

L.O.L.
C. H. BRYSON.

MAY 19 1919

JUL 10 1919

FIELD BOOK

361 S

W110

KEUFFEL & ESSER CO.

DRAWING MATERIALS
AND
SURVEYING INSTRUMENTS.
NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCE FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 18 FEET WIDE SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

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	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.

For Keith's Railroad Curve Labels see end of book.

Country
Poured
6/30/19
28 bat. @ 1.00

6/24/19
33 @ 1.75
22 @ 1.00 5 boxes
~~7/3 - 24 batches~~
7/5 - 18 batches @ 1.75
6 " @ 1.00
7/6 - 53 batches @ 1.00

1.00 + 1
1.75 6 98
1.75
56
1.575
71.75

MAY 19 1919

No inspection in San Diego
evening of 18TH.

Day

MAY 19 1919

Excavation - Progress both
class 3 & 4 right abutment.

Pressure Grouting - OK.

Sand Washing & Hauling - Progress to
meet masonry requirements -
Quality good.

Quarry - Mill rock - good.

Mass Rock ———

Overburden - Good clean
rock going to mill.

No masonry placed by day
shift acct. no place ready &
moving # 2 derrick.

Grout washing - Progress to
meet stripping of forms.

NIGHT. MAY 20 1919 4

Excavation - Good progress
right abt on class 3 & 4 Excar.

Sand Washing & Hauling - No sand
washed or hauled - Bin at mixer
full. Quality - good.

Quarry - Mill rock - OK.

Mass Rock - Instructed Supt. to
send up larger rock than had
loaded.

Overburden - Satisfac. clean rock
being sent to mill.

Proportions - All batches run
about 8 C.F. shy on $2\frac{1}{2}$ " & about
3' over on $\frac{1}{2}$ " $3\frac{1}{4}$ " & $1\frac{1}{2}$ " bins running
over $4\frac{1}{2}$ " only, half full. Bad
condition of $1\frac{1}{2}$ " screen lets quite a
little $2\frac{1}{2}$ " in this bin.

Duration - OK.

Wetness - Slightly wet, instructed
Supt. to use less water.

Latence - All old latence
cleaned off old concrete surface
sprinkled with neat cement before
placing new masonry.

Mass Rock - Small until corrected.

TESTING - 2 Test cylinders made
6 P.M. May 19.

Day - MAY 20 1919

Excavation - Progress both
abotments in class 4 Excavation
Right abt. showing good rock
surfaces except along where
up stream face will come.

Sand Washing & Hauling - Progress
to fill bin at concreting plant.
Quality - good.

Mill Rock - Good.

Mass Rock - No requirement.

Overburden - OK. Good clean rock
being sent to mill.

Grout Washing - Progress to meet
stripping of forms.

Housekeeping - OK.

No masonry placed by day shift.
Rock bins full.

MAY 21 1919

Excavation - Progress right
abutment in class 4 material

Sand Washing & Hauling - No
sand washed or hauled.

Quarry - Mill Rock OK. Mill down
acct. changing $1\frac{1}{2}$ & $\frac{3}{4}$ " screen
sections.

Mass Rock - Supt. instructed
to send up larger rock.

Overburden - OK.

Mixing -

Proportions - Batches running
about 6' shy on $2\frac{1}{2}$ " acct.
shortage of this size ($1\frac{1}{2}$ " & $\frac{3}{4}$ "
bins running over - $2\frac{1}{2}$ " about $\frac{2}{3}$ full)
about $\frac{1}{2}$ " over on $\frac{3}{4}$ "

Duration - OK.

Wetness - OK.

Laitence - OK.

Mass Rock - OK.

MAY 21 1919

Excavation - Progress both abts.
class 4 material. Right abt. washing
down & cleaning off exposed
rock surfaces.

Quarry - No production of either
mill rock or mass rock acct. mill
down changing $1\frac{1}{2}$ & $\frac{3}{4}$ " screen sections.

No Masonry placed by day shift.

Grout Washing - Progress to meet
stripping of forms.

Sand Washing & hauling - Progress to
fill ^{sand} concrete bin at plant

Housekeeping - OK.

MAY 22 1919

Excavation - Progress class 4 matl.
left abt. Right abt. prog class 4
material & cut off trench.

Sand bin at plant full.

Quarry -

Mill Rock - Good.

Mass Rock - Good.

Overburden - OK. Very clean rock
being sent to mill.

Crushers - Plenty of rock,

Proportions - Run 1st hour of shift
about 4' short on 2 1/2" until all 2 1/2
gotten out of 1 1/2" bin. Bgl. of night
good. A little strong on 3/4 until corrected.

Duration -

Wetness - Slightly wet - Supt. inst.
to dry up a little.

Laitence - All laitence cleaned off
old masonry before new concrete
placed.

Bonding - Surface of old masonry
thoroughly cleaned, sprinkled with cement
which was broomed in.

Mass Rock - Being placed within 2' of
face ASK H.P.D. Engr. otherwise OK.

MAY 22 1919

Excavation - Progress class 3 Excav.
right abt. ~~& class~~

Sand Washing & Hauling - Progress
to meet masonry requirements.

Quality - Good.

Quarry -

Mill Rock - Good

Mass " - "

Overburden - O.K. Good clean rock
being sent to mill.

Concrete - One crew - right abt.

Proportions - Good.

Duration - Good

Mass Rock - Shy in high section
right abt. - Impossible to place only a
few. OK. low section right abt.

Wetness - Slightly wet - Mixer man
instructed to dry up, mix.

Laitence - OK.

Bonding - To rock surf. & old conc.
right abt. good.

Grout Washing - Prog. to meet
stripping of forms.

MAY 23 1919

Excavation - Progress class 4

Ex. left abt.

Sand Washing & Hauling - Should have hauled bin of sand. Bin at conc plant low had to keep 3 men in after supper.

Quarry - Mill Rock - O.K.

Mass Rock - O.K.

Overburden - O.K. Clean

rock going to mill.

Crusher - Ran only 15 min.

acct. burned out bearing crusher elevator motor.

Concrete - Proportions - Small amt. of $2\frac{1}{2}$ " about 6-8 cu. ft. cut out during latter part of night acct. shortage of this size.

Duration - O.K.

Wetness - Slightly too wet.

Mass Rock - Good except in high section of right abt. where impossible to put in more.

Laitence - Not objectionable.

MAY 20 1919

Excavation

MAY 24 1919

MAY 24 1919

MAY 25 1919

MAY 25 1919

MAY 26 1919

MAY 26 1919

Excavation - Progress right abt.
class 3 & 4 excavation left
abt. progress class 4' excavation.
Pressure Grouting - Progress on
Drilling new hole left abt.
Sand Washing & Hauling - Progress to
meet masonry requirements - Quality
good.

Quarry - Mill rock - Good.

Mass Rock - No requirement.

Overburden - O.K. Satisfactorily
clean rock being sent to mill.

Masonry Placing -

No masonry placed by
day shift acct. no place ready to
pour.

Housekeeping - Good.

Night.

MAY 27 1919

Excavation - Progress class 4 excavation both abutments.

Sand Washing & Hauling - No sand hauled - bin full.

Quarry - Mill rock O.K.

Mass " - O.K.

Overburden - Small amount being wasted. Good clean rock being sent to mill.

Masonry Placing -

Proportions - Running about 4 c.f. shy on 2 1/2" account regular mixture not mortary enough to work around forms at Insp. gallery right abut. Other sizes O.K.

Duration - Good.

Wetness - Slightly too wet acct. right abt.

Mass Rock - Shy right abt. acct. impassibility to place more.

Latence. - Not objectionable

Forms - Steel forms covered with scabby old conc. ordered removed before concreting.

Day

MAY 27 1919

Progress - class 3 & 4 excav. right abt. & class 4 left abt.

Grouting under pressure - Progress in drilling new grout hole left abt.

Sand Washing & Hauling - Progress to meet masonry requirements. Quality good.

Quarry - Mill rock - Good.

Mass " - "

Overburden - Some being wasted. Clean, but some very dusty rock going to mill.

Crushers - Bins full practically all day.

Masonry Placing - Proportions - First several batches run shy of 2 1/2" 3/4" meas. box & band box calibrated by cu. ft. box.

Duration - Good.

Wetness - O.K.

Mass Rock - Too small - Supt. instructed to have larger rock put in. Latence - All latence water baled off low places & wasted.

Grout Washing - Progress to meet stopping of forms.

Night
Excavation - MAY 28 1919

Progress class 4 material on left abt.

Quarry - Mill rock - good small crew.

