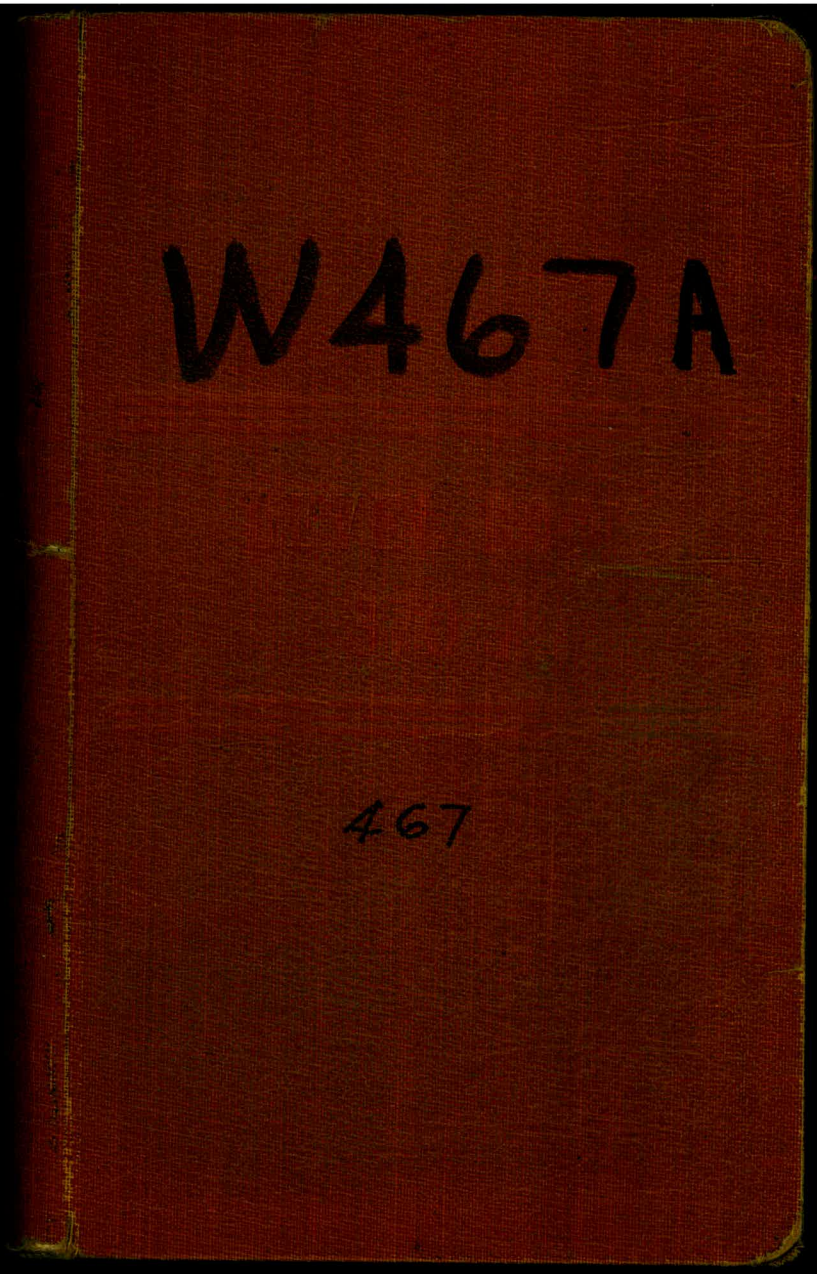
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TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.

FOR SINGLE TRACK EXCAVATION.

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

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

Concrete Field Book.

By

R.W. CARTER.

Concrete Inspector

Sat. OCT 14th to Nov. 7, 1933.

By

Otto von Seggern

Concrete Inspector

Nov 8, 1933 to Nov 12, 1933.

1350
1700
3050

3840
3050
790

4 465
21
84

332
332
365 2
32
368.4

Sat Oct. 14-1933 — 7:A.M.-to 4:P.M. Shift.

Placed concrete in Spillway OG:

Sta. 1+20 to Sta. 1+44-elev. 744° to 750°

Sta. 1+68 to Sta. 1+92-elev. 744° to 750°

Sta. 3+84 to Sta. 4+08-elev. 720 to 730°

1260

Start: 7:A.M.-finish-3:30 AM

MIX: 5-sacks cement
1350# Sand
850# - 2½" rock
850# - 1½" rock
790# - ¾" rock
9 gals. H_2O

332-Batches Concrete
8- Batches Grout
1700-Sacks of cement

20-Ft. copper
2200 Sacks Cleaned
16-Sacks of cement recovered.
4-sacks cement used by finisher

Equipment:

1-mixing plant
2-Blaw-Knox truckmixers
1- " " " " -12:30 P.M. to
2-Transit mix trucks-8:A.M. to 3 15
1-#10-Dragline
1-Truck #43
1-Truck #44
1-Crane #11 - 7:A.M.-to 3:P.M.
1-Compressor-waterliner + drills.

Oct. 14- continued:

Labor:

Forms
- 1- Gen. foreman
- 4- Carpenters
- 5- helpers
- 7- Carpenters
- 6- helpers

{ 12- midnight to- 8:30 A.M.

Mixing Plant
- 1- mixer man
- 7- men

Placing Concrete
- 1- Gen. foreman
- 1- man dumping trucks
- 1- man on chutes
- 6 men placing
- 1- man dumping buckets
- 1- #11- crane operator
- 1- " " oiler

{ 6 hrs.

Concrete Delivery
- 1- Blaw-knox truckmixer driver- 12:30 to
- 2- " " " " drivers
- 2- Transitmix drivers- 8 A.M. to

Oct. 14- continued

Aggregate Supply
- 1- #10- dragline operator
- 1- #10- " " oiler
- 2- Truck drivers

Chipping Concrete { 4 men - 4 hrs.

Stripping forms { 4 men - 4 hrs.

Curing Concrete { 1- laborer

Finishing Concrete
- 1- finisher
- 2- helpers

Grout holes
- 1- driller
- 2- helpers

Changed mix at batch # 168- to 332

5- sacks cement
1250# - Sand
850# - 2 1/2" rock
970# 1 1/2" "
770# - 3/4" "

Sat. Oct. 14 - 1933.

Core Trench excavation:

1 - Compressor
1 - Jackhammer + drills

1 - foreman
7 - laborers
1 - driller

2 - Trucks. #1 + #2
1 - #8. shovel 7 A.M. to 2:30
1 - " " runner
1 - " " oiler

#11. Dragline - 3:00 P.M. to 4 P.M.

9 - loads of rock - 30 - cu. yds. (solid) from Coretrench excav. to upstream rock embankment.

Sunday - Oct. 15

Spillway:

chipping concrete { 2 - men

Curing Conc. { 1 - man

1 - compressor
1 - water-liner + drills
1 - driller
2 - helpers

Grouting Spillway OG cut-off trench -
12: M. to 5:30 A.M. Inspected by Gottschling.
1 - Portable mixer
1 - Portable compressor
1 - 7. cu. ft. grout Tank
Hose +

1 - mixerman
1 - Grout tank man
3 - hose men

59 cu. ft. grout
40 - sacks cement.

Sta.	Cu. ft
3+60	11
3+65	2
3+70	4
3+75	2 11 1/2
3+80	7
3+85	6 1/2
3+90	7
3+95	8
4+00	

Monday- Oct. 16-1933

Placed concrete in Spillway 06.

Sta. 2+16 to Sta. 2+40 - elev. 743° to 750°

Sta. 2+64 to Sta. 2+58 - elev. 733° to 743°

Sta. 3+36 to Sta 3+60 - elev. 741° to 750°

Start: 7. A.M. - Finish 4. P.M.

Mix: 5-sacks cement
1250# #Sand
850# - 2½" rock
970# - 1½" rock
770# - ¾" rock
9 gals. H_2O

300 - Batches concrete
9 - batches grout
4150 - Sacks cleaned
24 - Sacks Cement recovered

17 - ft. copper

4 - sacks cement used by finisher

Equipment:

1 - mixing plant
2 - Transitmix trucks - 6 hrs.
1 - Blaw-Knox - truck mixer - 8:00 A.M. to 4:00
1 - " " " " 8:30 A.M. to 4:00
1 " " " " 12:30 P.M. to 4: P.M.
1 - #10 - Crane
1 - Barber Greene
1 - truck #43
1 - " #44
1 - compressor
1 - Waterliner drills

Labor:

Forms
- 1 - Gen. foreman
- 1 - Carp. foreman
- 3 - Carpenters
  (12 - midnight to 8:30 A.M.)
- 4 - helpers
- 1 - foreman
- 5 - carpenters (3 - only - 4½ - hrs.)
- 5 - helpers

Oct 16-1933 - Continued:

Mixing plant { 1-mixerman
7-men

Placing Concrete { 1-Gen. foreman
1-#10-crane operator
1-"10- " oiler
1-man dumping trucks
1-man dumping buckets
5-men placing

Concrete Delivery { 2-Transitmix drivers-6
1-Blaw-Knox driver-8:A.M. to 8:30 P.M.
1- " " " "
1- " " "

Aggregate Supply { 2-Truck drivers

Finishing Concrete { 1-finisher
2-helpers.

Curing Conc. { 1-man

Clean Concrete surface- { 1-laborer

Grout holes- { 1-driller
3-helpers

Grout holes -

Sta.	Depth of hole	Length of pipe
Sta. 4+10 -S	25'-6"	21'-7"
4+15 - N	22'-6"	20'-11"
4+20 - S	26'-0"	21'-2"
4+25 - N	25'-6"	20'-11"
4+30 - S.	26'-0"	19'-11"
4+35 - N.	26'-0"	21'-2"
4+40 - S.	25'-6"	21'-1"
4+45 - N -	25'-6"	21'-4"
4+50 - S -	26'-0"	21'-4"
4+55 - N -	27'-0"	20'-4"

Oct-16-1933-

Core trench - North Abutment.

1 #11 - dragline

1 Compressors

1 - Jackhammer + drills

1 - Truck #26 (Hazard)

1 - foreman

6 - laborers

1 - driller

1 - #11 - dragline operator

1 - " " " oiler

1 - Truck driver

No rock to-day.

Oct. 17-1933-

Core trench excav. North Abutment

1 - #11 - dragline

1 - Truck #26 (Hazard)

1 - Compressor
2 - Jackhammers + drills

1 - foreman

10 - laborers

1 - Truck driver

1 - Dragline operator

1 - " " oiler

2 - drillers

Tuesday- Oct. 17. 1933-

Placed concrete in Spillway. OG:

Sta. 3+84 to Sta. 4+08 - elev. 730° to 743°

Sta - 4+08 - rock to elev. 720° to

Sta. 4+56 - rock to elev. 719.5

MIX: 1: 2½: 5

5-sack cement
1250#- Sand
850#- 2½" rock
970#- 1½" rock
770#- ¾" rock
35-gals. H_2O

436- Batches Concrete
6 Batches grout
2210- sacks cement
482 cu. yds.
4-sacks by Finisher

84- Ft. copper

1850- Sacks cleaned

17- Sacks cement recovered.

1- set of 3- test cylinders at 1:30 P.M.
Sta. 3+84 to Sta. 4+08- elev. 730° to 743°

Equipment:

1- mixing plant - 9:A.M. to 6:P.M.
3- Blaw-knox truckmixers - 9:A.M. to 6:30 P.M.
2- Transitmix trucks. 9:A.M. to 5:30

1- Barber green
1- Truck #43
1- Truck #44
1- Portable compressor
1- Water-liner & drills
1- Portable compressor for curing conc.

Labor:

Forms:
1- gen. foreman
1- Carp. foreman
3- carpenters
4- laborers
12: MIDNight to 8:30 A.M.

1. Carp. foreman
2 Carpenters
7- laborers
2- Carpenters - 4 hrs.

Oct. 17 - continued:

Mixing Plant
- 1 - mixer man - 9:A.M. to 6:30 P.M.
- 4 - men - 9:A.M. " "
- 3 - men - 7:P.M. to 6:30 P.M.
- Clean sacks - 2 - hrs.

Placing labor
- 1 - gen. foreman - 7:A.M. to 8:30 P.M.
- 1 - man dumping trucks
- 1 - man on chutes
- 3 - men placing — 9:A.M. to 4:P.M.
- ~~3~~ men - 1:P.M. to 4:P.M.
- 7 - men - 4:P.M. to 8:30 P.M.

Concrete Delivery
- 3 - Blaw-Knox drivers - 8½ hrs.
- 2 - Transit mix drivers - 7½ hrs.

Aggregate supply
- 2 - Truck drivers

Chipping Conc.
- 2 - laborers - 2 - hrs.

Curing Conc.
- 1 - laborer

Finishing Concrete
- 1 - finisher
- 2 - helpers

Grout holes
- 1 - driller
- 2 - helpers

Clean foundation rock
- ~~4~~ laborers - 5 - hrs.

