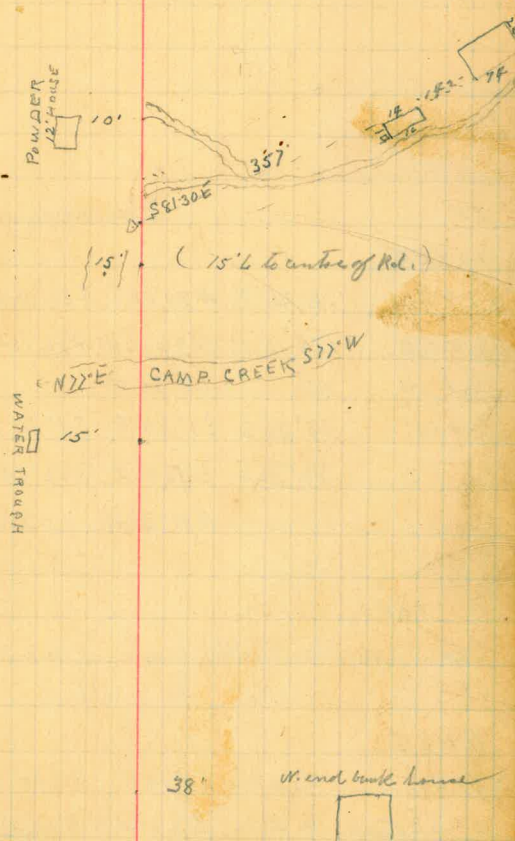
9/20/16

No. 1700 E

Δ 50+93			
Δ 48+75	51°30' L	N41°30' E	N91°15' E
Δ 47	83°00' R	S87°15' E	S87°00' E
Δ 45+80	35°00' R	N10°00' E	N10°15' E
45			
Δ 43+60	76°00' L	N24°45' W	25°15' W
Δ 43	47°45' R	S81°30' E	
42+50			
Δ 41	24°00' R	N50°45' E	N51°00' E
Δ 39+20	20°00' L	N27°00' E	N26°45' E
37+20			
Δ 37+10	92°30' R	N46°45' E	N47°00' E
Δ 35+80	28°30' L	N45°30' W	N45°30' W
Δ 33+80	47°00' R	N17°00' W	N17°00' W
Δ 31+40	13°30' R	N64°00' W	N64°15' W
Δ 29+40		N77°45' W	
Δ 22+10	54°10' L	N77°45' W	N77°40' W
Δ 20+30	22°00' R	N23°30' W	N23°30' W
Δ 19+30	32°00' R	N45°30' W	N45°30' W
17+80			
Δ 17+50	22°00' L	N77°30' W	N77°30' W
Δ 16+45	45°00' L	N35°30' W	

on

B.S. on Sta 41



Road on West side running South.
9/20/16 Travel to tunnel.

11

10+50

Δ 7+80 76° 25' R. N. 20° 00' E N 20° 10' E

Δ 6+90 125° 15' R N. 56° 15' W N 56° 15' W.

6+10 0.0_g S 1° 30' E

Δ 3+50 23° 30' L S 1° 30' E S 1° 30' E

E.C. = 0 86° 30' L S 22° 00' E S 22° 00' E

N 71° 30' W

+15.

6

4+25

Δ 3+50 23° 00' L S 1° 00' E S 1° 00' E

0 = E.C. of Dam. 86° 30' L S 22° 00' W S 22° 00' W.

N 71° 30' W

Cave in. impassable.

Cave in.

Mouth of tunnel

Back sight on B.C.

40° L to edge of road



45° R. to edge of road.

Junction of Y

B.S. on B.C. of Dam.

9/20/06

Word Road on Coast side.

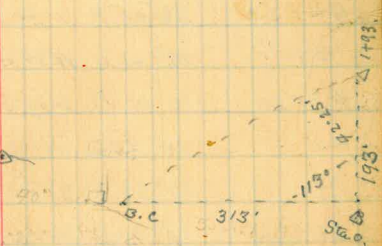
Δ 30+60	55°30' L	N30°00' E	N30°00' E
Δ 29+50	22°00' R	N85°30' E	N85°30' E
Δ 28	18°00' R	N63°30' E	N63°30' E
Δ 26+85	72°30' L	N45°30' E	N45°30' E
Δ 25+30	35°00' R	S62°00' E	S62°00' E
Δ 24+35	49°30' R	N83°00' E	N83°00' E
Δ 23+25	41°00' L	N33°30' E	N33°30' E
Δ 20	34°30' R	N74°30' E	N74°30' E
Δ 19	31°00' R	N40°00' E	N40°00' E
Δ 17+50	27°00' L	N9°00' E	N9°00' E
Δ 16+45	48°30' L	N36°00' E	N36°00' E
Δ 15+05	48°30' R	N84°30' E	N84°30' E
Δ 13+65	35°00' L	N36°00' E	N35°45' E
Δ 10+90	36°30' R	N70°45' E	N71°00' E
Δ 8	30°00' L	N34°30' E	N34°30' E
Δ 6+40	57°30' R	N64°00' E	N64°00' E
Δ 5+50	16°30' R	N7°00' E	N7°00' E
Δ 3+55	32°00' L	N9°30' W	N9°30' W
Δ 2+70	53°30' R	N22°30' E	N22°30' E
Δ 1+93	72°30' L	N31°00' W	N31°00' W
1.			
+60			
○	67°00' L	N41°30' E	N41°30' E
		S71°30' E	



Junction of Roads.

N. End of bench.

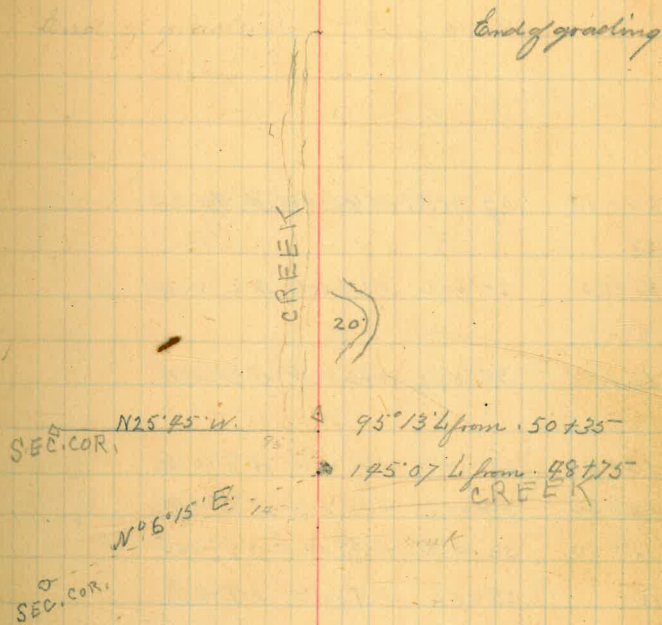
One prolongation of cord.
B. Dem B. C.



9/21/06

Wood Road.