Mass rock - Shy where night shift could get at them.

Overburden - Some being wasted. Quarry foremen told to instruct men in use of forks, some men using like shovels. Rock going to mill quite dusty.

Proportions - First few batches run shy on $2\frac{1}{2}$ " for bonding. Using about 2 c.f. too much $\frac{3}{4}$ " until corrected.

Duration - Good.

Wetness - Too wet. Superintendent instructed to use less water. Latence water ordered baled out & wasted.

Much loss of cement water through forms right abt.

Mass Rock - Good.

Bonding - Good to old masonry surface.

MAY 28 1919

Excavation - Progress both abutments - class 3 & 4 right abt & class 4 left abt.

Sand Washing & Hauling - Progress to meet masonry requirements. Quality good.

Mill rock - O.K.

Mass Rock - "

Overburden - Wasting some - Reasonably clean rock going to mill.

Masonry Placing -

Proportions - Good. Calibrated dust box, $1\frac{1}{2}$ " box & $2\frac{1}{2}$ " box with 1 cu. ft. measure & took dimensions for small & large mixer. Instructed both day & night superintendents on correct amt. of each size.

Duration - Good.

Mass Rock - Instructed supt to use larger rock.

Wetness - Slightly too wet.

Lateness - Not objectionable.

Grout Washing - Progress to meet masonry requirements.

May 29, 1919

Excavation - Progress left.
abutment class 4 material.
Sand Washing & Hauling - No
sand washed or hauled - Bin
at plant full.

Quarry - Mill rock - scarce.

Mass rock - OK.

Overburden - None being
wasted. Clean rock going
to mill.

Proportions - Concrete run
about 10' shy of 2 1/2" rock
while bonding to old masonry.
Otherwise OK.

Duration - Good.

Wetness - OK.

Laitence - OK.

Mass Rock - Good.

MAY 29 1919

Excavation - Progress by small crew
right abutment class 3 excar. Progress
~~left~~ left abutment washing down rock
surfaces & work on cut off trench.
Sand Washing & Hauling - Progress
to meet masonry requirements.
Quality - good.

Quarry - Mill rock - OK

Mass Rock - OK

Overburden - Some being
wasted. Satisfactorily clean
rock being sent to mill.

Masonry Placing -

Proportions - Batches run about
6' shy on 1 1/2" - 2' over on 2 1/2"
& 2' over on 3/4" acct. shortage of 1 1/2".

Duration - Good.

Wetness - OK.

Laitence - Not objectionable.

Mass Rock - Good where possible
to place.

Grout Washing - Progress to meet
stripping forms.

MAY 28 1919

Night-

No work done on excavation by night shift.

Sand Washing & Hauling - No sand hauled. Bin at Conc. plant full.

Quarry -

Mill Rock - Good

Mass " - "

Overburden - Some being wasted Satisfactorily clean rock being sent to mill.

Masonry Placing -

Proportions - Batches run without $2\frac{1}{2}$ " rock until new masonry bonded to old. Other batches run about 4' over shy on $1\frac{1}{2}$ " & 2' over on $\frac{3}{4}$ ". This acct. shortage of $1\frac{1}{2}$ "

Duration - All batches timed run from 1m 30" to 2' 30"

Mass Rock - Good

Wetness - Too wet Supt. inst. to use less water. This is getting more or less chronic.

Laitence - Some laitence raising to top but kept drained off with excess water

Bonding - Good to rock surfaces left abt.

MAY 30 1919

Excavation -

Progress both abutments by small crews

Pressure Grouting - 4 holes - 2 in each abt. - Not possible to get any grout in any except hole in right abt.

Progress on drilling new hole left abt.

Sand Washing & Hauling - Progress to meet masonry requirements.

Quarry - Mill rock - good

Mass Rock - "

Overburden - Some being wasted Satisfactorily clean rock being sent to mill.

Masonry Plac. - Proportions - Good

Duration - "

Wetness - Slightly wet

Mass Rock - Good

Laitence - Objectionable

on end of section where placing. Foreman keeping one end about 2' high allowing water & laitence to run to low end. Supt. inst. to correct this.

Grout washing - O.K.

House keeping - O.K.

MAY 31 1919

Excavation - No progress.

Quarry - Mill rock - good.

Mass " - "

Overburden - Some being wasted. Reasonably clean rock going to mill. Some quite dusty.

Masonry Plac.

Proportions - Good

Mass Rock - "

Duration - Good.

Laitence - Laitence water which had collected in low places ordered bailed out.

Wetness - Slightly wet - Inst. to use less water.

Placing - Foreman inst. to carry masonry up level instead of 1 end 2 lower.

MAY 31 1919

Excavation - Some progress class 34 material right abt.

Pressure Grouting - Progress on drilling new hole left abt.

Sand Washing & Hauling - Progress to meet masonry req. Quality good.

Quarry - Mill rock - good.

Mass rock - good

Overburden - ^{not} wasted. Satisfactorily clean rock going to mill.

Proportions - Good. Changed over from large to small mixer. Men on measuring platform shown correct proportions for small mixer. 1-2 1/2 - 5 Conc. used on extreme right end spillway section.

Duration - Good.

Wetness - Good in a.m. Too wet in P.M. when pouring spillway section.

Inspector instructed to dry up. Mass Rock - Good in abt. section. None placed in spillway section.

Placing - During afternoon conc. plac. in spillway section dumped in one end of forms & instead of being mucked to other end was allowed to flow causing separation of rock & mortar. This condition only noticed by insp. at 3 P.M. Insp. had been working on payroll all P.M. Steps were immediately taken to correct it.

JUN 1 - 1919

Excavation - No progress.

Sand Washing & Hauling - Bin full no sand hauled.

Quarry - Mill rock - good.

Mass Rock - Several mass rock which had been loaded to send to dam rejected acct. not conforming to spec't.

Overburden - Some being wasted. Satis fac. clean rock going to mill.

Proportions. Crew on meas. platform instructed to correct proportions for spillway lip. First few batches with big mixer about 10 ct. shy $2\frac{1}{2}$ " acct. pending.

Duration - Good

Wetness - "

Laitence - OK.

Mass Rock - Good in abt. sections.

Placing in spill way section good.

JUN 1 - 1919

Excavation - Progress both abts. small crews. Class 3 & 4 right abt. Class 4 left abt.

Pressure Grouting - Progress in drilling hole left abt.

Sand Washing & Hauling - To meet masonry requirements. Quality - Good.

Quarry - Mill Rock - Scarce

Mass " "

Overburden - OK. Satisfac. clean rock being sent to mill.

Crushers - OK.

Masonry - Plac. -

Proportions - Batches run abt 4 ct. shy on $1\frac{1}{2}$ " & 2' over on $\frac{3}{4}$ " this acct. of shortage of $1\frac{1}{2}$ " & overplus of $\frac{3}{4}$ " & $2\frac{1}{2}$ "

Duration - Good.

Wetness - "

Laitence - None.

Mass Rock - Good

Grout Wash - "

Housekeeping - OK.

JUN 2 - 1919

JUN 2 - 1919

Excavation - Some progress in morning
class 4 ex car. left abt.

Grout Washing - Pressure Grouting - Progress
on hole left abt.

Sand Washing & Hauling - Progress to
meet masonry requirements. Quality
good -

Quarry - Mill rock scarce.

Mass Rock - Good.

Oreburden - Bad. Satisfactorily clean
rock going to crushers.

Masonry Placing -

Proportions - Shy about 5 cf. of $1\frac{1}{2}$ "
all day orer ^{about about 3' $\frac{3}{4}$ "} same on $\frac{3}{4}$ " acct.
shortage orer plus on $2\frac{1}{2}$ & $\frac{3}{4}$ " & shortage
of $1\frac{1}{2}$ "

Duration - Good.

Witness - "

Mass Rock - Supt. instructed to
put more mass rock in center sec.
where pouring which he did.

Laitence - Not obj.

Grout Washing - Good.

Housekeeping - Camp needs picked
up.

JUN 3 - 1919

Excavation - No progress by night shift.

Quarry - Mill rock scarce - Powder crew shot at supper time

Mass Rock - Good

Overburden - Bad, Approx 9 c.y. wasted. Satisfac. clean rock going to mill.

Placing - Proportions - Running 4-5 cf. shy on $1/2$ & 2-3 cf. over on $3/4$ acct. shortage of $1/2$ "

Duration - Good.

Wetness - Good

Latence - OK.

Mass Rock - Good.

Bonding - Good.

JUN 3 - 1919

Excavation - No progress
Pressure Grouting - Progress on drilling of hole left abt.