Oct-18-1933

Placed concrete in Spillway OG:

Sta. 3+12 to Sta. 3+36 - elev. 723 to 733

1200

Start - 9:A.M. Finish - 3:P.M.

MIX: 5-sacks cement

1250# Sand
850# - 2½" rock
970# - 1½" rock
770# - 3/4" rock
35 gals. H20

} 240-Batches concrete

} 3-Batches grout

} 1215-Sacks Cement

No Copper

none - Sacks cleaned

none Sacks cement recovered

3- Sacks cement used by Finisher

Equipment:

1-mixing plant

3 Blaw-knox truck mixers

~~Transitmix trucks~~

1- Barber Greene aggregate loader

1- Truck #43

1- Truck #44

Labor:

Placing Concrete
- 1-foreman
- 1-man dumping trucks
- 3-men placing
- 9:A.M. to 3:30 P.M.

Forms
- 1-Carp. foreman
- 3 Carpenters
- 4-helpers
- } 12:MIDNIGHT to 8:30 A.M.
- 1-Carp. foreman
- 10-helpers

Mixing Plant
- 1-mixerman
- 6-men
- 9:A.M. to 3:P.M.

Concrete Delivery
- 3-Blaw-knox truck mixer drivers
- 9:A.M. to 3:P.M.

Aggregate Supply
- 2-Truck drivers

Chipping Conc.
- 2-laborers, 4-hrs

Curing Conc.
- 1-laborer

Oct 18 1933 - continued

Finishing Concrete { 1 - finisher
2 - helpers.

Oct 18 1933 -

Core trench excavation

1 - #11 - dragline
1 - #26 - Truck (HAZARD)
1 - Compressor
2 - Jackhammers + drills

1 - foreman
1 - Truck-driver
1 - #11 - dragline operator
1 - " " " oiler
8 - laborers
2 - drillers

Oct. 19-1933 -

Core trench work - North abutment:

1- #33- truck 4½ hrs.
1- #11- dragline "
1- Compressor
1- Jackhammer 8

1- foreman - 8-hrs.
3- laborer - 8-hrs.
3- laborers 4½-hrs.
1- truck driver "
1- driller 8
1- dragline operator "
1- dragline oiler "

Oct. 19-1933 -

Spillway OE concrete:

Sta. 3+84 to sta. 4+08

Elev. 743° to 750°

335

Mix: 5-sacks cement
1250# sand
850#- 2½" rock
970#- 1½" rock
770#- ¾" rock

67- Batches concrete
3- Batches grout
350 sks. cement

3850- sacks Cleaned

28- sacks Cement recovered.

13- Ft. copper

4- sacks cement used by finisher

Equipment:

1- mixing plant - 12:30 P.M- to
3- Blaw-Knox truck mixers " " to
1- Hil- Crane - 12:30 P.M- to

1- Barber Greene
1- Truck #43
1- " #44

1- compressor

1- waterliner + drills

LABOR: 1- gen. foreman

FORMS
- 1- carpenter foreman
- 8- Carpenters
- 3- helpers - 8-hrs.
- 7- helpers - 4½-hrs. } stripping forms.
- 4- laborers - 3½-hrs. } stripping forms.
- 4- laborers - 4½-hrs } stripping forms.

Mixing Plant 12:30 P.M. to 4: P.M.
- 1- mixerman
- 3- men
- 3- men (7:AM. to 12:30 P.M. clean jacks

Placing Concrete 12:30 P.M. to
- 4- laborers
- 1- #11- crane operator
- 1- #11- crane oiler

Concrete Delivery 12:30 P.M. to
- 3- Truck drivers

Aggregate Supply
- 2- Truck drivers

Finishing Conc.
- 1- finisher } 10½-hrs.
- 2- helpers } 10½-hrs.

Curing Conc.
- 1- laborer
- 9½ hrs

Grout holes
- 1- driller
- 3- helpers.

2788 to 3+12

Oct. 20-1933.

Pressure Grouting OG cut-off

trench in Spillway.

1- Portable mixer

1- " compressor

1- 7-cu. ft. Rix Grout tank

Labor:

1- mixerman
1- Grout tank man
2- hose men
} 1:A:M - to 7:A:M.

Sta.	Cu. ft. Grout
4+05	not drilled
4+10	1 1/2 cu. ft.
4+15	2
4+20	3 1/2
4+25	2
4+30	5 1/2
4+35	3 1/2
4+40	3 1/2
4+45	2
4+50	4
	37 1/2 cu. ft.

Mr. Moore Inspector

30- sacks cement used

Oct. 20-1933-

Concrete Spillway OG.

Sta. 2+64 to 2+88 - elev. 743± to 750±

Sta. 3+12 to 3+36 - elev. 733± to 740±

Sta. 4+32 to 4+56 - elev. 719±. To elev. 730±

870
915

Start: 7:A:M. Finish - 11:30 A:M-

Mix: 5 sacks cement
1250# Sand
850# - 2 1/2" rock
970#. 1 1/2" rock
770# - 3/4" rock
gals. #20
} Batches concrete

9 Batches grout

Sacks cement

500 - Sacks cleaned

11- Sacks cement recovered

4- Sacks cement used by Finisher

6- feet copper

108- batches to 9:30 A:M shift change

6- batches grout " " " "

3- batches grout 9:30 A:M to 11:30 A.M.

66- " Concrete " " " " "

Oct. 20- 1933-

Equipment:

1- mixing plant - 4½ hrs.
1- Transitmix truck - hrs.
1- Transitmix truck - hrs.

1- Blaw-Knox truckmixer - 8:30 AM

2- Blaw-Knox truckmixers

1- #10- Crane - { strip forms-4 hrs / Place conc.-4 hrs.

1- Barber-Greene loader - 6 hrs

1- Truck #43 - hrs

1- Truck #44 - hrs.

LABOR:

Forms + stripping forms { 1-foreman; 9- Carpenters; 8- helpers

Mixing Plant { 1-mixerman - 2½-hrs; 4- men - 2½-hrs.; 2- men; 1-mixerman - 9:30 A.M. to -; 2-men - 9:30 A.M. to -

Placing Concrete { 1-Gen. foreman; 1- man dumping trucks; 1- man " buckets; 4- men placing; 1- #10- Crane operator - 4-hrs { 4-hrs. strip forms.; 1- #10- Crane oiler - 4-hrs. { 4-hrs. strip forms.

Concrete Delivery { 1-Blaw-Knox driver- 8:30 A.M. to; 2- " " " 7 A.M. -; 1- Transitmix truck driver -; 1- " " " " -

Aggregate Supply { 2- Truck driver - - hrs.

Curing Concrete { 1- laborer -

Finishing Concrete { 1- Finisher; 2- helpers

Clean concrete Surface and clean scrap lumber from job site { 4- Laborers

Oct-20-1933

Core Wall Work-North Abut.

1- Compressor

1- Waterliner & drills

1- foreman
4- helpers } Building bulkheads for steps to steel grade.

Drilling Grout holes { 1- driller
3- helpers.

Note mixing plant broke down at 11:30- The concrete was keyed by shovelling concrete out to make 1'x3'- keyways. Started again 2 P.M.

Grout holes- Core trench-

Sta.	Depth of hole-	Length of pipe
4030 E	23'-6"	21'-0"
4037 W	25'-6"	20'-4"
4043 E	26'-0"	21'-5"
4052 W	25'-6"	21'-2"
4060 E	24'-3"	21'-5"
4068 W	25'-0"	21'-4"
4076 E	25'-4"	20'-9"
4084 W	26'-0"	20'-6"

MR. Wood out of Town I asked MR. Converse & Mr. Gilbert to inspect Core trench excav.

Oct. 21-1933.

Core Wall Concrete:

N4024 to N4032 - rock to elev. 688±

N4032 to N4040 - rock to elev. 692±

N4040 to N4056 - rock to elev. 696±

N4056 to N4072 rock to elev. 700±

N4072 to N4088.5 - rock to elev. 704±

84 ft. Copper

Start 8:30 A.M. Finish 4 P.M.

Mix: 7 Sacks cement ~~140~~ Batches Conc.

1250# sand
1340# 1½" rock
1030 - ¾" rock
39 - gals. H_2O

2 - Batches Grout

990 Sks. Cement

Equipment:

1 - mixing plant and crew { change ½ time on Core Wall, ½ time on Spillway

2 - Transitmix trucks

1 - Blaw-Knox - 2 hrs. 2 P.M. To 4 P.M.

Labor: 1 - foreman
4 men
1 - Carp - 9 A.M. To
1 - man - 4½ hrs.
2 - Transitmix drivers - 6½ hrs.
1 - Blaw-Knox " 2 - hrs

Oct. 21-1933.

Spillway OG concrete.

Sta. 3+60 to 3+84 - elev. 720.2 to 733.3

Start - 7:30 A.M. Finish.

Mix: 5-sacks cement

1250# Sand
850# 2½" rock
970# 1½" rock
770# ¾" rock
9 gals. H_2O

215 Batches Concrete
3 - Batches Grout
1 - 7-S.K.-B.

1167 Sacks of Cement

Sacks cleaned
4-Sacks used by Finisher.
Sacks Cement recovered.

No Copper

Equipment:

1 - mixing plant
2 - Transitmix trucks - 7:30-8:30
2 - Blaw-Knox truckmixers -
1 - Barber Greene loader -
1 - #43 - Truck
1 - #44 - Truck

Labor: 1 - gen. foreman

Forms: 1 - carpenter foreman; 8 - carpenters; 1 - carpenter - 2 hrs.; 8 - helpers

Placing Conc: 1 - man dumping trucks; 3 - men placing; 2 - men - 5 hrs.

Concrete Delivery: 2 - Transitmix drivers - 7:30 to 8:30

Aggregate Supply: 2 - Truck drivers

Curing Concrete: 1 - laborer

Finishing Conc: 1 - finisher; 2 - helpers

Clean & Chip Conc. Surface: 4 - laborers.

1 - 5-batch load Core Wall concrete at 9:15 A.M.

Sunday Oct-22-1933

Spillway:

1- man curing conc.

2- men chipping conc.

MONDAY OCT.-23.1933

Spillway OG. cut-off trench

Grout Holes.

1-Compressor 7:A:M. to 10:A:M.

1-driller

2-Helpers.

Sta.	Depth of hole	Length of pipe
4+60-S	26'-0"	21'-5"
4+65-N	26'-6"	19'-9"
4+70-S	27'-0"	21'-5"
4+75-N	26'-0"	21'-0"
4+80-S	24'-6"	20'-2"

Placed Concrete in Spillway OG:

Sta. 4+32 to Sta. 4+56. elev. 730° to 738°

Sta. 3+60 to sta. 3+84 elev. 738° to 743°

Oct. 23-1933- continued:
start - 8:A.M- finish 4:P.M.

MIX: 5-sacks cement

1250#-Sand
850#-2½" rock
970#-1½" rock
770#-¾" rock
35-gals. H_2O

380 Batches concrete
6 Batches Grout
1930- Sks. cement

16-ft. copper

750 sacks cleaned

Sacks cement recovered.

3-Sacks cement used by finisher

Equipment:

1-mixing plant

3-Blaw-Knox truck mixers

2-Transitmix trucks

1-#10-dragline - 5-hrs.

1-Truck #43

1-Truck #44

1-Barbergreene loader-3-hrs.

LABOR: 1-Gen. foreman

Forms { 1-camp. foreman; 5 Carpenters; 7-helpers

Mixing Plant { 1-mixerman; 6-men

Placing Concrete { 4-men

Concrete Delivery { 3-Blaw-Knox drivers; 2-Transitmix drivers

Aggregate Supply { 1-#10-dragline operator; 1-#11 " oiler; 2-Truck drivers

Clean concrete surface & Strip forms { 3-laborers - 4½-hrs. (LAID OFF AT NOON); 1- " 8-hrs.

Curing Conc. { 1-laborer

Finishing Concrete { 1-finisher; 2-helpers

Core Wall - Klork Oct. 23-1933.

1- foreman
4- laborers
1- Ford Flat rack truck
1- Carpenter

} Building forms + placing steel Columns.

Oct. 24-1933 - 960 15

Spillway OG:

Sta. 3+12 to sta. 3+36 - elev. 740° to 750°

Sta 3+60 to sta. 3+84 - elev. 743° to 750°

Start - 8 A.M. Finish 3:45 P.M.

Mix: 5 = sacks cement
1250 # Sand
850 # - 2½" rock
970 # - 1½" "
770 # - ¾" "
gals. H2O

} 192 - Batches Concrete
3 — Batches Grout
975 Sacks cement.