Δ 70+70	26°30' L	N83°30' E	N83°45' E	to Cotton Wood.
Δ 69	23°30' R	S69°45' E	S69°45' E	
Δ 68	29°00' R	N86°45' E	N86°45' E	
Δ 63+65	37°15' R	N62°45' E	N62°45' E	
Δ 61+80	19°30' L	N25°30' E	N25°30' E	
Δ 59+80	18°30' L	N45°00' E	N45°00' E	
Δ 56+50	2°00' R	N63°30' E	N63°30' E	
55				
Δ 54+20	78°30' R	N61°30' E	N61°30' E	
Δ 53+40	26°30' L	N43°00' E	N43°00' E	
Δ 50+35	82°00' L	N69°30' E	N69°30' E	
50				
Δ 48+75	27°00' L	S28°30' E	S28°30' E	
Δ 47	47°00' R	S1°30' E	S1°30' E	
Δ 46	10°00' R	S48°30' E	S48°30' E	
Δ 44+50	36°00' R	S58°30' E	S58°30' E	
Δ 43	18°00' L	N84°30' E	N84°30' E	
Δ 41+30	10°00' R	N77°30' E	N77°30' E	
Δ 40	14°30' L	S87°30' E	S87°30' E	
Δ 37	15°30' R	S73°00' E	S73°00' E	
Δ 35+60	17°30' R	S88°30' E	S88°30' E	
53				
Δ 32+40	44°00' R	N74°00' E	N74°00' E	



9/21/06

From junction of Wood Road to river.

Δ 24+60	27° 00' R.	N. 70° 00' W.	N. 70° 00' W.
23.			
Δ 21+80	25° 00' L.	N. 67° 00' W.	N. 67° 00' W.
21			
Δ 16+75	34° 00' L.	N. 42° 00' W.	N. 42° 00' W.
14+25			
Δ 13+40	27° 00' R.	N. 8° 00' W.	N. 8° 00' W.
Δ 12+20	74° 00' L.	N. 35° 00' W.	N. 35° 00' W.
Δ 11+10	36° 00' R.	N. 39° 00' E.	N. 39° 00' E.
Δ 10	25° 00' L.	N. 3° 00' E.	N. 3° 00' E.
9+25			
Δ 8+20	21° 00' L.	N. 28° 00' E.	N. 28° 00' E.
Δ 7+40	37° 00' R.	N. 49° 00' E.	N. 49° 00' E.
Δ 6+30	40° 00' L.	N. 12° 00' E.	N. 12° 00' E.
Δ 4+20	36° 00' R.	N. 52° 00' E.	N. 52° 00' E.
Δ 2+70	12° 00' L.	N. 16° 00' E.	N. 16° 00' E.
Δ 1+35	22° 30' L.	N. 28° 00' E.	N. 28° 00' E.
O= 6+40	43° 30' R.	N. 50° 15' E.	N. 50° 30' E.
		N. 7° 00' E.	

junction of River road.

20')

20')

10')

20')

6+40 Wood Road = 0

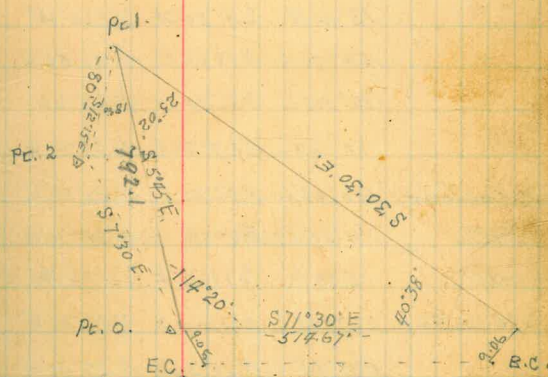
B.S. on 5+50 Wood Road.

15

Contours on West side of
River North of Dan.

9/22/66

				Mag. Ang.	Kod.
280' contour.	22° 20' R.	S 16° 30' W	S 16° 32' W	4° 00'	2.60
	18° 15' R.	S 12° 30' W	S 12° 30' W	3° 15'	3.27
	19° 00' R.	S 12° 15' W	S 12° 15' W	1° 00'	4.30
	15° 10' R.	S 9° 30' W	S 9° 25' W	4° 15'	5.78
	13° 45' R.	S 8° 10' W	S 8° 00' W	1° 45'	6.39
280' contour.	can't put in.				
290' contour.	14° 01' R.	S 8° 15' W	S 8° 15' W	0° 00'	6.73
290' contour.	15° 35' R.	S 10° 00' W	S 9° 50' W	0° 00'	6.02
	19° 00' R.	S 13° 15' W	S 13° 15' W	0° 00'	5.25
"	21° 15' R.	S 15° 30' W	S 15° 30' W	0° 45'	4.39
"	21° 00' R.	S 15° 15' W	S 15° 15' W	1° 30'	3.15
"	25° 15' R.	S 19° 30' W	S 19° 30' W	1° 45'	2.70
"	27° 30' R.	S 18° 45' W	S 18° 45' W	2° 15'	1.97
"	27° 45' R.	S 22° 00' W	S 22° W	4° 00'	1.15
290' contour.	21° 00' R.	S 15° 15' W	S 15° 15' W	10° 45'	0.40
300' contour.	40° 15' R.	S 37° 30' W	S 37° 30' W	0° 00'	0.38
"	30° 15' R.	S 27° 30' W	S 27° 30' W	0° 00'	1.50
"	27° 30' R.	S 21° 45' W	S 21° 45' W	0° 00'	2.13
"	28° 15' R.	S 22° 30' W	S 22° 30' W	0° 00'	2.65
"	22° 45' R.	S 17° 00' W	S 17° 00' W	0° 00'	3.35
300' cont.	22° 00' R.	S 16° 15' W	S 16° 15' W	0° 00'	4.97
= Pt. 6	16° 35' R.	S 11° 00' W	S 10° 50' W	0° 00'	6.22
= Pt. 0	117° 20' L.	S 5° 45' E		11° 00'	8.22
		S 71° 30' E			



Fore sight in Pt. 0

" " " B.C.

9/20/06

260' Contour.	138°35' L	N39°00' E	N33°55' E	34.30'	0.70
	2°35' R	S4°30' W	S4°55' W	21'30"	1.00
" "	14°30' R	S7°00' W	S7°00' W	7°45'	2.05
" "	16°10' R	S8°45' W	S8°40' W	1'15"	2.85
" "	14°40' R	S7°15' W	S7°10' W	4°00'	4.55
260' Contour.	12°50' R	N5°30' W	N5°20' W	3°10'	5.27
270' Contour	14°00' R	N6°30' W	N6°30' W	1.45	5.38
" "	19°15' R	S11°45' W	S11°45' W	5.45	3.90
" "	20°15' R	S12°45' W	S12°45' W	4°00'	2.80
" "	17°00' R	S9°30' W	S9°30' W	6°15'	2.15
" "	22°00' R	S14°30' W	S14°30' W	4°00'	1.75
" "	13°00' R	S5°30' W	S5°30' W	16'30"	0.87
" "	124°40' L	N48°30' E	N48°30' E	5.00	0.55
" "	136°10' L	N36°30' E	N36°20'	10.00	1.77
" "	135°20' L	N37°30' E	N37°10' E	10.00	2.00
270' Contour.	130°05' L	N42°30' E	N42°10' E	5°15'	2.57
Pt 2.	131°20' L	N41°15' E	N41°10' E	4°00'	3.27
Pt. 1-80'	18°00' R	S12°15' E	S12°15' E		
280' Contour.	127°25' L	N47°00' E	N46°30' E	5°00'	2.04
	123°45' L	N50°30' E	N50°30' E	15°15'	0.70
	98°00' L	N76°30' E	N76°15' E	16°15'	0.55
	6°10' R	S0°25' W	S0°25' W	18°00'	0.60
" "	19°20' R	S13°30' W	13°35' W	9°15'	6.00
280' Contour.	19°45' R	S14°00' W	S14°00' W	5°00'	1.80
		S5°45' E			