Quarry -

Mill Rock - Better.

Mass Rock - Good.

Overburden - Bad, - Satisfactorily clean rock going to mill.

Masonry Placing -

Proportions - Batches run approx 5 cf. shy on $1/2$ & 3 cf. over on $3/4$. Shortage of $1/2$ " rock.

Duration - Good.

Wetness - Good.

Latence OK.

Mass Rock - Quantity placed good. Same rock placed within 14" of front face & 6" of exp. joint form ordered mored.

Grout Washing - Progress to meet stripping of forms.

Housekeeping - Good.

JUN 4 - 1919

Excavation - No progress
Sand Washing & Hauling - 1 Bin of
sand washed & hauled - Quality
good.

Quarry - Mill rock - good only
small crew.

Mass Rock - Good.

Overburden - Some wasted. Clean
rock being sent to mill.

Masonry Placing.

Proportions - abt. 5 cft short
on $1\frac{1}{2}$ " about 2-3 ft over on $\frac{3}{4}$ ".
 $2\frac{1}{2}$ " bin half full. $1\frac{1}{2}$ " bin about $\frac{1}{2}$
full & $\frac{3}{4}$ " bin same.

Duration - OK.

Wetness - OK.

Latence - OK.

Mass Rock - Good where possible
to place.

Bonding - One crew started
placing masonry on old without
same being thoroughly cleaned &
without any cement sprinkled on
& swept in. Ordered to stop & do
this. Instructed about mass rock
placing - min. dist. apart.

JUN 4 - 1919

Excavation - No Progress.
Sand Washing & Hauling - Progress
to meet masonry requirements.
Quality - good.

Pressure Grouting - Progress on
drilling of hole left abt.

Quarry - Mill Rock - good.

Mass Rock - No requirement.

Overburden - Some being
wasted - Satisfactorily clean.
rock being sent to mill.

No masonry placed.

Grout Washing - Progress to
meet stripping of forms.

House Keeping - Good.

JUN 5 - 1919

Excavation - Good. No progress
Sand Washing & Hauling - Bin
full no sand hauled.

Quarry - Mill rock - Good Shortkrew
Mass Rock - good
Overburden - OK, Good

Clean rock being sent to
mill.

Proportions - About 5 cf. shy
each batch on $1\frac{1}{2}$ " abt 3 cf.
over on $\frac{3}{4}$ " - Shortage of $1\frac{1}{2}$ " rock.

Duration in Mixer - Good.

Wetness - Good

Laitence - "

Banding - "

Mass Rock - Good where Conc.
in spill. sec. Impossible to
place left abt acct. drainage
gallery forms.

JUN 5 - 1919

Excavation -

No progress.

Sand Washing & Hauling - Progress
to meet masonry requirements.
Quality - good.

Quarry - Mill rock - good

Mass rock - No requirement.

Overburden - Some being
wasted. Satisfactorily clean
rock being sent to mill.

Masonry Placing -

Proportions - About 4-5' shy on
 $1\frac{1}{2}$ " - 2-3 cf. over on $\frac{3}{4}$ " acct.
shortage of $1\frac{1}{2}$ "

Duration - Good.

Wetness - Slightly too dry - ordered
a little more water.

Laitence - OK.

Mass Rock - Not, can pass, to place
Placing - Concreting in section
where not possible to set skip but
had to be dumped in from each
side. Insisted that each skip be
mucked in level before next skip placed.

Grout Washing - Progress.

Housekeeping - OK

Night. JUN 6 - 1919

Excavation - No progress.
Sand Washing & Hauling - Bin at
Concreting plant full. No sand
washed or hauled.

Quarry - Mill rock - good.
Mass Rock - Several mass rock
which had been loaded into skips
to go to dam rejected acct.
not conforming to specit.

Overburden OK - Good clean
rock going to mill.

Masonry Placing - ^{Proportions} Sby about 4-5
c.t. $1\frac{1}{2}$ " over about 2-3' of $\frac{3}{4}$ "
shortage of small rock.

Duration in mixer - good.

Wetness - Slightly too wet. Supt.
instructed to use less water.

Laitence - Not ob. ^{Laitence water}
in low places ord.
bailed out.

Mass Rock - good.

Bonding - good.

JUN 6 - 1919

Excavation - No progress.
Sand Washing & Hauling - Progress to
keep sand bin at concreting plant
filled. Quality - Good.

Quarry - Mill rock - good.

Mass Rock - Good.

Overburden - OK. Satisfactorily clean
rock being sent to crushers

Masonry - Placing - Proportions - Sby
approx - 4-5 c.t. of $1\frac{1}{2}$ " rock & over 2-3'
of $\frac{3}{4}$ " acct. shortage of $1\frac{1}{2}$ "

Duration in mixer - good.

Wetness - Slightly too wet. Supt.
instructed to use less water.

Laitence - Laitence water ordered
bailed out.

Mass Rock - Not possible to place any.

Bonding - Very satisfactory in
~~was~~ left mass rock stall.

Grout Washing - Progress but
behind.

House keeping - Good, old manure
being hauled away from corral.

Night JUN 7 - 1919

Excavation - No progress

Quarry - Mill rock - good

Mass rock - good.

Overburden - Not bad - Satisfactorily clean rock being sent to crushers.

Masonry Placing -

Prop - Batches run 4-5 c.f. shy of 1 1/2" rock acct. shortage of this size. Other sizes good.

Duration - Good

Wetness - Good.

Lagrange - Objectionable at low end of section where placing masonry in spillway section acct. foreman carrying one end ^{about 2} higher & Lagrange water ordered bale down & Supt. inst. to bring low end up.

Mass Rock - good.

Bonding - "

JUN 7 - 1919

Excavation - Slight progress on class 4 matt. by small crew in P.M. night abt.

Sand Washing & Hauling - Progress to meet masonry requirements. Quality good.

Quarry - Mill rock - good.

Mass rock - good.

Overburden - Some being wasted - Progs Satisfactorily clean rock going to mill.

Proportions - Good.

Duration - good

Wetness - good

Lagrange - Not obj.

Mass Rock - good.

Grout washing - Progress but behind.

Housekeeping - good.

JUN 8 - 1919

JUN 8 - 1919

JUN 9 - 1919

JUN 9 - 1919

Excavation - No progress.
Sand Washing & Hauling - Progress
to meet masonry requirements.
Quarry - Mill rock - good.
Mass rock - No requirement.
Overburden - Some being
wasted - Satisfactorily clean
rock being sent to crushers.
Masonry placing -
Proportions - Excess of $2\frac{1}{2}$ "
rock being used up till corrected.
Duration - Good.
Wetness - Good.
Laitence - Not objectionable.
Grout Washing - Progress.
Mass Rock - Pouring spillway
lips not possible to use any.
House keeping - good.

JUNE 10 - 1919.

Excavation - No progress
Sand Washing & Hauling - No
sand washed or hauled acct
bin at conc. plant full.

Quarry - Mill rock - good.
Mass " - good.

Overburden - O.K. Satisfac-
torily clean rock being sent to
crushers.

Masonry Placing -

Proportions - slight excess
of $\frac{3}{4}$ " rock being used until
corrected.

Duration in mixer - Good.

Wetness - O.K.

Laitence - Not objectionable.

Bonding - good.

Placing - Placing masonry where
only possible to dump from one
side. Insisted that be carried
up level.

Mass Rock - Good where
possible to place. ^{Bad on latter part}
^{of shift}
Placing - Concrete left in bad shape
in Mass Rock still. About 2' low in D.S. end
covered with laitence.

JUN 10 1919

Excavation - No progress

Sand Washing & Hauling - Progress to meet
masonry requirements. Quality - good.

Quarry - Mill rock - Good.

Mass rock - Supt. instructed not
to send up rock for mass rock which
had been "doped" and shattered.

Overburden - Being wasted.

Satisfactorily clean rock being
sent to crushers.

Masonry Placing -

Proportions - Slightly too much $\frac{3}{4}$ "
rock being used until corrected. Other
sizes OK.

Duration in Mixer - good.

Wetness - O.K.

Mass Rock - O.K.

Laitence - O.K.

Grout ~~Washing~~ - Progress

Housekeeping - Good.

JUN 1 1919

Excavation - Progress by crew on class 4 excavation left abutment

Sand Washing & Hauling - None - Bin at concreting plant full.

Quarry - Mill rock - good.

Mass Rock - generally good - rock rejected which had one end badly shattered by "adobe" shot.

Oreburden - Not bad. Satisfactorily clean rock being sent to mill.