1 - set of 3 - Test Cyl. at 1:30 P.M. 3+84 to 3+60 elev - 743° & 750°

NO - Ft. Copper

2700 Sacks Cleaned

35 - Sacks cement recovered.
4 Sacks used by Finisher

Equipment:

1 - mixing plant
2 - Blaw-Knox truck mixers - 7 hrs.
1 - Transit mix truck - 7 hrs 12:30 P.M. - 2:30
1 - Transit mix truck - 12:30 P.M. - 2:30 P.M.
1 - #11 dragline - 2 hrs
1 - Barber Greene - 6 hrs
1 - #43 - Truck
1 - #44 - Truck
1 - #10 - Crane { 1 hr. lifting forms
7 hrs. placing concrete.

Oct. 24 - continued

Labor: 1-gen. foreman

FORMS
- 1-#10- Crane operator - 1-hr.
- 1-" 10- " oiler - 1-hr
- 1- Carp. foreman
- 3- Carpenters
- 1- Carpenter - 3½-hrs
- 10- helpers.
- 1- Carpenter - 5-hrs - Injured Knee at I.P.M.

Mixing Plant
- 1- mixerman
- 5- men
- ~~1-man - 12-20 RR~~ - ½

Placing Concrete
- 1-#10-crane operator
- 1-#10- " oiler
- 3- Laborers placing
- 1- man dumping trucks

Conc. Delivery
- 2-Okaw. Knox truck drivers
- 1- " " " " 2-hrs
- 1- Transitmix driver
- 1- " " " 2- hrs.

Aggregate Supply
- 1-#11- Dragline operator - 2-hrs.
- 1- " " " oiler - 2-hrs
- 2- Truck drivers

Curing Conc.
- 1- laborer

Finishing Concrete
- 1- finisher
- 1- helper

Chipping Concrete
- 3- men

Oct. 24-1933-

Core Wall Work:

1-foreman
1-Carpenter
2-laborers- 3½-hrs.
2- laborers -
1- Carpenter - 10:30 A.M. to

Core wall reported by foreman at 12:30 P.M. as ready for concrete.

I inspected the forms and concrete surface and found cleanout inadequate. Cited specific. on cleanout and foreman proceeded to comply with same. Pour postponed until Oct. 25-1933

Wednesday - Oct. 25-1933-

Core wall concrete Work:

N4024 - to N4032 - elev. 688° to elev. 694°.
N4032 to N4040 - " 692° to " 698°
N4040 to N4056 " 696° to " 702°
N4056 to N4072 " 700° to " 706°
N4072 to N4088 " 704° to " 710°

Mix: 7-sks. cement
1250# Sand
1340#-1½" rock
1030#-¾" rock
39-gals. H_2O

} 90 Batches concrete
} 3 Batches grout
5 sks. cement

90-ft. copper.

Start 7:30 A.M. - Finish 3 P.M.

1-mixing plant
2-Transit mix trucks
3-Blaw-Knox truck mixers
1-Barber Greene
2-Trucks.
1-#10-dragline 2½-hrs.

Labor: 1-foreman
1-Carpenter
4-laborers.
1-#10-dragline operator } 2½-hrs
1-#10- " " oiler

Stopped concrete 10:A.M. to 11:30 A.M. waiting for Crane.

Oct. 25-1933-

Placed concrete in Spillway OG:

Sta. 4+32 to 4+56 - elev. 738° to 744°

Sta. 4+08 to 4+32. elev. 719.5 to 731.2

Start: 7:30 A.M. Finish: 5:45 P.M.

Mix: 5-sacks cement
1250# Sand
850# - 2½" rock
970# 1½" rock
770# 3/4" rock
35-gals. H_2O

343 Batches concrete
6 Batches Grout
sacks cement
2-7 yd. batches conc. from Corewall Conc.

12-Ft. copper
NONE Sacks Cleaned
NONE Sacks of cement recovered

Equipment:

1-mixing plant
3-Blaw-Knox truck mixers
2-Transitmix trucks

1-Barber greene
2-Trucks

LABOR: 1-gen. foreman

Forms - 1-Carp. foreman
4-Carpenters
10-helpers
1-#10-dragline Operator } 8-hrs.
1-#10 " " oiler }

Mixing Plant - 1-mixerman } 8-hrs divided
6-men }

Placing Concrete - 1-man dumping trucks
3-men placing
1-#10 dragline operator - 2½ hrs
1-#10 " " oiler 4

Concrete Delivery - 3-Blaw Knox drivers
2-Transitmix drivers

Aggregate supply - 2-Truck drivers

Curing Concrete - 1-laborer

24 sks. cement recovered on night shift

Finishing Concrete - 1-finisher
2-helpers.

Supt. Steves asked me about size of alternate sections of spillway floor paving and also about anchors for floor slab. I gave him all I knew. (Roper. REC man)

Oct- 26- 1933.

Placed concrete in Spillway OG and OG-cut-off trench - Sta. 4+56 to Sta. 4+80 - rock to average elev. 719°

Sta. 4+32 to Sta. 4+56 - elev. 744 to elev. 750°

Mix: 5 - sacks cement

1250# Sand
850# - 2½" rock
970# - 1½" rock
770# - ¾" rock
35 - gals. H2O

} 197 - Batches Concrete
} 10 - Batches Grout
} 1035 - shs. cement

3 - shs. cement used by finisher

44 - ft. copper

750 - Sacks cleaned

14 Sacks cement recovered

Start Concrete - 7:15 A.M. - finish 1:15 P.M.

693 - bundles at 50 - shs. per bundle

Shipped = 34650 - cement sacks.

Equipment:

1 - mixing plant - 7:A.M. to 1: P.M.

1 - Blaw-Knox truckmixer - 7:A.M. to 1:30 P.M.
1 - " " " " 8:30 A.M. to 1:30 P.M.
1 - " " " " 9:30 A.M. to 1:30 P.M.

2 - Transitmix trucks - 7:A.M. to 11:30 A.M.

1 - Barber Greene loader

1 - #43 - Truck
1 - #44 - Truck
1 - Compressor (curing conc.)
1 - #10 - Crane - { 3 - hrs. on concrete
3 - hrs. on forms.

LABOR: 1 - Gen. Foreman

Forms { 1 - Carp. Foreman
3 - Carpenters " - 4½ hrs.
1 - " "
8 - helpers

Mixing Plant { 1 - mixerman
6 - men } 6 - hrs.

Placing Concrete { 1 - man dumping trucks - } 5½ - hrs.
3 - men placing
1 #10 - Crane operator } 3 - hrs.
1 #10 - " oiler

Oct. 26-1933 Continued:

Concrete Delivery
- 1-Blaw-Knox driver - 7:A:M.-1:30
- 1- " " " - 8:30 A:M.-1:3
- 1- " " " - 9:30 A:M. 1:3
- 2-Transitmix drivers- 7:A:M. to 11:30 A:M.

Aggregate Supply
- 2-Truck drivers

Finishing Concrete
- 1-finisher
- 2-helpers

Curing Concrete
- 1-laborer

Chipping Concrete
- 2-laborers

Cleanup Conc Surface
- 4-laborers-2½-hrs
- Concrete crew.

Oct. 26-1933.

Core Wall Work:

North Abutment

Clean Concrete & Place Steel
- 1-Foreman
- 4-laborers.

1-Carpenter on forms

1-Carpenter- 3½-hrs

Friday Oct. 27- 1933-

Spillway OG. Concrete

Sta. 4+08 to 4+32 - elev. 731° to 742°

Sta. 4+56 to 4+80 - elev. 719° to 729°

start 7:P.M - Finish 185-½ 5:P.M-

Mix: 5=3ks. cement
1250#- Sand
850#- 2½" rock
970#- 1½" rock
770#- ¾" rock

473 Batches concrete
6- Batches grout
5ks. cement

20- ft. Copper

Sacks cleaned

Sacks of cement recovered

Sacks cement used by finisher

EQUIPMENT:

1-mixing plant
2- Transit mix trucks
2- Blaw-Knox truckmixers
1- Blaw-Knox truckmixer 5 hrs
1- Barber Greene - 6 hrs
2- Trucks
1-#10 -Dragline 7:P.M-to 2:P.M.

1-#10 dragline (crane)

473
73
520.3

LABOR: 1-gen. foreman

FORMS { 1- Carp. foreman
3- Carpenters
1- Carp. 3½-hrs-
0- helper

Mixing Plant { 1-mixerman
6- men -
3½-hrs

NIGHT SHIFT { 1-mixerman
7-men
5:P.M-to 11:P.M-on Conc.
to 2:P.M-on Repairs

Placing Conc. { 6-men
3½-hrs.

NIGHT SHIFT { 6-men
1-Carp helper on chutes
5:P.M-to 11:30 P.M.

Concrete Delivery { 2-Transitmix drivers - 1:P.M-to-11:P.M
2-Blaw-Knox drivers " " " "
1- Blaw

Aggregate Supply { 2-Truck drivers - 1:P.M-to 2:P.M.
1-#10 dragline operator
1-" " oiler } 7:P.M-to 2:P.M-

Curing Conc. { 1-laborer

Finishing Concrete { 1-Finisher
2-helpers

Chipping & cleaning Conc. Surface Strip Forms { 3-laborers

FRIDAY Oct. 27-1933

Core Wall Work:

GROUTING: 7:A.M. to

1- Portable compressor
1- Portable mixer
1- 7-cu.ft. Rix Grout Tank

LABOR:

1-mixerman
1- Grout Tank man
3- hose men

Sta.	cu. ft. grout
N4030 E	3
N4037 W	2+½
N4043 E	3
N4052 W	3-cu.ft
N4060 E	6-cu.ft
N4068 W	3-cu.ft.
N4076 E	3-cu.ft
N4084 W	8-cu.ft.

31½-cu.ft.

5-sack batches

1@ 10:05 A.M.
1-@ 10:13 " "
1-@ 10:30 " "
1@ 11:17 " "
1 @ 11:36 " "

25-sacks cement
5-batches

Forms { 1-foreman
1-Carp. 4½-hrs
4-helpers
1 Carpenter

Oct. 28 Core Wall continued

Concrete in Core Wall:

N4024 to N4032 - elev. 694° to elev. 699°

N4032 to N4040 - elev. 698° to elev. 703°

N4040 to N4056 - elev. 702° to elev. 707°

Start Concrete - 7:A.M. Finish 11:30 A.M.

Mix: 7-sks. Cement
1250#-Sand
1340#-1½" rock
1030#-¾" rock
gals. H_2O
} 23- Batches concrete
3- Batches grout
176- sks. cement (21-sks Klisted-included)

50-ft. copper
2-sks Cement by finisher
(3-batches Klisted Form broke out)

Equipment:

1-mixing plant
1- Transitmixer - 4½-hrs
1- Blaw-Knox 3½-hrs
1- Barber Greene-
2- Trucks

Core Wall = 4½

Labor: 1-foreman
1-Carp.
4-laborers
} 4½-hrs Concrete
3½-hrs - forms & cleanup.

Inspected by Geer

Oct: 28 - 1933.

Spillway Concrete

OG - Sta 4+56 to 4+8 - elev 729 to 738

Mix: 5 sks cement
1250# sand
850# - 2½" rock
970# - 1½" "
770# - ¾" "
30 gals H20

193 - Batches Conc.
3 Batches Grout.
980 Sks. Cement.

18 - Ft. copper

5 Sks. cleaned

5 Sks. Cement recovered.

Start - 12:30 Finish - 4:00

Equipment

1 - mixing plant
3 - Blaw Knox - 3½ hrs
2 - Transit mixers - 3½ hrs
1 - Barber Greene
2 - Trucks

Inspected by Geer

LABOR: 1 - Gen. foreman -

FORMS { 1 - Carp. foreman
4 - Carp.
9 - helpers

mixing plant { 1 - mixerman
6 - men

Placing Conc. { 4 - men

Conc. Deliv { 3 - Blaw-Knox drivers
2 - Transit mix drivers

Aggreg Supply { 2 - truck drivers

Finishing Concrete { 1 - finisher
2 - helpers

Curing Conc { 1 - man

Strip forms + Cleanup {

Sunday - Oct. 29-1933-

1- man { wetting, Core Wall, Tower + Spillway Conc.

Oct. 30- 1933-

Spillway Concrete:

OG: Sta. 4+08 to 4+32 - elev. 742: to 750:

OG - Sta. 4+56 to Sta. 4+80 - elev. 738° to 744.

Start - 7:30 A.M. Finish - 2:30 P.M.

MIX: 5-SKS. Cement
1250# Sand
850# - 2½" rock
970# - 1½" rock
770# - ¾" rock
30-gals H2o
} 195- batches Conc.
6- batches Grout.

