

519

W519

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide
Slopes 1 on 1.
Single Track Embankment.

MICROFILMED

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be $30.6 + (20 - 16) \div 2$ or 2 ft. added to $30.6 = 32.6$. For slopes of 1 on 1½ see inside of back cover.

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Made in U. S. A.

519

W. P. Bayer

Isaacson Horber Steedman
Chambers St. N. 1196 J

M. L. Golden Contractor. Rancho ST
3167

Jack Tomlinson Supt 243-16th
Natar

Duncan Love Time-keeper 10/6

Jack Hightower Labor Foreman
Whinton Mixer Man - Hendrix

E. K. Ryland Timekeeper 7-6-36

Jewelrd New Foreman M. W. Galland

C. F. Graff

cleator cement Finishes

a cleator

Fred D. Pyle Hydraulic Eng

Beerman Asst "

L. H. Hill Res "

Fred Brackman Insp

W. P. Bayer Insp

Van Clev Curing

New Timekeeper Arthur Campbell

" " E. B. Rouse 7-10-1936-
8-5-36

Federal Public Works Project 1223R

H

0
1
2
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22
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26
27
28
29
30
31
32
33
34
35
36
37
38
39
40Ex
to be
of road
examp
30.6 =

Lake Hodges Dam

Bauer's Records

Book 1.

HODGES DAM

STRENGTHENING

22% 2 1/2

1936

16% 1 1/4

27% 3/4 Lake Hodges Dam.

30% 5/8

P.W.R. 1223R.

Symbol No.

42.133

April 16. Arriv. at Dam with

Mr. Hill - Hough

Looked over Dam-Tunnel

& studied plans & specifications

17. Studied plans - specif.

Excav.

Rec. Car. Cement Riverside

1) U.P. 124987

1200 SK

12 broken

Gardner - Denver Air Mage - Air

Filter arrived

Electrifying string & switch

board installed

18. Helped Surveyor - Cross-

Sectioning Excav. for Spillway

Made shelving for Office records.

Multifoote - Road - parer (27E)

arrived (N. 3720)

The Foote Co. Nunda N.Y.

April 20. Finished Shelving

Cut steel-samples

1) 2 $\frac{3}{4}$ " \square 2'lg

2) 2 $\frac{7}{8}$ " \square 2'lg

3) 2 $1\frac{1}{4}$ " \square 2'lg

Transformer arrived

2) Carload River-side Cement

U.P. 125-812 1200 Sks

Loss about 10%

2 Men cleaning steel. 8 hours

2 " unloading Cement 8 hours

April 21 Cutoff-Wall - Steel

Bottom { 9 - $1\frac{1}{8}$ " \square 40' } 20 - $\frac{3}{4}$ " - 2' Tie bars
3 - $1\frac{1}{8}$ " \square 21

Labour Steel-for Spill-way

1 Steel-formman

3 " workers

6 " carrier } Laboren.

3 " Cleaners

Section 1 South-East

Spillway

24 - 1" \square 40' Longitudinal Bars.

20 - $1\frac{1}{8}$ " \square 40' - 20 - $1\frac{1}{8}$ " - 21' Paralle. Stream-B

Cutoff-Wall - South-East - Horizontal Steel.

2 - $1\frac{1}{8}$ " - 40

1 - 1" - 40

April 21

Fenton-Murray Canyon

1 1/2 Rock 6.5 Ton Trucks

1 1/2 Rock 6.5 " " "

for Drainage-Ditches.

{ Helped surveyor cross-sectioning

{ Spillway - Cutoffwall.

April 22

- 1) Section 2 (next to SoE Section)
 18 - 1 1/8" x 40' & 18 - 1 1/8" - 21' (Parallel Stream)
 24 1 1/8" x 40' (Longitudinal)
 3 1" x 40' Horiz. (Cutoff-Wall)

- Section 3
 18 - 1 1/8" x 40' Parallel Stream
 Longitudinal 24 - 1 1/8" x 40' (Longitudinal)
 3 - 1" x 40' Horiz. Cutoff-Wall

- 2) 100 - 4" x 1' Cem. Train-Tile
 30 Rows 40 in Rows 10 high
 3) Carload 1200 st Riverside Cement.
 17 124389 Paperbags 114000 lb

Loads

1	105	6
138	2 135	7
	3 130	8
	4 130	9
	5 130	10
	6 130	
	760	

See Apr. 23.

4) Told Jack Tomlinson Supt.
 at 2 PM to bail Water out
 at Cutoff-Wall and mud
 at bottom

28.9
 32-9
 30-9
 22-9
 21-1
 19
 17-4
 7-4
 7-4

Section 4

9 - 1 1/8" x 40' +
 4 - 1 1/8" x 40'
 213

1 - 1" x 9'
 10.7
 8.9
 10
 11
 84
 13.6

1 - 1 1/8" x 13-9
 1 - 1 1/8" - 13-5
 13-7
 13-7
 13-5
 13-1
 13-0
 12-0

Parallel
 Stream
 Bed.

1 - 1" 34'
 1 " 32'
 1 " 32.5'
 1 " 37.0'
 1 " 32.5'
 1 " 32.
 1 " 32.
 1 " 31.
 1 " 32.
 1 " 32.5'
 1 " 27.5'
 1 " 29
 1 " 27.5'
 1 " 27.5'
 1 " 29.2'
 1 " 29.2'
 1 " 25.0'
 1 " 22.8'
 1 " 21.5'
 1 " 20.3'
 1 " 23
 1 " 19.2
 1 " 20.1

Longitudinal Steel

1 - 1" x 22' Horizontal in Cutoff Wall

- 5) Labor 1 Steel-Farman } 8 hour
 3 " Workmen } each
 3 " Cleaners }
 4 " Carriers }

760
 1) Car Riv. Cement UP 124389
 Bal 7 105
 8 105
 1200 9 970
 760 9 116
 440 10 114
 1200

April 23

2) 1:30 PM Cylinders 5 6 7
 28% 28% 28%

3) Slump test 9:45 AM 1 1/2"
 " 1:30 1 3/4"
 Added Water 19 per batch

4) Labor Mixer 8:45 8:45 to 9:45
 1 Mixer man 6x3 = 18 Batches
 1 Span boss 3.3 Min.
 2 Cement-Dumps
 2. with Rubber boots
 3 Tampers

Electr. Vibrator 10 AM
 2 Extra Men

5) Hauling Material 12 Trucks 3 Batches each
 11:30 AM 7 Sacks mix. 6x3x2
 21x3 = 63x7 441 = 73.5 yds

1)	7	7
2)	14	14
3)	20	00
4)	39	30
5)	12	18
6)	36	13
7)	13	39
8)	10	10
9)	11	11
10)	56	14
11)	04	

6) 15 test = 60 Train Tik
 S. 3-3-3-3-3-3-3-7-9-6-3-3-3-5 N

about 1 yd. Concrete
 wasted.

1/2 h waiting
 for Trucks

1) Mixer: Brown-Beris Equip. Co. April 24
 (Hoering) delivered.

2) Paving SE-Side of Spillway 8 AM

1)	7	7	7	45 Trucks - 3 Batches each 11634
2)	14	14	14	Truck 23 2 Batches left
3)	9	9	9	on old Spillway.
4)	12	12	12	A Loaded Trucks left for next
5)	13	13	13	day.
6)	10	10	10	133 Batches x 7 = 931 Sko Cem.
7)	04	04	04	6/931 = 155.17 yds
8)	39	39	39	
9)	11	11	11	
10)	18	18	18	
11)	5	5	5	
12)	10	10	10	
13)	23	23	56	
14)	4	4	36	
15)	00	00	23	

3) Steel in cut off wall
 1 - 1 1/8 - 40
 1 - 1 1/8 - 21
 2 - 1" - 40 each
 3 - 1" □ - 40' in North end
 of Spillway (Longitudinal)

A) Slump test 9 AM 1 1/4
 " 1:30 PM 1 1/2
 19 gal. Water

Baker leaves 5:30 PM

5) Labour 1 Superintendent 7 PM
 1 Mixer man 8 1/2
 1 Finisher 10 1/2 } 7 PM
 " 6 1/2 }
 2 Lab. at Vibrator
 4 Laborer Cement
 2 Carpenter (Form - Runway)
 8 Spreaders

Mr. Pyle out Late PM

April 25

1) 2nd. Section of Spillway
8 AM Moved Mixer off Steel
12 Min delay, Ordered By Bailey

1) ✓	23	23	Batched
2) ✓	7	7	7 ✓
3) ✓	00	00	00 ✓
4) ✓	14	14	
5) ✓	9	9	
6) ✓	12	12	12 ✓
7) ✓	109	109	10 ✓
8) ✓	4	4	
9) ✓	10 D	10 D	
10) ✓	11	11	
11) ✓	18	18	
12) ✓	5	5	
13) ✓	23	23	✓
14) ✓	39	39	✓
15) ✓	04	04	✓
16) ✓	20	20	✓
17) ✓	13	13	✓

16	110
16	7
4	
36	
3	
108	
2	50
110	20

6/770 = 128.33 yds

2 batches left 24th

2) Slump test

10:45 A.M. 1 1/2
1 P.M. 1 3/4
Cylinder 8, 9-10 filled. 1 P.M.
Water 20 Gallons per Batch

3) Afternoon Superintendent only occasionally
at mixer
no foreman on job
P.M. timekeeper at W.P.A.
inspector's office.

4) Labor.

- 1 Superintendent to 7 P.M.
- 2 Steelmen
- 2 Carpenters
- 2 Laborer on Vibrator
- 1 Mixerman
- 2 Finisher to 7 P.M.
- 4 Laborer on Cement
- 9 Laborer for spreading
& moving Timbers
- 1 Timekeeper

Cautioned Superintendent several
times to water spillway &
Subgrade

Mr. Golden out A.M.

Cylinder 4, 5, 6 taken to Testing Station
by Brackman

April 26 Sunday

Checked on wetting concrete at 9:15 AM & found it dry. I cautioned timekeeper severely as he was supposed to water until arrival of Tomlinson Superintendent.

Tomlinson came about 9:30 to 1 P.M.

I insisted that the concrete had to be watered & he kept wet all day. On checking at

12:15 P.M. & 4:10 P.M. I found the timekeeper watering. The whole slab was wet.

Weather hot & windy. The 3 test cylinders were kept moist by me during the day.

Aggregate sample



$= 0.36 \text{ ft}^3$
Weight Total
46
7.5 Pail.
Apr. 23rd 38.5 lb
net.

April 27

1) Third Section of Spillway.
Work commenced at 8:00 AM

Truck

1) 14 ✓	7) 00	11634 lb
2) 7 ✓	8) 04	
3) 12 ✓	9) 36	
4) 20 ✓	10) 22 Truck left	
5) 10.5 ✓	11) 6 Batches over.	
6) 39 ✓	$9 \times 3 = 27 \text{ B} \times 7 = 189 \text{ Cement}$	
		$= 31.5 \text{ yds}$

Water 19 to 20 Gallons

2) Labor.

1 Superint.	
1 Foreman	
2 Laborer Vibrator	
1 Mixerman (Winton) 8 to 10:30	
4 Laborer spreading	

6 h. → 1 finished to 2 P.M.
2 h. { 2 Laborer excavating & cleaning up.
2 " Cement
1 Timekeeper

3) Afternoon above even excavating below dam. except finisher & Steelworkers & helpers & Mixerman

46
7.5
38.5

D.

Total Concrete
73.50
23 4.41 155.17
24 9.31 128.33
25 7.70 31.50
27 1.89 388.50
28 31 388.50

April 28.

Rex-Pumpcrete Chain Belt Co.
Process-Ciese.-System Kooyman
Milwaukee delivered.

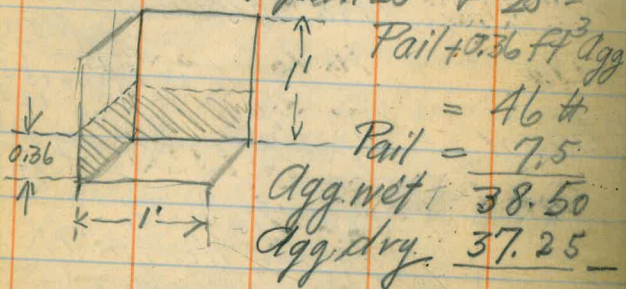
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1) Labor

8 hours { 2 Steelmen bending
A Helpers carrying
Gleaminy
1 Laborer water & Blab.

2) Preparing testing.

Material & Making Report
for April 23rd & 25th



Pail + wet aggregate 46 #
" & dry " 44.75

$$\frac{1.25}{38.5} = \frac{x}{100} \quad x = 3.25$$

Free water 3.25 %

11634 # = 20 Gallons =

1 cu ft Water = 7.5 Gall.

1 Gall = 8.345 #

1 cu ft Water 62.218 # (80°)

1 Batch free water (11634 #)
added 20 Gall = 20 x 8.345 = 166.90 # =
added 19 Gall. 19 x 8.345 = 158.555 #

2 1/2 Rock.	22%	} 4074 Sand	
1 1/4 "	16%		} 7560 Rock.
3/4 "	27%		
Sand	35%	11634	
	100%		

$$\frac{1 \text{ Gall Water}}{8.345} = \frac{x}{1.25}$$

x = .15 for sample
cut # = 3 x 15 = 4.5 Gall
for 15 sacks 4.5

April 23 2.02 + 2.71 added 19 = 4.73

Beerman out at 330 P.M.

P.W.A. Docket N° 122

April 25 2.02 + 2.86 added 20 = 4.88

April 29. 1) Bringing Test cylinders Test records
8-9-10 to Testing Station.
& delivered Boxes, Records
Test sheets & Films to Beermann
Office.

2) 2 Steelmen cutting, bending
Steel

8 hours each. 4 Laborers carrying &
cleaning steel
with elect. Operat.
Wirebrushes

1 Laborer kept spillway
net installed sprinkling
system late in afternoon
Electr. Hoist delivered late

April 30.

Moving Stationary Mixer 2 hours } 1 Steel Foreman Bending steel for
4 hours } 1 " Helper diagonal Reinforcement
2 hours } 5 Laborer carrying cutting steel
4 hours } 1 Pumpcrete Operator installing
2 hours } 1 Carp. Helper Stripping forms
Cut-off Wall & Apron

4 Carpenters working on Platform shown
for Stationary Mixer } 6 hours
1 Carpenter helper }
1 Pumpcrete Operator 8 hours
helping Carp.
1 Laborer " " 8 hours
1 Electrician working on hoist } 8 hours
plant }
Sprinkling for spillway works satisfactory.

May 1 Cement Report

1) Ap. 17	UP. 124987	1200	
2)	20 " 125812	1200	- 10
3)	22 " 124389	1200	
		<u>3600</u>	
	Loss.	10	
	Report Brockman	3	
	" Bauer	2331	
		<u>2344</u>	
	May 1st	1256	Sta

Cement
on hand
see next page

3 Laborers 6 hours
2 " 2 hours

May 5. Election day.
watering spillway.

May 6. 1) Steel.

8 hours { 1 Steel foreman } bending, checking
8 hours { 1 " Helper } carrying, cleaning
8 hours 3 Laborer

2) Platform for Mixer
& Pumpcrete Machine.

8 hours 1 Carpenter.

8 hours 1 Electrician: Wiring.

8 hours 1 Timekeeper E.K. Ryland.

23/7 24/8 25/9 27/11
Bauer checking Grades with
Brackman
Spillway watered all day.

May 7.

1.) Steel (no steelmen)

8 hours 3 Laborers carrying
cleaning.

2) Platform for Stationary Mixer
& Pumpcrete Machine
no labor.

3.
8 hours Timekeeper E.K. Ryland.

8 hours 1 Electrician Checking wiring
of Mixer, Pumpcrete Machine.

5.)
8 hours 1 Pumpcrete Operator.

6h. Helping on pipeline
Pumps.

Bauer making danger signs.

6. Spillway kept wet all day.
2 PM Tomlinson & Ryland cautioned to
protect cement.

May 8.

Checking cement on job.

Roll. 1 221 ✓
2) 221 + 44 = 265 ✓
3) 207 + 18 = 225 ✓
4) 207 + 10 = 217 ✓
5) 207 ✓
6) 96 ✓

7231 ✓

Checked May 1
1256.

Labor

1) Steel
8 hours 3 Laborers, Carrying
cleaning.

2) Platform for Stationary Mixer
+ Pumpcrete Mach.
8 hours 2 Carpenters

8 hours 3) Electrician, Lino's + Mixem.

8 hours 4) Timekeeper.
(7)

Bauer Checking & recording
Cracks in Buttresses
(in blue on wall)
see next page.

Spillway kept wet all day.

Visitors: Miss Graft out 2:30 PM

Record of Cracks
in Buttresses marked
with blue X Looking from E to W

7 E side	X								
8 W "					X				
E "	Dark				X				
9 W "					X				
E "		X			X				
10 W					(X) Bridge				
E	X	X			X (X) Bridge				
11 W					X (X) Bridge				
E					X X				
12 W		X			X				X
E		X			X X				X
13 W		X			X				X
E		X			X				X
14 W					X				X
E					X				X
15 W					X				X
E					X X				X
16 W					X X				X X
E	X				X				X X
17 W		X			X				X
E		X			X				X
18 W					X				X
E					X				X

5/12

5.11

2

5.12

Total
↓

19 W	x	x	x	} 5/12
E	x	x	x	
20 W		x		}
E	x	x		
21 W			x	} X
E		x		
22 W			x	}
E			x	
23 W	} no cracks			
E	} no cracks			
24 W	} no cracks			
E	}			

Labor

23

May 9

1.) Steel
8 hours. 3 Laborer. Carrying, Cleaning

2.) Platform for Mixers.

2 Carpenters

3 Laborer

(9 Men) A) Timekeeper

Tomlinson cautioned to protect the cement better.

Spillway kept wet all day

(last day for curing)

Bauer finished locations recording cracks in Buttresses.

replaced reporter for cylinders 5, 6, 7, 8, 9, 10

2x4 Coping

Weather: clear-warm.

Sunday

May 10

Cement is well covered now.

19 May 11 Labor.

1) Steel

4 hours 3 Laborers carrying
cleaning

2) Platform for Mixers

8 hours 6 carpenters
30+ 4 hours 3 Laborers

3) Power-saw

8 hours 1 Electrician rigging up
Power saw

8 hours 4) Time Keeper

(11 Men)

Contractor using City $\frac{5}{8}$ " steel
for drift pins on Mixer platform.
(Permission by Hist.)