Masonry Placing -

Proportions - Using excess of $2\frac{1}{2}$ " rock until corrected. Otherwise OK.

Duration - Good.

Mass Rock - good.

Latence - Not bad - latence water ordered bailed out.

Wetness - Too wet some water ordered cut out.

Bonding - good.

JUN 1 1919

Excavation - Progress by crew on class 4 ex car. left abutment.

Sand Washing & Hauling - Progress to meet masonry requirements. Quality good.

Quarry - Mill Rock - Good. Called quarry foreman's attention to fact that shoring into skips going to mill was not permitted.

Mass Rock - Several rock rejected acct. not conforming to specific, & being shattered by "adobe shots".

Oreburden - Satisfactorily clean rock being sent to crushers.

Mas. Placing - Proportions - Batches running 4-5% shy on $\frac{1}{2}$ " rock acct. shortage of this size.

Duration - Good.

Wetness - Too wet. Supts. attention called to fact several times.

Latence - Bad at low end of section where placing.

Mass Rock - Good.

Housekeeping - "

JUN 12 1919

Excavation - Good progress
class 4 excavation left abt.

Quarry - Mill rock - good.

Mass Rock - good

Overburden - Not bad.

Satisfactorily clean rock
being sent to crushers.

Masonry Placing -

Proportions - Batches run

4-6 cf shx on 1¹/₂" rock acct.

Shortage of this size other
sizes good.

Duration - good.

Wetness - Good

Latence - Not objectionable

Mass Rock - Good where
possible to place.

JUN 12 1919

Excavation - Progress both abuts
class 3 & 4 matl. right abt. - class
4 matl. left abt. Prog. in drilling
holes for excar. in spillway.

Quarry - Mill rock - no requirement
mill down changing concaves

#4 - Mass Rock No req.

Mas. Plac.

None Placed.

Sand Washing & hauling - Progress
to meet masonry req. Qual. good.

Grout Washing - Progress.

JUN 13 1919

Excavation - Progress left abt.
in class 4 material.

Quarry -

Mill rock - good.

Mass rock - good

Overburden - Satisfactorily
clean rock being sent to
crushers.

Masonry Placing -

Proportions - Batches run
4-6' shy on $1\frac{1}{2}$ " rock acct.
shortage of this size. Others
O.K.

Duration - good.

Mass Rock - Good where
possible to place.

Bonding - Good.

Wetness - Good.

Latence - Not obj.

JUN 13 1919

In San Diego on Official
Business

JUN 14 1919

Excavation - Progress by small crew in cut off trench right abt.

Quarry - Mill rock - Good

Mass rock - "

Overburden - Not bad. Satisfactorily clean rock being sent to crushers.

Masonry Plg.

Proportions - All patches run 10-15 c.f. shy $2\frac{1}{2}$ " acct.

Shortage of this size. Other sizes OK.

Duration - Good.

Wetness - OK.

Latence - OK.

Mass Rock - Only possible to place small amount.

JUN 14 1919

Excavation - Progress left abt. on class 4 material. Progress on drilling for spillway excar.

Quarry - Mill rock - scarce.

Mass rock - No requirement

Overburden - Bad, being wasted. Satisfactorily clean rock being sent to crushers.

Masonry Placing - Patches run $2\frac{1}{4}$ ' shy on $2\frac{1}{2}$ " rock acct. Shortage of this size.

Duration - Good.

Wetness - Slightly too wet. Mix ordered dried up.

Mass Rock - impossible to place any.

Latence - Latence water ordered bailed out.

Bonding - Good.

Sand Washing & Hauling - Prog. to meet masonry requirements.

Grout washing - Progress to meet stripping of forms

Housekeeping - good.

JUN 15 1919

Excavation - Progress class 4 material left abutment.

Sand Washing & Hauling - Progress to meet masonry requirements. Quality good.

Quarry -

Mill rock - Good.

Mass " - "

• Drerburden - Bad - Being shored into skips & wasted. Satisfactorily clean rock being sent to crushers.

Placing -

Proportions - Good

Duration - Good.

Wetness - O.K.

Leakage - Not objectionable.

Mass Rock - Good.

Grout Washing - Progress

Housekeeping - Good.

JUN 16 1919

Excavation- Progress on cut off trench left abt.

Sand Washing & Hauling- Bin at mixer full - no sand washed or hauled.

Quarry- Mill rock- Good.

Mass rock- Several mass rock rejected acct. not conforming to specifications.

Overburden- Quarry foreman's attention called to some men not forking rock correctly.

Masonry Placing-

Proportions- Running shy on 2 1/2" rock until corrected.

Duration- Some batches turned out in less than min time.

Mass-Rock- Good

Wetness- Slightly too wet.

Supt. inst. to dry up mix.

Laitence- Laitence water ordered bailed out.

JUN 16 1919

Excavation- Progress on cut off trench left abt. & class & drilling & shooting spillway.

Sand Washing & Hauling- Progress to meet masonry requirements.

Quality- good.

Quarry Mill rock- scarce

Mass Rock- no requirement.

Overburden- Bad- being shored into skips & wasted. Satisfactorily clean rock going to mill.

Masonry Placing- Proportions- good. Using 3-4 c.f. excess of sand until corrected.

Duration- Good.

Mass rock- not possible to place any.

Wetness- good

Laitence- None

Groot washing- Progress

Bonding- good.

JUN 17 1919

Excavation - Progress cut off trench left abt.

Sand Washing & Hauling - No sand washed or hauled.

Quarry - Mill rock - good.

Mass Rock - Several mass rock rejected acct. not conforming to specifications. Larger rock ordered sent to dam.

Overburden - Bad - Being wasted. Quarry foremen told to instruct men in correct use of tools. Satisfactorily clean rock going to mill.

^{Has. Plac} Proportions - Running 3-4' over on dust & corresponding amt less on sand acct. overplus on dust. Other sizes good.

Wetness - Slightly too wet.
Laitence - Not bad.

Duration - good

Mass rock - good - small in size until corrected.

JUN 17 1919

Progress - on cut off trench excav. left abt.

Sand Washing & Hauling - Progress to meet masonry requirements.

Quality - good.

Quarry - Mill rock - plenty.

Mass rock - good but very little requirement.

Overburden - Bad, being wasted. Fairly clean rock being sent to crusher.

Masonry Placing -

Proportions - good.

Duration in mixer - good.

Wetness - Slightly too wet.

Laitence - Not objectionable.

Mass rock - not possible

to place any.

Grout washing - progress.

Housekeeping - OK

JUNE 18

Excavation - No progress
Sand Washing - Bin at conc. plant filled. No sand hauled / bin washed. Quality good.

Quarry - Mill rock OK
Mass " - Good

Overburden - being wasted. Satisfactory clean rock being sent to crusher.

Masonry Plac -

Proportions - Running slightly shy on $2\frac{1}{2}$ until corrected. Running 4-5 ct. sh on sand and 4-5 ct. over on dust acct. shortage overplus of dust.

Duration - good.

Mass rock - OK. where possible to place.

Laitence - Bad on old masonry near face of dam. Ordered cleaned off before allowed to start plac. masonry.

Bonding - Started concreting in expansion well with $1\frac{1}{2}$ of water in it. Crew stopped & ordered to bail out all water bet - starting.

Wetness - OK

JUNE - 18

Excavation - Prog. on cut off trench left abt. & moving steam shovel into position for spillway excar. also prog drilling & shooting spill ex holes - Sand Washing & Hauling - Progress to meet masonry requirements.

Quarry - Mill rock - OK

Mass rock - good

Overburden - Being wasted, Fairly clean rock going to mill.

Proportions - Good except through misunderstanding with supt. crew using $1\frac{1}{2}$ - 5 mix until corrected for sec. in right abt. bet - 485-490.

Duration - good

Wetness - good

Laitence - OK.

Grout Wash - OK Progress.

Mass rock - One mass rock placed within 6" of D.S. form in spill. sec. Supt. notified of this bot, nothing done. Mass rock shy. Supt. notified. nothing done.

Housekeeping - OK

Night

JUN 18 1919

Excavation - Progress for half shift on finishing cut off trench left abt.

Sand Washing & Hauling - No sand washed or hauled acct. bin at plant full.

Quarry

Mill rock - good

Mass rock - "

Overburden - being wasted, Satisfactorily clean rock being sent to crushers.

Masonry Placing -

Proportions - Good.

Duration - Good.

Wetness - Slightly too wet.

Supt. inst. to use less water

Bonding - good.

Latence - Not objectionable.