12-ft. Copper

Equipment:

1- mixing plant
1- #10- Crane
2- Blaw-Knox truckmixers - 7:30 A.M. to 2:30
1- Transitmix truck - 2-hrs
1- " " " 2-hrs
1- Barber Greene

2- Trucks
1- Compressor

LABOR: 1- Gen. foreman

Forms { 1- Carp. foreman
4- Carpenters
7- helpers

Mixing Plant { 1- mixerman
6- men

Placing Conc. { 4- men
1- #10- Crane oper.
1- #10- " oiler

Concrete Delivery { 2- Blaw-Knox drivers: 7:30 A.M. to 2:30 P.M.
2 - Transitmix trucks - 2-hrs

Aggreg. Supply { 2- Truck drivers

Finishing Concrete { 1- Finisher
2- helpers

Curing Conc. { 1- laborer

Cleanup Site { 4- men - 2-hrs.

Oct. 30. 1933.

Spillway Floor:

Finish Grading { 7 laborers.
1 laborer - 3½ hrs

Header Boards { 1 carp.
1 helper

12:30 P.M. foreman Bryant asked about floor excav.

Mr. Wood, Albert & Comerce & J with Steves inspected the area in question - Mr. Wood ordered excav. according to Specs.

Anchors taken up also for discussion.

Oct. 30. 1933.

Core Wall - North Abutment:

Forms { 1 foreman
1 Carpenter
1 helper } 8 hrs

Oct. 31. 1933

Spillway floor:

1 foreman
2 Carp.
22 laborers
1 mcmillan oper.

1 mcmillan & Tractor
1 Compressor
1 Jackhammer

Oct. 31- 1933-

Spillway

Equipment

1-#10-Crane

12:30 to 4:P.M. { 1- Compressor on Anchor holes
2-Jackhammers

1400- 5ks. cleaned

9- 3ks. cement recovered.

Labor: 1-Gen. foreman

Forms { 1-Carp. foreman - 5-hrs
1-Carpenter - 5-hrs.
4- helpers - 5-hrs.
2- Carpenters - 4-hrs.

Fixing Mixing Plant Roof { 2-Carpenters - 4-hrs.

Strip forms { 2-laborers
1-#10-Crane oper.
1-#10- " oiler } 1½-hrs.

Finish Conc { 1-Finisher
1-helper } 1½-hrs.

Drilling Anchor holes in spillway floor { 2- Jackhammer men- 12:30 P.M-to 4:P.M.
1- nipper

Core Hall - Oct. 31-1933.

FORMS { 1-Carp. foreman, 1-Carpenter, 1-helper } 5½-hrs.

NOV. 1st 1933.

Placed concrete in Core Hall:

N4024 to N4032 - elev. 699° to 710°

N4032 to N4040 elev. 703° to 710°

N4040 to N4056 elev. 707° to 712°

Start: 7:30 A.M. Finish 9:30 A.M.

MIX: 7-Sks. cement, 1250#-Sand, 1340#-1½" rock, 1030#-¾" rock, 33-gals H2O { 11- Batches Conc., 2- Batches Grout, 87 Sks. Cement

39- Ft. copper

Equipment:

1-mixing plant - 2½-hrs
1- Blaw-Knox truckmixer - 2½-hrs
1-#10-Crane
1- Barber greene
1- Truck
1-Blaw-Knox truckmixer - 1-hrs.

LABOR:

Mixing Plant 2½-hrs { 1-mixerman, 5-men

Placing Conc. 2½-hrs. { 1-foreman, 1-#10-crane oper., 1-#10- " oiler, 3-laborers

Conc. Delivery { 1-Truck driver - 2½-hrs., 1- " " 1-hr.

Aggreg Supply 2½-hrs { 1-Truck driver

Forms 5½-hrs. { 1-foreman, 2-Carpenter, 1-laborer

NOV. 1-1933.

Spillway:

Placed concrete OG section:

sta. 4+56 to 4+80. elev. 744± to 750±

start 9:30 A.M. Finish 11:30 A.M.

Mix: 5-sack cement
1250# Sand
850# - 2½" rock
970# - 1½" rock
770# - 3/4" rock
29-gals. H_2O

44 - Batches concrete
3 - Batches grout
3 sks. cement
+
1-7-sks. batch from Core Wall

4-sks. cement used by Finisher

11-ft. copper.

sacks cleaned

sacks cement recovered.

Equipment:

1-mixing plant
3-Blaw-Knox truckmixers
1-#10 - Crane
1- Barber Greene
1- Truck
1- Compressor - curing concrete
1- Transitmix truck

Labor:

Mixing plant 2-hrs. { 1- mixerman; 5- men

Placing Conc. 2-½ hrs { 1- Foreman; 4- Laborers; 1-#10. Crane operator; 1-#10- " oiler

Concrete Delivery 2-hrs { 3- Truck drivers; 1- Transit mix driver

Aggregate Supply 2-hrs { 1- Truck driver

Finishing Concrete { 1- finisher; 2- helpers

Curing Conc. { 1- laborer

Forms { 1- Carpenter Foreman; 1- "; 1- helper — 4-hrs. forms OG. section; 4-hrs. making finishing tools for spillway floor

Drilling Anchor holes. Spillway Floor { 1- compressor; 1- Jack hammer; 1- Jack hammer — 10:A.M. to; 1- driller; 1- nipper; 1- driller - 10:A.M. to

Nov. 1st 1933.

NOTE: Ten large boulders came from top of North bank of Spillway excavation and rolled into spillway floor Area - sta. 1+75 to sta 2+40. One of the boulders hit the OG section and cracked the concrete from sta. 1+42 to sta. 1+50 to about 30-inches above finish floor grade. This area must be removed and rebuilt.

1:10 P.M. Boulders projecting above finish subgrade were shattered by shooting during the lunch hour. One of the laborers was prying the shattered rocks loose and probed into a missed hole. I told him to leave it alone and reported it to the foreman who in turn reported the condition to the Powder man who removed the powder & cap.

Note: The North face of OG section is being scarred & chipped by flying rock from blasting operations.

84-holes
EIGHT shift

Setting Anchor rods: 12:30 P.M. to

1- Blaw-Knox truckmixer mixing grout

1:2-mix: 5-sks cement - 1040# sand.

2- Batches @ 2+ 5-sks. @ 0.4 cu. yds = 0.8 cu. yds grout

1-Truckdriver, 1-mixerman, 3 men { Grouting anchor bars - 1"ф x 4'-6"

2-steel men { Setting anchor bars.

Anchor bars set in grout - sta. 1+02 to sta. 2+50 inclusive - holes #1, #2, #3 and #4 at each sta.

152 - anchor bars 1"ф. 4'6"

1726 to 1768-NIGHT

NOV. 2nd 1933.

Spillway OG:

Stripping FORMS 4½-hrs { 1-Carp. foreman, 2-Carpenters, 1-helper } 4½-hr..

Finishing Concrete { 1-Finisher, 2-helpers }

Curing Concrete { 1-Compressor, 1-Laborer }

SPILLWAY FLOOR

Setting 1¼" Anchor bars 18-rows@5 Sta. 1794 to 1726 Total 90-bars { 1-foreman (mixerman { Grouting 4-hrs 3-laborers -2-hrs, 2-Steel men, 1-Blair-Knox track driver, GROUT- 7-SHS. Cement. 1640# Sand.

Setting 6" drain tile { 4-laborers { 12: MIDNIGHT to 8:30 A.M., 1-foreman { Sta. 1700 to 1798, 98- 6"x12" tile

Finishing Cove { 2-helpers, 1-finisher } 2-hrs

NOV. 2-1933- 35

Drilling Anchor holes. Spillway floor

1-Compressor, 2-Jackhammers, 2-drillers, 1-nipper – 4-hrs

Sta. 1770 to 2746 – #5-6-7-8-9- Total 100-holes

Forms. Screeds { 1-Carp. foreman, 1-Carp., 1-helper } 3½-hrs

CORE WALL

FORMS { 1-Carp. foreman, 1-Carpenter, 1-Carp – 3½-hrs

Pointing Cone holes { 1-laborer, 1-sx. cement

NOV. 2nd 1933 -

Placed concrete in Spillway floor. Sta. 1425 to 1445^{25} from toe of OG to 36^{5} North.

Start - 3: P.M - finish 5. P.M

MIX: 6-sacks cement
1250# sand
1340# - 1½" rock
1030# - ¾" rock
32 - gals. H_2O
} 35 - batches
210 - sks. cement

Equipment

1 - mixing plant
3 - Blaw-Knox truck mixers } 2-hrs
1 - #10 Crane

LABOR.

Mixing plant { 1 - mixerman, 5 - men } 2-hrs

Placing Concrete { 5 - laborers, 1 - #10 - Crane operator, 1 - #10 " oiler } 2-hrs.

Conc. Delivery { 3 - Truck drivers } 2-hrs

Core WALL - NOV. 3. 1933

N4024 to N4032 - elev. 710° to 714°

N 4032 to N4040 - elev. 710° to 718°

N 4040 to N4056 elev. 712° to 722°

N 4056 to N 4072 - elev 706° to 712°

Start - 2. P.M - Finish 4: P.M.

1.61

MIX: 7 sks. cement
1250 # sand
1340 # 1½" rock
1030 # 3/4" rock
33 - gals. H_2O
} 23 - Batches concrete
2 Batches grout
30 - ft. copper

5 - batches @ 7 sks. wasted too wet to make concrete. NOT included in batch count

Equipment: 1 - mixing plant
3 - Blaw-Knox truck mixers
1 - #10 - Crane

Labor: Placing Concrete { 1 - foreman, 5 - laborers }
1 - #10 - Crane Crew - 2 - men

Mixing Plant { 1 - mixer man, 5 - men }

Conc. Delivery { 3 - truck drivers }

LABOR:

FORMS { 1 - Carp. foreman - 6 - hrs., 2 - Carpenters - 4 hrs., 1 - helper - 6 - hrs }

NOV. 3. 1933 -

SPILLWAY Floor:

Placed concrete in floor: Sta. 1+65^{5} to Sta. 1+85^{75} From Toe of OG to 36^{5} NORTH

sta. 2+06 to 2+26^{25} - From Toe of OG to 36^{5} ft. North.

~~sta. 2+46^{25} to 2+66^{25} from toe of OG to 32^{5} ft. N.~~

Start 9:30 A.M. - Finish 2: P.M. P.M.

MIX: 6 - sks. cement
1250# Sand
1340# 1½" rock
1030# - ¾" rock
30 - gals H2O

70 - Batches concrete
420 - sks. Cement

1 - set of 3 - test Cyl. at 10:30 A.M. 1+85^{75} to 1+65^{5}

Equipment:

1 - mixing plant
3 Blaw-knox truck mixers
1 - #10 - Crane
1 - #43 truck
1 - Barber Greene

LABOR:

Mixing Plant { 1 - mixerman - 9:30 AM to 2 PM
5 - men

NIGHT DRILLING - NOV. 2
2+46 to 2+86 - #5-6-7-8-9 { 36 - hole - 2+55 - eliminated cut off trench here

Placing Concrete { 4 laborers - 9:30 A.M. to 2: P.M.
1 - #10 - Crane operator " "
1 - #10 - Crane oiler " "

Aggregate Supply { 1 - Truck driver

Conc. Delivery { 3 -

Forms { 1 - Carp. foreman, 3 - Carpenter { 3½ hrs.
2 - helpers { 8 - hrs.

HUNT PROCESS Curing Conc. { 1 - compressor, 1 - laborer { 2 - hr.

Finishing Concrete { 1 - finisher, 2 - helpers - { 3 - hrs

Placing Steel { 2 - steel men
1 - helper

Blowing ground Surface with air { 1 - laborer - cleaning surface with air

Setting anchor bars in grout 2½ - hrs. { 1 - Blaw-knox truckmixer & driver, 1 - mixerman } 7: A.M. - to - 9:30
3 - men 2+98 to 3+26 - 72 - bars - #1 to #9 bars = 205
Sta 1+30 to sta. 2+94 holes #5-6-7-8-9
Sta. 2+58 to sta. 2+94 holes #1-2-3-4 = 40 - bars
3+30 to " 3+50 - #1 to #9 → 1 - 2 - sk batch Grout, 2 . 7 - sk. batches "

Drilling Anchor holes { 1 - compressor
2 - Jackhammers
2 - drillers
1 - nipper

Sta. 2+90 to Sta. 3+38 holes # 5-6-7-8-9
Sta. 2+94 to Sta. 3+38 holes # 1-2-3-4
" 3+42 to " 3+50 - #1 to 9 - inclusive -

NOV. 3-1933 - continued.

Setting 6"x12" clay tile { 4-laborers. Sta. 1+98 to Sta. 2+90 = 87-tile placed. 2+52½ to 2+55½ Trench area. Tile left out.