For sight on Pt. O . Bears S7°30' E
 For sight on Pt. O

Pt.
 S23°0' E
 Pt 2
 Pt. 1

17

9/27/66

	39°00'L	S91°30'E	S91°00'E	32°00'	1.10
	10°45'L	S9°15'E	S9°15'E	16°30'	1.70
*	8°45'R	S1°15'W	S1°15'W	10°30'	2.70
	14°30'R	S7°00'W	S7°00'W	8°30'	3.15
	14°00'R	S6°30'W	S6°30'W	7°00'	2.00
" "	12°15'R	S9°45'W	S9°45'W	6°00'	4.75
240 Contour	10°00'R	S2°30'W	S2°30'W	5°30'	5.25
250 Contour	11°30'R	S9°00'W	S9°00'W	7°30'	5.25
	16°00'R	N8°30'W	N8°30'W	6°30'	3.90
	13°30'R	S6°W	S6°00'W	9°00'	2.55
	1°00'R	S6°30'E	S6°30'E	15°30'	1.70
	13°00'R	S5°30'W	S5°30'W	16°30'	1.35
	13°00'L	S20°30'E	S20°30'E	26°30'	1.06
	96°45'L	N75°45'E	N75°45'E	37°00'	0.88
	127°30'L	N48°00'E	N48°00'E	18°00'	1.35
	120°15'L	N52°15'E	N52°15'E	9°00'	2.70
	125°30'L	N47°00'E	N47°00'E	7°00'	3.20
	120°15'L	N52°15'E	N52°15'E	6°30'	3.80
250 Contour	126°00'L	N46°30'E	N46°30'E	7°00'	4.60
260 Contour	129°30'L	N48°00'E	N48°00'E	5°00'	3.95
	126°30'L	N46°00'E	N46°00'E	6°15'	2.80
	127°30'L	N45°00'E	N45°00'E	8°30'	2.20
260 Contour	128°50'L	N43°45'E	N43°40'E	11°15'	1.35
		S7°30'E			

X
see p. 19

F.S. on p. 10

9/29/06

	11°00 R.	S3°30' W.	S3°30' W.	9°30	4.20
220' Contour	7°15' R.	S0°15' E.	S0°15' E.	9°30	5.00
230' Contour	8°40' R.	S1°15' W.	S1°10' W.	7°00	5.16
	12°00 R.	S7°30' W.	S7°30' W.	7°30	4.50
	17°00 R.	S6°30' W.	S6°30' W.	8°00	3.00
	6°30 R.	S1°00' E.	S1°00' E.	11°00.	2.80
	1°45 L.	S9°15' E.	S9°15' E.	16°30	1.70
	17°00 L.	S21°30' E.	S21°30' E.	18°00	1.35
	57°45 L.	S62°15' E.	S62°15' E.	36°00.	1.35
	98°30 L.	N77°00' E.	N77°00' E.	28°00	1.70
	112°00 L.	N60°30' E.	N60°30' E.	21°00	1.85
	110°15' L.	N62°15' E.	N62°15' E.	12°00.	2.80
	117°15' L.	N55°15' E.	N55°15' E.	10°00.	3.35
	117°15' L.	N58°15' E.	N58°15' E.	8°30	4.00
	123°00 L.	N49°30' E.	N49°30' E.	5°00	4.90
230' Contour	121°30 L.	N51°00' E.	N51°00' E.	5.45	5.65
290' Contour	124°00 L.	N48°30' E.	N48°30' E.	4°30'	5.35
290' Contour	125°30 L.	N47°00' E.	N47°00' E.	5°00	4.95
	116°30 L.	N56°00' E.	N56°00' E.	8°00	3.80
	121°45 L.	N50°45' E.	N50°45' E.	8°30'	3.15
	115°30 L.	N57°00' E.	N57°00' E.	11.30	2.65
	118°30 L.	N54°00' E.	N54°00' E.	17°30'	1.80
270' Contour	96°30 L.	N76°00' E.	N76°00' E.	31°30	1.10

57°30 E

F. S. M. P. O.

9/29/06

"	"	15°45'L	N21°30'W	N21°30'W	15°30'	2.95
210	"	16°00'L	N21°45'W	21°45'W	16°00'	2.50
210	"	9°40'L	N15°30'W	N15°20'W	9°30'	3.95
240	Contour	4°30'L	N10°15'W	N10°15'W	9°30'	4.56
210	"	2°45'L	N8°30'W	N8°30'W	8°00'	4.53
210	"	1°00'L	N6°45'W	N6°45'W	7°15'	5.00
220	"	0.00	N5°45'W	N5°45'W	2°00'	5.51
210	"	1°15'R	N4°30'W	N4°30'W	7°00'	4.90
"	"	6°45'R	N1°00'E	N1°00'E	5°30'	6.92
"	"	11°30'R	N5°45'E	N5°45'E	2°30'	7.83
"	"	16°30'R	N10°45'E	N10°45'E	17°30'	8.05
"	"	18°30'R	N12°45'E	N12°45'E	4°15'	8.66
210	"	22°15'R	N16°30'E	N16°30'E	4°00'	9.15
220	Contour	109°45'L	N63°00'E	N62°45'E	10°45'	3.80
		110°00'L	N62°30'E	N62°30'E	12°45'	3.20
		106°00'L	N66°30'E	N66°30'E	15°00'	2.90
		104°00'L	N68°30'E	N68°30'E	26°30'	1.85
		69°00'L	N76°30'E	S76°30'E	37°45'	1.45
		42°15'L	S79°45'E	S79°45'E	33°30'	1.45
		17°30'L	S25°00'E	S25°00'E	29°00'	1.35
"	"	6°30'L	S17°00'E	S17°00'E	19°30'	2.00
220	"					
220	Contour	12°15'R	S4°45'W	S4°45'W	7°00'	3.55
			S7°30'E			

50 + to contour.

see P. 17.

see below

Δ on D. P.S. on Pt. 1. N. 5-45 W

Out of sight. Locate from Pt. 0. see above.
For sight on Pt. 0.

9/29/06.

180'	5° 20' R	N 0° 45' W	N 0° 45' W	3° 00'	5.76
"	2° 30' L	N 8° 30' W	N 8° 15' W	4° 30'	3.75
180' contour	9° 00' L	N 14° 45' W	N 14° 45' W	6° 45'	2.40
190' contour	12° 00' L	N 17° 30' W	N 17° 45' W	11° 00'	2.35
"	3° 00' L	N 8° 45' W	N 8° 45' W	6° 00'	4.12
"	4° 00' R	N 10° 45' W	N 11° 45' W	4° 30'	5.73
"	5° 00' R	N 10° 45' W		4° 00'	6.28
"	10° 15' R	N 7° 30' E	N 7° 30' E	3° 30'	7.00
"	13° 40' R	N 8° 00' E	N 7° 55' E	3° 00'	7.98
"	19° 30' R	N 13° 45' E	N 13° 45' E	3° 00'	7.90
"	21° 00' R	N 15° 15' E	N 15° 15' E	3° 00'	8.44
190' contour	24° 00' R	N 18° 15' E	N 18° 15' E	3° 00'	8.64
200' contour	23° 00' R	N 17° 15' E	N 17° 15' E	3° 30'	8.88
"	19° 15' R	N 13° 30' E	N 13° 30' E	4° 00'	8.45
"	17° 30' R	N 12° 45' E	N 12° 45' E	4° 00'	7.85
"	12° 45' R	N 7° 00' E	N 7° 00' E	4° 00'	7.66
"	8° 00' R	N 2° 30' E	N 2° 15' E	4° 30'	7.02
"	3° 30' R	N 2° 15' W	N 2° 15' W	4° 30'	6.31
"	1° 50' R	N 4° 00' W	N 3° 55' W	6° 00'	5.33
"	0° 20' L	N 5° 30' W	N 5° 25' W	6° 30'	4.84
"	5° 30' L	N 11° 00' W	N 11° 15' W	7° 30'	4.10
"	13° 30' L	N 19° 00' W	N 19° 15' W	11° 00'	2.90
200' contour	18° 20' L	N 24° 00' W	N 24° 05' W	15° 30'	2.07
		N 5° 45' W			

From right on P 51.