JUN 19 1919

Excavation - Excavation completed left abt. Progress in drilling blast holes spillway excav. Steam shovel washing out boiler

Sand Washing & Hauling - Progress to meet masonry requirements. Quality - good.

Quarry - Mill rock - good

Mass rock - good

Overburden - better - some being wasted. Satisfactorily clean rock being sent to mill.

Proportions - Running batches 3-4 cf. over on $\frac{3}{4}$ + same amt. shy on $\frac{1}{2}$ " acct. over plus of $\frac{3}{4}$.

Duration - Good.

Wetness - OK.

Latence - OK.

Mass Rock - good.

Grouit Washing - Good Progress.

Howekeeping - good.

Night.

JUN 20 1919

Excavation - Excavation left
abt. completed by day shift

Sand Washing & Hauling - No progress
bin at concreting plant full.

Quarry - Mill rock - Plenty but
very short crew.

Mass rock - good.

Overburden - Not bqd. Satisfactorily
clean rock being sent to crushers.

Masonry Placing -

All batches ran 8-12 c. f. sh y
of 2 1/2" rock acct. bins practically
empty of this size. Slight excess
of 1 1/2" & 3/4" used.

Duration - good.

Wetness - "

Bonding - "

Laitence - Not objectionable

Mass rock - good where
possible to place.

JUN 20 1919

Excavation - Progress by steam
shovel, and in drilling blast holes,
spillway weir lip excavation.

Sand Washing & Hauling - Progress to
meet masonry requirements. Quality
good.

Quarry - Mill rock - good.

Mass rock - no requirement

Overburden - Some being wasted.
Satisfactorily clean rock being sent
to mill.

Masonry placing.

Proportions - In morning crew pouring
parapet wall using 1-2 1/2-5 mix with coarse
aggregate from 2 1/2" to 3/4". Inspector set
new mix from 1 1/2" - 3/4" without material &
changing materially from 1-2 1/2-5 which
produced much more desirable concrete to
place ground, reinf. steel. In P.M. proportions
normal 1-3 1/4-6 1/2" mix rock sizes from 2 1/2" - 3/4".

Wetness - good

Laitence - OK

Placing - Concrete in parapet wall
not being placed in 6" layers but
dumped in a skip load to a place.
Supt. notified of this & corrected.

GROUT washing - Progress.

Housekeeping - OK

Night

JUN 21 1919

Sand Washing & Hauling - Bin at mixing plant full, no sand washed or hauled.

Quarry - Mill rock good but small crew
Mass rock - good.

Overburden - Not bad. Satisfactorily clean rock being sent to crushers.

Masonry Placing -

Proportions - Batches run with only $\frac{1}{2}$ batch of $2\frac{1}{2}$ " rock until corrected by inspector who insisted that there was plenty of $2\frac{1}{2}$ " rock to run full batches. Other sizes: OK.

Duration - good.

Wetness - "

Latence - not objectionable.

Mass rock - all placed that were economically possible to place.

Bonding - good.

Placing - Superintendent told to instruct foremen to be more careful in spading & tamping against D.S. forms.

JUN 21 1919

Day

Progress on drilling & shooting blast holes in spillway exca.

Prog. by steam shovel also in same

Sand Washing & hauling - Progress to meet masonry requirements -

Quality good.

Quarry - Mill rock - good.

Mass rock - no requirement.

Overburden - being wasted
Satisfactorily clean rock being sent to crushers.

Masonry Placing -

Proportions - good.

Duration - "

Wetness - OK.

Latence - not objectionable.

Mass rock - good.

Grout washing - Prog.

Hoosereeping OK

JUN 22 1919

JUN 22 1919

JUN 23 1919

JUN 23 1919

Day-

Excavation - Progress on drilling & shooting blast holes for spill way weir lip excavation. No progress by steam shovel acct. broke down.

Quarry - Mill rock - Scarce

Mass " - No requirement

Overburden - Being shoveled into skips & wasted. Satisfact - only clean rock being sent to crushers.

Masonry Placing -

• Proportions - good.

Duration in mixer - good.

Netness - good.

Latence - not objectionable.

Placing - good.

Bonding - good.

S. Grout washing - Progress

Sand Washing & Hauling -

Progress to meet masonry requirements. Quality - good

Housekeeping - good.

Night

JUN 24 1919

Excavation - no progress

Sand Washing & Hauling - No sand washed or hauled.

Quarry -

Mill rock - good.

Mass " - good.

Overburden - Not bad. Satisfactorily clean rock being sent to crushers.

Masonry Placing -

Proportions - good.

Duration in mixer.

Wetness - O.K.

Mass rock - good where possible to place.

Laitence - Not objectionable.

Bonding - good.

Placing - Insisted to supt. that masonry be mucked out each batch & not heaped in center.

JUN 24 1919

Excavation - Progress in drilling & shooting holes for spillway weir lip excar. No progress by Steam Shore.

Sand Washing & Hauling - Progress to meet masonry requirements. Quality good.

Quarry - Mill rock - good.

Mass " - no requirement.

Overburden - Not bad some being wasted.

Masonry Placing -

Proportions - 1-3-4 $\frac{1}{4}$ mix used on floor, standard mix proportions O.K. on other work.

Duration - good.

Mass rock - not possible to place any.

Bonding - good.

Laitence - Not objectionable.

Wetness - Slightly too wet.

Grout Washing - progress

Housekeeping - O.K.

JUN 25 1919.

Excavation - Progress by hand crew on excavation for spillway lip.

Sand Washing & Hauling - ~~Prog~~ - No sand washed or hauled.

Quarry -

Mill rock - good.

Mass rock - good little requirement.

Overburden - not bad, some being wasted. Satisfactorily clean rock being sent to crushers.

Masonry Placing

Proportions - Batches run slightly shy on 1/2" acct. of shortage of this size.

Duration in Mixer - Good.

Mass rock - All placed that could economically be placed.

Wetness - Top wet. Supt. instructed to dry up mix.

Bonding - good.

Placing - good.

JUN 25 1919

Excavation - Progress in drilling blast holes for spillway Excavation. Steam shovel idle on repairs.

Sand Washing & Hauling - Progress to meet masonry requirements. Qual. Good.

Quarry -

Mill rock - good

Mass rock - no requirement.

Overburden - Some being wasted. Satisfactorily clean rock being sent to crushers.

Masonry Placing

Proportions - Dam roadway floor, run 1-2 1/2-4. Proportions good.

Wetness - Too wet. Supt. inst. to dry up mix.

Lattice - Not objectionable.

Supt. instructed to keep men off roadway finished floor which was not yet 24 hrs. old.

Bonding - Good.

Mass rock - not possible to place any.

Housekeeping OK.

JUN 26 1919

Excavation - Progress by hand crew on spillway excav.

Sand Washing & Hauling - No sand washed or hauled - Bin at concreting plant full.

Quarry -

Mill rock - good

Mass rock - "

Overburden - Some being wasted.

Satisfactorily clean rock being sent to crushers.

Masonry Placing -

Proportions - good.

Duration - "

Wetness - OK.

Bonding - good.

Placing - OK.

JUN 26 1919

Excavation - Progress by steam shored, & drilling spillway lip excavation.

Sand Washing & Hauling - Progress to fill bin at concreting plant.

Quarry - Mill rock - good no requirement bins full.

Mass rock - No requirement.

Overburden - Being shored into skips & wasted.

Masonry Placing -

No masonry placed.

Grout washing good progress.

Housekeeping - OK.

(N)

JUN 27 1919

Excavation - Progress by hand crew on spillway class 4 excavation.

Quarry - Mill rock - good

Mass rock - "

Overburden - Being shored into skips & wasted. Satisfactorily clean rock being sent to mill

Masonry Plac -

Proportions Good

Duration - "

Wetness - "

Latence - Not objectionable.

Mass rock - All placed that possible to place.

Bonding - good.

Placing - OK.

JUN 27 1919

Excavation - Progress by hand crew on spillway floor excar. Prog. in drilling & blasting spillway weir lip excar. Prog. by steam shored in spillway weir lip excar.

Quarry - Mill rock no requirement.

Mass " - " "

Overburden - Being shored into skips & wasted.

No masonry placed.

Grout Washing - progress.

Sand Washing & Hauling - 1 bin sand washed & hauled.

Housekeeping - OK

JUN 28 1919

Excavation - Progress by hand crew in spillway floor excav.

Sand Washing & Hauling - No sand washed or hauled. Bin at plant full.

Quarry - Mill rock - good.

Mass " - "

Overburden - Some being wasted.

Crushers down all night changing concaves in # 8.