Spillway OG:

GROUT HOLES:

		Length of Pipe
Sta. 4+85 N	25'-0" deep.	20'-9"
Sta. 4+90.5	25'-0" deep	21'-3"
Sta. 4+95 N-	25'-0" "	21'-0"

Stripping forms { 1-Carp. foreman. 2-Carpenter } 4-hrs

Finishing Conc { 1-Finisher 2-helpers } 5-hrs

Curing Conc { 1-laborer- 1-compressor

Drilling Grout holes OG-cut-off 5-hrs. { 1-Compressor 1-Waterliner + drills 1-driller 2-helpers

NIGHT SHIFT- Nov. 3rd

Spillway Floor:

1- Compressor

2- Jack hammers

2- drillers

Drilled anchor holes. Sta 3+86 to Sta. 3+54 holes #- 1- to 5-incl. = 45-holes.

Sta. 3+54 - to Sta. 3+66. holes # 6- to 9- inc = 16

Core Wall - NOV. 4 - 1933

FORMS North Abut. { 1- Carp. foreman 1- Carpenter 1- helper 2- Carpenters -4-hrs.

NOV. 4 - 1933 -

Spillway Floor:

Placed concrete sta. 1+45 25 to sta. 1+65 5

from toe of OG to 36 5 Ft. North

Sta. 1+85 75 to sta 2+06 - Toe of OG to

36 5 ft N.

Sta. 2+65 to sta. 2+85 - to 33 5 Ft. North

Sta. 3+05 to Sta. 3+25 - to 36 5 Ft. North

~~Sta. 3+45 to Sta. 3+65 - to 38 Ft. North~~

start: 7:A.M - Finish 6 - 2:P.M.

MIX: 6 - sacks cement
1250# sand
1350# - 1½" rock
1030# - 3/4" rock
30 - gals H_2O
} 120 - batches

Equipment:

1 - Mixing Plant
3 - Blaw-Knox truck mixers
1 - #10 Crane
1 - Barber Green
1 - Truck #43

LABOR: 1 - Gen. Foreman

Mixing Plant { 1 - mixerman, 5 - men

Placing Concrete { 1 - #10 - Crane operator, 1 - #10 - Crane oiler, 4 - laborers

Concrete Delivery { 3 - Truck drivers

Aggregate supply { 1 - Truck driver

Forms { NONE

Finishing Concrete { 1 - finisher, 2 - helpers } 5 - hrs.

Nov. 4 - continued:

Spillway floor:

Drilling anchor holes { 1 - Compressor
2 - Jack hammers
2 - drillers } 3 - hrs
1 - helper
Holes - Sta. 3+70 to sta. 3+86
holes # 6-7-8-9 = 20 - holes.

Placing Steel { 1 - steel foreman
4 - steel men

Setting 1" # bars in Grout { NONE

Laying - 6" - Tile 2 - hrs. { 2 - laborers
Sta. 2+55³ to sta. 3+28
72 - 6" x 12" - Clay Tile placed.

905
450
880
800
250
2700

Spillway OG - Nov. 4 - 1933 -

FORMS { 1 - Carp. foreman
3 - Carpenters - 4 - hrs
3 - helpers

Finishing Concrete { 1 - Finisher
2 - helpers } 3 - hrs.

Curing Conc. { 1 - laborer

Placed concrete in OG cut-off trench and OG section Sta. 4+80 to sta. 4+95 rock to average elev: 719°

Start: 2:P.M. - finish 4:P.M.

Mix: 5 sks Cement
1200# Sand
850# - 2½" rock
970# - 1½" rock
770# - ¾" rock
} 85 - Batches
5 - batches grout.
15 - gals. H_2O added
23' ft. Copper

LABOR:
Mixing plant 2 - hrs. { 1 - mixerman
5 - men
Placing Conc. 2 - hrs. { 3 - laborers
Conc. Delivery { 2 - Truckdrivers 2 - hr
1 - " 1 - hr.

Equipment:
1 - mixing plant
2 - Blaw-knox truckmixers
1 - " " " " 3:P.M. - to 4:P.M.

Sunday - Nov. 5-1933.

2-laborers chipping concrete on OG pour. Sta. 4+80 to 4+95 and curing concrete.

Monday. Nov 6-

Spillway floor

Grouting Anchor bars 2-hrs.
- 1-Blaw-Knox truck mixer
- 1- " " " driver
- 1-mixer man
- 2-men

Sta. 3+54 to 3+86- holes #1 to #9 inclusive - 72-bars.

1-5-SK-Batch grout. = 0.4-cu.yd.

Drilling Anchor holes
- 1-compressor
- 2-Jackhammers
- 2-drillers (1-4-hrs.)
- 1-nipper-4-hrs.

Sta. 8+74 to sta. 3+06 holes #10 to #14-inc = 90-hole

Placing reinforcing steel
- 1-steel foreman
- 4-steel men

Nov. 6 - continued:-

Laying 6" tile drain 3-hrs.
- 3-laborers - 2½-hrs.
- sta 3+28 to Sta. 3+87

59-6"x12" clay tile

Placed concrete in spillway floor:

Sta. 1+02.5 to Sta 1+25.5 to 14'-0" North.

Sta. 2+85.5 to Sta. 3+05 to 36.5 Ft. N.

Sta. 3+25.5 to Sta. 3+45 to 37.5 Ft N.

Sta. 3+65.5 to Sta 3+86 to 37.5 Ft. N.

Sta. 2+26.25 to Sta. 2+46 to 36.5 Ft. N

Start: 9:30 A.M., finish 4:00 P.M.

Mix: 6-sacks cement
1250# Sand
1340#-1½" rock
1030#-¾" rock
30-gals. H_2O

133-Batches concrete

Equipment:

4½ hrs
- 1-mixing plant
- 3-Blaw-Knox truck mixers
- 1-#6-Crane

2-hrs
- 1 Barber Greene
- 1-Truck #4-3

Nov. 6 Spillway Floor (Concrete)

LABOR:- 1 - Gen. foreman

Mixing plant 5½-hrs. { 1 - mixerman, 4 - men

Placing Concrete 5½-hrs. { 1 - #6 Crane operator, 1 - #6 Crane oiler, 4 - laborers

Concrete Delivery 5½-hrs { 3 - Blaw-knox truck-mixer drivers

Aggregate Supply { 1 - truck driver - 2 hrs.

Forms { 2 - Carpenters, 1 - helper - 3 hrs.

Finishing Concrete { 1 - finisher, 2 - helpers - { 5½-hrs

NOV- 6 - 1933 -

Spillway OG.

Finishing Concrete { 1 - finisher, 1 - helper { 4½-hrs

Forms { 2 - Carpenters, 1 - helper - 10:A.M. - to 4:P.M

NOV. 7-1933-

Placed concrete in Spillway

Floor: Sta. 3+45 to 3+65

to 36-ft. North of OG Toe.

Sta. 2+46 to Sta. 2+65- to 32½ ft.

North of OG Toe; including

cut-off wall at Sta. 2+55

from toe of OG to 32½ ft. North.

Start-9:30 A.M. finish 1:30 P.M.

Mix: 6-sks. cement
1250# sand
1940# 1½" rock
1030# ¾" rock
gals H2O
} 60-Batches Conc. = 360-sks. Cement

none sacks cleaned

none Sacks cement recovered.

Equipment:

3 hrs. { 1-mixing plant
1-#10-crane
3-Blaw-Knox truck mixers

Labor: 1-Gen. foreman - 4-hrs.

Mixing plant 3-hrs. { 1-mixerman
4-men

Placing Concrete 3-hrs. { 1-#10-Crane operator
1-" " oiler
4-men

Concrete Delivery 3-hrs. { 3-truck drivers

Aggregate Supply { NONE

Clean & Wet surface before Placing Conc. { 1-lab. 1-hr.

Curing Conc. { 1-Laborer-2-hrs.

Finishing Conc { 1-finisher - 11 A.M. to
1-helpers 4 P.M.
3-sks. cement used.

Removing form lumber & panels from Job site 2-hrs { 1-#10-crane & crew
1-truck & driver

Nov. 7- continued :

Drilling anchor holes { 1- compressor
1- Sackhammer
1- driller

1- Sackhammer
1- driller
1 nipper — 4 hrs. { 10:30 A.M. to 4 P.M.

Sta. 3+02 to Sta. 2+62
holes # 10 to # 14 inclusive
5 - 42" holes.

Spillway OG

Finishing Conc. { 1- finisher
2- helpers { 7 A.M. to 11:00 A.M.

Curing Conc. { 1- laborer - 2 hrs.
1- compressor

Nov 7 1933 -

Core Wall

Forms { 1- Carpt. foreman
1- Carpenter - 10 A.M. to 4:00 P.M.
1- helper

O.V.S. ✓

NOV. 8 - 1933 ✓

Core wall concrete:

Sta N4056 to sta N4072 - elev. 712.5 to elev. 718.5

Sta N4072 to N 4088.5 - elev. 710.0 to elev - 718.5

Start 9.00 AM. Finish 11.30 2½ hrs

Mix 7 sks cement

161
10
171

1350# Sand
1340# 1½" rock
1030# ¾" rock
30 gals H_2O
} 13 Batches of Concrete
2 Batches of Grout.

2.3 x 7 = 16.1
2 x 5 = 10

41' Copper.

1- Str Steel Col. (171) sks cement.

Equipment 1- mixing plant to 11.30
2½ hrs. 2 Blaw Knox truck mixers
1- #10 crane.

Labor Forms { 1- carpenter foreman 2 hrs.
1- Carpenter 2 hrs
1- Laborer. 2 hrs

Mixing Plant { 1 mixer man
4 Laborers. 2½ hrs.

		Start	Finish
Placing Conc. 2½ hrs.	1- foreman.		
	1- Crane operator	9 AM.	11.30 ✓
	1- " oiler	"	✓
	3- Laborers	"	✓
1½ hrs →	1- Laborer	10 am.	✓
Conc. Delivery 2½ hrs.	~~2~~ 1 Truck drivers	9 a.m.	✓

Labor Forms { 1- carpenter 1.30 p.m. 4

✓
Nov 8, 1933 O.V.S.

Spillway O.G.

Placed Concrete in O.G. Section
from Sta 4+80 to Sta 4+95

Elev. 719. to 729

Start ~~12^30~~ 1^30 pm. Finish 8 pm.

Mix 5 sks. cement 169 Batches of Concrete
1250# Sand.
850# 2½" rock 3 * Batches of Grout
970# 1½" rock 881 + 1 = 882
770# ¾" rock (1029) sks cement.
Gals. H_2O added.
*3 - 7 ~~sks~~ Batches to O.G.

169 x 5 = 845
3 x 5 = 15
3 x 7 = 21
881

1029
881
168.2

10 ft copper

— ~~sks~~ cleaned — sks recovered

Equipment

5½ { 1 mixing plant
2 - Blaw Knox Truck mixers

4 hrs { 1 - Barbar Greene Loader.
1 - Truck No 42 } 4 hrs.

Labor

Finishing Conc. { 1 finisher
4½ hrs. { 1 helper

Labor { 1 - carpenter Foreman. - 1 (9) a.m. to 12^30 pm
Forms { 1 - Carpenter Helper 7 am. ✓
4½ ✓ { 4 Laborers 7 am. ✓
~~1 - carpenter~~ ~~12^30~~ ✓

Mixing Plant { 1 mixer man 1^30 p.m. to 8 pm.
5½ { 4 men. ✓

Placing Conc. { 1 - gen. Foreman. 1^30 p.m. to 8
5½ ✓ { ~~4~~ 3 Laborers 1^30 to 4, 5 to 8 2½, 3, 5½ ✓

Conc. Delivery { 2 Truck Drivers 1^30 to 8
5½ ✓

~~Drilling Anchor holes. { 1 - compressor 12^30 pm. 2 Jackhammers 2 Drillers~~
1 Nipper

Agg. Supply
1 1 Truck Driver 4 hrs.

Clean & Wet surface before placing Conc. 1 Laborer 1 hour.

Nov 8, 1933 O.V.S.

Spillway Floor. 12³⁰ p.m.

Drilling Anchor Holes { 1- Compressor, 2- Jackhammers, 2- Drillers, 1- Nipper
3½ hrs.

~~Sta 2+88 to Sta 2+62~~

Setting Forms or Screeds. ~~1- Gen Foreman. 3 p.m.~~
1 hr. 1- Carpenter.
1- Carpenter Helper.
1 Laborer.

Bending & Cutting Reinf Steel. 1- Steel Foreman. 8 hrs.
4- " men.

Anchor Holes.

Sta 2+82 to Sta 2+86 incl.

holes No 15 to 17 incl.

Sta 2+90 to 2+94 incl.

holes # 15 to 18 incl.

Sta 2+98 ~~to~~ =

holes # 15 to 17 incl.

Sta 3+02 to Sta 3+38 incl.

holes # 15 to 19 incl.

Total - 67 - 42" holes.

Nov. 9 1933 O.V.S.