Contours West side of reservoir

9/25/06

170'	"	7° 30' R	N13° 15' W	N13° 15' W	5° 00'	2° 80'
"	"	6° 00' R	N0° 15' E	N0° 15' E	2° 30'	5.73
"	"	11° 45' R	N6° 00' E	N6° 00' E	0° 00'	6.88
170'	"	25° 30' R	N19° 30' E	N19° 35' E	1° 30'	8.25
180'	"	22° 45' R	N17° 00' E	N16° 55' E	2° 15'	8.32
"	"	17° 45' R	N9° 00' E	N9° 00' E	2° 30'	7° 45'
180' Contour		10° 00' R	N7° 15' E	N7° 15' E	3° 00'	6.83
			N5° 45' W			

22

Proposed tunnel line East side.

9/26/16

Δ 5+15.8

5.
+75

+50

+25

Δ +09

S 4° 30' W.

4.

Δ 3+11.8

S 4° 30' W.

+50

+25

3

+75

+50

+25

2

Δ 1+92.8

S 7° 30' W. S 7° 30' W.

Δ 1+56.3

Intersecting cord produced. 104° 03' R. 139' to B.C.

N 71° 30' W.

+25

1

+75

+50

+25

Δ 0

S 7° 30' W.

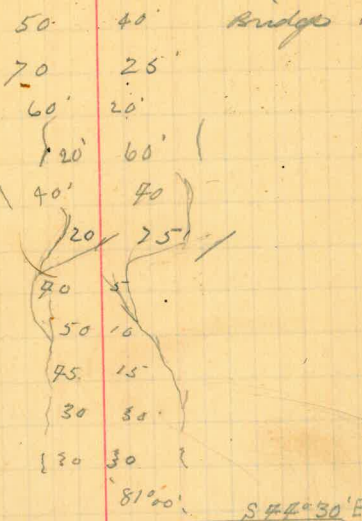
150' contour in gulch about Dam E side

= 150' contour in gulch below dam.

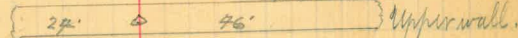
9/27/06

Traverse in river bottom between walls

30+70		N57°45'W
29		
26		
24		
Δ 22+90		18°15'W
22		
21		
20		
Δ 19+06		N. 4°30' E
Δ 16		N. 28° E
Δ 13+66		N. 50°30' E
		S 47°30' E S 47°30' E
Δ 9+12	81°00'R.	N 54°30' E N 54°30' E
Δ 5+91.8	47°30'R	N. 10°00' E N. 9°45' E
Δ 0 = 3+70	84°15'R.	N 77°30' W
5+24		S 7°15' E S 7°15' E
Δ 0+84	15°00'L	S 17°00' W. S 17°15' E
Δ 0 = 3+70	88°30'L	N 77°30' W.
Δ 3+70	24°56'	
Δ 2+70	17°36'	
Δ 1+60	11°47'	



to wall line.



Δ on dam curve

Back sight on Sta 2+70 on curve.

to boulder in river

S 60°30' E

S 64°51' W

75'

40'

Lower wall.

O Traverse line = 3+70 on curve. back sight on 2+70 on curve.

Δ on curve in river bottom

Δ Dam curve

Δ " " Back sight.

24
9/27/66

Tower location

Δ 260' contr.

0.00 12.00

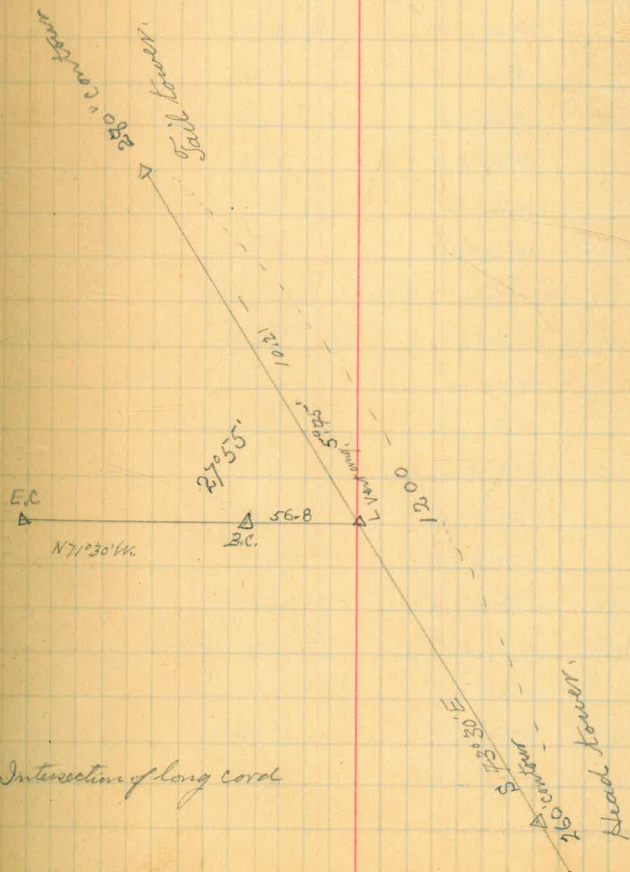
Δ Intersection. $R 27^{\circ} 55' L$

$5^{\circ} 45'$ 10:21

Δ 280' contour.

$S 73^{\circ} 30' E$

5



Dec. 15, 1906

175' Contour. Points on West Side J. Barrett.

	Def.	Pod.	Vert. ang.
175' Cont. E. Δ	0° 0'	N. 46° 30' W	5.60
1 South	2° 47' L ✓		5.63
2 "	7° 33' L ✓		5.83
3 "	10° 24' L ✓		5.86
4 "	14° 35' L ✓		6.12
5 "	16° 46' L ✓		6.24
1 North	5° 34' R ✓		5.74
2 "	7° 02' R ✓		6.06
3 "	11° 24' R ✓		6.41
4 "	17° 55' R ✓		6.47

Contour Pts. on East Side

175' Cont. W. Δ	22° 28' L	3.64	26° 40'	39.68
	24° 04' L	3.63	28° 20'	28.72
	0° 00' ✓	$5.61 + 5.60 \div 2 = 5.605$		
1 South	1° 22' R ✓	5.78		
2 "	2° 46' R ✓	6.05		
3 "	3° 40' R ✓	6.92		
4 "	7° 54' R ✓	7.46		
1 North	5° 37' L ✓	5.90		
2 "	5° 22' L ✓	5.98		
3 "	10° 49' L ✓	6.32		
4 "	17° 26' L ✓	6.43		

Upper Down Site.

S.S. on a 175' Cont. West Side.

S.S. on a 175' Cont. East Side.

Trial Curve for Upper cut off - Road at Barrett Dam.
 $14^{\circ}40'$ L. from East side of Canyon.