8:15 AM ordered Tomlinson to cement
Honeycombed places in front of
cutoff wall & cleaning out Weep
holes.
Watering of spillway dis-
continued.

Making records of cracks in
Buttresses 17N to 12E showing elevation
& extensions of cracks below walk
(Brackman + Bauer)

25

Visitors: Mr. Pyle - Dick Smith 12:30 P.M.
Inspector Graft out { 2 P.M. to
3 P.M.

Weather clear-warm.

May 12

Labor.

1) Steel

no work done

2) Platform for Mixers

8 hours 4 Carpenters.
8 hours 3 Laborers

3) Power saw & Formwork

8 hours 2 Carpenters

8 hours 4) 1 Timekeeper

10 Men.

5) Recorded Cracks in Buttresses W. 12 to E10
with Brackman
E18 to N. 21
& 17E-18N

(9W to 7E
missing)

{ 10 E-side to
9 E-side

6) Weather to 10 AM. cloudy-cool
after 10 AM clear-warm.

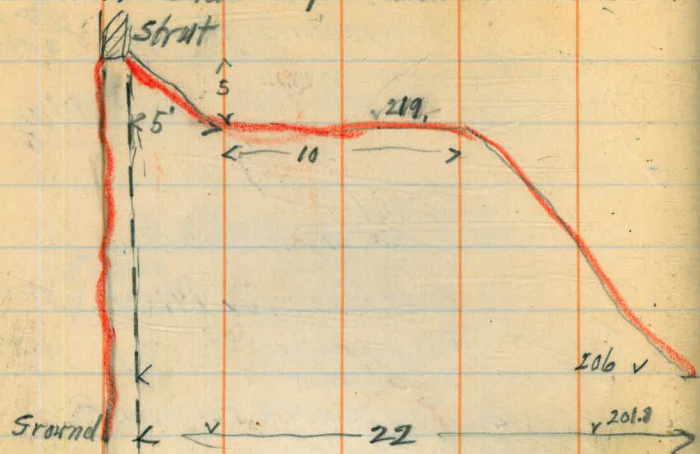
7) Cutoff wall not cemented.

8) Visitors: Mr. Graft, 3:30 P.M.

May 11.

(All records taken looking against buttresses.)

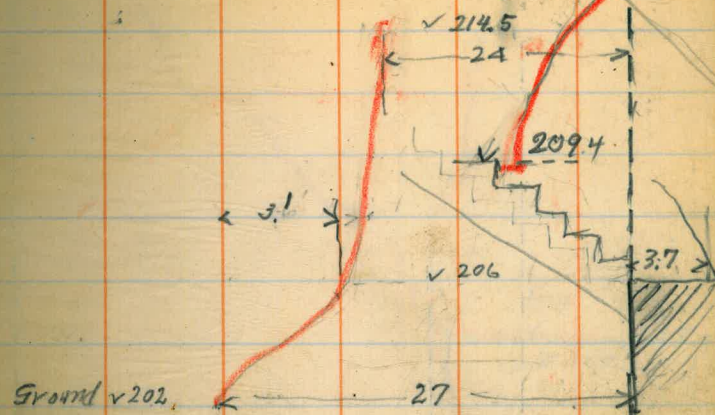
W. side 17.



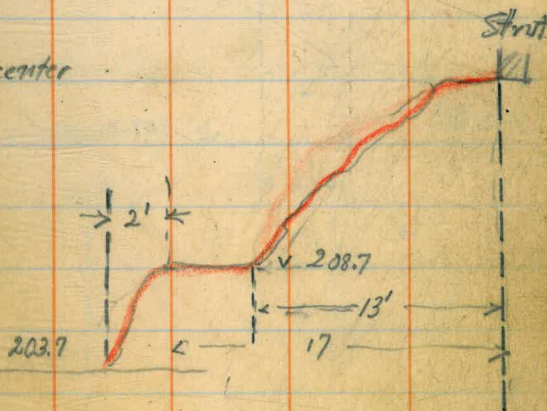
E side 16.

5/11

E side 16 upstream



E side 16 center



5/11

E side 16 down stream

→ 3 ←

↑ 5 ↓

↓ 203.7 29'

← 1.5 →

W-side 16 down-stream

Strut 5 →

↑ 2 ←

19.5

√ 204.5

W-side 16 up stream

Strut

209

→ 3.5 →

← 2.5 →

214

4'

203

27

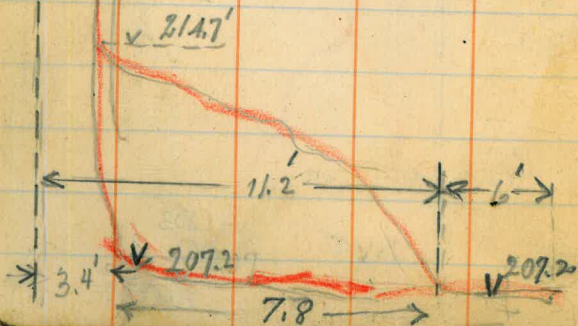
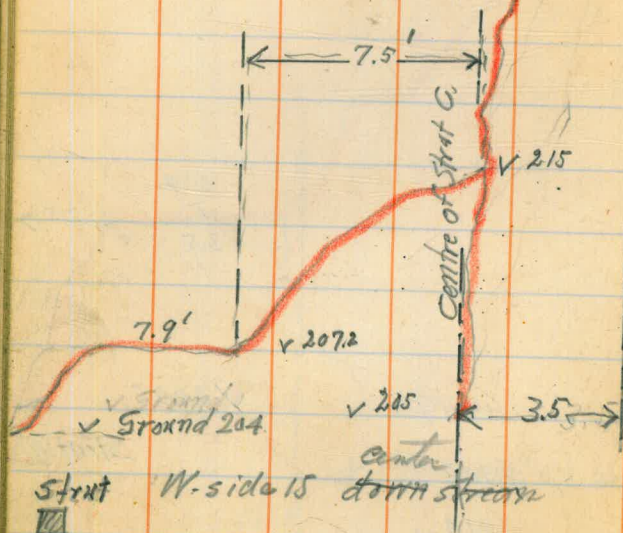
Ground

5/11 29

5/11

E side N centre

Strut



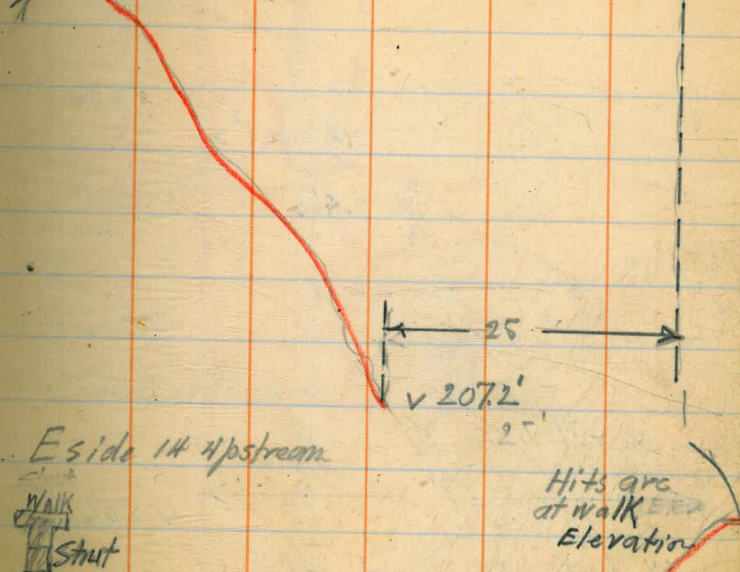
5/11

W-side 15 upstream

Hitting arc A' below Walk

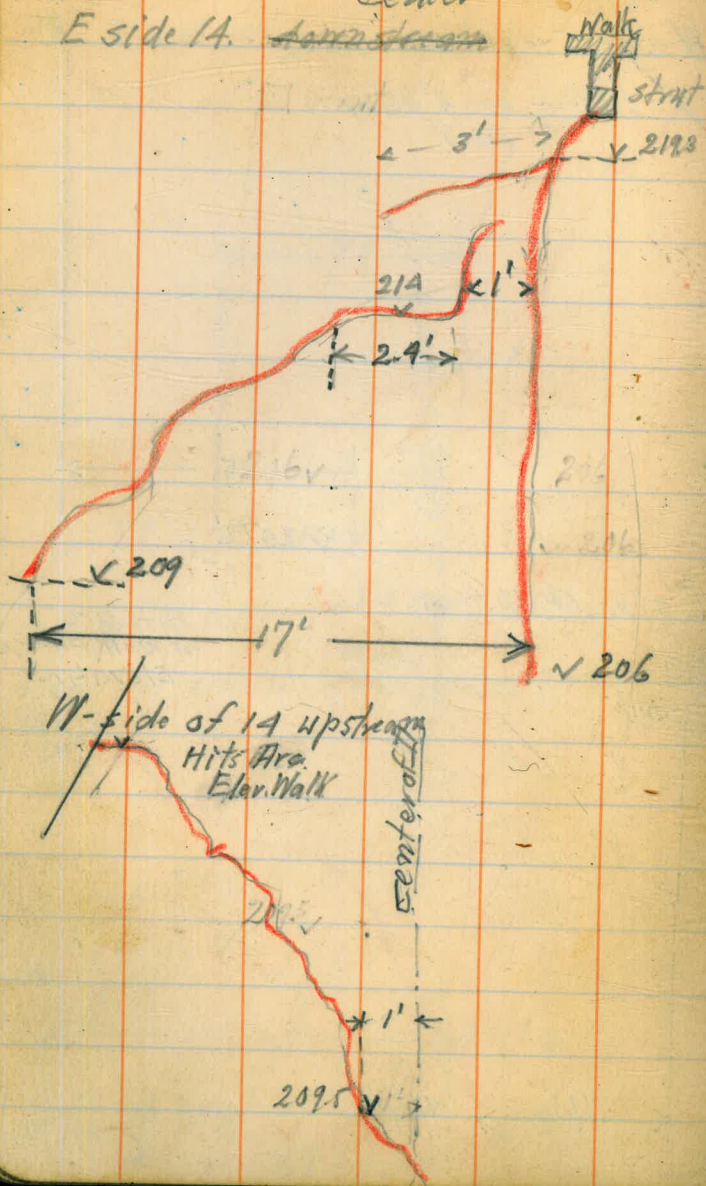
31

Strut



5/11

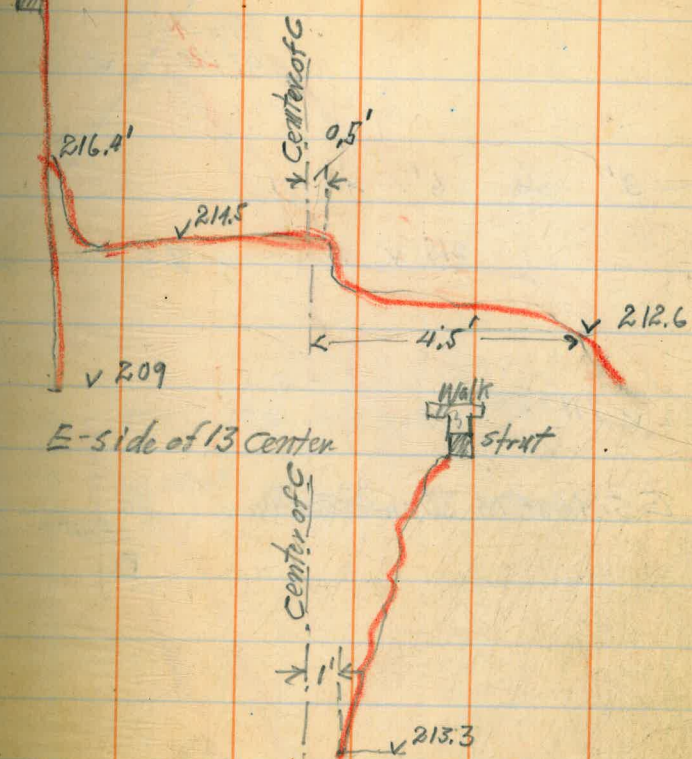
E side 14. ~~down stream~~



5/11

33

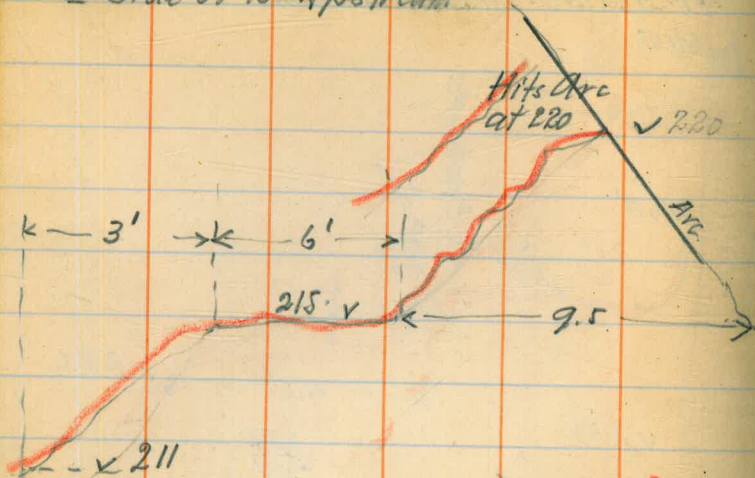
Walk strut
W-side of 14. down stream



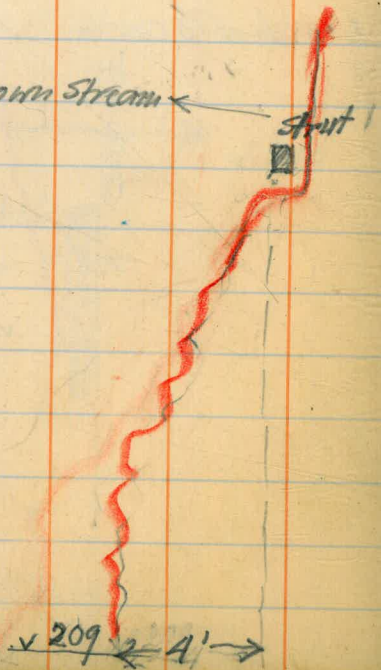
E-side of 13 center

5/11

E Side of 13 Upstream



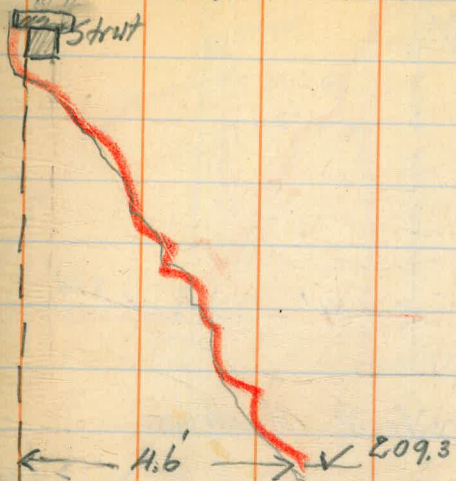
E Side of 13 Down Stream



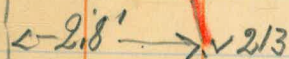
5/11

35

W-Side of 13 Downstream



W. side of 13, center



5/11

222.3 v
Hits Ave
West side of 13. Upstream

4' →
214

Eastside 12. Upstream

222

6'