1- Gen Foreman 7 am. to 11 30

Spillway Floor

Drilling Anchor Holes
7 hrs.
1- compressor 1 30 to 4
2- Jackhammers
2- Drillers
1- Nipper

Setting Forms or Screeds 2 hrs.
1- carpenter helper
~~1- Helper.~~
1- Laborer. 2 hrs.
1- Laborer.

Placing Reinf Steel 8 hrs
1- S Forman
2- Steelmen

Grouting ~~Reinf Steel~~ Anchor Bars. 2 hrs
9 am - 11 am.
1- B-K Truck Mixer
1- " " " Driver
1-3 mixer man.
2-3 men.

Sta. 2+82 to Sta 3+02 holes 10 to 17 incl.
Sta 3+02 to Sta 3+42 holes 10 to 18 incl.
1 - 5 Sack Batch grout = .56 cu yd.
(7 sacks)

Laying 4" Drain Tile 2 Laborers. 3 hrs.

First 4" Drain North of O.G. Toe. from
Sta ~~2+55~~ 2+82 to Sta. 3+58
~~103~~ 76 Number 4 X 12" Clay drain Tile.

Nov 9 1933.
Spillway Floor. Continued

Cleaning & Wetting 1 man 2 hrs.
~~wetting forms 1 man 2 hrs. Start 1pm.~~ 12 30 pm

Placing Concrete in Spillway Floor.
Beginning 2nd line of alternate Pouring.
Sta. 2+85 to 3+05 beginning 36½ N. of O.G. Toe
to 26' & 32' } av. 29 Feet North of O.G. Toe
36½
26
62½

Sta. 3+25 to Sta. 3+45 beg. 37' N. of O.G. Toe.
to 35½ 37½ } av. 36½ Feet North O.G. Toe

(Note 1 hr. delay)
Start 12 30 p.m. Finish 4 30 4 hrs.

Mix 6 sks cement
1250# Sand.
1340# 1½ rock
1030# ¾ rock
gals. H2O.

58 Batches Conc.
= 348 sks cement.
7
355

1400 sks. cleaned. None sks recovered.

Equipment

1 mixing plant.
1- #10 crane
2 Blaw Knox Truck mixers
1- Barbara Greene 1 hr.
1- Truck #4

see continued

Nov 9. 1933. 7am.

Labor. Spillway O. G.

Chipping Conc. 2 Laborer. 2 hrs.

Forms 8 — 1- Carpenter Foreman. 7am. to 4
1- Carpenter Helper. 7am. to 4.
~~1- Carpenter.~~

3½ hrs. 2 Laborers. 9am. to 12³⁰

3½ 1/3 Laborer. 12³⁰ to. 4

Nov. 9 1933.

Core wall.

Stripping forms. 1- Carpenter 7am. to 4pm

Nov. 9 1933 Start 12 30

Spillway Floor Continued

Labor. 1 - Gen Foreman 4

Mixing Plant. { 1 - mixerman 4
4 men

Placing Conc. { 1 - #10 Crane operator.
1 - " " oiler 4
4 men.

Conc. Delivery { 2 Truck Drivers 4

Finishing Conc. { 1 - Finisher 3 p.m. to 5 4 30
- Helper ~~4 30~~ 2
none sks cement used.

Agg. Supply. { 1 - Truck driver 1 hr.
1 hr.

Anchor Holes. (hard rock)

Sta 2+10 to Sta 2+22 holes. 10 & 11 incl.

Sta 2+26 to Sta 2+30 10 to 14 incl.

Nov 10 1933 ✓

Spillway Floor. 7am to 2^{30} pm [illegible]

Drilling Anchor Holes. 6½ hrs — 1- Compressor; 3- Jackhammers; 2. Drillers; 1- Nipper

Removing Forms. Setting Forms. 1 hr — 1- Gen Foreman; 3- Laborers. 7 to 8; 1- Carpenter; 1- " Helper

Cleaning & Wetting — 2 Laborers 2 hrs.; 2 Laborers 1 hr.

Hunt Process. — 1 Laborer. ~~4 hr.~~ 2 hr

Placing Reinf Steel — 1- Steel Foreman 4½; 2 " men.

Grouting Anchor Bars. — 1- B.H. Truck Mixer; 1- " " Driver; 1. Mixer man; 1- Laborer } 1 hr.

(2) sacks 1:2 Grout — 2 Laborers } ½ hr.

Nov 10, 1933. ✓

Placing Concrete in Spillway Floor.

Sta. 3+05 begining 36½' N to 68½ N of O.G. Toe
to Sta. 3+25 begining 36½' N to 72' N of O.G. Toe

Sta 3+45 begining ~~37~~ 36' N to ~~74½~~ 73½ N of O.G. Toe.
to Sta. 3+65 begining 36' N to 74½ N of O.G. Toe.

Sta 2+65 begining 32½' N to 60½ N of O.G Toe
to Sta. 2+85 begining 33½' N to 62½ N of O.G. Toe.

Start 9^{00} a.m. Finish 11^{30} 2½
1^{30} p.m. " " 2^{30} 1
3½

Mix 6 sks cement. (27) Batches Concrete
1250# Sand.
1340# 1½ Rock
1030# ¾ rock
gals H_2O

= 162 Sacks cement

Sacks cleaned [illegible] received

Ray left about 1 o'clock 25 Batches in place?
Not enough concrete.
See Estimate

Equipment.

1 Mixing Plant
1-#6 ~~[illegible]~~ Crane
3- Blaw Knox Truck Mixers } 3½ - 1 = 2½ ✓ Tower
1- Barber Greene
1- Truck No 42 } 9 hr.

Cutoff at Sta 2+55.
Gave permission to step over hard rocks.

Nov 10 1933.

Core Wall Concrete.

Placing Steel Forms

1- Carpenter Foreman

8 hrs.

Nov 10 1933.

Spillway Floor Continued.

Mixing Plant. 1- Mixerman $2\frac{1}{2}$ 9 to $1\ 30$ = $2\frac{1}{2}$
3 Men. $2\frac{1}{2}$ $1\ 30$ to $2\ 30$ $\frac{1}{3\frac{1}{2}}$
1 man $3\frac{1}{2}$

Placing Conc. 1- Gen Foreman
$3\frac{1}{2}$ 1- #6 Crane operator
1- " " Oiler
4 men.

1 Motor car hauling

Conc Delivery 3 Truck Drivers $2\frac{1}{2}$
2 " " 1

1- Finisher 10 a.m. to 12^{30} = $2\frac{1}{2}$
Finishing Conc 1- Helper 3 pm to 4 pm $\frac{1}{3\frac{1}{2}}$
$3\frac{1}{2}$ hr.

Agg. Supply 1- Truck Driver 1 hr.
$\frac{2}{3}$ hr.

Laying 4" Drain Tile 2 Laborers 1 hr.

Sta 2+65 to Sta 2+82

17'- 4x12" Clay Drain Tile

Nov 10, 1933.

O.G. Section 8 am

Forms. 1- carpenter Foreman.
8 hrs 1- " Helper.
1- Laborer.
1½ hrs. 1- Laborer 2 30 to 4

Mr Wood.

15' copper for Horizontal joint (start 1 30 Finish 8 pm)
Pour of Nov 8.1 Sta 4+80 to Sta 4+95

does not show on surface.

ob only copper on first joint

Nov 10 1933

Test Samples. Spillway Floor.

Sta 3+45 beginning ~~37~~ 36' N to 74½' N of O.G. Tie

to Sta 3+65 beginning 36' N to 74½' N of O.G. Tie

Mix 6 sks cement
1250# Sand.
1340# 1½" Rock
1030# ¾" Rock
90's H_2O.
} 1:2:4

Numbers 585 - 586 - 587

Water saturated Sand in buckers, No additional water added at the mixer.
water leaking out of Buckets into Mixer.
Nov 13

Barber Green Operator claims washing & screening plant Sand was hauled direct to buckers. because Barber Green was out of order.
Nov. 13

Nov 11. 1933

Holiday

Gen Foreman will have water boy to look after last pour. & core walls.

Nov 12, 1933

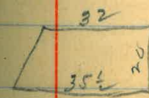
Sunday.

Gen Foreman will have water boy to look after green concrete & core walls.

Nov 10. Estimate For Spillway Floor

Sta 3+05 Beg. 36½'N to 68½'N

to Sta 3+25 Beg. 36½'N to 72'N



32
35½
2)68
34

$\frac{34 \times 20 \times 1.3^{\pm}}{27}$ = (1.26) 34 cu yds

Sta 3+45 Beg. 36'N to 73½'N

to Sta 3+65 Beg. 36'N to 74½'N

$\frac{38 \times 20 \times 1}{27}$ = (1.4) 28. cu yds

Sta 2+65 Beg. 32½'N to 60½'N

to Sta 2+85 Beg. 33½'N to 62½'N

$\frac{29 \times 20 \times 1}{27}$ = (1.1) 22 cu yds

84 cu yds

.99 cu yd per batch

$\frac{84}{.99}$ = 84 Batches — 504 sks ±

32 × 20 × 1 / 27 = 24 cu yds.

36 × 20 / 27 = 26 cu yds.

50 cu yds. 6 sk. mix = 50 batches.

say 55 batches then hold .5

36½ + 32 = 68½

37½ + 37½ = 74½

36½ + 35½ = 72

27)32 = 1.2

84 × 6 = 504

2482 + 20 = 3407

3442 + 16 = 3458

3458 − 2455 = 1003

10 × 4 = 40

4 × 4 = 16

1.3 × 1.3 = 1.69

169 + 20 = 340 [?]

33½ + 29 = 62½

13 × 4 = 52

3458 − 2482 = 76

28 + 2½ + 1½ = 32

32 + 26 = 58

35 + 38 = 73; 73 ÷ 2 = 36½

169 × 5 = 845

845, 15

2482 × 5 = 2410

24 × 1 / 1 = 26

27)34 = 1.26

23 × 7 = 161; 161 + 10 = 171

169 × 5 = 845

3 × 5 = 15

21

881

169

1050

1.4 × 2 = 28

27)38 = 1.4

27)29 = 1.07

20 + 20 = 220 [?]

Concrete.

$S_{28} = S_7 + 30\sqrt{S_7}$

Example 7day Test at 1040#

$S_{28} = 1040 + 30\sqrt{1040}$

$= 1040 + 30 \times 32 = 2000$# conc.

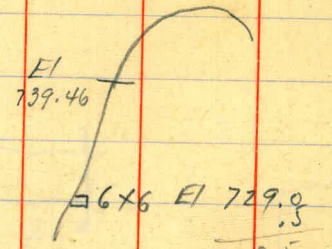
Taking Samples.

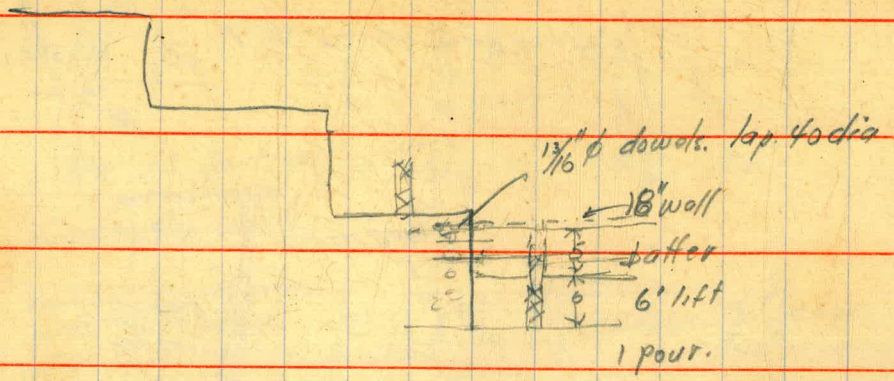
Take Sample for 7days 28days & 60 days ~~each~~ once a week.

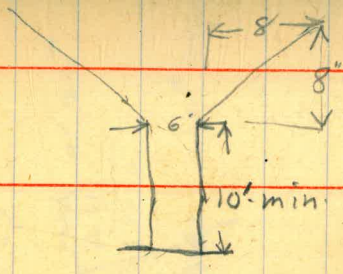
Fill cylinder 1/3 Full. Tamp 25 times

" " 2/3 " " "

" " Full " " & rodeveltop







Core wall Excavation.
Alignment & slope stakes.
from Mr. Converse.
see Mr. Wood when
excavation is finished for
state inspection.