0	B.C.		
+	20	$1^{\circ}28'$	✓
+	40	$2^{\circ}56'$	✓
+	60	$4^{\circ}24'$	✓
+	80	$5^{\circ}52'$	✓
1 +	00	$7^{\circ}20'$	✓
+	20	$8^{\circ}48'$	✓
+	40	$10^{\circ}16'$	✓
+	60	$11^{\circ}44'$	✓
+	80	$13^{\circ}12'$	✓
2 +	00	$\Delta 14^{\circ}40'$	✓
+	20	$16^{\circ}08'$	✓
+	40	$17^{\circ}36'$	✓
+	60	$\Delta 19^{\circ}04'$	✓
+	80	$20^{\circ}32'$	✓
3 +	00	$22^{\circ}00'$	✓
+	20	$23^{\circ}28'$	✓
+	40	$24^{\circ}56'$	✓
+	60	$26^{\circ}24'$	no books not set.
+	80	$27^{\circ}52'$	at measuring box
4 +	00	$29^{\circ}20'$	✓

Dec. 17, 1906

$$D^{\circ} = 14^{\circ}40'$$

$$R = 391.727$$

$$C = 562.50 \quad (562.93)$$

$$L = 623.24 \quad (626.65)$$

$$\Delta = 91^{\circ}22' \quad (91^{\circ}52')$$

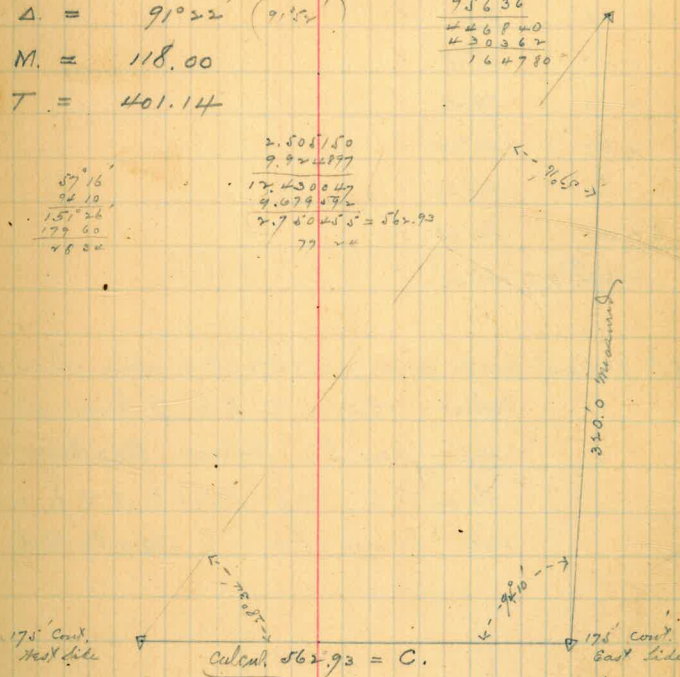
$$M = 118.00$$

$$T = 401.14$$

$$\begin{array}{r} 57.16 \\ 26.10 \\ 157.26 \\ 179.60 \\ 48.20 \end{array}$$

$$\begin{array}{r} 2.505150 \\ 9.924877 \\ 17.430027 \\ 9.679472 \\ 27.504525 = 562.93 \\ 77.20 \end{array}$$

$$\begin{array}{r} .84120 \\ 320 \\ 1682400 \\ 257360 \\ \hline 26718400 \\ 239090 \\ \hline 300920 \\ 286808 \\ \hline 1223320 \\ 756336 \\ \hline 426840 \\ 430362 \\ \hline 164780 \end{array} \quad (562.93)$$



Triangulation of chord at upper dam site.

4+30	30°48'	✓	
+40	32°16'	✓	
+60	33°44'	✓	
+80	35°12'	✓	
5+00	36°40'	✓	
+20	38°08'	✓	
+40	39°36'	✓	
+60	41°04'	✓	
+80	42°32'	✓	
6+00	44°00'	✓	
+22 ⁹ /P.T.	45°41'	✓	628.50

R.P. N25^Δ of located curve Lower Site B.S. along chkd. N. 71°30' W
 Deflect 93°47' R. to E.C. of Curve at
 upper Low Site. Distance 866.0 Curve N 29°16'
 From E.C. Def. 116°07' R. to B.C. on chkd.
 Old Curve L 41°36' E. 563.0 To B.C.

Levels. etc.

Contours Upper Dam Site (Barrett)

East Side of Canal.

Jan. 24th 1907

4.70	156.770		152.050
		6.77	150.0
6.18	156.43	6.52	150.25
3.34	155.08	6.67	149.76
12.51	165.44	2.25	152.73
		5.24	160
4.19	167.73	1.70	163.54
6.41	167.60	6.54	161.19
9.30	172.99	3.91	163.69
		2.99	170
11.63	180.79	3.83	169.16
11.53	189.78	2.54	178.25
		9.78	180
11.80	191.91	10.57	179.21
8.63	196.86	2.78	188.23
		6.86	190
4.70	194.83	6.74	190.12
10.43	203.28	2.00	192.85
		3.28	200
10.13	213.37	1.02	204.24
		2.37	210
11.38	222.46	1.29	211.08
		2.46	220
		1.93	220.53

B.M. on E. side of Canal. 1598.173 = G.A. Elev.

Contours: line letter A. 1, 2, 3 etc. running North.

Contours: line letter B. 1, 2, 3 etc. running South.

Contours: line letter C. 1, 2, 3 etc. running North.

Contours: line letter D. 1, 2, 3 etc. " South.

" " " E. 1, 2, 3 etc. " North.

" " " F. " " " South.

" " " G. " " " North.

" " " H. " " " South.

Jan. 25 1907.

East Side of Canon

12.07	232.60		220.53
		2.60	230.
10.98	242.69	0.89	231.71
		2.69	240
10.51	252.98	0.22	242.47
		2.98	250
2.51	255.08	0.41	252.57
10.04	262.49	0.63	254.45
		4.49	260
12.67	274.75	2.41	262.08
		4.75	270
11.25	282.82	1.38	273.37
		4.82	280
10.56	294.65	0.73	284.09
		4.65	290
11.29	302.62	1.22	293.33
		4.62	300
12.80	315.90	1.52	303.10
		5.90	310
10.37	325.02	1.25	314.65
		5.02	320
12.58	332.71	2.89	324.13
		4.71	330
		2.18	332.53

Contours, line letter I. 1, 2, 3 etc. running North.

" " " J. " " South.

" " " K. " " North.

" " " L. " " North.

" " " M. " " South.

Intersection of road with Canon road on E. side is
about the 275' Contour
N. North.

" line letter O 1, 2, 3 etc. running South.

" " " P. " " North.

" " " Q. " " South.

" " " R. " " North.

" " " S. " " South.

Jan. 26, 1907

Feb. 6, 1907

East Side of Canal.

12.27	344.80		332.83	
		4.8		340
7.59	346.51	5.81	338.99	
8.23	349.08	5.43	341.15	
10.88	347.41	12.85	336.53	
10.68	346.44	11.65	335.76	
10.20	345.74	10.90	335.64	
13.05	353.45	6.34	340.40	
		3.25		350
10.65	361.27	2.83	350.62	
11.77	361.91	11.13	350.14	
6.88	356.32	12.47	349.44	
* 1.05	153.10		152.05	
5.51	147.31	11.30	141.80	
		7.31		140
1.54	136.35	12.60	132.71	
		6.25		130
Feb. 6, 1907				
6.29	138.41		131.92	
		8.41		130
0.96	126.87	14.50	125.91	
		6.87		120
0.24	116.28	11.93	114.94	
		6.29		110
8.78				

Contours Line letter J. 1, 2, etc. running North.

" " " U. " " South.

Contours Bales marked 140-1, 2, 3 etc. running North

" " " 130-1, 2, 3 " " South

B.M. above Blacksmith Shop.

" " " 130-1, 2, 3 etc. " "

" " " 120- " " North

120' Cont. intersects cut with Shed over it.

" Bales marked 110-1, 2, 3 etc. running South

Jan. 26, 1907

Feb. 6, 1907

East Side of Canal.