4.8' →
216 v

Fill

5/11 37

Eastside 12 center

strut

Construction joints

220 v

← 6' →

213 v

209

7.5' →

Eastside of 12 Downstream

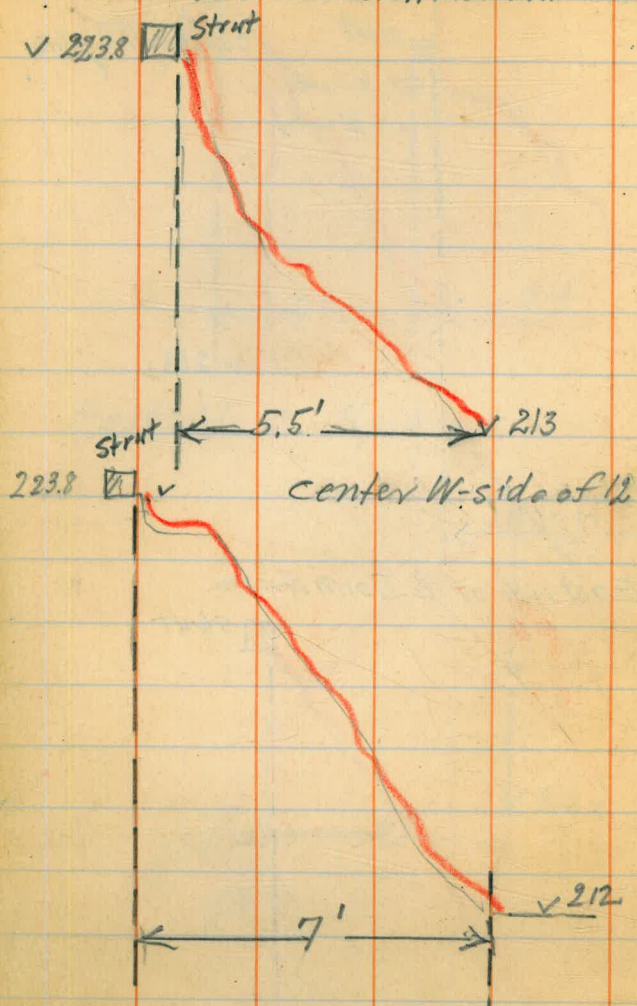
strut

209 v

5' →

May 12, 36

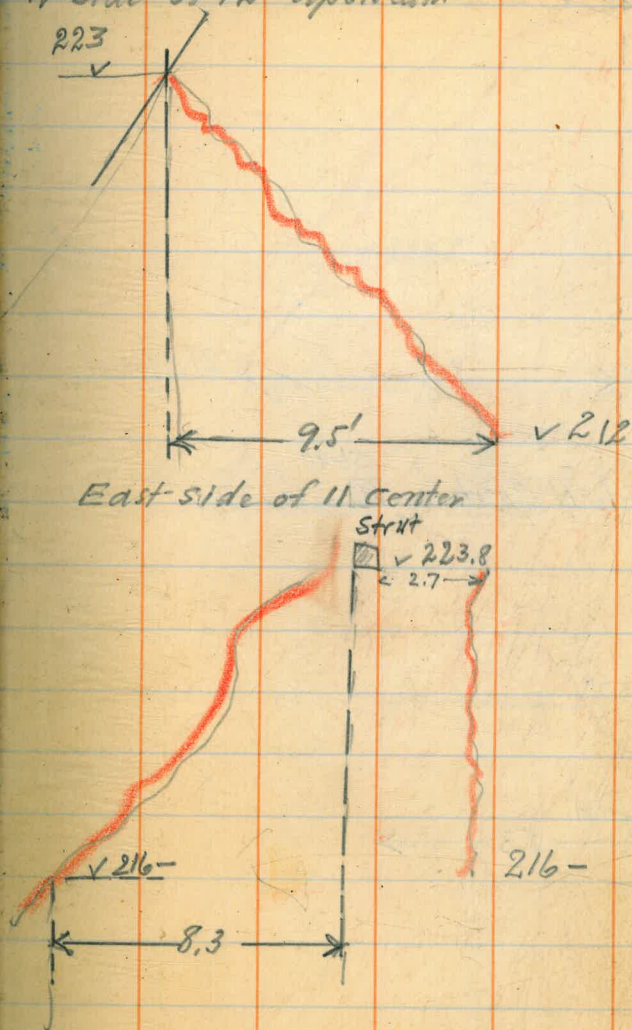
Westside of 12. downstream



5/16

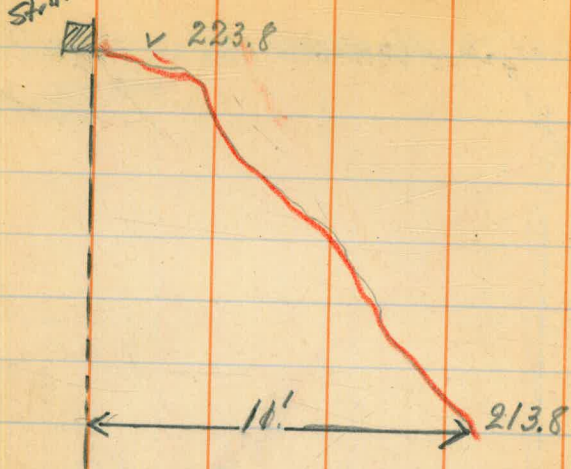
39

W-side of 12 Upstream

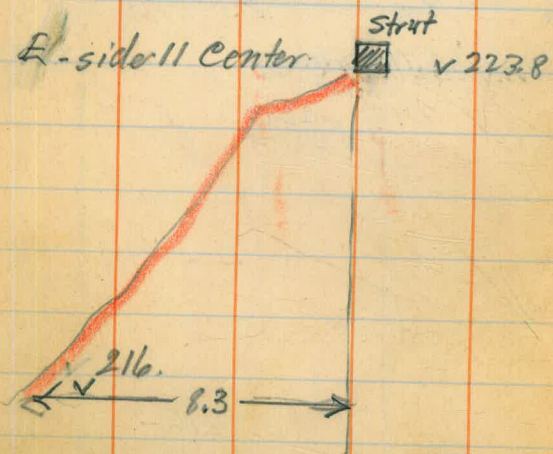


5/12

W-side 11 Center

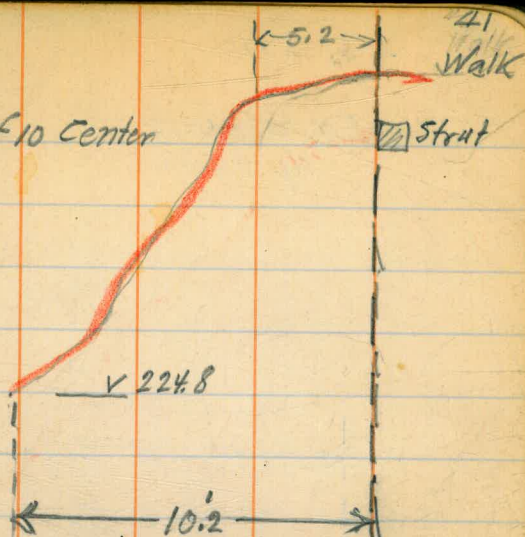


E-side 11 Center

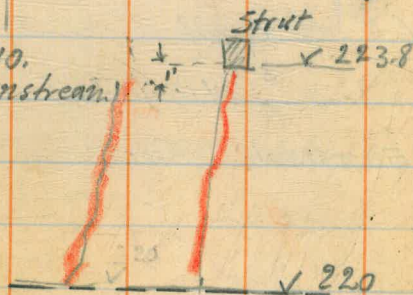


5/13

E-side of 10 Center

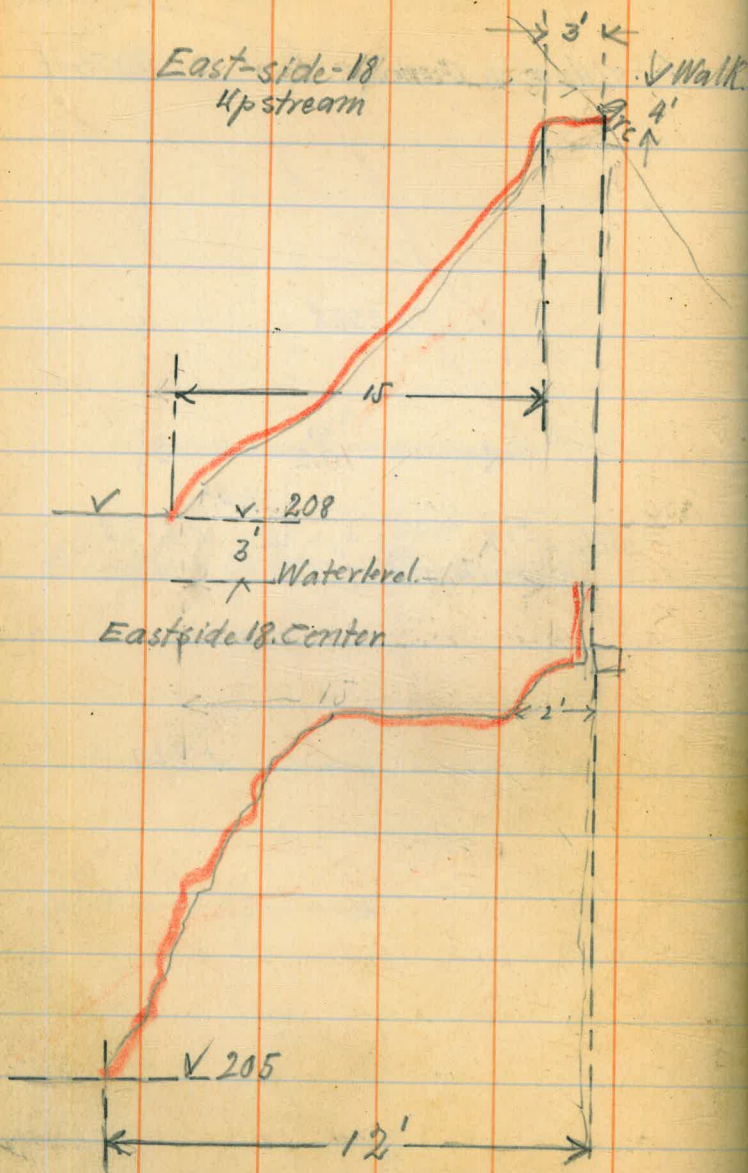


E side of 10 downstream



5, 12. 1936

East-side-18
Upstream

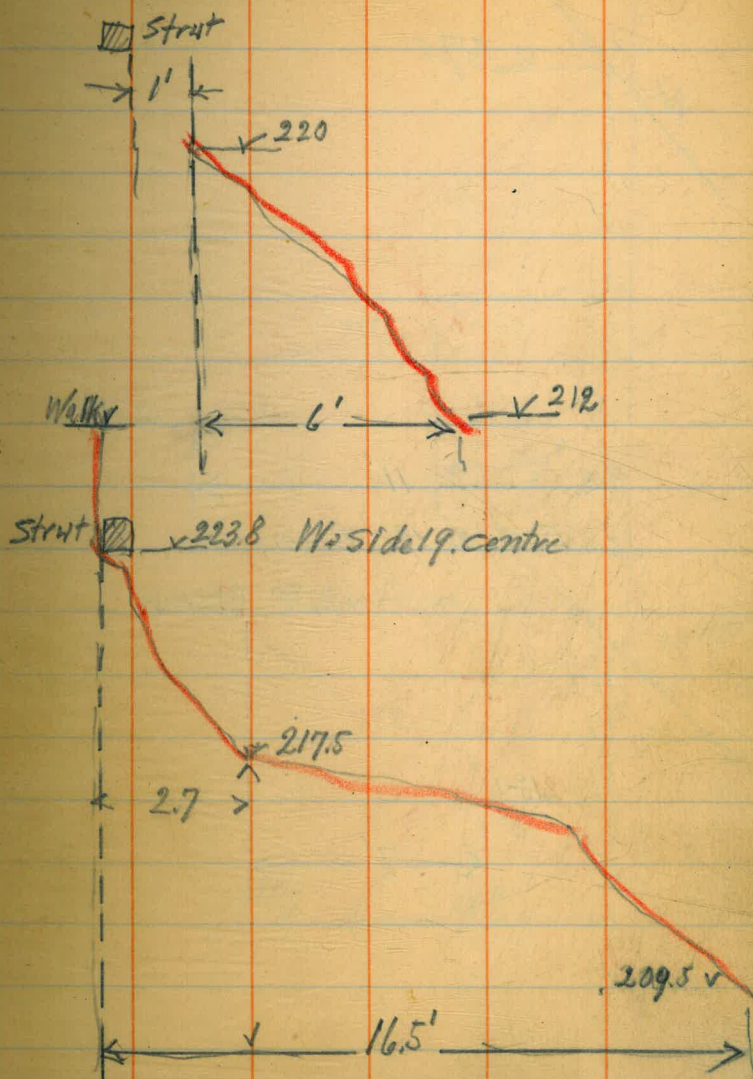


Eastside 18. Centre

5/12

43

W-side 19. Downstream



W-side 19. Centre

5/12

W side 19. Upstream

Ar.

v 219.5

v 208

11'

E-side 19. Downstream

v 223.8

Strut

213.1

7'

5/12

E side 19 centre

Walk 45

Strut

v 223.8

217.5

2.7'

209.5

16.5

E-side 19 Upstream

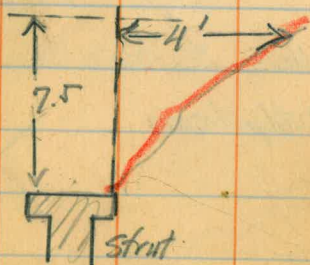
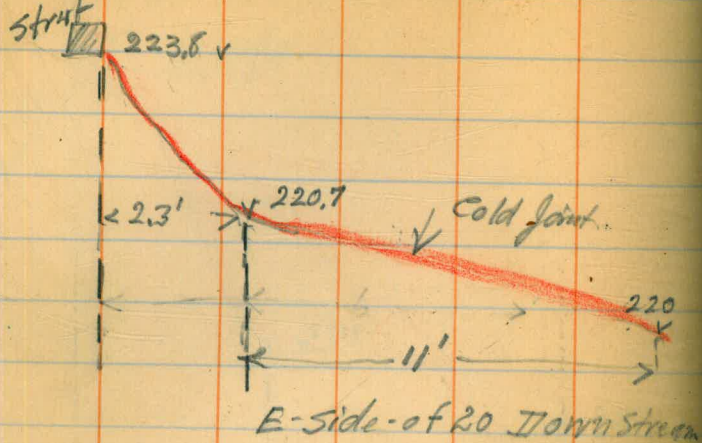
v 219.5

211.7

17'

5/12

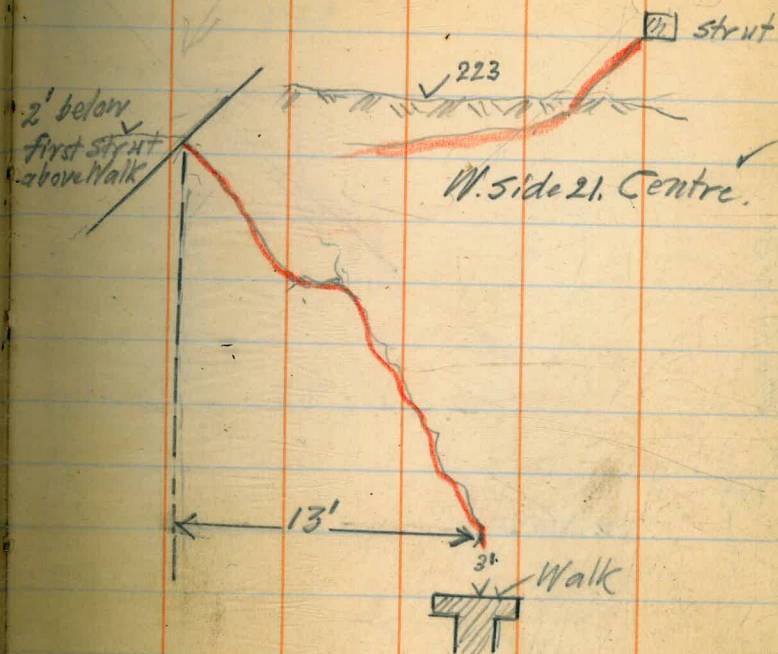
W-side 20 Centre



5/12

47

Eside 20. Centre



5.12.1936

17. Eside Center

225

5/12

49

W-side Center

223.8

223.8

Center of B

Center of C

Center of C

1.84

202.5

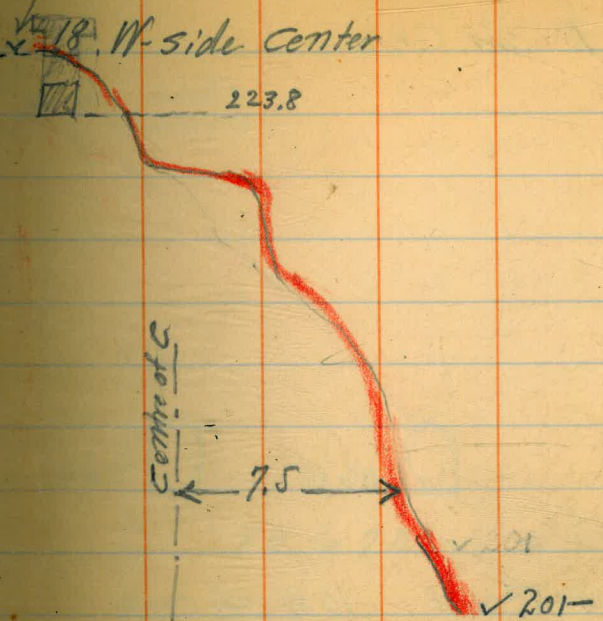
200.8

5'

7.5

201

201



5. 12. 1936

10 E-side Center

1' below
second strut

Ave



Walk

1' below 2nd strut

10 W-side Center



Walk

5/12

9 E-side Centre

51

1' below 2nd
strut

Walk



9 W to 7 E side missing

May 13. Labor.

1. Steel.
 - 8 hours 3 Laborers carrying-cleaning
- 2) Platform for Mixers & Pumcrete pipes
 - 8 hours 3 Carpenters
 - 8 hours 2 Laborers
- 3) Powersaw.
- 4) Timekeeper.
 - 8 hours 1 Timekeeper
- 5) Pumcrete Machine
 - (9 Men) Moved on Platform

Bollen to 20 & B. Car. E16041
serviced, rewired at Mi. 9233.

Bringing letters, blueprints, films
from main office to Mr. Hill
back at 4:30 P.M.

Visitors 3:30 P.M. Anderson, Mayehoten
Griffith, Pyle - Graff
Weather Clear-hot.

53

Labor

- 1) Steel.
 - 8 hours 3 Laborers carrying-cleaning
 - 2) Platform for Mixers & Pumcrete pipe
 - 4 hours 3 Carpenters
 - 3) Electrician out 2 hours.
 - 4) Timekeeper.
 - 8 hours 1 Timekeeper
- { Total 7 Men
10:30 a.m. coil in Motor control box burnt out.
Drillers left 11 a.m.
Carpenters quit 12 P.M. no crane.
Bauer checking Strut Elevations.
Weather clear, very hot.
Graff out 3:30 p.m.

May 14.

Labor

- 1) Steel.
 - 8 hours 1 Foreman (getting steel ready for footing of Bay 17/18 set. N.C.B.A.)
 - 8 " 1 Helper
 - 8 " 2 Laborers
 - 1 Laborer - cleaning
- 2) Platform - Runway for trucks & Pumcrete pipe.
 - no work done.
- 3) Electrician installing new coil in control box of Motor & stringing light wires to Bay 8/9.

May 15.

8 hours. 4) 1 Timkeeper

5) Carpenters (except 2) were sent home & told not to come back until called.

8 hours

2) Carpenter Building forms & connecting some patented forms in Bay 17/18 Set C x Set D.

5) Bauer all day below to check on steel-forms - cleaning foundation.

4^{pm} Lee foreman for Etnisco Co asked me about chipping concrete near cracks; I referred him to Brackmann.

5) Weather clear & hot
Visitors: Snap Gratt 3³⁰
Supt. Anderson of the patent form Co on job, instructing carpenters how to build them up.

5.15.36

5/16-36

5/18.