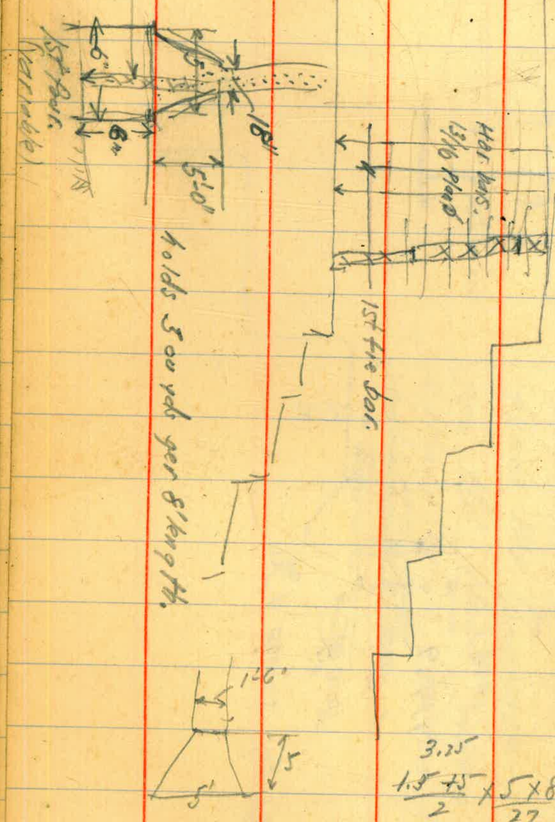
Sta for grout holes from Curley Elliott or "Red" Simpson.

Mr. Converse Chief

generally 25

(staggered) Grout holes.

only 2 rebars in 6 sec.

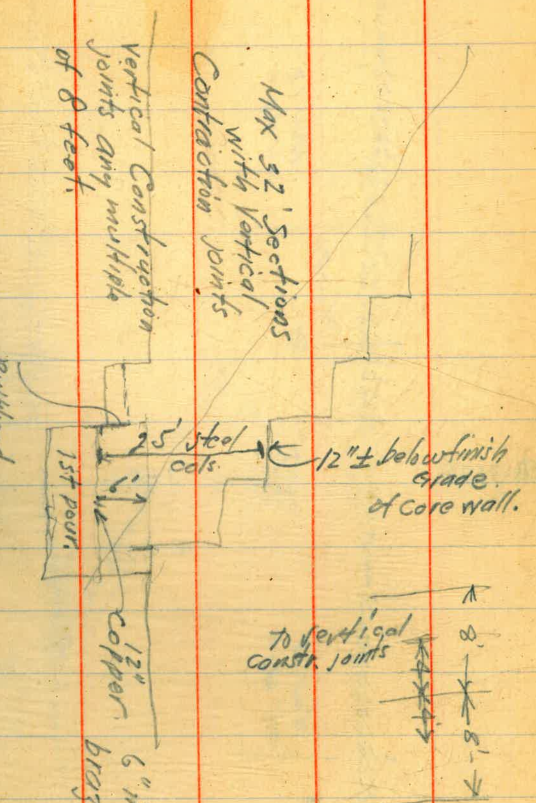


holds 3 cu yds per 8' length.

$$\frac{1.5+1.75}{2} \times \frac{5 \times 8}{27} = 5.\ \text{cu yds}$$ (3.25)

Max 32' Sections with vertical Contraction joints

Vertical Construction joints any multiple of 8 feet.



braze all connections

Anchor holes in spillway floor

North of OG slope

Sta.	#Hole	Depth
3+70	1	43"
	2	43"
	3	43"
	4	43"
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	Nov 13 all 42"
	20	
	21	
	22	
	23	
	24	
	25	
	26	Nov 21 ↓
	27	
	28	
	29	
	30	
	31	
Sta. 3+74	1	42"
	2	42"
	3	42"
	4	43"
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	Nov 13 all 42"
	19	
	20	
	21	
	22	
	23	
	24	
	25	
	26	Nov 21 ↓
	27	
	28	
	29	
	30	
	31	
	32	

Sta.	#Hole	Depth
3+78	1	42"
	2	43"
	3	42"
	4	42"
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	Nov 13 all 42"
	20	
	21	
	22	
	23	
	24	
	25	
	26	Nov 21 ↓
	27	
3+82	1	41"
	2	42"
	3	42"
	4	43"
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	Nov 13 all 42"
	19	
	20	
	21	
	22	
	23	Nov 21
	24	
	25	
	26	Nov 22
	27	

Sta.	#hole	Depth
3+86	1	38"
	2	42"
	3	44"
	4	43"
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	Nov 13 all 42"
	20	
	21	
	22	
	23	Nov 21
	24	
	25	
	26	Nov 22
	27	
3+90	1	
	2	
	3	
	4	
	23	Nov 21

See Book No 468

Sta.	#hole	Depth
3+94	1	
	2	
	3	
	4	
3+98	1	
	2	
	3	
	4	

Anchor holes in Spillway floor

Sta.	No. of hole North of OG. Toe	Depth
3+26	1	40"
	2	43"
	3	43"
	4	42"
	5, 6, 7, 8, 9	Nov. 3. Day 42"
	10, 11, 12, 13, 14, 15, 16, 17, 18, 19	all 42"
	20, 21, 22, 23, 24	
3+30	1	40"
	2	44"
	3	45"
	4	43"
	5, 6, 7, 8, 9	Nov. 3rd Day 42"
	10, 11, 12, 13, 14, 15, 16, 17, 18, 19	all 42"
	20, 21, 22, 23, 24	
3+34	1	40"
	2	42"
	3	42"
	4	42"
	5, 6, 7, 8, 9	Nov. 3. Day 42"
	10, 11, 12, 13, 14, 15, 16, 17, 18, 19	all 42"
	20, 21, 22	

Sta.	# hole	Depth
3+38	1	32"
	2	43"
	3	42"
	4	42"
	5, 6, 7, 8, 9	Nov. 3. Day. 42"
	10, 11, 12, 13, 14, 15, 16, 17, 18, 19	all 42"
	20, 21, 22, 23, 24	
3+42	1	42"
	2	42"
	3	43"
	4	44"
	5	42"
	6	42"
	7	42
	8	42
	9	42
	(1–9)	Nov. 3. Day
	10, 11, 12, 13, 14, 15, 16, 17, 18, 19	all 42"
	20, 21, 22, 23, 24, 25	
3+46	1	42"
	2	42"
	3	44"
	4	43"
	5	42
	6	42
	7	42
	8	42
	9	49
	(1–9)	Nov. 3 Day
	10, 11, 12, 13, 14, 15, 16, 17, 18, 19	all 42"
	20, 21, 22, 23, 24, 25	

Sta.	# hole	Depth
3+50	1	43"
	2	43"
	3	42"
	4	43"
	5, 6, 7, 8, 9	
	10, 11, 12, 13, 14, 15, 16, 17, 18, 19	all 42"
	20, 21, 22, 23, 24, 25, 26	
3+54	1	43"
	2	44"
	3	43"
	4	43"
	5, 6, 7, 8, 9	
	10, 11, 12, 13, 14, 15, 16, 17, 18, 19	all 42"
	20, 21, 22, 23, 24, 25, 26, 27	
3+58	1	44"
	2	44"
	3	44"
	4	42"
	5, 6, 7, 8, 9	
	10, 11, 12, 13, 14, 15, 16, 17	all 42"

Sta.	# hole	Depth
	18, 19	
3+58	20, 21, 22, 23, 24, 25, 26, 27, 28	
3+62	1	44"
	2	44"
	3	44"
	4	43"
	5, 6, 7, 8, 9	
	10, 11, 12, 13, 14, 15, 16, 17, 18, 19	all 42"
	20, 21, 22, 23, 24, 25, 26, 27, 28, 29	
Sta. 3+66	1	42"
	2	43"
	3	43"
	4	42"
	5, 6, 7, 8, 9	
	10, 11, 12, 13, 14	Nov 9 all 42"
	15, 16, 17, 18, 19	Nov 13 all 42"
	20, 21, 22, 23, 24, 25, 26	Nov 21
	27	
	28, 29, 30	

Anchor Holes in Spillway Floor

North OG Toe

Sta.	#hole	Depth	Sta.	#hole	Depth	Sta.	#hole	Depth	Sta.	#hole	Depth
Sta. 2+78	1	33"	Sta. 2+90	1	32"	3+02	1	36"	3+14	1	42
	2	39"		2	40"		2	42"		2	43"
	3	41"		3	43"		3	42"		3	42"
	4	42"		4	42"		4	42"		4	42
	5	42		5	Nov-3 Day 42"		5	43"		5	Nov-3 Day 43"
	6	42		6			6	Nov 1st Night		6	
	7	42		7			7			7	
	8	42		8			8			8	
	9	42		9			9	Nov-3 Day 42"		9	
	10	42		10			10			10	
	11			11			11			11	
	12			12			12			12	
	13			13			13			13	
	14			14			14			14	
	15			15			15			15	
	16			16			16			16	
	17			17			17			17	
	18	Nov 20		18	Nov 8 All 42"		18			18	All 42"
	19			19			19			19	
	20			20	Nov 20		20				
	21						21				
	22					Fo Hog Wallods Wall Nov 20					
Sta. 2+82	1	31"	2+94	1	36"	Sta. 3+06	1	39"	3+18	1	41"
	2	40"		2	41"		2	42"		2	43"
	3	42"		3	42"		3	42"		3	44"
	4	42"		4	42"		4	42"		4	44"
	5	42		5	Nov-3 Day		5	Nov 1st Night		5	
	6	42		6			6			6	
	7	42		7			7			7	
	8	42		8			8			8	
	9	42		9	Nov-3 Day 42"		9	Nov-3 Day 42"		9	Nov-3 Day 42"
	10			10			10			10	
	11			11			11			11	
	12			12			12			12	
	13			13			13			13	
	14			14			14			14	
	15			15			15			15	
	16			16			16			16	
	17			17			17			17	
	18			18	All 42"		18			18	All 42"
	19			19			19			19	
	20	Nov 20		20	Nov 20		20				
	21			21			21				
	22						22				
2+86	1	32"	2+98	1	34"	Sta. 3+10	1	42"	3+22	1	42"
	2	39"		2	42"		2	42"		2	43"
	3	42"		3	43"		3	42"		3	43"
	4	42		4	43"		4	42"		4	41"
	5	42		5	Nov-3 Day		5	Nov-3 Day 42"		5	Nov-3 Day 42"
	6	42		6			6			6	
	7	42		7			7			7	
	8	42		8			8			8	
	9	42		9	Nov-3 Day		9			9	
	10			10			10			10	
	11			11			11			11	
	12			12			12			12	
	13			13			13			13	
	14			14			14			14	
	15			15			15			15	
	16			16			16			16	
	17			17			17			17	
	18	Nov 8 All 42"		18	All 42"		18	All 42"		18	All 42"
	19			19			19			19	
	20	Nov 20		20	Nov 20		20				
				21			21				
							22				
							23				

Anchor Holes in Spillway Floor

North from OG Toe

Sta.	# hole	Depth
2+30	1	34"
	2	42"
	3	43"
	4	43"
	5	42
	6	42
	7	42
	8	42
	9	42
	10	42
	11	36
	12	42
	13	42
	14	42
2+34	1	34"
	2	40"
	3	43"
	4	42"
	5	42
	6	42
	7	42
	8	42
	9	42
	10	42
	11	42
	12	42"
	13	42
	14	42
	15	42
2+38	1	39
	2	44
	3	44
	4	44
	5	42
	6	42
	7	42
	8	42
	9	42
	10	42
	11	42
	12	42
	13	42
	14	42
	15	42
	16	Nov 20

Sta.	# hole	Depth
2+42	1	41"
	2	44"
	3	51"
	4	44"
	5	42
	6	42
	7	42
	8	42
	9	42
	10	42
	11	42
	12	42
	13	42
	14	42
	15	42
	16	Nov 20
2+46	1	42"
	2	44"
	3	44"
	4	45"
	5	42
	6	42
	7	42
	8	42
	9	42
	10	42
	11	42
	12	42
	13	42
	14	42
	15	42
	16	Nov 20
2+50	1	42"
	2	43"
	3	43"
	4	44"
	5	42
	6	42
	7	42
	8	42
	9	42
	10	42
	11	42
	12	42
	13	42
	14	42
	15	42
	16	Nov 20

Sta.	# hole	Depth
2+54	1	Cut-off trench goes here
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	Nov 20
Sta. 2+58	1	37"
	2	42"
	3	47"
	4	44"
	5	42
	6	42
	7	42
	8	42
	9	42
	10	42
	11	42
	12	42
	13	42
	14	42
	15	42
	16	42
	17	42
	18	Nov 20
Sta. 2+62	1	38"
	2	42"
	3	43"
	4	42"
	5	42
	6	42
	7	42
	8	42
	9	42
	10	
	11	
	12	
	13	
	14	
	15	
	16	All 42"
	17	
	18	Nov 20
	19	

Sta.	# hole	Depth
2+66	1	40"
	2	43"
	3	44"
	4	43"
	5	42
	6	42
	7	42
	8	42
	9	42
	10	
	11	
	12	
	13	
	14	
	15	
	16	All 42
	17	
	18	Nov 20
	19	
	20	
Sta. 2+70	1	38"
	2	42"
	3	43"
	4	42"
	5	42
	6	42
	7	42
	8	42
	9	42
	10	
	11	
	12	
	13	
	14	
	15	All 42
	16	
	17	Nov 20
	18	
	19	
	20	
2+74	1	34"
	2	41"
	3	42"
	4	49"
	5	42
	6	42
	7	42
	8	42
	9	42
	10	
	11	
	12	
	13	
	14	
	15	
	16	All 42"
	17	Nov 20
	18	
	19	

Anchor Holes - Spillway Floor

Top of 06-N.