Masonry Placing

Proportions - good.

Duration - good.

Mass rock - good.

Laitence - Not obj.

Bonding - OK

Placing - good.

JUN 28 1919

Excavation - Progress by hand crew on excavation for floor of spillway channel. Progress by drilling & shooting by steam shovel & teams for spillway weir lip excav.

Sand Washing & hauling - Progress to meet masonry requirements. Quality - good.

Quarry - Mill rock - Plenty no requirement.

Mass rock - OK. no requirement.

Overburden - Some being wasted.

Masonry Placing -

Proportions - Concrete for dam parapet wall mixed 1-2 $\frac{1}{2}$ -3 $\frac{1}{2}$

Duration in mixer - good.

Wetness - Good.

Laitence - OK.

Mass rock - not possible to place any.

Grout washing - progress

House Keeping - Good.

JUN 29 1919

No inspection in San Diego
for evening.

JUN 29 1919

Excavation - Progress by hand
crew on spillway channel floor
excavation - Progress by drilling &
shooting & by steam shovel on
spillway weir lip excavation.
Sand Washing & hauling - No sand
washed or hauled acct. bin at
mixer full.

Quarry - Mill rock - good

Mass rock - "

Overburden - Some being
shoveled into skips & wasted.

Masonry Placing -

Proportions - Good.

Duration - Good

Mass rock - Good in quantity

Some placed closer than min. of 6".
Foreman cautioned about placing rock
closer than 2' to down stream form.

Wetness - OK.

haltence - Not objectionable.

Grout Washing - Progress.

Housekeeping - OK

JUN 30 1919

Excavation - Progress on hand excavation for spillway channel floor.

Quarry - Mill rock - no requirement mill not running.

Mass rock - no requirement not placing masonry.

Masonry - None placed

~~7-16-22~~

1-2 1/2 - 3

JUN 30 1919

Excavation - Progress by hand crew on excavation for spillway channel floor. Progress drilling & shooting & with steam shovel on spillway weir lip excar.

Sand Washing & hauling - Progress to meet masonry requirements. Quality good.

Quarry - Mill rock - good.

Mass " - no requirement.

Overburden - OK. Satisfactorily clean rock going to mill.

Masonry Placing -

Proportions - Using 1-2 1/2 - 3
Concrete for dam roadway floor

Workmanship - Good

Duration - "

Jointing - OK.

Bonding - Good

Mass Rock - None.

GROUT washing - Progress

Placing - Good.

JUL 1-1919

Excavation - Progress by hand crew on excavation for floor spillway channel.

Sand Washing & Hauling - No sand washed or hauled.

Quarry - Mill rock - no requmt.

Mass rock - good.

Overburden - OK

Masonry - Placing -

Proportions - good

Duration - good

Wetness - OK

Laitence - not objectionable.

Mass Rock - not possible to place any.

Bonding - Good,

Placing - Good.

Grout Washing - No progress crew working on finishing roadway floor all day.

Housekeeping - Good.

(Changing concaves on #4 all morning & part of P.M.)

50

JUL 1-1919

Excavation - Progress for half a shift on excavation for spillway floor

Quarry - Mill rock - plenty only run 1/2 shift.

Mass rock - good.

Overburden - OK. Good clean rock being sent to crushers.

Masonry Placing -

Proportions - good

Duration - Good

JUL 2-1919

Excavation - Progress for $\frac{1}{2}$ shift
excavation spillway channel floor
Sand Washing & Hauling - No sand
washed or hauled.

Quarry - Mill rock - plenty only
run $\frac{1}{2}$ shift.

Mass rock - good.

Overburden - not bad. Satis-
factorily clean rock going to mill

Masonry Placing - Proportions
good.

Duration - good.

Wetness - good

Laitence - not objectionable.

Mass rock - good.

Bonding - good.

Placing - good.

JUL 2-1919

Excavation - Progress Drilling & Shooting
& excavating by steam shovel for
spillway weir lip.

Sand Washing & Hauling - Progress to
meet masonry requirements - Quality
good.

Quarry - Mill rock - good.

Mass " - "

Overburden - None being wasted

Good clean rock being sent to
mill.

Masonry Placing -

Proportions - Good. Slightly
richer mix used when pouring
between drainage tunnel & face of
dam.

Duration - good.

Mass Rock - good.

Laitence - not objectionable.

Placing - good

Bonding - good.

Housekeeping - good.

JUL 3 - 1919

Excavation - Progress on Excav.
for spillway Channel floor.

Sand Washing & Hauling - No sand
washed or hauled.

Quarry - Millrock - no requirement

Mass rock - Several mass
rock ~~not~~ rejected acct. not
conforming to specifications.

Overburden - ———

Masonry Placing -

Proportions - Good

Duration - Good.

Wetness - Slightly too wet

Latence - not objectionable.

Mass rock - good.

Banding - good.

Placing - Good.

JUL 3 - 1919

Excavation - Progress in drilling, blasting
& excavating by steam shovel for
spillway weir lip.

Sand Washing & Hauling - Progress to meet
masonry requirements. Quality - good.

Quarry - Millrock - Plenty

Mass rock - good no requirement /
Overburden - O.K. Satisfactorily

clean rock being sent to crushers.

Masonry Placing - Conc. in left end
of spillway section 12-30-3.30.

Proportions - good

Duration - Good.

Wetness - Good

Latence - not objectionable.

Mass rock - not possible to place any

Grout Washing - Progress but behind

Banding - good

JUL 4 - 1919

JUL 4 - 1919

JUL 5 - 1919

JUL 5 - 1919

JUL 6 - 1919

JUL 6 - 1919

JUL 7 - 1919

Day - JUL 7 - 1919

Excavation - Progress on excar. for spillway weir lip. Progress on excavation for ^{extension of} parapet wall left abt.

Sand Washing & Hauling - Progress to fill bin at conc. plant. Quality good.

Quarry - Mill rock OK
Mass rock - good - no require
ment.

Overburden - OK. Satisfactorily clean rock being sent to crushers.

Masonry Placing - No masonry placed.

Grout Washing - Progress but behind. Plaster on parapet wall hair checking badly.

JUL 8 - 1919

Excavation - Progress by teams
& hand crew on excar. for spillway
weir lip also on cut off trench for
spill. channel floor.

Quarry - not operated

Masonry Placing -

Proportions - good

Duration - "

Wetness - "

Laitence - not obj.

Bonding - good

Placing - "

JUL 8 - 1919

Excavation - Progress to completion
of excavation for parapet wall left
abt. Progress on excavation of
spillway weir lips by steam shovel, teams
& hand crew & drilling & blasting

Sand Washing & Hauling - Progress to meet
masonry requirements. Quality - good.

Quarry - Mill rock - good

Mass rock - no requirement

Overburden - not bad. Satis-
factorily clean rock going to mill.

Masonry Placing -

Proportions - Using a 1-2½-4½
mix for spillway lip with no rocks
larger than 1½".

Duration - good

Wetness - slightly too wet ordered
less water used.

Laitence not objectionable.

Grout Washing - Progress but behind.

Mass rock - not possible to place

any -

Bonding - good

Housekeeping - good.

JUL 9 - 1919

Excavation - Progress by hand crew & teams for spillway weir lip excavation.

Quarry - Operated only for mass rock required.

Masonry Placing - Proportions - good.

Duration - good.

Wetness - good.

Placing - good.

Mass rock - not possible to place more than put in.

Laitence - Not objectionable.

JUL 9 - 1919

Excavation - Progress by steam shovel teams & hand crew for excavation for spillway weir lip.

Quarry - Mill rock - Good.

Mass rock - No requirement.

Overburden - Not bad. Satisfactorily clean rock being sent to crushers.

Masonry Placing -

Proportions - good.

Duration - good.

Wetness - good.

Placing - good.

Bonding - good.

Laitence - OK.

Mass Rock - not possible to place any - concreting dam roadway floor left abt.

Sand Washing & Hauling - Progress to meet masonry requirements.

Quality - good.

Housekeeping - good.