5/19

55

Steel

Bay 17/18 Set II - 4 - 1" - 20' Bottom
 (8-1/8 Anchors) - 4 - 1" - 19'-9" Top
 - 6 - 3/4" - 1'-7" Spreader
 24 { 2A 7/8 - 20'-2" Top El. 219
 - 8 7/8 - 7'-8"
 - 4 7/8 - 8'-6"

201 v Bay 17/18 Set C - 4 - 1" - 19'-8" Bottom
 (8-1/8 Anchors) - 4 - 1" - 19'-9" Top Top El. 219
 - 7 - 3/4" - 1'-7" Spreader
 - 1 8 - 1 1/4 - 20'-6" 10 - 7/8 - 20'-2" 1
 - 8 - 3/4 - 7'-8" 2 - 3/4 - 19'-6" } 24
 - 4 - 3/4 - 8'-6" 4 - 3/4 - 19'-6"

201 v Bay 17/18 Set B - 4 - 1" - 19'-6" Bottom
 (8-1/8 Anchors) - 4 - 1" - 19'-8" Top
 - 8 - 3/4" - 1'-7" Spreader
 28 { 12 - 1 1/8 - 21' (Top El. 219)
 - 1 15 - 3/4 - 19'-6" 1 - 7/8 - 20'-2"
 - 8 - 3/4 - 7'-8"
 - 4 - 3/4 - 8'-6"

200 v Bay 17/18 Set A - 4 - 1" - 19'-4" Bottom
 (8-1/8 Anchors) - 4 - 1" - 19'-6" Top
 - 8 - 3/4" - 1'-7" Spreader
 48 { 32 - 1 1/4 - 20'-6" 4 - 1" - 20'-2" Top El. 218
 - 12 - 3/4 - 19'-6"
 - 8 - 3/4 - 7'-8"
 - 4 - 3/4 - 8'-6"

Footings x 200

6/2.36 All steel transferred to steel record book Continued Page 59/60

May 16 Labor

1) Steel carpenter 4 hours
 setting steel in set D & E of Bay 17/18 in foundation }
 1 Steel foreman 4 hours
 1 " helper 4 "
 cleaning, carrying 3 Laborers 8 "

2) Haggards Crane lower
 Pumcrete Machine +
 Stationary Mixer to its
 platform below dam
 gamtol 2. }
 2 Steelman } 4 hours
 1 Pumcrete man }
 1 Rigger }
 2 Carpenters }
 3) Carpenter work (Shelving, Repair)
 in Gratts Office
 1 Carpenter 4 hours
 4) Timekeeper 8 hours
 (10 Men)

May 17 Sunday

Labor 1) Steel

8 hours 1 Steel foreman } Bay 17/18 Set E - H. B.
 8 " 1 " helper } Setting steel
 8 hours 1 Laborer } carrying steel - cleaning
 8 hours 1 Laborer } cleaning Rods } Trowel
 4 " 1 Pumpman } Set D, C, B } x British
 pumping }

May 18

2) Form Superint. Anderson of the
 Universal Form Clamp Co
 8 hours 2 Carpenters Form Set D & E
 4 hours 1 Laborer carrying 2/4
 Bay 17/18

3) Platt form for Mixers
 4 Carpenters
 5 Laborers
 1 Rigger
 1 Pumcrete operator

4) 1 Electrician

5) 1 Timekeeper not on job am Court
 here 9 am

Bauer making 3- 12' measuring rods

May 19. Labor

1) Steel

1 Steel form setter } setting Steel
1 helper } Bay 17/18 Set A, B, C, D
1 Laborer } cleaning
3 Laborer } carrying, cleaning

2) Forms. Bay 17/18 Set II, C, B

2 Carpenters
1 Laborer, oiling forms

3) Platform for Mixers
Burn Kero.

4 Carpenters
1 Electrician wiring

A) 1 Timekeeper

8 hours

15 Men

Visitors. Golden 9^{am} to 10^{am}
Normanout 3^{pm} to 4^{30pm}
Graftout 3 to 4^{pm}

May 19 5/20

59

Steel.

Bay 17/18 Set II. 2'-4" Cement drain
(See page 58) F.L. El. 200.1

10 { - 8 - 3/4" x 19'-6"
- 4 - 3/4" x 11'-3" spliced
1 2 - 3/4" x 10'-7"
- 14 - 3/4" x 1'-7" spreaders.
^ 4 - 3/4" x 8'-0"

Bay 17/18 - Set C.
(See page 58)

5/20 5/23
4'-4" Cement drain
F.L. El. 200.1

- 10 - 3/4" x 19'-6"
1 2 - 3/4" x 11'-7"
Spreaders 4 - 7/8" x 1'-7"
^ 4 - 3/4" x 8'-0"
- 4 - 3/4" x 8'-0"

6-2-36. All steel transferred to
↑ steel record-book

May 19

5/20 5/23

Bay 17/18 Set B

Steel

2' - 4" Cement drain

Fl. L. El. 199.1

(See page 55)

-	10	-	3/4" □ 19'6"
1	2	-	3/4" □ 11'7"
spreaders	4	-	7/8" □ 1'7"
^	4	-	3/4" □ 8'0"

Bay 17/18 Set A

2' - 4" Cement drain

5/20 5/23

Fl. L. El. 199.1

(See page 55)

-	10	-	3/4" □ 19'6"
1	2	-	3/4" □ 11'7"
Spreaders	4	-	7/8" □ 1'7"
^	4	-	3/4" □ 8'0"

6. 2.36. All steel transferred to
↑ steel record book

Laborer

61.
May 20.

1. Steel Bay 17/18 Set B, A.

8 hours	1 Steel
8 "	1 " helper
8 "	1 " cleaner + carrier
8 "	1 Laborer cleaning rock foundation pumping water in Set A bolting forms, & helping comp.

2.) Forms Bay 17/18 Set C-B-A

8 ea. 2 Carpenters.

8 " 3.) 1 Time Keeper

4.) Burners

8 ea. 5 Carpenters

8 " 1 Electrician

8 " 3 Laborers

10 ea. Visitors: Station Engineer Jones 11 AM to 12:30 PM.
W.P.A. Engineer out 12 PM to see Gratt. (11 AM to 3 PM)

Reminded Tomlinson again to clean foundation
of set A Bay 17/18

Set D Bay 15/16
before steel was set. 12:30 PM

Visitors 3 PM to 4 PM.

Flagg, Pyle, Cromwell, Andrews, Wacste
& others

Weather: Foggy, cool in morning
clear + hot after 9:30 AM.

Hoist moved on platform

May 21. Labor

8 hours 1) Steel. (Steelmen not working)
1 Laborer cleaning

8 hours 2) Forms Bay 17/18 Set C; B.
2 Carpenters
8 1 Laborer Helper

8 hours 3) Bunkers - Runway For Trucks
7 Carpenters. Platform Bunkers
8 1 Laborer help on leveling road
across West side of spillway
8 1 Electrician Wiring
8 1 Pumpcrete Operator working
on Pumpcrete Pipes

8 hours 4) 1 Timekeeper

(16 Men)

Weather cool + foggy early, clear + sunny after 9 AM
Watertank overflowed during night; Electrician
repaired it 11 AM.

Cautioned 2 Carpenters Hutson - Garcia
to fit Filler forms better to patent forms
(Bay 17/18 Set B Center - Bottom) 2 PM.

Steel bars 1/4 - 1/8 - 7/8 uprights should not
be cut. (20'6") (20') (20'2") (19'6")

Insurance Agent for Golden out 1 PM went
through tunnel; made some recommendations for the
safety of the workers

2'-4" drain
Floorline El. 202.1'

Steel

5/22

5/23

63

Bay 15/16, Set D. Anchors set 5/19 AM

- 4-1" \square 19'-6" Bottom

- 4-1" \square 19'-3" Top

20-7/8 \square 20'2"

4-3/4 \square 19'6"

- 9-3/4 1'7" Spreader

- 9-7/8 1'7" Spreader

- 8-7/8 7'-8"

- 4-7/8 8'-6"

- 6-3/4 19'-6"

1 2-7/8 9'-7"

1 4-7/8 8'-0"

- 5-7/8 1'7" Spreader

6. 2.36 All steel transferred to
steel record-book

2ft 4" drain **Steel**
E1 202 5/23 5/25 5/26

Bay 15/16 Set C. Anchors set 5/20 P.M.
W-side not clipped 3 P.M.

204
203 - 4 - 1" □ 19 1/2" Bottom
- 4 - 1" □ 19 1/2" Top
203 - 18 - 3/4 □ 1' 7" Spreaders
24 { 1 8 1 1/8 □ 40 1/2"
1 16 3/4 □ 19 1/2"
- 8 7/8 □ 7' 8"
- 4 7/8 □ 8' 6"
- 4 7/8 □ 20'
- 2 3/4 □ 19' 6"
Spreaders - 4 3/4 □ 1' 7" Spreaders
1 4 7/8 □ 8'
1 2 7/8 □ 9' 7" /

6.2.36 All steel transferred
to steel record book

2ft 4" drain **Steel**
E. 202 5/25 5/26

Bay 15/16 Set B. Anchors set 5/22

203
201 - 4 - 1 1/2 □ 19 1/2" Bottom
- 4 - 1" □ 19 1/2" Top
- 16 3/4 □ 1' 7" Spreaders
28 { 1 4 - 1 1/8 □ 40 1/2" was bent by pulling it in place
1 8 - 1 1/8 □ 21' & had to be taken out.
1 16 - 7/8 □ 20 1/2"
- 8 - 7/8 □ 7' 8"
- 4 - 7/8 □ 8' 6"
- 6 - 7/8 □ 20'
1 4 - 7/8 □ 8'
1 2 - 7/8 □ 10' 7"
Spreaders - 4 - 7/8 □ 1' 7"
- 4 - 7/8 □ 20' (2 missing)

6.2.36 All steel transferred to steel
record book

45 3/4
2 1/2 40

65

2A 4' drain 5/26
El. 201.6'

Steel

all 1/4

Bay 15/16 Set A Anchors set 5/23

- 204 - 4 - 1" x 19'8" Bottom
- 203 - 4 - 1" x 19'8" Top
- 23 - 3/4" x 1'7" Spreaders.
- 48 { 12 - 1 1/4" x 40'2"
- 1 20 - 1 1/4" x 20'2"
- 1 4 - 1" x 20'6"
- 1 12 - 7/8" x 20'2"
- 8 - 7/8" x 7'8"
- 4 - 7/8" x 8'6"
- 6 - 7/8" x 20'
- 1 { 2 - 1/8" x 8
- 2 - 3/4" x 8
- 1 2 - 7/8" x 10'7"
- 4 - 7/8" x 20'

6. 2. 36. All steel trans.

Refered to steel record-book

67

Labor

May 22

1) Steel Bay 15/16 Set II.

- 8 hours 1 Steel foreman
- 8 " 1 " helper
- 8 " 2 Laborers } Cleaning Rock foundation
} Carrying Steel. Set. J. C.

2) Forms Bay 15/16 Set II.

- 8 hours ea 2 Carpenters
- 8 hours 1 Carpenter Building Forms for opening
- 8 hours 1 Laborer helping-oiling form.
- 3) Bunkers
- 8 hours ea 7 Carpenters - Bunkers
- 8 " 1 Pym concrete man helping on Bunkers
- 8 " ea 2 Laborers setting Pym concrete
- 8 hours 1 Timekeeper carrying pipe
- 8 hours 1 Electrician Inst. Electr. Steel cleaner below Dam

20 Men

Checked up on all available City owned Steel labor & below Dam. (Made list for Hill)
The use of 7/8" - 40' long steel in Set II Bay 15/16 was abandoned 12 PM as not feasible under existing conditions
Weather clear & hot

4) Visitors. 2 Officials of Emco Co 3 PM
Gratt 12 to 4:30

May 23. Labor.

1) Steel Bay 15/16 Set D, C
8 hours 1 Steel foreman
8 hours 1 Ironworker

2) Forms Bay 15/16 Set D.
8 hours 2 carpenters
8 " 1 Laborer oiling forms, carrying
8 " 1 Carpenter special Material
Forms

3) Bunkers - Pipeline - Trestle
8 hours 4) 2) Carpenters
6 " 2) Carpenters
8 " 3) Laborers
8 " 1) Pumpcrete operator

4) 1) Timekeeper
8 hours

17 Men

Weather AM Cloudy, cool till 9am
Clear, sunny after 9 AM

Visitors: none

Tie bars delivered: Bethlehem Steel Co
3 Loads

May 24. Sunday

Labor.

1) Steel Bay 15/16 Set C, B, A,
8 hours 1 Steel foreman
8 " 1 Ironworker (Nelson)
8 " 29 3 Laborers carrying, cleaning.

2) Forms Bay 17/18 So Side of Set C Forms.
8 hours 29 2 Carpenter. Bracing Set D, C, B.
8 hours 29 2 Carpenter Bay 15/16 Set C Forms.

3) Bunkers - Pumpcrete - Pipeline
4 1 2) Carpenter
8 hours 29 2 Carpenters Bunkers
4 " 29 2 Carpenters Trestle for pumpcrete pipe
8 " 1 3) Pumpcrete Operator } Pipeline
8 " 1 Laborer }
8 " 1 Electrician Wiring

4) 1) Timekeeper

17 Men

a) Weather cloudy cool

b) Visitors: Stebbing - Grove 11:30 AM
Graff,

c) Tomlinson told to cement honey-combed
places on cutoff wall + clear rebar
holes of cement. 11 AM &
Bauer also told him again, that the run-
way was not safe, without bolting the
braces to the timbers

May 25.

May 26 Labor

- 1) Steel Bay 15/16 Set C, B, A.
 8 hours 1 Steel foreman
 8 " 1 Iron worker
 8 " ea 2 Laborers carrying, cleaning, hoisting.
- 2) Forms Bay 15/16 Set C, B.
 8 " ea 2 Carpenters
 4 " ea 2 " "
 4 " ea 2 " "
 Forms Bay 17/18 Set D, C
 4 " ea 2 Carpenters filling holes between Forms & along brattresses.
 Bracing Bay 17/18 Set B, A
 4 " ea 2 Carpenters
- 3) Trestle - Laying Pumpcrete pipe to Bay 17/18
 8 " ea 2 Carpenters
 8 " 1 Rigger
 8 " 1 Pumpcrete Operator
- A) 8 " 1 Electrician Plant, Testing wiring
 8 " 1 Timekeeper

16 Men

- 1) Weather cloudy-cool
- 2) Electrician brought & put out to test Mixer & Pumpcrete Machine, worked O.K.
- 3) Tom Larson reminded to put chamfer strips at edges of openings 12 1/2" high & got scale for Aggregater. No visitor.

- Labor: 1) Steel Bay 15/16 Set B, A
 8 hours 1 Steel foreman
 8 " 1 Iron worker
 8 " ea 2 Laborers hauling (truck) cleaning
 8 " 1 Electrician (steel helpers) & install. elect. Pump.
- 2) Bay 15/16 Set C, B, A. Forms. & Chamfer strips in A, B, C, D.
 8 " ea 3 Carpenters
 8 " 1 Laborer carrying forms, oiling, lumber.
 Bay 17/18 Set A, B, C, D. Chamfer strips put in A, B, C, D.
 4 " ea 3 Carpenters
- 3) Bunker Trestle - Laying Pumpcrete pipe to Set D. Bay 17/18
 4 " ea 3 Carpenters
 8 " 1 Pumpcrete Operator
- A) 8 " 1 Timekeeper
 13 Men

May 27

- 1) Weather: cloudy-cool
- 2) Pumpcrete Pipeline finished to Set D Bay 17/18
- 3) Electrician installs 1 h.p. elect. Pump below dam. Bay 17/18. sent it back, as it did not work satisfactory.
- 4) Visitors: none.

2085

6

209

208

5/28 5/29

2'-4" tile

Bay 13/14 Set II Anchors set 5/26 am.

Bottom - 4 - 1" □ 19'11"
 Top - 4 - 1" □ 19'8"
 1 24 - 7/8 □ 16'6"
 - 8 - 7/8 □ 7'8"
 - 4 - 7/8 □ 8'6"
 - 5.28 2 7/8 □ 20' 5.28 PM
 - 2 7/8 □ 20'
 1 2 7/8 □ 17'
 ^
 spreaders - 4 3/4 □ 8'
 23 7/8 □ 1'-7"

6. 2. 36 All steel transferred
 ↗ to steel record book

2'-4" tile

73

5

210

209

208.5

5/28 5/29 6/1

Bay 13/14 Set C Anchors set 5/25

Bottom - 4 - 1" □ 19'11"
 Top - 4 - 1" □ 19'8"
 1 4 1 1/8 □ 30
 1 4 1 1/8 □ 29'6"
 2 1 4 7/8 □ 18'
 1 4 7/8 □ 17'3"
 1 8 3/4 □ 11'6"
 - 8 7/8 □ 7'8"
 - 2 7/8 □ 20' 5.28 PM
 - 4 7/8 □ 20'
 spreaders { 2 3/4 □ 4'
 1 3/4 □ 3'
 ^ 4 3/4 □ 8'
 1 2 7/8 □ 4'7"
 spreaders 22 7/8 □ 1'-7"

6. 2. 36 All steel transferred
 ↗ to steel record-book

5
v 210

2'-4" Tile

209
208.4" 5/28 5/29 6/1

Bay 13/14 Set B Anchors set 5/25

Bottom - 4 - 1" □ 19'11"

Top - 4 - 1" □ 19'8"

28 1 { 6 1 1/2 □ 19'0"

6 1 1/2 □ 18'6"

8 7/8 □ 20'2"

o.k. Hill 8 3/4 □ 7'4" o.k. Hill

- 8 7/8 □ 7'8"

5/28. 7m - 2 7/8 □ 20' 5.0000

- 4 7/8 □ 20

spliced 1 8 3/4 □ 7'2"

^ 4 3/4 □ 8

1 2 7/8 □ 4'7"

Spreaders - 16 7/8 □ 1'7"

6.2.36 All steel transferred
to steel record book207
should be 208
6 206

2'-4" Tile 75

205 5/28 5/29 6/1

Bay 13/14 Set A Anchors set 5/26 P.M.

Bottom - 4 - 1" □ 19'11"

Top - 4 - 1" □ 19'8"

28 1 { 12 - 1 1/4 □ 20'4"

10 - 1 1/4 □ 25'

10 - 1 1/4 □ 23'11"

4 - 1" □ 20'6"

2 - 7/8 □ 22'

2 - 7/8 □ 23

add to list 4 - 7/8 □ 14'

Page % - 8 - 7/8 □ 16'

- 4 - 7/8 □ 8'6"

5/28 - 7/8 □ 20'

Spreaders

6.2.1936

all steel transferred
to steel record book

May 28 Labor

- 1) Steel Bay 13/14 Set II, C. B. A.
 - 8 hours 1 Steel foreman
 - 8 " ea 3 Ironworkers 1 Electrician
 - 8 " ea 3 Laborers carrying, cleaning
 - 8 " 1 Rigger
 - 8 " 1 Timbercrete Op. cutting, carrying.
- 2) Forms Bay 13/14 Set II, C. B.
 - 8 hours ea 3 Carpenters
 - 8 " ea 2 Laborers carrying, oiling forms
 - 8 " 3) 1 Timekeeper
 - 4) Crane
- 3) Carpenters

(18 Men) 7) Bauer made list of all steel set in Bays: 17/18; 15/16; 13/14 to 5/28. 4:30 PM

8) Visitors: Pyle, City clerk Wright, 4:30 PM
Graff;

6) Weather: Clear, warm

7) Total of steel set in Bays 17/18, 15/16, 13/14
up to 4:30 PM 5/28

2835' 1"	3/4"	
3740' 4"	7/8"	+ 325' 4"
1889'	1"	+ 240' 4"
1365'	1 1/8"	
1705' 4"	1 1/4"	+ 96' 4"

See Page 85.