12.27	344.80		332.83	
		4.8		340
7.59	346.51	5.81	338.99	
8.23	349.38	5.43	341.15	
10.88	347.41	12.85	336.53	
10.68	346.44	11.65	335.76	
10.20	345.74	10.90	335.64	
13.05	350.45	6.34	340.40	
		3.25		350
10.65	361.27	2.83	350.62	
11.77	361.91	11.13	350.14	
6.88	356.32	12.47	349.44	
* 1.05	153.10		152.05	
5.51	147.31	11.30	141.80	
		7.31		120
1.54	136.35	12.60	132.71	
		6.25		130
Feb. 6, 1907				
6.29	138.41		131.92	
		8.41		130
0.96	126.87	14.50	125.91	
		6.87		120
1.24	116.28	11.93	114.94	
		6.27		110
8.78				

Contours Line letter J. 1, 2, 3 etc. running North.

" " " U. " " South.

Contours Bales marked 140-1, 2, 3 etc. running North

" " " 130-1, 2, 3 etc. " South

B.M. above Blacksmith Shop.

" " " 120-1, 2, 3 etc. " "

" " " 120- " " North

120' Cont. intersects cut with Shed over it.

" Bales marked 110-1, 2, 3 etc. running South

Feb. 6, 1907
" 7, "

Contours

East Side of Canyon upper Dam Site

		116.28					
			1.61	114.67			at on B.M.
○	1.55	105.51	12.32	103.96			
			5.51		100.		Cont. Gages marked, 100 - 12.2 etc. running North.
○	0.74	95.00	11.23	94.28			
			5.0		90		" " " " 90 - 12.2 etc. " South
○	1.54	85.08	11.46	83.54			
			5.08		80		" " " " 80 - 12.2 etc. " North
○	1.67	74.48	12.27	72.81			
			4.48		70		" " " " 70 - 12.2 " " South
			2.54	71.94			at on B.M. near Black Shop.
○	3.38	66.01	11.85	64.63			
			6.01		60		Cont. Gages marked, 60 - 1, 2, 3 etc. " North
○	2.25	57.59	10.67	55.34			
			7.59		50		" " " " 50 - 1, 2, 3 etc. " South.
○	4.69	55.35	6.92	50.66			
			4.90		50.45		at on B.M. below Hard Smith Shop.
		55.34					
○	4.40	48.61	11.13	44.21			
			8.61		40		Cont. Gages marked, 40 - 1, 2 etc. running North
Feb. 7, 1907							
○	9.28	46.88	11.01	37.60			
			6.88		40		
			11.31	35.37			

"Barrett's" Feb. 7, 1907

East Side of Canon upper Dam Site

	2.77	38.34	35.57	
			8.34	
○	3.06	33.02	10.38	27.96
			3.02	
			1.30	31.72
○	3.28	32.05	4.25	28.77
			1.47	
○	2.22	23.74	10.55	21.50
			3.72	
	3.55	24.67	4.60	19.12
○	8.25	27.50	3.42	19.25
			3.35	22.15
			6.54	20.96
			5.97	21.33
			6.24	21.16

30 Cont. Sta. marked 30/1, 2, etc. running South.

30

Pump foundation intake of pump 1.0 higher

30.580. Elev B.M. Lower Dam Site (East Side)

30 Cont. Sta. marked 20/1, 2, etc. running North.

Round iron pin in toulder 25' below crest of wall
on E. side of bank

Top of crest of wall, at N. end of wooden tulkhead

" " " " at water gage

Bottom of water gage. (approx. reading of gage)

"Barretto"

Levels on West Side of Canal for Temporary B.M. Site.
 200' below Cut off Hall at upper dam working Govt.

Feb. 7
 " 8/07

	6.700	57.278		30.578	1276.701	B.M. below Blacksmith shop. lower dam site		
			8.040	29.238		Temp. B.M. 30' Contour.	Corrected Elev. *	29.267
○	11.322	44.882	3.718	33.560		" " 40' "	" "	40.281
			4.670	40.712		" " 50' "	" "	* 50.742
○	9.240	54.291	0.021	44.851		" " 60' "	" "	60.628
			3.590	50.701	✓	" " 70' "	" "	* 70.284
○	10.880	64.025	1.146	53.125		" " 80' "	" "	78.343
	11.882	72.466	3.441	60.584		" " 90' "	" "	* 88.210
	12.221	82.460	2.227	70.239		" " 100' "	" "	97.270
	11.528	89.836	4.162	78.298		" " 110' "	" "	* 107.074
	10.979	99.145	1.670	88.166		" " 120' "	" "	* 121.477
	12.262	109.491	1.916	97.229		" " 130' "	" "	129.458
	9.400	116.431	2.460	107.031		" " 140' "	" "	140.262
○	10.788	122.791	2.428	114.003		" " 150' "	" "	* 149.721
	12.020	133.454	3.357	121.434		" " 160' "	" "	157.919
	12.900	142.312	4.040	129.414				
	10.580	150.899	1.995	140.319				
Feb. 8, 1907	12.206	159.984	3.220	147.679				
		7.922	2.107	157.877	*			
	7.978	166.028		152.050	1598.173	Old B.M. on E. Side of Canal near Lower Dam Site		
			2.107	157.921	*	= 160' Contour.		
				.44	discrepancy			

checked.

Lands for Temporary B. M. Continued

Feb. 8 1907

12.667	170.544		157.877
11.890	180.905	1.509	169.035
12.500	192.545	0.860	180.045
12.627	202.840	2.332	190.213
11.490	212.910	1.420	201.420
12.540	222.587	0.863	212.047
12.487	232.874	4.200	220.387
12.220	241.934	3.160	229.714
11.422	252.227	1.229	240.805
12.890	262.801	2.316	249.911
10.620	273.249	2.172	260.629
10.878	282.610	1.517	271.732
12.438	293.258	1.790	280.820
12.388	302.766	2.880	290.378
12.745	311.988	3.523	299.243
11.540	321.266	2.262	309.726
12.015	331.663	1.618	319.648
12.780	340.265	4.178	327.485
11.881	350.768	1.378	338.887
12.5		0.745	350.023

Corrected
Elev.

Reg.	170'	Continued
	180'	"
	190'	"
	200'	"
	210'	"
Reg	220'	"
Reg	230'	"
	240'	"
	250'	"
	260'	"
	270'	"
	280'	"
	290'	"
	300'	"
	310'	"
	320'	"
	330'	"
	340'	"
	350'	"

Corrected Elev. 169.077

"	"	180.085
"	"	190.253
"	"	201.460
"	"	212.081
"	"	220.428
"	"	229.755
"	"	240.847
* 249.954	1" from hole.	
Corrected in, toulter		260.674
Corrected Elev.		271.774
"	"	280.865
"	"	290.420
"	"	299.282
"	"	309.765
"	"	319.682
"	"	327.525
"	"	* 338.927
"	"	350.062

check Levels on
Temporary B.M's West

0.640	350.665		350.023
1.057	339.942	11.778	338.885
4.050	331.534	12.458	327.484
1.742	321.376	11.900	319.634
1.858	311.579	11.655	309.721
3.092	302.331	12.340	299.239
2.622	293.003	11.950	290.381
1.320	284.148	12.175	280.828
1.361	273.095	10.444	271.734
1.950	262.588	12.457	260.638
2.118	252.034	12.672	249.916
1.212	242.019	11.227	240.807
2.898	232.612	12.305	229.714 ✓
4.354	222.739	12.225	220.387 ✓
1.102	213.140	12.698	212.041
1.700	203.718	11.725	201.418
0.262	190.673	12.907	190.211
1.078	181.221	10.630	180.043
2.322	171.359	12.084	169.037
1.485	162.224	10.620	160.739
0.395	158.275	4.344	157.880
1.262	148.944	10.593	147.682
0.150	140.272	8.620	140.324
		11.054	129.220