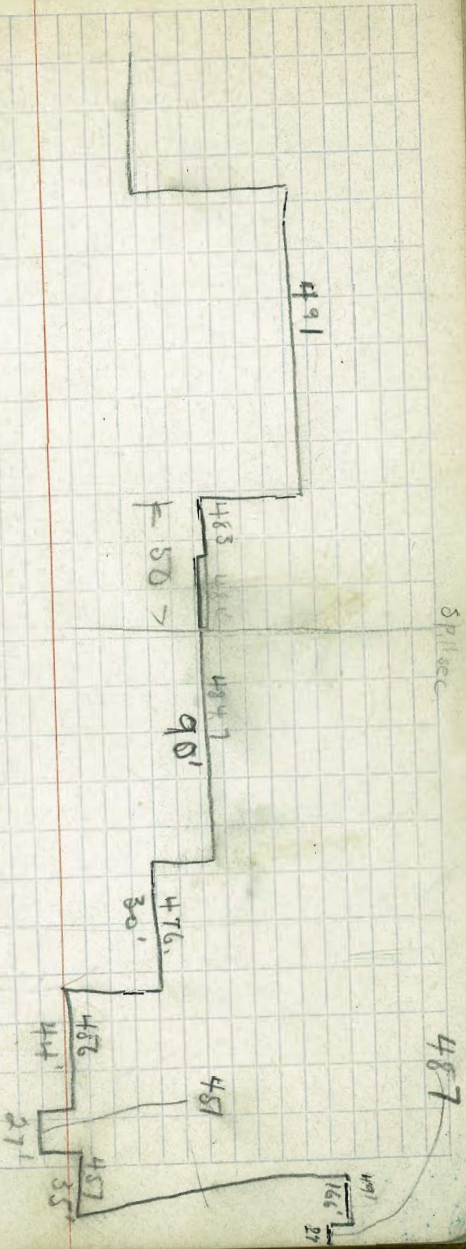
JUL 10 1919

Lumber Est.

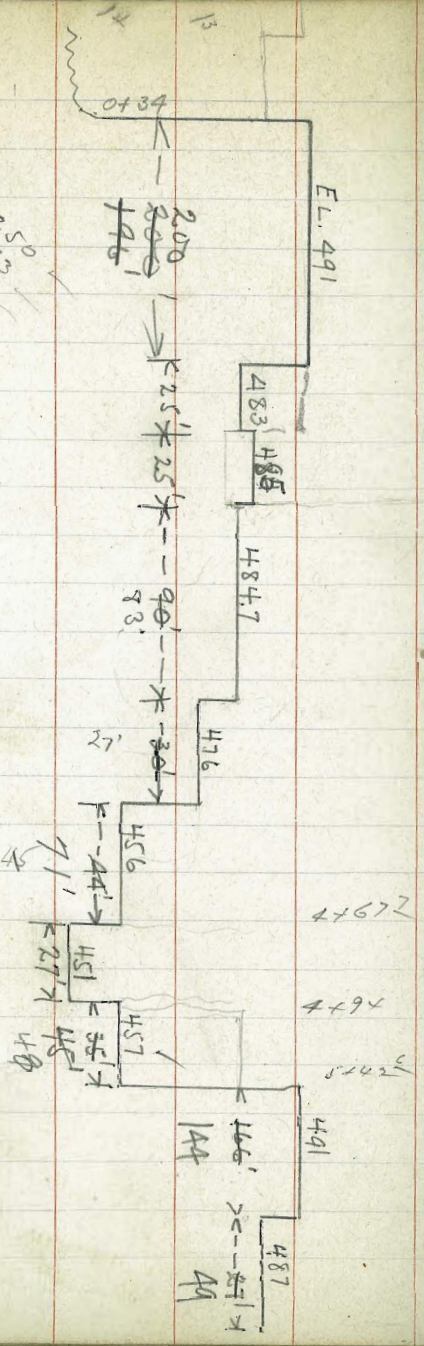
Cableway Towers	16,000'
Cement Wh.	30,000
Sand Bin at Plant.	5,000
Cement shed	1,000
Bins	30,000
Plant	
Sand Plant	5,000'

JUL 10 1919

$$\begin{array}{r} 970 \\ 35 \\ \hline 249 \end{array}$$



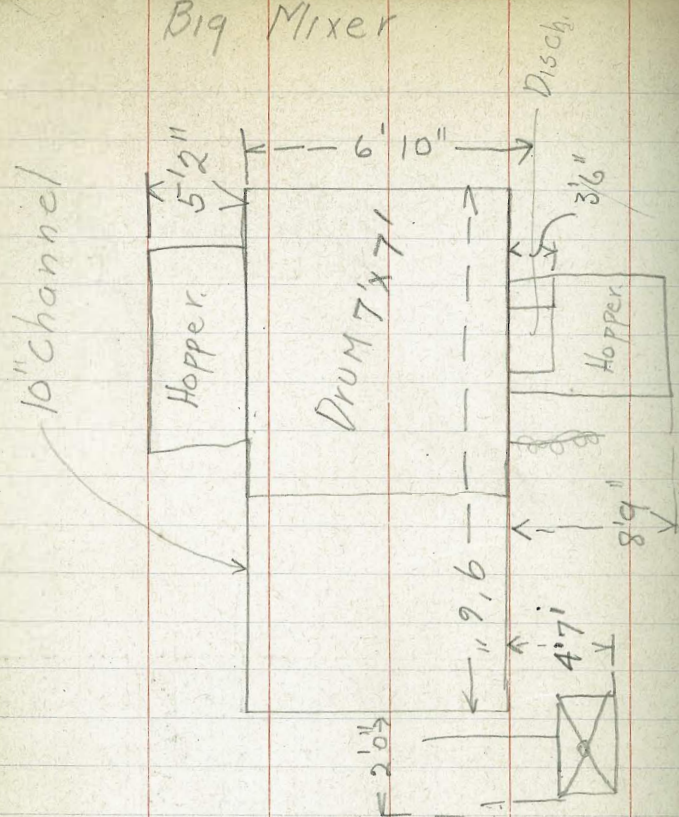
Profile along top of L.O.D. 6/20/19



$$\begin{array}{r} 200 \\ 83 \\ \hline 144 \\ 497 \end{array}$$

$$\begin{array}{r} 200 \\ 83 \\ \hline 144 \\ 497 \end{array}$$

Big Mixer



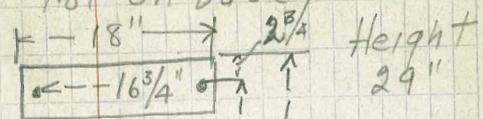
Overall height top
water tank to bed 12'10"

49"
12"
60"

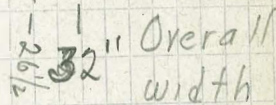
Big Mixer Motor

F.M. 5916

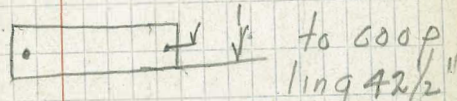
Motor Not on base



Height
29"



Overall
width



to coupling
42 1/2"

to motor

26 1/2"

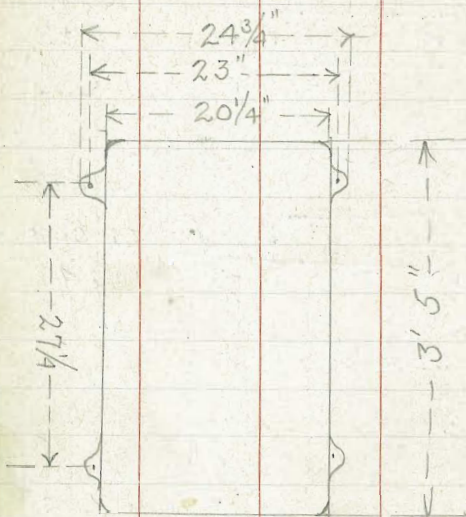
Byron Jackson - Imp. stage 6" suction
6" discharge sand pump. Pump
on 7" I beam base 6' x 2' 3 5/8"

Shaft 3/8" + about 6' long

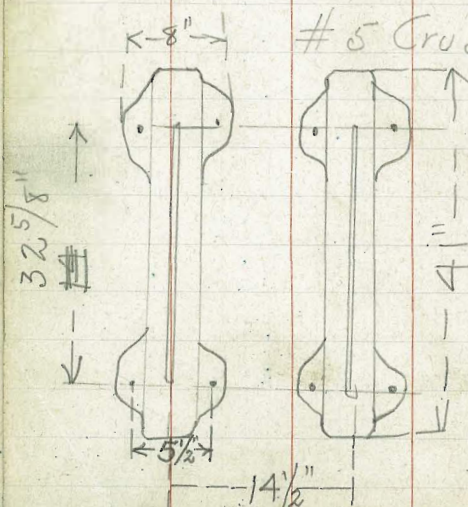
2 pedestal high speed bearings 2' 7" to center

3/4" keyway 1' long - 18" from end of shaft.