Anchor-bar

Labor. 1) Steel Bay 13/14 Set A

May 29

8 hours 1 Steel foreman

8 " ea 2 Ironworkers

8 " ea 1 Electrician helping + some elect. Repair.

8 " ea 2 Laborers: carrying, hoisting, cleaning

2) Forms Bay 13/14 Set C, B.

6 hours ea 2 Carpenters 1/4

8 " 1 Carpenter bracing B

8 " 1 Laborer carrying, oiling forms

3) Bay 15/16 Trestle for Timbercrete Pipe to Set II.

8 hours ea 2 Carpenters

8 " ea 2 Laborers carrying lumber

4) Forms

8 hours 1 Carpenter making 2 shoots for concrete + Forms for openings.

5) Timekeeper

(16 Men) 1) Horizontal Steel in Bottom Set A Bay 13/14 changed, Hill.

2) Light rain 6 AM Clear + cool during day.

3) No visitors

Holiday
Sunday.

May 30

May 31

Jurnal Labor.

1. Steel Bay ¹³/₁₄ Set A, B, C, D.
 8 hours 1 Foreman Bay ¹¹/₁₂ Set B, A.
 8 " ea 3 Ironworker } cutting, setting steel
 8 " 1 Electrician helping Ironworker.
 8 " ea 2 Laborers - cleaning, carrying

2. Forms Bay ¹³/₁₄ Set B, A.
 8 hours ea 2 Carpenters Forms
 8 " 1 " bracing D, C, B, A
 8 " 1 Laborer carrying, oiling forms

3) Crane
 8 hours ea 2 Carpenters
 8 " 1 Rigger
 8 " 1 Participate

4) Forms for openings
 8 hours 1 Carpenter

5) 1 Timekeeper

17 Men

1) 1 Load x trailer with $\frac{5}{8}$ " $\frac{7}{8}$ " $1\frac{1}{2}$ " steel $\frac{5}{30}$

2) 1 Load Golden's Steel arrived 5.30.36 no bill of lading, o.k. later.

3) Weather clear, cool A.M. & P.M.

4) Visitors: Golden, Srove, Stebbins, Horny, Graff. (Safety Drop?)

5) 1 Load x trailer steel for Golden $\frac{5}{1}$

6) All Chamferstrips in D, C, B, A Bay ¹³/₁₄

Golden's Steel 5/29-36 deliv. by Miracle.

2) 118 Pcs $1\frac{1}{2}$ sq. def. inter 40'-0" 25063
 16 " " " " " 29'-3" 2485
 16 " " " " " 22'-6" 1912
 76 " $\frac{7}{8}$ Rd " " " 40'-0" 6202
 85 " $\frac{5}{8}$ " " " " 40'-0" 3536

Total 39198 ✓

3) Steel 6/1, 36
 182 - $1\frac{1}{4}$ sq. def. inter. 40'-0" 38656
 36 - $\frac{7}{8}$ rd. " " " 23'-0" 1689
 = 40345 ✓

1) 5/28 $\frac{5}{8}$ " Steel delivered by Golden: Fientor
 50 - $\frac{5}{8}$ " 40' ✓ 2086 lb ✓

4) Steel 6/3-36
 123 Pcs $1\frac{1}{4}$ sq. def. inter 40'-0" 26125
 40 " " " " " 26'-6" 4354
 43 " " " " " 20'-0" 4567
 24 " $\frac{7}{8}$ " " " " 29'-0" 1420
 24 " $\frac{7}{8}$ " " " " 14'-0" 685
 24 " $\frac{7}{8}$ " " " " 20'-0" 979
 24 " $\frac{7}{8}$ " " " " 9'-0" 441
 24 " $\frac{7}{8}$ " " " " 15'-0" 1734
 24 " $\frac{7}{8}$ " " " " 10'-0" 490

Σ 39795 ✓

5) June 4.
 87 Pcs $1\frac{1}{2}$ D 20'-0" 9239 682 " " 13-2 9339
 12 " $\frac{7}{8}$ Rd 23'-0" 563 212 " " 9-6" 2095
 12 " " " 21'-0" 514 324 $\frac{3}{8}$ -9-6" 1154
 22 " " " 20'-6" 920
 4 " " " 20'-0" 163
 84 $\frac{5}{8}$ " " 11'-0" 961

Continued 24948 ✓

Book 536 Page 144

6
214
212

All steel furnished by Golden
213.0 listed thus. ① ② ③ ④

Bay 11/12 Set II Anchors set

6.2.36. All steel

→ transferred to special
Steel recordbook

6
214
213

212-8"

81

Bay 11/12 Set C Anchors set

6.2.36. All steel transferred to
→ special steel recordbook

214
212 6/1 212-41

Bay 11/12 Set B

Anchor set 5/29

- 4 - 1" □

- 4 - 1" □

- 2 - 7/8 □

12 - 1 1/8 □ 17' 0"

4 - 7/8 □ 15' 6"

6. 2. 36. P.M.

All Steel transferred
to special steel
record book.

213
210 6/1 212

83

Bay 11/12 Set A

Anchor set 5/29

4 - 1" □

4 - 1" □

2 - 7/8 □

12 - 1 1/4 □ 36'

20 - 1 1/4 □ 20' 6"

4 - 1" □ 19' 8"

12 - 3/8 □

6. 2. 36 P.M.

All Steel transferred
to special steel record
book.

20+10

June 2nd Labor

1.) Steel: no work done, no steel men on job

2.) Bay $11/12$ Set H, B.

4 hours ea

2 Carpenters Forms.

8 "

1 Laborer carrying material
by oiling forms
& cleaning foundation in H, B.

3.) Crane

8 hours

1 Rigger

8 "

1 Pumpcrete Operator

8 "

1 Electrician

4.) Runway widened

8 hours ea

2 Carpenter

4 " ea

4 "

5.) Bay $11/12$ Set C

4 hours ea

2 Carpenters

forms for foundation

8 hours ea

1 Timekeeper

11 Men

Total 30)

7. Remarks

- a) Light rain 8 to 10 am P.M. ^{sunny} warm
Told Tomlinson & timekeeper to
protect Cement better.
- b. Tomlinson says he bought scale Johnson
T. on job 19 45
- c) Visitors: none.

85

Bay $17/18$ $15/16$ $13/14$ $11/12$ (Sets A, B, C, D)

Total Anchor Bars. (Fred. Brackman)

52 $1\frac{1}{4}$ - 8'2" = 42A - 8"44 $1\frac{1}{8}$ 7'9" = 341'32 $\frac{3}{4}$ 5'6" = 176'

to 6.2.36 P.M.

See page 76. For steel.

June 3rd Labor

1) Steel Bay $1\frac{1}{2}$ Set D, C, B, A

8 hours 1 Foreman
 8 " ea 3 Ironworkers
 8 " 1 Laborer cleaning found. D, C.
 8 " ea 2 Laborers carrying, cleaning

2) Bay $1\frac{1}{2}$ Set C, B

4 hours 1 Carpenter bracing c. (Walls)
 4 " 1 Laborer oiling forms.
 8 hours 1 Laborer carrying lbr. & pump
 3) Runway-widening

6 " ea 3 carpenters.

4 " 1
 8 " ea 3 Laborer

4) Bay $1\frac{1}{2}$ Set C

2 hours 3 Carpenters Bracing Ditch walls
 8 " 5) 1 Timekeeper

6. Crane
 8 hours 1 Rigger
 8 " 1 Pushcrete Operator.
 8 " 1 Electrician & Electr. Pump Bay $1\frac{1}{2}$

7) Visitor: Beerman x Dr. Bowen!

20 $\frac{1}{2}$ Men out of
 Total of 35 $\frac{1}{2}$

8) Weather: clear, cool
 c. Told Tomlinson again to clean Found. Rock before setting steel. 27th (Hill)
 d. Third Load of Steel for Golden See page 79
 e) Good electn pump installed Bay $1\frac{1}{2}$.
 f. Tomlinson allowed to leave part of forms out in foundation of Set D, C Bay $1\frac{1}{2}$ (Hill)

Labor. 1. Steel Bay $1\frac{1}{2}$ Set A.

June 4. 36

8 hours 1 Foreman
 8 " 1 Ironworker
 8 " 1 Laborer

2) Runway-widening

8 " ea 6 Carpenters
 8 " 1 Laborer.

3) Crane

8 " 1 Rigger
 8 " 1 Pushcrete Operator
 8 " 1 Electrician

8 " 4) 1 Laborer carrying, oiling forms

8 " 5) 1 Timekeeper.

15 Men out of
 36

6. a. Weather clear, warm

b) Visitor. Graft 3 PM.

c) Placing charts for cracks above walk. Buttress 7 to 22 incl.

d) Graft wants receipts for materials delivered.

Bay 11/12 4 x (2' - 4") daintite 89

June 5. Labor. 1. Steel

- 8 hours. 1 Steel foreman bending
- 8 " 1 Iron worker 5/8 stirrup.
- 8 " 1 Laborer & cleaning City Steel
 { carrying stirrups.
 2.) Crane-Hoist installed
 on top of dam
- 8 " 1 Rigger. } install
- 8 " 1 Pumpscrete-Operator } install
- 8 " 1 Electrician
- 3.) Runway & Scales.
- 8 ea 6 Carpenters.
 { widening runway
 installing Johnson
 scales
- 1 Laborer.
- A) 1 Timekeeper
- 5.) Weather clear & warm
- 6.) Frost out 4:10 P.M.
- 7.) Cement covered P.M.

8 " 1A out of 36

Labor.

June 6

- 1. Steel. - 13'2"
- 8 hours. 1 Steel Foreman bending 5/8
- 8 " 1 Iron worker } stirrup.
- 8 " 1 Laborer cleaning, carrying.
- 2.) Forms. Bay 11/12 Set B, F
- 8 ea 3 Carpenters
- 3.) Crane-Hoist
- 8 " 1 Rigger & helping on scales
- 8 " 1 Pumpscrete-Operator
- 4.) Runway-Scales.
- 8 ea 3 Carpenters
- 8 " 3 Laborer & moving cement below runway.
- 8 " 1 Timekeeper.
- 6.) Visitor 10 am Golden to 12 Noon.
- Es. Bittres 16 Laborer fell, brought to Hospital 9:30 am
- Weather, clear, warm.

15 out of 32

Cement on hand May 8th = 1231

F. Brackman used May 8 / 6/6 = 10
 for granting thick bars = 1221

6.6 Cement near Mixer = 431
 6.8 } 130 } 6/6
 } 130 }
 } 130 }
 } 821

5 3/4 1 1/2
 20 - 427 181 459
 40 854 362 918
 1 = 213 1/2 90 1/2 229 1/2

20
10
30

July 7. Sunday

James. U Steel

8 hours 1 Steel foreman } 5/8 Stumps
8 " 1 Ironworker }
8 " 1 Laborer carrying, cleaning

2) Scales-Mixer-Pumpcrete
8 hours ea 2 Carpenters
8 " 1 Concrete Operator
8 " 1 Mixer man (building Road)
4 " 3) Crane-Hoist
1 Rigger welding for scales

4) Forms, Shoot Bay 17/18
8 hours 2 Carpenters
8 " 3 Laborer { Watering,
cleaning,
Pumping

5) 1 Timekeeper
6) Graff 8 to 12.
7) Weather, hot, clear
8) Bauer testing 1 1/2 Rock
" Scales
d. Gate Tomlinson & Mixer man
Aggregate weights Sec 91.
e. Lowered 1 Shoot from 7 to 4
17/18 Set D.

8 " 13 1/2 out off 30

91

June 8
Carload

3/4 Rock 92300 ✓
Sand 96200 ✓
1 1/2 Rock 94700

Cement
1 3/4 Rock 114 1/2
90 1/2 }
205 }
2 181 }
3 245 1/2 }
4 271 1/2 }
(362) 24 1/2 balancer scale
386
Mix for Bay 17/18

Sand 1 1/2 Rock
213 1/2 229 1/2
427 459
640 1/2 688 1/2
854 918

Otag 1 1/2 Rock 33-5.5
Ret 1 1/2 " 1-3
" 1 " 20-4
" 3/4 " 11-2.5
" 5/8 " 0-2
" 1/2 " 0-5
33-0.5

Otag 3/4 Rock 36-10
Ret. 1 " 2-9
" 3/4 " 19-13
" 5/8 " 5-11
" 1/2 " 4-7
" 3/8 " 0-7
" No 4 Sieve 0-4.5
" No 8 " 3-0
Bal. 5.5
36-9 1/2

Otag Sand
3-9

Sieve ret 0-3
" 8 " 0-8
" 16 " 0-13
" 28 " 0-18.5
" 50 " 0-25.5
" 100 " 0-25
Bal. 5
3-8

June 8.36

3 Carloads
 Otag. }
 Material } 3/4 Rock 92300 ✓
 Fenton } 1 1/2 " 94700 ✓
 sand 96200 ✓

1 1/2" Otag-Rock 33-5.5 = 33.34
 passing 1 1/2" 32-2.5 = 32.56 = 97%
 " 1" 11-14.5 = 11.91 = 36%
 " 3/4" 0-12 = 0.75 = 2.2%
 " 5/8" 0-10 = 0.625 = 1.9%
 (43%) " 1/2" 0-8 = 0.312 = 0.9%

3/4" Otag Rock. 36-10 = 36.625
 passing 1" 34-1 = 34.0625 = 93%
 " 3/4" 14-4 = 14.25 = 39%
 " 5/8" 8-8.5 = 8.531 = 23%
 " 1/2" 4-1.5 = 4.094 = 11%
 " 3/8" 3-10.5 = 3.64 = 9.9%
 " N#4 Sieve 3-6 = 3.375 = 9.2%
 (17%) " N#8 " 0-6 = 0.375 = 1%

Otag sand 3-9 = 3.56
 passing N#4 Sieve 3-6 = 3.375 = 95%
 " " 8 " 2-14 = 2.875 = 80.8%
 " " 16 " 2-1 = 2.0625 = 58%
 " " 28 " 1-3.5 = 1.219 = 34%
 " " 50 " 0-4 = 0.25 = 7 1/2%
 " " 100 " 0-1.5 = 0.094 = 2.6%

(40%)

24 5cm

32

Labor
 1.) Pouring concrete 9:00 AM
 Bay 17 1/8 Set II

93

June 9.

4 hour 1 Foreman
 4 " ea 2 Carpenters
 4 " 1 Man on Vibrator
 4 " 1 Laborer helper.
 4 ea 2 " Spading
 4 " 1 " pumping }
 4 " 1 " cleaning }
 4 " 1 " footing }

at Mixer

4 hour 1 Mixerman: Hendrix
 " 1 Laborer Cement Lidstone
 " 1 Pumpcrete-Operator

9am. Mixing starts

2 Sacks Cement for batch of
 grout to lubricate pipeline
 mixed = 4 Batches. level part of pipeline
 taken out & cleaned 2+24 = 26.5 x c.
 + aggregate wasted
 3 hours for above work used for cleaning
 & relaying pipe.

11:30 AM mixing starts again, pipe plugged again
 at foot of decline 11:45. 5 sections taken
 out & pipeline cleaned. 2+24 = 26 c.

Golden order Pipeline raised to 22 1/2°.
 52.5c Cement & vents put in pipe to
 waste. } connect air hose.

2.) Steel

8 hours 1 Steel foreman } bending $\frac{3}{8}$
 8 " 1 Ironworker } stirrups
 8 " 1 Laborer } cleaning
 carrying

3.) Raising concrete pipe

8 " ea 2 Carpenters
 4 " ea 1 Pipe concrete Op.
 4 " ea 2 Carpenters
 4 " ea 7 Laborers

8 hours 1 Timekeeper

- 5.) a. Visitors 12:45 P.M. Graft in & out. Golden Pile P.M.
 b. Weather: clear, warm
 c. Drop of Concrete 17'-II. 4' x 4 1/2' to Bottom
 Tomlinson objects in saying, he could not change his shaft every 2 feet, & that he was permitted under contract to drop concrete 8 ft in forms.

Total 33

6 Men 8 = 48 hours

10 " 8 = 80

2 " 4 = 8

136 hours

Labour.

June 10.

1. Steel.

8 hours 1 Foreman } Diagonal
 8 " 1 Ironworker } Steel
 8 " 1 Laborer cleaning city steel

2.) Trestle for concrete pipe raised.

8 " ea 5 Carpenters
 8 " ea 3 Laborers

3.) 1 Timekeeper 4 Crane Hoist

8 " 1 Rigger
 13 Men 8 h 4 " 1 Pipe concrete Op
 2 " 4 h 8 " 1 Electrician

out of 33

- a) Weather hot, clear
 b) Baum test $\frac{3}{4}$ Rock
 figures out % of aggregate.
 c) Visitors none

June 11 1.) Steel

8 hours 1 Foreman } Diagonal Steel.
 8 hours 1 Ironworker }
 8 hours 1 Laborer. cleaning City Steel.

8 " 2.) 1 Timekeeper

3) Trestle + Pumpcrete Pipe

3 hours ea 5 Carpenters } start
 3 " " 6 Laborers } 7³⁰ AM
 3 " 1 Labor-Foreman

A.) Crane-Hoist

8 hours 1 Rigger
 8 hours 1 Electrician

5) Pouring concrete Bay 7/18 11 AM
 D. C. B. A.

1st pour {
 8 hours 1 Superintendent
 8 hours 1 Mixer-man Hendrix
 8 " ea 2 Laborer
 8 " 1 Pumpcrete-Operator
 Bay 7/18
 5 " 1 Laborforeman (Gallardo)
 5 " ea 3 Carpenters
 5 " ea 2 Man on vibrator
 5 " ea 2 Laborers spading
 8 " ea 2 Laborers. cleaning ahead

6) Building forms, shoots
 5 hours 2 Carpenter

23 Men out }
 of total of 34 }

Poured II, C, B - to about Spring Line.

A East of Door 1' fr. "

W " " 3' fr "

2 Batches at 8 Sacks Grout 16

61 " at 4 " $\frac{244}{260}$

Remarks.

- a) Weather clear & hot
- b) Grout out
- c) Lots of trouble, scaffolding shoots giving away & estimate about 10% of concrete wasted keys in A, B, C put in after 5:30 PM. Set II: concrete too hard but surface well roughed.
- d) Filler form below Door on South side gave away about 1 1/2".
- e) Weepholes not opened as ordered (to equalize water surface on both sides of forms.)

3
6 coming.June 12. Labor.