Sta.	Hole #	Depth	Sta.	hole #	Depth
1+02	1	Oct. 31 3'-1"	1+30	1	Oct. 31 34"
	2	3'-4"		2	42"
	3	3'-5"		3	43"
	4	3'-4"		4	43"
	5			5	Nov. 1st Night 42
	6			6	42
	7			7	42
	8			8	42
				9	42
				10	
1+06	1	Oct. 31 3'-0"	1+34	1	Oct. 31 39"
	2	3'-6"		2	40"
	3	3'-5"		3	42"
	4	3'-1"		4	46"
	5			5	Nov. 1st Night 42"
	6			6	42"
	7			7	42"
	8			8	42"
	9			9	42"
	10			10	
1+10	1	Oct. 31 3'-4"	1+38	1	Oct. 31 37"
	2	3'-5"		2	39"
	3	3'-6"		3	42"
	4	3'-0"		4	42"
	5			5	Nov. 1st Night 42"
	6			6	42"
	7			7	42"
	8			8	42"
	9			9	42"
	10			10	
			1+42	1	Oct. 31 34"
				2	36"
				3	42"
				4	42"
				5	Nov. 1st Night 42"
				6	42
				7	42
				8	42
				9	42
				10	

Sta.	# hole	Hole Depth
1+14	1	Oct. 31 3'-5"
	2	3'-7"
	3	3'-5"
	4	3'-0"
	5	
	6	
	7	
	8	
	9	
	10	
1+18	1	Oct. 31 2'-8"
	2	4'-2"
	3	3'-6"
	4	2'-11"
	5	
	6	
	7	
	8	
	9	
	10	
1+22	1	Oct. 31 2'-8"
	2	44"
	3	42"
	4	39"
	5	
	6	
	7	
	8	
	9	
	10	
1+26	1	Oct. 31 42"
	2	37"
	3	41"
	4	43"
	5	Nov. 1st Night 42"
	6	42"
	7	42"
	8	42"
	9	42"
	10	

Sta.	# hole	Depth
1+46	1	Oct. 31 32"
	2	36"
	3	42"
	4	40"
	5	Nov. 1st Night 42"
	6	42"
	7	42"
	8	42"
	9	42"
	10	
1+50	1	Oct. 31 Night 34"
	2	37"
	3	39"
	4	37"
	5	Nov. Night 42
	6	42
	7	42
	8	42
	9	42
	10	
1+54 52 2+06	1	Oct. 31 Night 33"
	2	33"
	3	37"
	4	39"
	5	Nov. Night 42
	6	42
	7	42
	8	42
	9	42
	10	
1+58	1	Oct. 31 Night 31"
	2	32"
	3	41"
	4	42"
	5	Nov. 1st Night 42"
	6	42"
	7	42"
	8	42"
	9	
	10	Nov 20
1+62	1	Oct. 31 Night 34"
	2	32"
	3	43"
	4	42"
	5	Nov. 1st Night 42"
	6	42"
	7	42"
	8	42"
	9	42" Nov 20
	10	

Anchor holes - Spillway floor

North from ℄ toe

Sta.	# hole	Depth		Sta.	# hole	Depth	
1+66	1	31"	Oct. 31 Night	1+82	1	32"	
	2	31"			2	33"	Oct. 31 Night
	3	43"			3	45"	
	4	44"			4	44"	
	5	42"	Nov. 1 Night		5	42	Nov. 2 Day
	6	42"			6	42	
	7	42"			7	42	
	8	42"			8	42	
	9	42"			9	42	
	10	Nov 20			10	Nov 20 ✓	
1+70	1	32"	Oct. 31 Night	1+86	11		
	2	33"			12		
	3	42"			1	29"	Oct. 31 Night
	4	44"			2	37"	
	5	42"	Nov. 2 Day		3	43"	
	6	42"			4	43"	
	7	42"			5	42	Nov. 2 Day
	8	42"			6	42	
	9	42"			7	42	
	10	Nov 20			8	42	
	11				9	42	
1+74	1	30"	Oct. 31 Night	1+90	10	Nov 20 ✓	(10 11 12)
	2	30"			11		
	3	43"			12		
	4	43"			1	36"	Oct. 31 Night
	5	42	Nov. 2 Day		2	43"	
	6	42			3	43"	
	7	42			4	42"	
	8	42			5	42	Nov. 2 Day
	9	42 ✓			6	42	
	10	Nov 20			7	42	
	11				8	42	
1+78	1	33"	Oct. 31 Night	1+94	9	42	
	2	36"			10	Nov 20 ✓	
	3	43"			11		
	4	43"			12		
	5	42	Nov. 2 Day		1	40"	Oct. 31 Night
	6	42			2	42"	
	7	42			3	42"	
	8	42 ✓			4	43"	
	9				5	42	Nov. 2 Day
	10	Nov 20			6	42	
	11				7	42	
					8	42	
					9		
					10	Nov 20 ✓	
					11		
					12		

Sta.	# hole	Depth	
1+98	1	38"	Oct. 31 Night
	2	40"	
	3	41"	
	4	43"	
	5	42	Nov. 2 Day
	6	42	
	7	42	
	8	42	
	9	42	
	10	Nov 20 ✓	
	11		
	12		
2+02	1	38"	Oct. 31 Night
	2	40"	
	3	42"	
	4	43"	
	5	42	Nov. 2 Day
	6	42	
	7	42	
	8	42	
	9	42	
	10	Nov 20	
	11		
	12		
2+06	1	40"	Oct. 31 Night
	2	40"	
	3	42"	
	4	43"	
	5	42	Nov. 2 Day
	6	42	
	7	42	
	8	42	
	9	42	
	10	Nov 20	
	13 12		
2+10 ✓	1	38"	Oct. 31 Night
	2	40"	
	3	42"	
	4	42"	
	5	42	Nov. 2 Day
	6	42"	
	7	42	
	8	42	
	9	42	
	10 Day	Nov 9	42
	11		
	12	Nov 20	
	13		

Sta.	# hole	Depth	
2+14 ✓	1	38"	Oct. 31 Night
	2	40"	
	3	43"	
	4	44"	
	5	42	Nov. 2 Day
	6	42	
	7	42	
	8	42	
	9	42	
	10	Nov 9 Day 42	
	13 11 12 14		Nov 20
2+18 ✓	1	38"	Oct. 31 Night
	2	42"	
	3	42"	
	4	44"	
	5	42	Nov. 2 Day
	6	42	
	7	42	
	8	42	
	9	42	
	10	Nov 9 Day 42	
	13 11 12 14		Nov 20
2+22 ✓	1	40"	Oct. 31 Night
	2	43"	
	3	43"	
	4	42"	
	5	42	Nov. 2 Day
	6	42	
	7	42	
	8	42	
	9	42	
	10	Nov 9 Day 42	
	13 11 12 14		Nov 20
2+26 ✓	1	36	Oct. 31 Night
	2	41"	
	3	42"	
	4	42"	
	5	42	Nov. 2 Day
	6	42	
	7	42	
	8	42	
	9	42	
	10	42	
	11	42	
	12	42	
	13	42	Nov 9 Day
	14		
	12		

1933 – Inspectors overtime, Sunday & Holiday

DATE	HRS. Overtime	HRS. Sunday	HRS. holiday	HOURS. Time off duty.
Accumulation to Oct-13	169			
Oct. 17	1			
Oct. 25	2			
Oct. 29	8			Oct. 28 – 8 hrs.

Location of work

Accumulation of hrs. credit continued from Book #440 #442

Spillway concrete

" "

Mix yield:

5- 1:2½:5 - yields - 1.01 cu yds per batch
6- 1:2:4 - " - 0.99 " " " "
7- 1:2:4 modified " - 1.03 " " " "
1:2 Grout - 0.40 " " " "

lap steel 40 diameters
Str. steel 3" clearance to forms.

Grout Mix for Hor Const. Joints and Foundation Floors.

5 sks cement. } = .4 cu yd.
1040# Sand.

Dry Sand uses 20 gallons for thin grout.

Batch Measures.

1:2:4 modified - Core Wall

7-5ks. Cement
1400 / 1250# Sand
1190 / 1340# - 1½" rock
1030 / 1030# - ¾" rock

2000# Minn. Run 2500# conc. ±

3" to 4" slump in 6' ft sections and batter sections

8" to 9" slump in 18" wall

1:2:4 regular

6.3 ks. cement
1258# Sand
1340# - 1½" rock
1030# - ¾" rock

Min 2000 conc Run 2200, assume 1½ moisture Content use Not over 40 gallons added mixing water.

Any slump to fit the work for workability.

1:2½:5 (Mass concrete)

5-sacks cement
1250# Sand
850# - 2½" rock
970# - 1½" rock
770# - ¾" rock

Min. Running 1600 to 2000.

Not over - 4" slump.

Thin - Pressure Grout

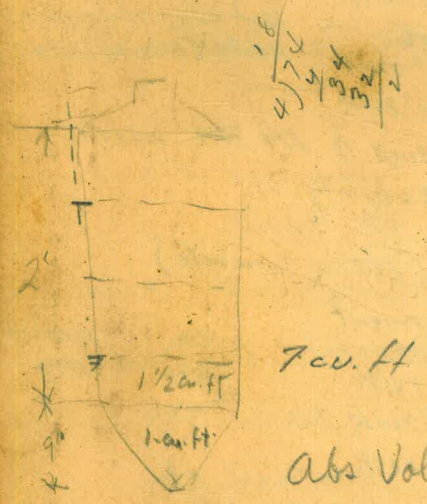
cement and water only.

5 sks cement. 35 gal. water.

= 7 cubic feet of grout.

use 100# per sq. in.

Modified to suit conditions.



7 cu. ft capacity

Abs Vol = Weight / Sqm. × 62½

Note: See previous books #440 & 442 - for reference. Also Grout Book # 381

R. W. Carter.
Public Works Office
Naval Air Station
San Diego, Cal.

Res.
8251 El Cajon
La Mesa
to Dec 1st.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

FOR SINGLE TRACK EMBANKMENT.

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

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

MADE IN GERMANY.

Dec 15 '33

Von Seggern:

Concrete test cylinder

O.G. 4+80 – 4+95

2440 #/□" 28 days.

Required 1600 #/□'

Floor of Spillway

3+45 N 36' to 74' N

2770 #/□" 28 days.

Required 2000 #/□

H. Wood

Report Work Ord ✓

Dec. 13 33

Mr. Von Seggern:

Please report on your report for to-day 6 – 6 sack batches of concrete poured in outlet tunnel invert repairs 1+98 ± 18'x7.5'

1 – Mixer Truck

1 – Conc. Mixer

1 – Foreman

1 – Mixer man

4 – laborers

2 – cement finishers

12:30 to 4 PM.

H. Wood

Dec. 7 33
Nov 9

Von Seggern:

Test cylinders

573, 574 & 575

are reported as follows:

No	Time	#/□"
573	7 days	1990
574	28 days	2880
575	3 months	—

J. Wood

P.S. This is from Spillway floor 1+65 to 1+85 to 36' N. of crest

Hew

Night Shift

Inspection

Grout Holes. Core wall

No Sta.	Depth. -	Pipe Lth.
LE4092	25'-6"	20'-9"
2-W 4100	25'-6"	20'-6"
3-E 4105	25'-8"	20'-8"
4-W 4110	25'-8"	21'-8"
5-E 4115	25'-6"	21'-2"
6-W 4120	25'-8"	20'-4"
7-E 4125	25'-6"	21'-0"
8-W 4130	25'-5"	20'-6"
9-E 4135	25'-5"	19'-3"
10-W 4140	25'-5"	20'-3"
11-E 4145	25'-5"	20'-4"
12-W 4150	25'-5"	18'-11"
13-E 4155	25'-5"	19'-8"
14-W 4160	25'-6"	20'-0"
15-E 4165	25'-6"	21'-3"

Thin - Pressure Grout
cement and water only.

Abs Vol = $\frac{\text{Weight}}{\text{Sg. } \times 62\frac{1}{2}}$

Note: See previous books #440 + 442 - for reference. Also Grout Book # 381

R. W. Carter,
Public Works Office
Naval Air Station
San Diego, Cal.

Res.
8251 El Cajon
La Mesa
to Dec 1st.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES $1\frac{1}{2}$ TO 1.

FOR SINGLE TRACK EMBANKMENT.

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

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

MADE IN GERMANY.