Side of Common

4/8/07

350'	Contours.
340'	"
330'	"
320'	"
310'	"
300'	"
290'	"
280'	"
270'	"
260'	"
250'	"
240'	"
230'	"
220'	"
210'	"
200'	"
190'	"
180	"
170	"
160	"
150	"
140	"
130	"

	0.380	129.800		129.420
	0.520	121.958	8.362	121.438
0	0.267	110.277	11.948	110.010
			3.244	707.035
0	0.620	98.499	12.378	97.879
			1.270	97.429 ✓
	0.730	88.901	10.328	88.171
	0.913	79.219	10.595	78.506
	1.895	74.143	8.972	70.247
	0.670	61.261	11.552	60.591
	1.873	52.574	10.560	50.701 ✓
	1.480	41.689	12.365	40.209
			12.463	29.226
			11.150	30.539
	11.150	41.728		30.578
			1.480	40.228
			12.463	29.265

120' Contour.

110' "

100' "

90' "

80' "

70' "

60' "

50' "

40' "

30' "

El. on B.M. at Low dam site. El. 30.578
 30.539
 " " " at 150' Cont. not shown 0.039 page 33.
 0.044
 Average elev. 30.683
 0.041

An error in first reading on B.M. (El. 30.578)
 was made. Therefore, 0.041 must be added to
 the average elevation pages 33 + 34

To express foot elev., add to working elev.
 1446.120

Sept 19, 1907

Permanent B.M's. on West Side of Canyon - Upper Dam site.

6.918 245.845 338.927

3.581 342.264 B.M.

Corrected elev. see page 34

1" round iron pin cemented in boulder above office on West side of Canyon

6.444 256.398 249.954

5.974 250.422 B.M.

see page 34

1" round iron pin cemented in boulder.

4.825 184.310 180.085

4.100 180.210 B.M.

see page 34

1" round iron bolt cemented in boulder.

2.383 150.104 147.721

2.710 147.394 B.M.

see page 33

1" round iron bolt cemented in ledge.

7.116 142.988 B.M.

" " " " "

4.146 125.623 121.477

3.379 122.224 B.M.

see page 33

" " " " "

4.300 111.374 107.074

4.023 107.351 B.M.

see page

" " " " "

4.500 90.710 88.210

3.235 87.475 B.M.

see page 33

1" round iron bolt cemented in ledge

3.812 74.096 70.584

3.800 70.296 B.M.

see page 33.

1" round iron bolt cemented in ledge

Permanent B.M's continued.

5.850	56.592	50.744	
		6.863	+9.729 B.M.

See page 33.

1" round iron bolt cemented in ledge

2.988	32.255	29.267	
		2.910	+29.445 B.M.

See page 33

1" round iron bolt cemented in ledge

1.130	310.895	309.765	
		1.308	+309.587 B.M.

See page 34

1" round iron bolt cemented in ledge

Barrett upper dam site. Contours on

West side of Canon

			350.064	
	6.28	356.34		
			6.34	350.
⊙	1.04	345.05	12.33	344.01
			5.08	340
	7.04	324.50		329.28
			4.50	350
⊙	2.70	324.85	12.35	322.15
			4.85	350
			5.17	319.68
	4.91	314.50		309.587
			4.5	310
⊙	2.30	304.47	12.33	302.17
			4.47	300
	4.80	295.22		290.44
			8.22	290
⊙	3.50	286.68	12.04	283.18
			6.68	280
			5.75	280.93
	0.77	275.02	12.33	274.25
			5.06	270

Feb. 12/07.

See corrected elev. page 34.

350' Contour. Stakes marked 350/1, 2, 3 etc. running South.

" " " 320/ " " North.

" " " 350/ " " South.

" " " 320/ " " North.

Temp. P.M. Page 34

B.M. Page 38

Contours. Stakes " 310/ " " South.

" " " 300/1, 2, 3 etc. " North.

Temp. B.M. Page 34.

Contours. Stakes marked 290/1, 2, 3 etc. running South.

" " " 280/ " " North.

" " " 270/ " " South.

West Side

		275.12			
			3.35	271.77	
○	2.63	265.79	11.96	263.16	
			5.79		260
			5.12	260.67	
○	2.67	256.13	12.33	253.46	
			6.13		250
			5.71	250.244	
○	2.46	246.55	12.04	244.09	
			6.55		240
			5.70	240.85	
○	2.80	237.23	12.12	234.43	
			7.23		230
			7.47	229.76	
○	0.46	225.93	11.76	225.47	
			5.93		220
			5.50	220.43	
○	1.89	215.24	12.58	213.35	
			5.24		210
			3.16	212.08	
○	2.82	205.02	13.02	202.20	
			5.02		200
			3.56	201.26	
○			11.96	193.06	

Feb. 13, 1907

Feb 12/13/07

Temp. 13. m. see page 34

Contours. Stakes marked 260 / 1, 2, 3 etc. " North.

Temp. 13. m. see page 34

Contours. Stakes marked 250 / 1, 2, 3 etc. " South.

Temp. 13. m. see page 34

Contours. Stakes marked 240 / 1, 2, 3 etc. " North.

Temp. 13. m. see page 34

Contours. Stakes marked 230 / 1, 2, 3 etc. " South.

Temp. 13. m. see page 34

Contours. Stakes marked 220 / 1, 2, 3 etc. " North.

Temp. 13. m. see page 34

Contours. Stakes marked 210 / 1, 2, 3 etc. " South.

Temp. 13. m. see page 34

Contours. Stakes marked 200 / 1, 2, 3 etc. " North.

Temp. 13. m. see page 34

West Side

Feb. 13, 1907
" 14, "

4.62	195.68	193.06
------	--------	--------

5.68	190
------	-----

Contours. Stakes marked 190/1, 2 etc. run South
Temp. B.M. see page 34

5.43	190.25
------	--------

1.73	185.45	180.92
------	--------	--------

5.24	180.21
------	--------

Perm. B.M. see page 37

5.45	180
------	-----

Contours. Stakes marked 180/1, 2 etc. " North.

1.99	175.27	173.28
------	--------	--------

5.27	170
------	-----

Contours " " 170/ " " South.

6.19	169.08
------	--------

Temp. B.M. see page 34

4.34	166.95	162.61
------	--------	--------

6.95	160
------	-----

Contours Stakes marked 160/ " " North.

9.03	157.92
------	--------

Temp. B.M. see page 33.

1.945	157.01	155.07
-------	--------	--------

11.88	150
-------	-----

Contours. Stakes marked 150/ " " South.

7.01	150
------	-----

Perm. B.M. see page 37

9.32	147.29
------	--------

12.30	144.71
-------	--------

4.66	140
------	-----

Contours. Stakes marked 140/ " " North.

4.30	140.26
------	--------

Temp. B.M. see page 33

1.68	142.98
------	--------

Perm. B.M. " " 37

1.82	134.21	132.39
------	--------	--------

4.21	130
------	-----

Contours. Stakes marked 130/ " " South.

4.75	129.46
------	--------

Temp. B.M. see page 33

12.69	121.82
-------	--------

Feb. 14, 1907

- 0.05	144.66	144.71
--------	--------	--------

4.66	140
------	-----

Contours. Stakes marked 140/ " " North.

4.30	140.26
------	--------

Temp. B.M. see page 33

1.68	142.98
------	--------

Perm. B.M. " " 37

1.82	134.21	132.39
------	--------	--------

4.21	130
------	-----

Contours. Stakes marked 130/ " " South.