8 hours 1) Steel Bay 15/16 & 13/14 i 11/12 } setting above
8 " 1 Foreman } steel opening.
8 " 1 Ironworker }

8 " 2) 1 Timekeeper

3) Pouring concrete Bay 15/16 Set A.
Start 10⁰⁰ AM to 12 Noon (no sand)

8 " 1 Superintendent

8 " 1 Mixerman

8 " 1 Pumpcrete Operator

8 " ea 2 Laborers

8 " 1 Labor Foreman

8 " ea 5 Carpenters

8 " ea 2 Men on Vibrator

8 " ea 2 Spading

1 Batch Grout = 8 Sk

16 Batches at 4 Sk. c. = 64 Sk

72 Sk

Above Men 6 hours; trestle Bay 13/14

concrete pipe, cleaning up.

watering old work, cleaning pipe.

oiling forms; setting forms.

4 " ea 5 Laborers helping above men
in the afternoon.

18 Men 8 hours

5 " 9 " 1) Weather hot-clear

out of total 2) Visitors; graft out

of '31

Labor.June 13.

1 Foreman } worked on bolts for
1 Ironworker } Brackman.

8 " 1) 1 Timekeeper

2) Pouring concrete Bay 15/16
Starts 9 am. Set D, C, B. to 1 pm.

8 " ea { 1 Superintendent
1 Mixerman
1 Pumpcrete Operator
2 Laborers

8 " ea { 1 Labor foreman
4 Carpenters
2 Men Vibrator
2 " Spading
2 " Pumping cleaning ahead. Cement

1 Batch Grout = 8 Sk

48 Batches at 4 Sk. = 192 Sk

All of men under 2) worked 4 hours

preparing for pouring & moving equip.

17 Men out) ment to Bay 13/14. Scaffolding Pumping

of total of 23) cleaning.

Remarks:

- Weather clear-hot
- Visitors: P.M. Pyle, Beerman, Gabriel, Golden
- Slump test 2" - 2 1/4"
- 3 Test cylinders filled with concrete
from Set D Bay 15/16. Marking 11, 12, 13.

Sunday. -

June 14

June 15. 1st Pouring concrete Bay 13/14 Set II, C, BA

8 hours Agat Mixer
 8 " 1 Mixer man
 8 " 1 Pumpcrete Operator
 8 " ea 3 Laborers Helpers
 8 " ea 7 " hauling Cement Karload
 B. On Bay 13/14
 8 " 1 Superintendent
 8 " 1 Labor foreman
 8 " ea 2 Laborers at Vibrator
 8 " ea 2 " Spading
 8 " ea 2 " Clearing ahead of Pouring-crew
 8 " ea 4 Carpenters
 8 " 1 Laborer pumping
 8 " 1 Electrician

8 hours 2) 1 Time Keeper
 Cement used
 Groat 1 Batch = 4
 56 Batches at 4 = 224

27 Men out of Total of 33

Remarks
 a) Weather clear-hot
 b) Visitors: Graf P.M. - Golden
 c) Scales tested (Sand 30 #/light)

6/15 car. S.D.A.E. 3505 101200 Sand
 1/2 " S.D.A.E. 3504 84800 1 1/2 Rock

6/15 car. see page 157

1) Pouring concrete Bay 17/18 D, C, BA 2nd Pour. June 16. 36.

a) At Mixer
 8 hours 1 Mixer man
 8 " 1 Pumpcrete Operator
 8 " ea 3 Laborers helping
 8 " ea 3 " Hauling Cement
 B. On Bay 17/18
 8 " ea 5 Carpenter raising, stripping forms
 8 " ea 5 Laborers helping
 8 " 1 Superintendent
 8 " 1 Labor foreman
 2) 1 Time Keeper

Cement used
 Groat 1 Batch = 4
 75 Batches at 4 = 300

21 Men out of Golden Total of 30

Remarks:
 a) Weather clear-hot
 b) Visitors: Graf.
 c) Set H for 1/2 hour P.M. rocky concrete

June 19. Labor. Bay 15/16 Set D, C, B, A
215 215 216 215

2nd pour

A) at Mixer. }
 8 hours 1 Mixer man
 8 " 1 Pumpcrete Operator
 8 " ea 2 Laborers, helping. }
 5 hours

B, On Bay 15/16. }
 8 " 1 Superintendent
 8 " 1 Labor foreman.
 8 " ea 5 Laborers.
 8 " ea 4 Carpenters brackley, shoots. }
 63 Batches = 252 C. = 42 yds

2.) Bay 13/14 Sets D, C, B, A
 8 " ea 4 Carpenters Forms, promptly
 8 " " 3 Laborers cleaning.
 All Men under }
 1) worked 3 hours } 3 hours
 to get ready to }
 pour in Bay 13/14 }
 3.) Timekeeper
 8 " "

Remarks: Visitors: Staff P.M.
 1) Form in B shifted downstream
 east of opening.
 2) Weather Hot, dry.
 3) Concrete good.
 4) 6 Cylinders reports made p.m.

2.3 / Golden
31

June 20 Labor 1.) Bay 13/14 I, C, B, A
220 220 220 220

2nd pour

A) at Mixer }
 8 hours 1 Mixer man
 8 " 1 Pumpcrete Operator
 8 " ea 2 Laborers helping. }
 B) On Bay 15/16 }
 8 " 1 Superintendent } 56 Batches
 8 " 1 Labor foreman } 224 Cement
 8 " ea 5 Laborers } 37,33 yds.
 8 " ea 8 Carpenters setting forms-shoots. } - 1/3 for grad.

2.) Bay 11/12 I, C, B, A
 8 " ea 8 Laborers & Men under 1.)
 worked 4 hours to move to
 Bay 11/12 & pumping, cleaning, stripping,
 setting forms, cementing, curing etc
 3.) Timekeeper
 8 " "

28 /
out 30

Remarks: a) Weather, warm dry
 b) Visitors, Golden-Griff
 c) Difficulties again in Set A
 on account of steel.
 d. concrete good.
 e) sand bulking test
 f) all old cement below bynken.

Sunday.

June 21

4 x 2' = 8' 4" drain tile D, C, B, A.
Top of pipe 213 212.4 212

June 22. Labor. Bay 1 1/2 D, C, B, A

sand test

9-5.5 net = 9.344 lbs.
passing #100 = 0.2187
3.5 lbs. = 2.38%
= 2.38%

Labor.

8 hours ea 8 Carpenters
8 " ea 12 Laborers
8 " ea 1 Superintendent
8 " ea 1 Labor foreman
8 " ea 1 Mixer man

stripping, setting forms, align, cleaning,
curing concrete, pumping for Bay 1 1/2
patching walls & generally preparing for pour in Bay 1 1/2

2) Crane-Hoist
8 hour 1 Carp Foreman
8 hours 1 Pumpcrete Op
8 " 1 Electrician

3) 1 Timekeeper

Remarks: a) Weather dry & hot
b) Visitors: Nielsen (Golden) & Gratt.
c) scales tested
d) Diagonal Steel 2 1/2 from form (Hi 1)
(Top & Bottom of openings)

27/
31 Golden

Labor. 1) Bay 1 1/2 D, C, B, A June 23.

A) At Mixer

8 hours 1 Mixer man
8 " 1 Pumpcrete Operator
8 " ea 2 Laborers

49 Batches

B. In Bay 1 1/2

8 " 1 Superintendent
8 " 1 Labor foreman
8 " ea 6 Laborers
3) 8 " ea 4 Carpenters

196 Cement

32.67 Yds

8 hour 2) Hoist Crane
8 " 1 Carp Foreman
8 " 3 Electrician

3) 5 Laborers
& all men under 1) cleaning up
& getting rear for next pour
& forms = 4 hours.
8 " A) 1 Timekeeper

8 " 5) 1 Cement finisher patching walls.

Remarks: 1) Warm & dry.
2) Visitors: (none)
3) In Set D sloppy work
on keys & construction joint
Reason: Always new inex-
perienced men to break in
4) 1st time that contractor
has finished on job.

28/33

June 24 1) Crane-Hoist

- 8 hours 1 Carp. Foreman
- 8 " ea 2 " "
- 4 hours ea 3 Laborers
- 8 " 1 Electr
- 8 " 1 Pumpcrete-Op

placing rails
rails

2) Bay 1/2

- 8 hours ea 2 Carp.
- 8 " 2 Lab. Helping

Scaffolding for
chippens, Steel.
mon

3) 1 Timekeeper

4) Buggy run ways

- 8 " ea 2 Carpenters building frames
- 8 " 5) 1 Superint
- 8 " 1 Lab Foreman

6) Cement Carr

- 4 " ea 3 Laborers
- 8 " 1 Carpenter Steps, shoots
- 8 " 1 Mixer Man

enloading

7) Cem finisher Patching Walls.

Remarks: a) weather: hot-dry
b) visitors: Formel Foreman
Graft: P. 9h
Hightoren
P.M.

20/32

1) Crane-Hoist

- 8 hours 1 Carp Foreman
- 8 " ea 3 " "
- 8 " ea 1 Pumpcrete Op
- 8 " ea 2 Laborers

rails

- 8 " 2) 1 Superintendent
- 8 " 1 Labor foreman
- 8 " 1 Timekeeper

3) Buggy run ways

- 8 " 4 Carpenters & stripping forms 1/2

4) 1 Cement finisher

- 8 " 1 Concrete-Operator (Laborer)
- 8 " 1 Laborer (watering)

17/12
15/16
12/14 1/2

5) Carrying steel to 9/10

- 8 " ea 4 Laborers
- 4 " 1 Steel foreman } cutting, setting steel
- 4 " ea 3 Ironworkers } II - 11/12

6) Scaffolding for Chippens, stripping

- 8 " ea 2 Carpenters Forms
- 8 " ea 2 Laborers carrying lbr.

a) Weather: hot-dry

b) Visitor: am. Graft
{ Coratater Robinson
Wife + couple 9 AM.
Thomas Iron Works
Mohl Labor Hot Carr
Union

29/32

June 25

6.29.36 Labor Diagonal Strengthening

- 1) Steel Buttress 14 West 17 West
- " " 16 East 16 West
- " " 15 East
- " " 14 East 12 West
- " " 12 East 12 West

8 hours 1 Steel Foreman
 8 " ea 3 Iron workers
 8 " ea 2 Laborers cleaning

2) Bay 9/10 Forms D. C. B. A
 8 " ea 7 Carpenters 2295 229 2272 221.7

3) 1 Superintendent
 8 " 1 Labor Foreman
 8 " 1 Time Keeper

A) Setting Buggy runways
 1 at crane
 1 Mixer man
 1 Pumpcrete Operator

B) Below
 8 " 1 Carpenter foreman
 8 " ea 5 Laborers

5) 1 Laborer watering & stripping
 1 " " 12 1/2 mps
 1 Cement Finisher Patching 1/2

26 1/2
 33

Remarks: Weather dry-hot
 Pyle: PM

Labor. 1)

- 8 hours 1 Superintendent
- 8 " 1 Labor foreman
- 8 " 1 Timekeeper
- 8 " 1 Carp foreman
- 2) Steel

8 " { 1 Steel foreman
 8 " ea { 3 Iron worker
 8 " ea 2 Laborers cleaning
 8 " ea 2 Laborers carrying

3) Buggy-Runways
 Setting Forms 9/10
 8 " ea 4 Carpenters Forms 9/10

8 " 1 " stripping scaffolding
 Forms 11/12
 8 " ea 2 " Nailing Floor on Buggy runway
 8 " ea 3 Laborers carrying lumber
 8 " ea 2 Men siling concrete walls
 8 " 1 C-Finisher patching 11/12
 8 " ea 4 Laborers stripping 11/12

Remarks: 1) Weather Dry-hot
 2) Visitors Golden PM
 3) 1 1/2' dr sand covered
 with 3/4 Rock

27/32

6.30.36

231.5
 2295
 229.3
 2290
 228
 227.2
 226
 222

221
 229
 228
 227
 226
 222

7-1-36 Labor.

- 1)
- 8 hours 1 Superintendent
 8 " 1 Laborforeman
 8 " 1 Timekeeper
 8 " 1 Carp. Foreman
- 2) Bay 9/10 D, C, B, A
 Steel. Forms.
- 8 hour 1 Steelforeman
 8 " ea 2 Ironworkers
 8 " 1 Laborer carrying
 8 " ea 4 Carpenter Forms & scaffold
 8 " ea 4 Laborer helping carpenter
- 3) Bay 11/12 Bay 17/18
- 8 " 1 Cement finisher } patching
 8 " 1 Laborer helping } Walls
 8 " 1 Carpenter stripping
- 4) Bay 15/16
- 8 " ea 2 Carpenters } setting diagonal
 1 Carpenter } Form
- 5) 1 Electrician changing wire system
 to Walk inside
 8 " 1 Laborer opening weepholes.
 8 " 1 " watering

2A/36

Remarks: a) Weather to 9am cool, cloudy
 after 9am warm.
 b) Visitor, German Noon
 9 AM Holme 4:30 PM.
 c) Running out of spreaders.

Labor. 1)

7-2-36

- 8 hours 1 Superintendent
 8 " 1 Laborforeman
 8 " 1 Timekeeper
 8 " 1 Carpforeman
- 2) Steel - Diagonal Forms. Elephant
 Bay 14/15 15/16 16/17 Bay 9/10 A } Trunks,
 } Forms
- 8 " 1 Steelforeman } Stirrups, Bay 9/10
 8 " ea 2 Ironworkers } 15/16 } A
 8 " 1 Laborer }
 8 " ea 2 Carpenter Di. Forms 15/16 16/17
 1 Laborer helping
 8 " ea 2 Carpenter 15/16 Hor. Beams
 8 " ea 2 Carpenter Forms 9/10 D, A
- 3) 1 Carpenter Chamfer strips & 9/10 set A
 1 Pymporote Operator } Crane.
 1 Electrician } & steel
- A) Bay 11/12
- 8 " 1 Cementfinisher Patching
 8 " 1 Laborer helping
 8 " 1 Laborer clearing Univ Forms.
- 5) 1 Laborer watering
 1 Laborer opening weepholes
 1 Laborer painting walls

23 1/2 / 33

Note: Weather: warm.
 Spreaders delivered 10:30 too late to pour.
 Visitor: Quade.

El. 237.5

234.5

7-3-36 Labor Bay 9/10 II C B A

- 8 Pouring concrete
- 8 hours 1 Superintendent
- 8 " 1 Labor foreman
- 8 " 1 Mixer man
- 8 " 1 Pumpcrete Op.
- 8 " ea 2 Laborers
- 8 " ea 1 Cement Finisher
- 8 " ea 6 Laborers
- 8 " ea 2 Carpenter Form.
- 2) Steel 15/16 II, C, B, A
- 8 " 1 St. Foreman Verticals
- 8 " ea 2 Iron Workers strapping
- 8 " 1 Electrician 15/16
- 8 " 1 Laborer carrying
- 3) 4 Carpenter 19/20 Form.
- 8 " 1 " 19/20 "
- 8 " 1 Laborer helping

1 Gromt 4
Batches 74
Cement 300
yds 19/16

26/33

Note: a) Weather Warm, sunny
b) 10:10 Jesse Moyer fell Bay 9/10 set C.
c) Slump 2" 3 cylinders filled Bay 9/10 set C. (kept 1/2 c.)
d. Visitor: Graff.

7-4-36 } Hot } Timekeeper watered
7-5-36 } dry } concrete.

117

Labor: 1)

7-6-36

- 8 hours 1 Superintendent
- 8 " 1 Labor foreman
- 8 " 1 Carpenter foreman
- 8 " 1 Timekeeper
- 2) Steel 17/18 II, C, B, A
- 8 " 1 Steel foreman
- 8 " ea 8 Iron workers
- 8 " 1 Electrician
- 8 " ea 2 Laborers
- 3) Bay 17/18 Forms II, C, B, A
- 8 " ea 6 Carpenters
- 8 " ea 2 Laborers
- 4) Bay 9/10 II, C, B, A Stripping
1 Cement finisher cementing
2 Laborer cleaning oiling
Form
- 5) Pumpcrete - Pipe
- 8 " 1 Mixer man
- 8 " 1 Laborers

25/33

Note: a) Weather: hot sunny, after 10 am: warm
b) Visitor: Graff.
c) Jesse Moyer back at work

- 7-7-36 1.)
 8 hours 1 Superintendent
 8 " 1 Labor foreman
 8 " 1 Timekeeper
 8 " 1 Carpenter foreman
 2) Steel Bay 15/16 - 17/18.
 8 " 1 Steel foreman
 8 " ea 2 Iron workers
 8 " 1 Electrician helping
 8 " 1 Laborer carrying
 3) Bay 15/16 Set II, C, B, A
 8 " ea 5 Carpenters
 8 " ea 4 Laborers
 4) Hoist-Crane
 4 " 1 Pumpcrete Op. } Hoisting Steel
 4 " 1 Mixer man } in place
 5) Bay 9/10 II, B, A
 4 " 1 Cement Finisher } painting concrete
 8 " 1 Laborer } watching
 6) Bay 21/22 Forms
 8 " ea 2 Carpenters
 8 " ea 2 Laborers

23 + 3/2 / 33

Note: Weather dry-hot
 b. Visitors.
 c) Set A Bay 9/10 Northside poor painting job had to be done 2nd time

Golden's
 Steel delivered see page 79)

5th Load	99 - 7/8	40'-0"	8078
	133 - 1 1/4	40'-0"	28249
	16 - 1 1/4	31'-0"	2634
	48 - 7/8	35'-9"	3506
			<u>42462</u>
			7

- Labor: 1)
 8 hours 1 Superintendent
 8 " 1 Labor foreman
 8 " 1 Timekeeper
 8 " 1 Carpenter foreman
 2) Bay 7/18 - Bay 13/14 Set II
 Steel
 8 " 1 Steel foreman
 8 " ea 3 Iron workers
 8 " 1 Laborers carrying
 8 " 1 Electrician helping Iron workers
 3) Bay 15/16 II, C, B, A Pouring Concrete
 8 " ea 9 Carpenters
 8 " 4 Laborers helping
 8 " 1 Mixer
 8 " 1 Pumpcrete Op. & 1 Batch Grout 8
 8 " 1 Mixer man } 47 Batchers Concr 188
 8 " 2 Laborers } Cement 196
 yds - (31.33.2) = 32 yds.
 b) Below
 8 " ea 7 Laborers
 4 " 1 Cement finisher

7-8-36

7-8-36 continued

4) 1 Laborer pumping 19/20
35 1/2 / 37

Note: 1) Weather partly clear, cool all day,
2) Visitors: Graff. P.M. Nielsen P.M.