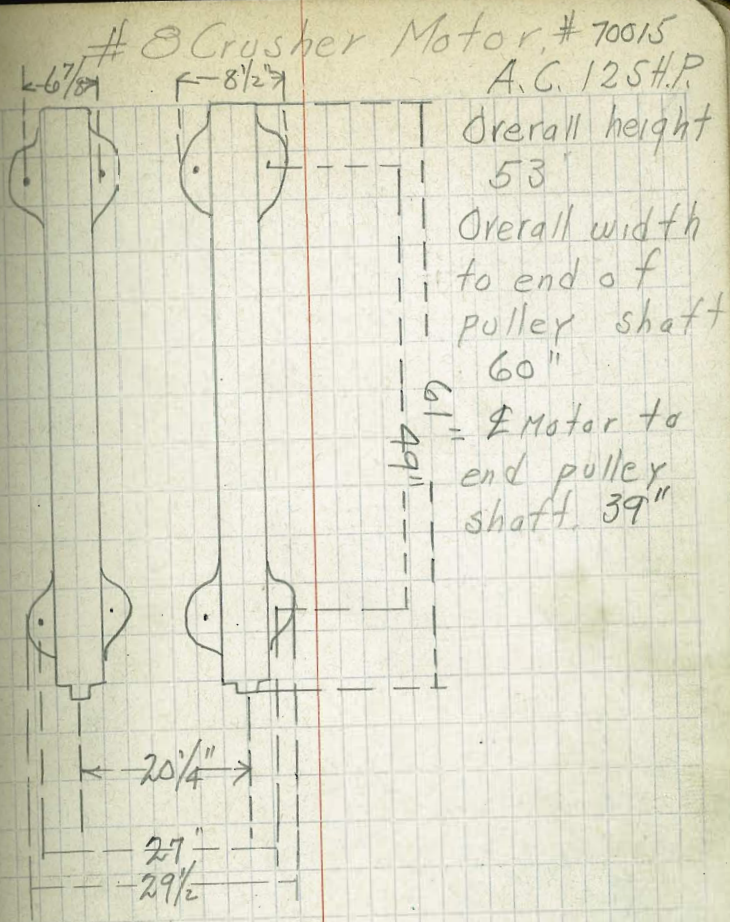
Bed plate #4 Crusher motor
 G.E # 94853
 This motor now driving Clayton Comp



Overall height of motor 34"
 Overall width incl. pulley 44"
 From Φ motor to end pulley shaft 22"

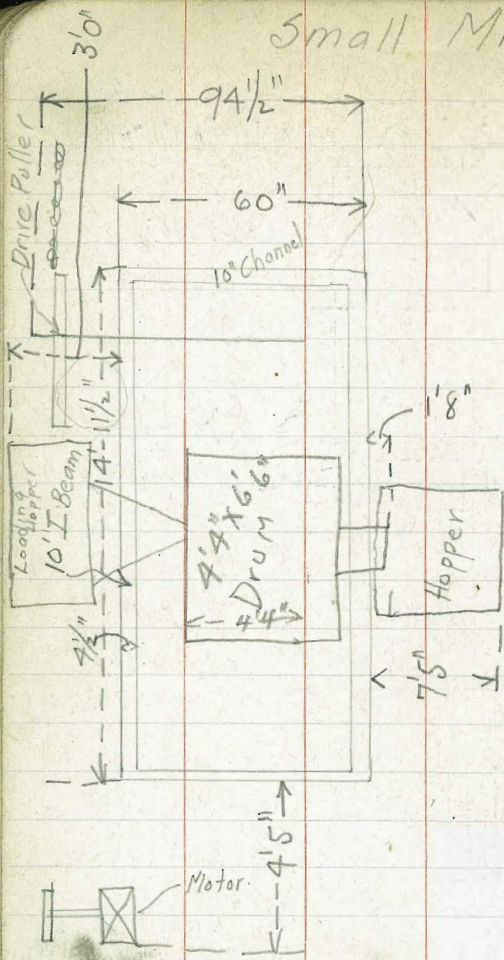


#5 Crusher Motor
 A.G # 70379
 23 1/2" Φ motor to end of pulley shaft
 Overall height 36"
 Overall width not incl. pulley 39 1/2"



#8 Crusher Motor, # 70015
 A.G. 125 H.P.
 Overall height 53"
 Overall width to end of pulley shaft 60"
 Φ Motor to end pulley shaft 39"

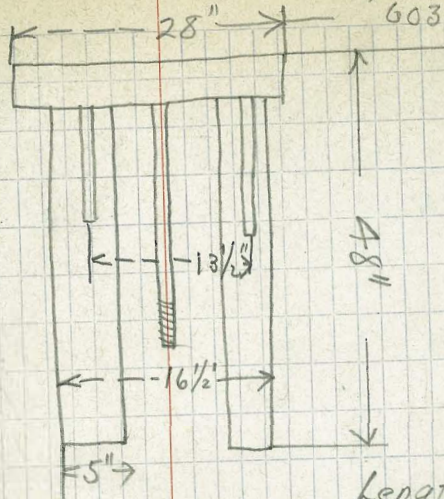
Small Mixer



Overall height from top water tank to bed 11' 5"

Small Mixer Motor

F.M.#
60393



Length Motor
27"

Height - 27"

Overall width to end pulley shaft 36"

Motor to end pulley shaft 1' 10 3/4"

Concrete Proportions

Large Mixer

Cement	7 c.f.
Sand	19 c.f.
2 1/2"	21.6 "
1 1/2"	15.4 "
3/4"	8.4 "
Dust	4.0

Small Mixer

Cement	4 c.f.
Sand	10.9 "
2 1/2"	12.35
1 1/2"	8.8
3/4"	4.8
Dust	2.3

1 1/2" Box - For small mixer. At Bottom of box 10" at 1st from 2x4 on which top of box is nailed or 12" from top of box. At Top of box 12 1/2" from 2x4 at 1st to top of box slope. For big mixer box full to bottom of 2x4 on which top of box is nailed to within one ft. from top end of 2x4 meas on bottom side then level across box

6-14 21

Sand bin for little mixer. Fill on slope of box to within 10" at right angles to top of box or for full length of box or - fill box full from gate to within 9" at end of top part of box

Sand for big mix. bin full to top & stop 16" from end of 2x4 with horizontal strip.

3/4" Box - For little mixer 11" at right angles to slope from bot top of box. For big mixer box full to at right angles to top of box.

Dust Box - 10 1/2" at 1st from top of box for small mixer. For large mixer 2 1/4" at 1st from top of box at end

4 3/4"	"	"	"	"	"	"	1' from end
6 3/4"	"	"	"	"	"	"	2' "

1 1/2" box - small mix - At up end of box 14 1/2" from top of box at down end of box 12" from top of box.

2 1/2" box - large mixer - Box full to top of box then level with top of box for balance

Sills 100'x12x12
 Columns 240-12x12
 Bracing-600'-3x12
 Misc.

Siding
 Head Tow
 Tail

Cement House

120x12 (sides) 2
 40x12 2 ends
 2x4s
 2x8
 2x6
 2x4s

Roof
 Trusses
 Floor (1 thickness)

House at end

37000

1200'
 2880'
 1800'
 200'
 6080
 1500
 7580
 6000
 73580

2880
 960
 1200
 220
 320
 160

5040
 3300
 4800
 18880
 10000
 120
 20000

KEITH'S RAILROAD CURVE TABLES.

Published by KEUFFEL & ESSER CO., New York.

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HOW TO USE KEITH'S TABLES.

EXAMPLE.

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

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

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

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

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

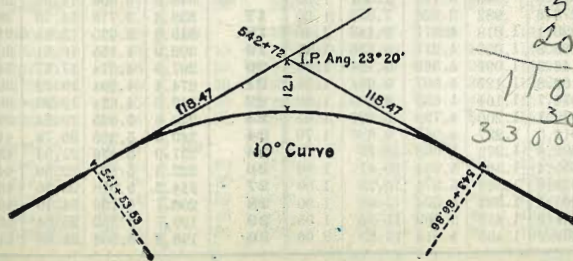
2° 19½' = def. for sta. 543	I. P. = sta.	542+72
4° 49½' = " " " +50	Tan. =	1.18.47
7° 19½' = " " " 543	B. C. = sta.	541+58.53
9° 49½' = " " " +50	L. C. =	2.33.33
11° 40' = " " " 543+	E. C. = sta.	543+86.86
86.86		

100-53.53=46.47x3'(def. for 1 ft. of 10° Cur.)=139.41'
 2° 19½' = def. for sta. 542.

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

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

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



26 40

40'
 50'
 20'
 110
 30
 3300