4.75	129.46
------	--------

Temp. B.M. see page 33

12.69	121.82
-------	--------

Feb. 14, 1907

42

	3.35	124.87		121.52
			4.87	120
			2.63	122.22
○	3.35	115.90	12.32	112.55
			5.90	110
			8.55	107.25
○	1.28	105.14	12.04	103.86
			5.13	100
○			7.87	97.27
	4.06	103.73	5.47	99.67
○	3.37	95.35	11.75	91.98
			5.35	90
			7.87	87.48
○	1.07	84.68	11.74	83.61
			4.68	80
			6.32	78.24
○	2.38	75.50	11.56	73.12
			5.56	70
			5.25	70.20
○	3.29	66.36	12.43	63.07
			6.36	60
			5.73	60.63
○			11.91	54.45

Contours. Stakes marked 120/1, 2 etc. run North.
 Perm. B.M. see page 37

Contours. Stakes marked 110/1, 2 etc. run South.
 Permanent B.M. see page 37

Contours. Stakes marked 100/1, 2 " North

Contours. Stakes marked 90/1, 2 etc. " South.
 Perm. B.M. see page 37

Contours. Stakes marked 80/1, 2 etc. " North.
 Temp. B.M. page 30.

Contours. Stakes marked 70/1, 2 etc. " South.
 Perm. B.M. page 37

Contours. Stakes marked 60/1, 2 etc. " North.
 Temp. B.M. Page 33.

Feb. 18, 1907

Contour	Sta	Lower Target	Correct Rod	Contour	Sta	Lower Target	Correct Rod	Contour	Sta	Lower Target	Correct Rod	Contour	Sta	Lower Target	Correct Rod
380	1	5.97	14.08	340	1	5.86	14.28	330	1	6.04	1395	320	1	6.34	1332
	2	6.04	13.96		2	6.07	13.86		2	6.01	1398		2	6.61	1278
	3	6.20	13.59		3	6.21	13.58		3	6.11	1384		3	6.82	1236
	4	6.41	13.17		4	6.38	13.24		4	6.05	1341		4	0.83	1217
	5	6.49	12.07		5	6.58	12.82		5	6.29	1331		5	1.26	1174
	6	6.47	13.05		6	6.60	12.84		6	6.30	1297		6	1.27	1173
	7	6.48	13.07		7	6.59	13.18		7	6.35	1266		7	7.23	1154
	8	6.46	13.19		8	6.42	13.13		8	6.50	1251		8	1.44	1155
	9	6.45	13.07		9	6.40	12.86		9	6.64	1228		9	1.32	1168
	10	6.42	13.13		10	6.41	12.85		10	6.70	1240		10	1.07	1192
	11	6.38	13.36		11	6.55	12.98		11	6.77	1250		11	1.15	1185
	12	6.37	13.25		12	6.51	12.83		12	0.71	1256		12	1.29	1170
	13	6.51	12.97		13	6.56	12.85		13	0.43	1245		13	1.25	1176
	14	6.48	13.05		14	6.59	12.82		14	0.55	1245		14	1.20	1188
	15	6.47	13.32		15	6.58	12.94		15	0.55	1245		15	1.10	1172
	16	6.22	13.56		16	6.60	13.06		16	0.55	1271		16	1.31	1169
	17	5.85	14.30		17	6.53	13.42		17	0.29	1245		17	1.22	1178
	18				18	6.27	13.82		18	0.55	1228		18	0.95	1205
					19	6.08	13.91		19	0.71	1229		19	0.38	1262
						6.10			20	0.18	1252		20	0.42	1258
						6.03			21	0.22	1278		21	0.36	1264
						6.06			22	0.09	1291		22	6.50	1300
									23	6.26	1348				
									24	6.05	1390				

6.49
6.50
6.51
6.52

7.00
6.00

7.23
1.44

6.07
6.08
6.09

Contour No	Lower Target	Correct Rod
310	1 6.57	1286
	2 6.68	1264
	3 0.49	1251
	4 0.95	1205
	5 1.32	1168
	6 1.22	1176
	7 1.40	1160
	8 1.43	1157
	9 1.49	1151
	10 1.45	1155
	11 1.28	1172
	12 1.40	1160
	13 1.45	1155
	14 1.26	1174
	15 1.57	1143
316	16 1.62	1138
	17 1.63	1137
	18 1.42	1158
	19 1.36	1164
	20 6.96	1208
	21 6.66	1268
	22 6.43	1314

	2.29	56.74		54.45	
			6.74		50
			7.01	49.73	
⊙	4.66	49.84	12.56	44.18	
			7.84		40
	8.62	48.89	9.59	40.25	
			8.89		40
	0.17	36.13	12.93	35.96	
			6.13		30
			6.68	29.45	
out		24.35	12.16	23.97	
			12.42	11.96	

B.M. in angle 38

L6.

Dip & Elev's in Incline Test Hole

H¹ Vert A.
3' 10 1/2"

Contour sth.	5.58	75.58	70. Apr
Sta. 0. loc.		3.08	72.50

R.P. 0 137° 19' L N 31 10 W

95.8

60+3

30+6

0

N 55 40 E 21° 3'

Barrett Dam Upper Site.

Nail in N end of tie at top of slope.

To floor of Incline 5'-0"

" " " 4'-2 1/2" 4.5 1.1

" " " 1'-11" 4.16 1.66

To

Nail in N. end of tie Top of slope H.I. 3' 10 1/2"
10.70 From Sta 0 to mouth of Tunnel

Elm. of	B. M.	E. side. Linn.	Site
	working	Govern mt.	
	30.578	1476.701	
	50.440	1496.563	
	71.927	1518.060	
	94.203	1540.326	
	114.670	1560.793	
	131.944	1578.045	
	152.060	1598.173	

	+		-	
	10.84	162.89		152.05
	12.27	172.69	2.47	160.42
	12.78	184.98	0.49	172.20
	12.55	197.01	0.52	184.26
	12.75	210.34	0.60	197.61
		197.01		
	12.78	209.12	0.60	196.42
	12.02	220.90	0.24	208.88
	12.69	233.08	0.51	220.59
	12.54	245.28	0.24	222.74
	11.38	256.02	0.64	244.64
	7.96	257.75	6.23	229.79
			4.98	254.77

Oct. String
Red + Black paint for Red

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

MINUTES	LKS.	MINUTES	LKS.	MINUTES	LKS.
1	2 1/3	21	49	41	95 2/3
2	4 2/3	22	51 1/3	42	98
3	7	23	53 2/3	43	100 1/3
4	9 1/3	24	56	44	102 2/3
5	11 2/3	25	58 1/3	45	105
6	14	26	60 2/3	46	107 1/3
7	16 1/3	27	63	47	109 2/3
8	18 2/3	28	65 1/3	48	112
9	21	29	67 2/3	49	114 1/3
10	23 1/3	30	70	50	116 2/3
11	25 2/3	31	72 1/3	51	119
12	28	32	74 2/3	52	121 1/3
13	30 1/3	33	77	53	123 2/3
14	32 2/3	34	79 1/3	54	126
15	35	35	81 2/3	55	128 1/3
16	37 1/3	36	84	56	130 2/3
17	39 2/3	37	86 1/3	57	133
18	42	38	88 2/3	58	135 1/3
19	44 1/3	39	91	59	137 2/3
20	46 2/3	40	93 1/3	60	140

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

Angle	COR. IN LINKS	Angle	COR. IN LINKS	Angle	COR. IN LINKS	Angle	COR. IN LINKS
0		0		0		0	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