- 3) 1 1/2" R. & Sand arrives 8:30 A.M.
- 4) 12 1/2 Concrete rocks, wasted ca 6 ft³
- 5) G.O. Banta knocked down by falling
Elephant Truss Set A. 15/16

7-9-36 Labor. 1.)

8 hours 1) Superintendent
 8 " 1 Labor foreman
 8 " 1 Timekeeper
 8 " 1 Carpenter foreman
 2) Steel 13/14 17/18 19/20
 1 Steel forman
 5 Ironworkers
 1 Electrician
 1 Laborer

3) Bay 17/18 Pouring concrete

A) At Mixer
 1 Mixerman } x Gravel
 1 Pump operator }
 2 Laborers

8 "
8 "
8 " ea

B.) Belon.

8 hours 7 Laborers
 8 " 1 Carpenter
 4 " 1 Cement finisher

GROUT 8
 53 Batches 2 1/2
 at 4 220 C.
 35.33 + 0.66 =
 36 yds.

A) Diagonal Form Buttress 12 E, 16 E, 17 W
 11 E, 17 E
 Form footing 19/20 A

8 " ea 9 Carpenters
 8 " ea 4 Laborers carrying

37 1/2 / 43.

Note: a) Weather cool, windy, clear
 b) Visitors: Golden A.M.
 Tomlinson's Relations P.M.
 c) 4 - 3/4" Steel bars in Set A Bay 17/16 missing.
 d) 1 1/2 yds Concrete wasted.

Labor. 1.)

8 hours 1 Superintendent
 8 " 1 Labor foreman
 8 " 1 Timekeeper
 8 " 1 Carpenter foreman

7-10-36

7-10-36 continued

2) Steel 17/18^A 13/14^A 19/20^B 11/12^A
 8 hours 1 Steel foreman
 8 " eq 5 Ironworkers
 8 " 1 Laborer

3) 9 carpenters
 6 " 1 Carpenter
 4 " eq 2 Carpenters
 8 " eq 4 Laborers - helping
 Diagonal Forms 15/16
 Column Forms 15/16 D.C.
 Footing " 19/20

A) B.16W. B.15E Diagonal Strengthening
 B.14E B.17W. B.16E W. Column 15/16 D.C.

Pouring Concrete
 A) at Mixer

8 " 1 Mixer man
 8 " 1 Pumper operator
 8 " eq 2 Laborers
 B. Below
 7 Laborers

8 hours
 4 " $40 \frac{5}{2}$
 4 " $46 \frac{3}{2}$
 1 cement finisher Patching
 1 Helper & Keys

Note: Weather clear-cool

b) Visitor: Nelson
 c) New Timekeeper Campbell.

W-side
 19/20 D C B H 123
 218 218 217 217
 214 213.1 212.3 213
 209 209 209

Labor. 1)

8 hours 1 Superintendent
 8 " 1 Labor foreman
 8 " 1 Time Keeper
 8 " 1 Carpenter foreman

2) Steel 11/12
 8 " 1 Steel foreman
 8 " eq 6 Ironworkers
 8 " eq 2 Laborers

3) Pouring concrete Bay 15/16 start 12.
 A) at Mixer D.E) C

8 "
 8 "
 8 " eq

1 Mixer man
 1 Pumper operator
 2 Laborers

GROUT 4
 Batches 104
 (26 at 4)
 Cement 108

B) Below
 7 Laborers

Yds 17.33 + .33
 17.66 - 2 yds 1/2 pipe

4) Carpenter Forms 15/16 19/20
 11 Carpenters
 5 Laborers

5) Pouring Concrete 19/20 A.B.

(Trouble about) Batches
 tamping in A. 25 at 4 = 100 c

Note: Weather clear, cool
 Visitor: Pyle-Bierman. P.M. = 16.66 yds
 + 2.00 pipe = 18.66

40/47

7-11-36

7-12-36 Sunday Jesse waiting

7-13-36 Labor

8 hours 1) Superintendent
 8 " 1 Labor Foreman
 8 " 1 Timekeeper
 8 " 1 Carpenter Foreman

2) Steel Bay No 11/12 19/20 C
 8 " 1 Steel Foreman
 8 " ea 4 Ironworkers
 8 " 2 Laborers
 8 " 1 Electrician

B15W, B12E
 3) Carpenters Bay 19/15, A, B, 19/20 1/6
 8 " ea 11 Carpenters Forms, Diag
 8 " ea 5 Laborers Helping

4) 19/20 Set A 17/18 A stripping
 8 " 1 Cement finisher patching
 8 " 1 Helper
 1 Men painting & pumping

5) crane
 8 " 1 Mixer man
 8 " 1 Pump concrete Op
 8 " 1 Laborer

3A/45

Notes: Weather: cool-clear
 Visitors: Graft
 Small Vibrator delivered

Labor. 1)
 8 hours 1 Superintendent
 8 " 1 Lab. Forem
 8 " 1 Time K
 8 " 1 Carp Forem

2) Steel 13/14 15/16 17/18
 8 " 1 St. Forem
 8 " ea 4 Iron Workers
 8 " 1 Laborer
 1 Electrician

3) Carpenters 19/20 17/18
 8 " ea 11 Carpenter Formr.
 8 " ea 4 Laborers

4) Pouring concrete
 Bay 18/16 Set B, A #130 Batch = 124 C = 20 1/2 yds
 Bay 19/20 Set B, C, 55 Batch = 220 C = 36 1/2 yds
 19/20 three ITE 3 Batches = 120 C = 2 yds
 Flat Mixer
 1 Mixer M } Total 41888
 1 Pump Op } 356 C
 2 Laborers } 59 = yds

Belon
 7 Laborers
 1 cement finisher
 1 Helper & painting

Note: Weather: clear-warm.
 b) Visitor: Graft
 c) out of 1 1/2 Rock 11 am to 1 PM
 d) Big Vibrator breaks down 1:30 to 4 PM
 e) Steel sampler 1 1/4 - 7/8 - 5/8
 f) B17E Chamfer strip missing

7-14-36

7-15-36 Labor U

- 8 hour 1 Superintendent
- 8 hour 1 Labor foreman
- 8 " 1 Timekeeper
- 8 " 1 Carp. Foreman

- 8 " 2) Steel B11W, B12W, Bay 15/16 C 13/14
- 8 " ea 1 Steel foreman
- 8 " ea 6 Ironworkers
- 8 " 7 Laborers
- 8 " 1 Electr part time + wiring

- 8 " ea 3) Carpenters Bay 17/18 13/14 Floor
- 8 " ea 1A Carpenters Forms 1/4 Forms
- 8 " ea 4 Laborers helpers

4) Pouring concrete 12 Noon
 Bay 17/18 A 232 } 4 + 47B = 200 } 33 1/2
 B 232.1 }
 C 2300 } A - 40 - 167 = 27.00

Buttress 12E 3Ba = 12C = 2 1/2
 + 52 - 212C (35)

- A) At Mixer. 29.00
- 1 Mixer M.
- 1 Pumpcrete Op.
- 2 Laborers
- Below
- 10 Laborers
- 1 Cement finisher Stripping patching Keys
- 1 Helper
- 1 Laborer painting

48/52

Note: a) Weather Hot - clear
 b) Visitor: Graff.

Labor 1)

7-16-36

- 8 hour 1 Superintendent
- 8 " 1 Labor foreman
- 8 " 1 Timekeeper & Secretary
- 8 " 1 Carpenter foreman

- 8 " 2) Steel 15/16 B17W
- 8 " ea 1 St. Foreman
- 8 " ea 6 Ironworkers
- 8 " 1 Electrician
- 8 " ea 2 Laborer.

- 8 " ea 3) Carpenters Bay 13/14
- 8 " ea 12 carpenters - Buttress
- 8 " ea 4 Laborers

A) Pouring concrete 11:30 AM 17/18 yds.
 Bay 17/18 (C) 233 } gr 4 + 20B - 84C = 131.66
 D 237 }
 Golden = A + 233 = 96 C = 15.66

Buttress 14W. 3" = 12" 2"
 23 96 15.66

- 8 " A) At Mixer
- 8 " 1 Mixer M.
- 8 " ea 1 Pumpcrete Op.
- 8 " ea 2 Laborers
- Below
- 8 Laborer
- 1 C. Finisher Stripp 15/16 patch
- 1 Helper
- 1 Painting

47/51

Note: a) Weather Hot - clear
 b) Visitor: Graff.

7-17-36 Labor 1)

- 8 hours 1 Superint
- 8 " 1 L. Form
- 8 " 1 Ti. Keeper
- 8 " 1 Carp Forem.
- 2) Steel BLUE B/L/W - BISE
B15W, B16E, 12E
- 1 St. Form
- 6 Iron W.
- 2 Laborer
- 1 Elect. & wiring
- 3) Carpenters 9/10, 13/14, 19/20
B12E, 13W, 11E, 12W
- 10 Carpenter Form.
- 3 Laborers helpers.

A 232 A) Pouring Concrete 8¹⁰ AM
B 233 Bay 13/14 A, B, C, D. $4 + 615 = 250$ 41.88
C 233 Golden $4 + 63 = 256$ 42.33
D 237

Buttress. 14. V. 5.0 3 B. 120 24
46 + 268 44.38

- 8 " A) At Mixer
- 8 " 1 Mix. M.
- 8 " 1 Pump Op
- 8 " ea 2 Laborers
- A1/48 8 B) Below
- 5 Laborers

Note: a) Weather hot-clear
by Visitors: Gratt. Golden, P.M. Holmes 9 AM
c. Argument with Galland about pouring
too much concrete without tamping.

Labor 1)

7-18-36

- 8 hours 1 Superintendent
- 8 " 1 Lab. Forem
- 8 " 1 Time K.
- 8 " 1 Carp Forem
- 2) Steel Bay 19/20
B17W
- 1 St Foreman
- 8 " ea 6 Ironworkers
- 8 " ea 2 Laborer
- 3) Carpenters Bay 19/20 9/10 B.H.
B17W, 17W,
- 8 " ea 11 carpenter
- 8 " ea 3 Laborers (helpers)

A) Pouring Concrete 2 PM
Set D Bay 19/20 Grout. Batches Cement Yds.
A 32 x 4 = 132 21.66
B13W 2 x 4 8 1.33

A) At Mixer (C: 268) 4 + 34 x 4 140 23.0
1 Mixer man
1 Pumpcrete Op.
2 Laborers

B) Below
7 Laborers
1 Cement Finish. Patching. Stripping
1 Laborer Painting 15/16 19/20

- 8 "
- 8 "
- 8 " ea
- 8 " ea
- 4 "
- 8 "

39 1/2 / A3
Note a) 15/16 B E stripped, painted p.d. with brush
no air.
b) Weather hot, cloudy d. Scales bal. 9⁰⁰ AM
c) Visitors: Platterer & Secretors
d. Cement left 9 AM 268.5x
E.M. Bierman 2 coats

7-19-36 Sunday very hot; Jesse Plage materials 2 hours

7-20-36 Labor 1)

8 hours 1 Superintendent
 8 " 1 Labor Foreman
 8 " 1 Timekeeper
 8 " 1 Carp. Foreman
 8 " 2) Steel Bay 17/18, 15W, 14W.
 1 St. Foreman
 5 Iron Workers
 1 Electr. & Wiring
 2 Laborers
 3) Pouring concrete 1 P.M.
 Bay 7/10 Set C, B, A.
 Grout Batch C, yds

A) At Mixer (total 26 yds)

8 " 1 Mixer M.
 8 " 1 Pump concrete sp.
 8 " ea 2 Laborer

B Below
 5 Laborers
 1 Cement finisher stripping
 1 Helper patching
 1 Laborer Painting 15/11

A) Carpenter 9/10
 8 " ea 11 Carp. B 16E, 17E, 15E, 16W
 8 " ea 3 Lab.

38 1/2 / A2

Note: a) Weather
b) Visitors

Note: c) Enloading Cement: Carr Driver + 2 L
 Bankers 5 L
 d. Cement left 268-160 = 108 See Page 129

5 I.W
16 C
11 C

Labor 1)

8 hours 1 Superintendent
 8 " 1 Labor Foreman
 8 " 1 Timekeeper
 8 " 1 Carp. Foreman
 8 " 2) Steel Bay 19/20 D, C, 15/16 F
 1 St. Foreman
 8 " ea 4 Iron Workers
 8 " ea 2 Laborers
 8 " 1 Electr. & Wiring

3) Carpenter - B 16W, 15E, 16E
 Bay 13/14
 8 " ea 13 Carpenter
 8 " ea 12 Laborers

4) concrete stripping patching, painting
 Bay 17/18
 8 " 1 Cem. Finisher
 8 " 1 Helper
 8 " 1 Laborer painting

37 / 37

39 / 45

Note: a) Weather hot-dry
 b) Visitors: Golden most of the day
 c. Bauer to 20 x B with H.F. D
 carp. cancelled.

18 L
9 C
45 F

131

7-21-36

575
Car. 12
Lab. 17

7-22-36 Labor 1)

8 hours 1 Sptd.
 8 " 15/17
 8 " 17/18 K
 8 " 1 Camp Forem
 8 " 2) Steel. 13/14 15/16 B.C. 17/18
 1 Steel Forem
 5 Ironworkers I.M. cleaning
 2 Laborers cleaning, carrying
 1 Electr & wiring
 8 " ea 3) Carpenters. 15/16 A, B, C, D.
 12 Carpenters
 4 Laborers
 8 " 4) Concrete 17/18 13^P/14 9/10
 1 Cement Finisher } stripping
 1 Helper } patching
 1 Painter } painting
 1 Laborer }
 8 " 5) Crane hoisting steel
 1 Rigger
 2 Laborers
 1 " /AA
 8 " /AA

38 1/2 /AA Note: a) Weather: warm, cloudy.
 b) Visitor: Grath, AM.
 c) Forem. Galland. Rock in left eye 3 PM
 d) 2 Laborers Nail in foot (Br 1/2)

C. 13
S. 4
L. 19

136

Labor 1)

8 hours 15/14 paint
 8 " 1 Labor forem
 8 " 1 Time Keeper
 8 " 1 Camp Foreman
 8 " 2) steel. 17/18; bottom strut A, B, C - 13/14
 1 Steel Foreman Columns
 8 " ea 4 Iron Work
 8 " ea 1 Laborer
 8 " 1 Electr
 8 " ea 3) Carpenters. 15/16; 17/18 - 19/20
 13 Carpenters
 8 " ea 4 Laborers
 4 " 4) Concrete 17/18
 1 Cement Finisher } stripping
 1 Helper } patching
 1 Painter } painting
 1 Laborer } oiling forms
 8 " ea 6 Laborers. 9/10 } stripping, cleaning forms
 4 " 5) Crane
 1 Rigger } hoisting steel
 2 Laborers } lumber
 4 " ea
 4 " ea
 4 1/2 /Ab

Note: a) Weather: warm-clear. PM, cloudy.
 b) Visitors: Golden AM, Grath - Bell
 c. not enough material (1 1/2 bags sand) to pour.

17 L
11 C
4 St

7-24-36 Labor 1)

- 8 hours 15 Superintendent
- 8 " 1 Labor foreman
- 8 " 1 Time Keeper
- 8 " 1 Carpenter foreman
- 8 " 2) Steel 13/14 A, B, C; B18W
- 8 " 1 St. Foreman
- 8 " ea 4 Ironworkers
- 8 " ea 2 Laborer
- 8 " 1 Electrician
- 3) Carpenters
- 8 " ea 11 Carpenters
- 8 " ea 2 Laborer

Elev. Gr. Bat. Yds
Total
4 + 114 = 460
= 76.33

A) Concrete-pouring 8am to 6pm

Bay	Grout	Batches	Cem.	Yds
15/16	A, B, C, D	4	49 x 4	200 33
17/18	A, B, C		43.5 x 4	174 29
B 15 E		7.5 x 4	28	477
B 16 W		7.5 x 4	30	477
B 16 E		7 x 4	28	477
		4	114	460 76.33

A1/A2

- A) A1 Mixer
 - 8 hours 1 Mixer Man
 - 8 " ea 1 Pump Op
 - 8 " ea 2 Laborer
 - B. Below
 - 8 " ea 9 Laborer
 - 8 " 1 Cem. Finish
 - 8 " 1 Help. op
 - 8 " 1 Painter
- 9/10 15/16 17/18

- b) Visitor: Golden Pehl. Graft
- c) Spreader left (in 17/18 East)
- d) Graft Insp. Cont 17/18

13 L
10 C
6 St
29

Labor 1)

135

7-25-36

- 8 hours 15 Superintendent
- 8 " 1 Labor foreman
- 8 " 1 Time Keeper
- 8 " 1 Carpenter foreman
- 2) Steel (B17W); 18E;
- 8 " 1 Steel foreman
- 8 " ea 6 Ironworkers
- 8 " ea 1 Laborer

- 3) Carpenters 13/14 B18W
- 8 " ea 10 Carpenters
- 8 " ea 3 Laborer

AM
= Pouring 11:30 to 4:30 PM

A) Concrete

Bay	Grout	Batches	Cement	Yds
B 17 W			6.66	26.66 433
B 17 E			6.66	26.66 433
B 18 W			6.66	26.66 433

- A) A1 Mixer
 - 8 " 1 Mixer M.
 - 8 " 1 Pump Op
 - 8 " ea 2 Laborer
- Total
A 19 x A = 80 13

- B. Below
 - 6 Laborer
 - 1 " watering

Note: cloudy-cool
b) Visitor: Roy Ferguson Cal. State Emp. Sec. Ins.
Pyle-Golden P.M. Beerman

36/36

44 { 11C
6st
17L
10 Kaym

Note: 15/16 (east) (spread)

Sunday 7-26-36 Jesse May waterway Weather
(Foggy) some rain,

7-27-36

Labor. 1)

8 hours 1 Superintendent
8 " 1 Labor foreman
8 " 1 Timekeeper
8 " 1 Carpenter Foreman

2) Steel. B14E, 12W, 13E, 13W, 11E, 11W
19/20 11/12

8 " 1 Steel foreman
8 " ea 6 Iron workers
8 " ea 1 Laborer
8 " 1 Electr & Wiring.

3) Carpenters Bay 13/14 11/12
Forms

8 " ea 11 Carpenters
8 " ea 3 Laborers

A) Concrete - pouring 11-11 AM
Elev. A) 4 Mixer 3000
1 Mixer 9M 1314 44.50 = 182 300
1 4 m per Op 237
2 Laborer 210
B) Below
7 Laborer B12W 3 = 12 2
B11E 3 = 12 2
B11W 1.50 6 1

[calc 3429]

8 " 11 Comp Finisher 45/16 Stripping, patching
8 " ea 2 Laborer painting
11/20
cleaning oiling
forms

41/44

C 12

St. 5

L: 20

K.M. 10
47

137

continued:

Note: Weather: cool, foggy, slight rain till 11 AM

3 PM 3 PM Sunshine

a) B.I.W. 12WB-24 b) Visitors: None
13ugg 30 c) Argument with Supt. about vibrating set #. Bay 13/14
d) C-15/16 Form. 647.

Labor. 1)

8 hours 1 Superintendent
8 " 1 Labor foreman
8 " 1 Timekeeper
8 " 1 Carp. Foreman

2) Steel. B14E; 17W

8 " 1 St. Forem
8 " ea 5 Ironworkers
8 " 1 Electr & wiring
8 " ea 2 Laborers cleaning & carrying
3) Form. 15/16 17/16 17/18 stripping
12 Carpenters B14W, 13E, 16W, 17W
8 " ea 3 Laborers

4) Concrete 15/16 17/18

8 " 1 Cement finished stripping patching
8 " 1 Laborer helper
8 " 1 Painter & watering
8 " ea 6 Laborers stripping cleaning up
5) Cement-carload (2 trucks)
1 Mixer than
6 Laborers.
6) Rigger 17/18 Take scaffolding down
1 4 m per Op } 47/47
1 Laborer

Note: 1) Weather: cool, cloudy A.M. warm sunny P.M.

2) Visitors: Golden
3) carload cement

10 K.M. } 43
 5 St }
 12 Cor }
 16 L. }

7-29-36 Labor

1) 8 hours 1 Superintendent
 8 " 1 Labor Foreman
 8 " 1 Time Keeper
 8 " 1 Carpenter Foreman
 8 " 2) Steel 19/20 15/11 13/1A
 8 " 1 St. Foreman B18W, 18E., 19W.
 8 " ea 5 Ironworkers
 8 " ea 2 Laborers cleaning, carrying
 8 " 1 Electrician
 8 " ea 3) Forms Runway 11/12 Forms Runway
 8 " ea 12 Carpenters 19/20 B, 13E, 1AW.
 8 " ea 2 Laborers
 8 " A) Concrete 11:30 A.M.
 8 " 1 Cement Finisher 9/10 Anchors 15/1 Strips
 8 " 1 Helper 1/10 Sr. Batch C. Yds
 8 " 1 Painter Bay 11/12 4 72 392 483
 8 " A) Ht Mixer 4.48 H.B.C. (El: 240)
 8 " 1 Mixerman II }
 8 " 1 Pumpcrap 3/11 }
 8 " ea 2 Laborers }
 8 " ea B. Below
 8 " ea 5 Laborers El: 220 B14W 5 20 333
 39/43 $\Sigma 4 77 \times 4 = 312.51$

Note: 1) Weather clear, warm
 2) Visitors: Golden C.E. Asst. (Coast Ward)
 Neal Morgan Traveling Engineer
 Harvey Chamberlain Steel Contr. T.N.A.
 B.O. Larson Contractor
 Chris Larson

3 St } 36
 12 C }
 8 K.M. }
 14 L. }

7-30-36

Labor 1) 8 hours 1 Superintendent
 8 " 1 Time Keeper
 8 " 1 Carpenter Foreman
 8 " 2) Steel 19/20
 8 " 1 St. Foreman B19W
 8 " ea 3 Ironworkers
 8 " 1 Electrician
 8 " ea 2 Laborers
 8 " ea 3) Forms Runway 19/20
 8 " ea 12 Carpenters
 8 " ea 4 Laborers
 8 " A) Concrete 13/14 stripped, patched
 8 " 1 Cement Finisher
 8 " ea 2 Helpers
 8 " 1 Laborer
 8 " ea 2 Laborers cleaning up, oiling forms.
 8 " 5) Crane
 8 " 1 Pumpcrete Op.
 8 " 1 Mixerman
 8 " b) Scaffolding 19/20
 8 " 1 Rigger
 8 " ea 3 Laborers
 39/43

Note: Weather: cloudy-warm, clear hot P.M.
 2) Visitors: Golden A.M. Insurance
 Adjuster P.M.

4.911
C
4

9
11 } 42
3
19 }

38/42

7-31-36 Labor 1)

- 8 hours 1 Superintendent
 - 8 " 1 Time Keeper
 - 8 " 1 Labor Foreman
 - 8 " 2) Steel B18W. B9E hor.
1st. Forem B11W,-
 - 8 " ea 3 Iron workers
 - 8 " ea 2 Laborers
 - 8 " 1 Electrician & wiring.
 - 8 " ea 4) Forms B19W, 17E, 17W, 16E
10 carpenters 18W,
 - 8 " ea 3 Laborers
 - 8 " 5) Concrete pouring 8 a.m.
 - 8 " 1) H+Mixer
 - 8 " 1 Mixer M
 - 8 " ea 1 Pumper Op
 - 8 " ea 2 Laborers
 - 8 " ea BBelair
 - 8 " 7 Laborers
 - 8 " 1 carp. Groat Batch Com Yeh
- | | | | | | | | | |
|-------------|-----|-----|----|------|---|-------|-------|-------|
| D | C | B | H | 191 | A | 106.5 | 430 | 70.00 |
| 233.5 | 233 | 233 | 20 | | | 7 | 28 | 4.65 |
| cal. 71.4yd | | | | B19W | | 6 | 24 | 4.00 |
| | | | | B18E | | 4 | 117.5 | 482 |
| | | | | | | | | 79.66 |

6) 1 Cement finished 13/14 strips patching
 8 " ea 2 Laborers } & Keys;
 Note: Weather, clear, warm
 by Visitors: Graft, A.M.

Continued
Book 536

143

147

1936

Holes 9"

149

Horizontal Beam - Golden Steel (Yard)

Date	Direction	D	C	B	A	Steel	Remarks
7-29	SE	13	14	16	16	3/8" x 2 1/2"	grouted.
7-29	SW						
7-29	10W	13	14	16	16	3/8" x 2 1/2"	grouted.
8-6	11E	16	14	16			
	12W	13	14	16			
	13E	16	14	16			
	14W	13	14	16			
	15E	16	14	16			
	16W	13	14	16			
	17E	16	14	16			
	18W	13	14	16			
	19E	16	14	16			
	20W	13	14	16			
	21E						
	22W						

Concrete poured Drains

Weepholes 7-7-36

Buggy = 6 ft³

17/18 D C 2 2

10' length of 2" = 95 yd.
(100) pipe

15/16 D C B 2

13/14 ^{2x3} D C B A11/12 ^{2x3} D C B A
14 A

9/10 D 2 B A

21/22 — 2 2 2

19/20 21A 2 2 2
209 213 2123 2137/8 — — — {2x3
4'}

B. 21 = 59

Bay	A	B	C	D
7/8	2"RI 4'	0	—	—
9/10	2'	2'	(2')	2'
11/12	2'	2'	(2')	(2')
13/14	2'	2'	2'	(2')
15/16	(2')	2'	2'	2'
17/18	(2')	(2')	2'	2'
19/20	(2')	(2')	(2')	(2')
21/22	2'	2'	2'	—

O.K.

2x38=76'
4" pipeB. 21 = 59'
2" RI

Start

Concrete poured, Columns

Date	No. Batches	Cement	Bags	Set. yds.	Remarks
6/9	4	13	48 (52)	17/18	(9.66) - 1/2 Loss 52 Elev
6/11	16	(65)	61 2A4	17/18	D.C. 40.66 + 10% 4 1/2 B.A.
6/12	8	(18)	16 64	15/16	A 10.66 + 1 1/4
6/13	4	(49)	48 192	15/16	D.C. 32 + 3/4 B.
6/15	4	(57)	56 22A	13/14	D.C. 37.33 + 1 B.A.
6/16	4	(76)	75 300	17/18	D.C. 50 + 1 B.A.
6/18	4	(65)	64 256	11/12	D.C. 42.66 + 1 B.A.
6/19	4	(63)	62 248	15/16	D.C. 41.33 + 1 B.A.
6/20	4	(56)	55 220	13/14	D.C. 36.66 + 1 B.A.
6/23	4	(47)	48 192	11/12	D.C. 32.7 + 1 B.A.
6/27	4	(96)	95 380	11/12	D.C. 63 + 1 B.A.
		56	580		386.63 4.66
			2320		391.29
7/3	4	(75)	74 300	9/10	D.C. 49.66 + 1 B.A.
7/8	8	(48)	47 196	15/16	D.C. 32.00 + 1 B.A.
7/9	8	54	53 220	17/18	D.C. 36.00 + 1 B.A.
7/10	8	8	27 36	15/16	D.C. 15.33 + 1 B.A.
7/11	4	24	23 96	15/16	D(E) 15.66 + 1 C
7/11	0	2	28 112	19/20	A(B) 18.66 + 1 AS
			960		157.31

Continued 150/157

Diagonal Strengthening
Concrete poured.

Date

Date	No. Batches	Cement	Buttress yds.	Remarks
7/10	15	60	60	10 yds.

16 W. 15E
16 E. 17E
17 W
10 yds.
10 yds

11-7-36 Steelsamples taken to testing station

17	{	1	1 1/4	□	16"
		1	1 1/4	□	24"
18	{	1	7/8	○	16"
		1	7/8	○	24"
19	{	1	5/8	○	16"
		1	5/8	○	24"

Rock, Sand

	1 1/2 Rock.	3/4 Rock	Sand
1) 8	94700 ✓	92300 ✓	96200 ✓
2) 13	84800 ✓		101200 ✓
3) {	15 86300 ✓		93800 ✓
	15 46000 ✓	46000 ✓	
4) {	17 83100 ✓	93400 ✓	86400 ✓
	17 84800 ✓		102100 ✓
5 23		89080	97000 ✓
28	92600	93200	96700
7-6	93300		97800
7-10	97000	90900	104900
7-13	92300		96800
7-15	95200		
7-15	50800		50800
7-17			
7-22	96100		97480 ✓
7-24	96300		99200
7-27	92400	95200	103000

continued Book 536 Page 146

See Page 15-19-89-1221
 Old Cement
 June 12 Car Riv. Port. Cement 1200
 U.P. 125397 1200
 5) 6-22-36 H.P. 18710 1000
 6) 7-8-36 H.P. 10326 1200
 7) 7-20-36 1000
 8) 7-27-36 U.P. 137679 1000
 Continued Book 536 Page 145

April 17 U.P. 124987 1200 1)
 April 20, Carload 125812 1200 2)
 22 " U.P. 124389 1200 3)

Cement Check 6/23.36 P.M. Left 1221

Car. U.P. 125397 1200
 2421
 Used 4/9 to 6/23
 counted below Bunkers 2044
 below 50-12-38 377
 2358

Corrugated Rounds.

$\frac{5}{8}$ $\frac{7}{8}$
 0.30 0.60
 1.05 2.06

Corrugated Squares.

$\frac{1}{2}$ $\frac{3}{4}$ 1 $1\frac{1}{8}$ $1\frac{1}{4}$
 0.25 0.56 1. 1.26 1.55
 0.86 1.94 3.43 4.34 5.35

Cement Used.

yds.	6/9	52	5x	Cement	wasted	Laitance	Bay
43.33	6/11	260	"	10%	"	Lat 8 - 61at 4 - 17/18	17/18
172	6/12	72	"			Lat 8 - 16-4 - 15/16	15/16
32.67	6/13	196	"			Lat 4 - 48-4 - 15/16	15/16
38	6/15	228	"			Lat 4 - 56-4 - 14/16	14/16
50.46	6/16	304	"			Lat 4 - 75-4 - 17/18	17/18
43.33	6/18	260	"			65-4 - 11/16	11/16

See page 154.

Legal Holidays.

5. 30.
7. 4
9. 7 L
9. 9 a
10. 12. c
11. 11.
11. 26

C. Huff: Pymperete Open
Rigger

carpenter: 1) Ybarra
2) Hutson
3) Brady
4) Parita
5) Cass
6) Broyles
7) Woodline

CALCULATION OF EARTHWORK.

Width	HEIGHT														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	.02	.04	.06	.07	.09	.11	.13	.15	.17	.18	.20	.22	.24	.26	.28
2	.04	.07	.11	.15	.18	.22	.26	.30	.33	.37	.41	.44	.48	.52	.56
3	.06	.11	.17	.22	.28	.33	.39	.44	.50	.56	.61	.67	.72	.78	.83
4	.07	.15	.22	.30	.37	.44	.52	.59	.67	.74	.81	.89	.96	1.04	1.11
5	.09	.19	.28	.37	.46	.56	.65	.74	.83	.93	1.02	1.11	1.20	1.30	1.39
6	.11	.22	.33	.44	.56	.67	.78	.89	1.00	1.11	1.22	1.33	1.44	1.55	1.67
7	.13	.26	.39	.52	.65	.78	.91	1.04	1.16	1.30	1.42	1.55	1.68	1.81	1.94
8	.15	.30	.44	.59	.74	.89	1.04	1.19	1.33	1.48	1.63	1.78	1.92	2.08	2.22
9	.17	.33	.50	.67	.83	1.00	1.17	1.33	1.50	1.67	1.83	2.00	2.17	2.33	2.50
10	.18	.37	.56	.74	.93	1.11	1.30	1.48	1.67	1.85	2.04	2.22	2.41	2.59	2.78
11	.20	.41	.61	.82	1.02	1.23	1.43	1.63	1.83	2.04	2.24	2.44	2.65	2.85	3.06
12	.22	.44	.67	.89	1.11	1.33	1.56	1.78	2.00	2.22	2.44	2.67	2.89	3.11	3.33
13	.24	.48	.72	.96	1.20	1.44	1.68	1.92	2.16	2.41	2.65	2.89	3.13	3.37	3.61
14	.26	.52	.78	1.04	1.30	1.55	1.81	2.08	2.33	2.59	2.85	3.11	3.37	3.63	3.89
15	.28	.56	.83	1.11	1.39	1.67	1.94	2.22	2.50	2.78	3.06	3.33	3.61	3.89	4.17
16	.30	.59	.89	1.18	1.48	1.78	2.07	2.37	2.67	2.96	3.26	3.56	3.85	4.15	4.44
17	.31	.63	.94	1.26	1.57	1.89	2.20	2.52	2.83	3.15	3.46	3.78	4.09	4.41	4.72
18	.33	.67	1.00	1.33	1.67	2.00	2.33	2.67	3.00	3.33	3.67	4.00	4.33	4.67	5.00
19	.35	.70	1.06	1.41	1.76	2.11	2.46	2.82	3.17	3.52	3.87	4.22	4.57	4.92	5.28
20	.37	.74	1.11	1.46	1.85	2.22	2.59	2.96	3.33	3.70	4.07	4.44	4.81	5.18	5.56
21	.39	.78	1.17	1.55	1.94	2.33	2.72	3.11	3.50	3.89	4.28	4.67	5.06	5.44	5.83
22	.41	.81	1.22	1.63	2.04	2.44	2.85	3.26	3.67	4.07	4.48	4.89	5.30	5.70	6.11
23	.43	.85	1.28	1.70	2.13	2.56	2.98	3.41	3.83	4.26	4.68	5.11	5.54	5.96	6.39
24	.44	.89	1.33	1.78	2.22	2.67	3.11	3.56	4.00	4.44	4.89	5.33	5.78	6.22	6.67
25	.46	.92	1.39	1.85	2.31	2.78	3.24	3.70	4.17	4.63	5.09	5.56	6.02	6.48	6.94
26	.48	.96	1.44	1.92	2.41	2.89	3.37	3.85	4.33	4.82	5.30	5.78	6.26	6.74	7.24
27	.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50
28	.52	1.04	1.55	2.07	2.59	3.11	3.63	4.15	4.67	5.18	5.70	6.22	6.74	7.26	7.78
29	.54	1.07	1.61	2.15	2.68	3.22	3.76	4.30	4.83	5.37	5.91	6.44	6.98	7.52	8.06
30	.56	1.11	1.67	2.22	2.78	3.33	3.89	4.44	5.00	5.55	6.11	6.67	7.22	7.78	8.33
31	.57	1.15	1.72	2.30	2.87	3.44	4.02	4.59	5.17	5.74	6.32	6.89	7.46	8.04	8.61
32	.59	1.18	1.78	2.37	2.96	3.56	4.15	4.74	5.33	5.92	6.52	7.11	7.70	8.30	8.89
33	.61	1.22	1.83	2.44	3.05	3.67	4.28	4.89	5.50	6.11	6.72	7.33	7.94	8.55	9.17
34	.63	1.26	1.89	2.52	3.15	3.78	4.40	5.04	5.67	6.29	6.93	7.56	8.18	8.81	9.44
35	.65	1.30	1.94	2.59	3.24	3.89	4.53	5.18	5.83	6.48	7.13	7.78	8.42	9.08	9.72
36	.67	1.33	2.00	2.67	3.33	4.00	4.66	5.33	6.00	6.67	7.33	8.00	8.67	9.33	10.00
37	.68	1.37	2.06	2.74	3.42	4.11	4.79	5.48	6.17	6.85	7.54	8.22	8.91	9.59	10.28
38	.70	1.41	2.11	2.82	3.52	4.22	4.92	5.63	6.33	7.03	7.74	8.44	9.15	9.85	10.56
39	.72	1.44	2.17	2.89	3.61	4.33	5.05	5.78	6.50	7.22	7.95	8.67	9.39	10.11	10.83
40	.74	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.67	7.41	8.15	8.89	9.63	10.37	11.11

Table gives cu. yds. in 1 ft. of a triangle of given width and height. Corrections for tenths of width are one tenth the values found under each height considering the widths from 1 to 9 as tenths and similarly the corrections for tenths of height are one tenth the figures opposite width considering the heights from 1 to 9 as tenths. Thus if w = 16.2 and h = 5.3, cu. yds. = 1.43 + .028 + .089 = 1.597 cu. yds. or practically 160 cu. yds. per 100 ft. If w exceeds 40 ft., use one half and multiply result by 2, if both w and h are large use one half of each and multiply result by 4. Any cross-section may be divided into triangles by the following rule. To the triangle of the sum of the outside cuts (or fills) = h, and 1/2 the roadbed = w, add the triangles formed by taking the distance out to each break in turn (=w) by the difference between the cuts (or fills) on each side of it (=h) always subtracting the outer from the inner.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1 1/2
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	26.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.2	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example r above for 20 ft. roadbed distance will be 41.9 + (20 - 16) ÷ 2 or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.