

90-10

Fri May 9

Showers - Warm.

Mohr was on job for
first time today. 2 teams
and 4 men, excavating
for west abutment.

Saturday May 10

Showers.

Melene working same
crew as yesterday.

Reminded him that he
had better do something
to protect traffic on State
Rdwy. I ordered caution
signs from the shop,
also had party getting
status in U. M.

Mon. May 12

Shovels.

Digging for center pier
2 carpenters building
runway for concrete.

Pill Shivers arrived on
jet this P.M. and said
that he would begin to
dine on West. Swearing
contractor wants stakes
set along tracks for piling
bents

Tue. May 13

Rail 17,

Contractor building
runway for concrete, and
repairing pumps.

Worlin pulled his
pile driver onto jet this
afternoon. He is subcontractor
for machine. Vulcan # 2
single action steam hammer.

Wed. May 14

Rain - Cold.

Crew of six men setting
up pile drivers.

Melins repairing equipment.
Mac. says to make row of
piling which is shown on
plan as 12" from edge of each
abutment and put in to
18" from edge.

Manned melins about
guarding traffic at
night.

Intend to drive test
piling tomorrow

Thurs. May 15th
Fair - warm.

Moline had 2 men
and team digging out
N.W. footing 4 men repairing
masonry.

Driven 2 test pile today
No. 38 and 53 in east
abutment. On no. 53 we
got a penetration of $\frac{1}{8}$ " per
blow at a depth of 23'
On no 38 we got a penetration
of $\frac{1}{10}$ " per blow at 21.5' depth
Mac and I decided to
order 24' piling for the east
abutment and 20' piling
for the east footing.

54 - 24' piles

38 - 20' "

#2 Vulcan Driver,
3000 lb. weight
32" stroke.

Friday May 16,
Cloudy cold.

Mohins had 4 men
working today.

Donlin's pile driver working
with 7 men set test piles
in center pier, got good
bearing at 22 ft. on one at
location no. 53. Test pile at
location no. 38 went down
and apparently broke through
the gravel drove it 25 feet
then stopped for lunch and I
called Mac. He came out and
we drove the pile down to 29 ft.
getting 5 blows per inch
Mac ordered a 45' pile to be
driven next to it. We then
drove one in center of pier and
got a fall of $\frac{1}{16}$ " per ft. at
a depth of 20'.

Mac wants me to take
samples of sand and gravel
to Highway for testing

Saturday May 17

Fair - Cool

Mohin working four men today. Pike driver working with 7 men drove 45' pile at location #35 of 2 per and went down 22.6' to get a penetration of $\frac{1}{25}$ " per blow. Mac was on the job and ordered it cut off. Mac then ordered 16 thirty foot piles and 56 twenty four ft piles for the rest of the job. Contractor ran out of picking at noon and shut down the pile driver.

I took Mohin over to his plant and he gave me a sample of gravel and one of sand which I took to the U. of M. for testing.

45-
22.6
22.4

Mon. May. 19
Cloudy - cool

Machine working six men
like driving pit down two
bents of temporary piling
and quit at 3:00 P.M. Out
of files.

Told both foremen to be
sure to report affidavits
of readiness ready for me
tomorrow.

Tue May 20.
Fair - Hot.

Pile drivers not working
to day because they ran
out of piling.

Mohr's working 7 men
and 1 team - placing
temporary piling and
excavating east abutment.

Wed May 21
Very hot.

Mohr working 9 men
and 1 team excavating
for west abutment
and setting up mixer
No piling - carload
supplies to be in at
9 A.M. tomorrow.

Mohr asked about hauling
sand and gravel, told
him to wait for test
results.

Thurs. May 22, 1930

Cloudy cool

Crew of mine men
working for Mohr.

Carload of piling delivered
today all Spruce Pine.

Pile driving crew finished
temporary piling and drove
test piling at west abutment
piling on south end of
abutment went down 15' and
the one on north end
23.5'. we will drive a
thirty foot pile next to it
tomorrow. as per Mac's orders

Fri May 23

Fair - Cool.

Drove twenty ft. piling
in west abutment
no 1 to 18 and 45 to 54
ran out of 20' piling at
2:30 P.M.

Contractor wanted to
cut 30' piles in half and
use each end. I would
not allow this.

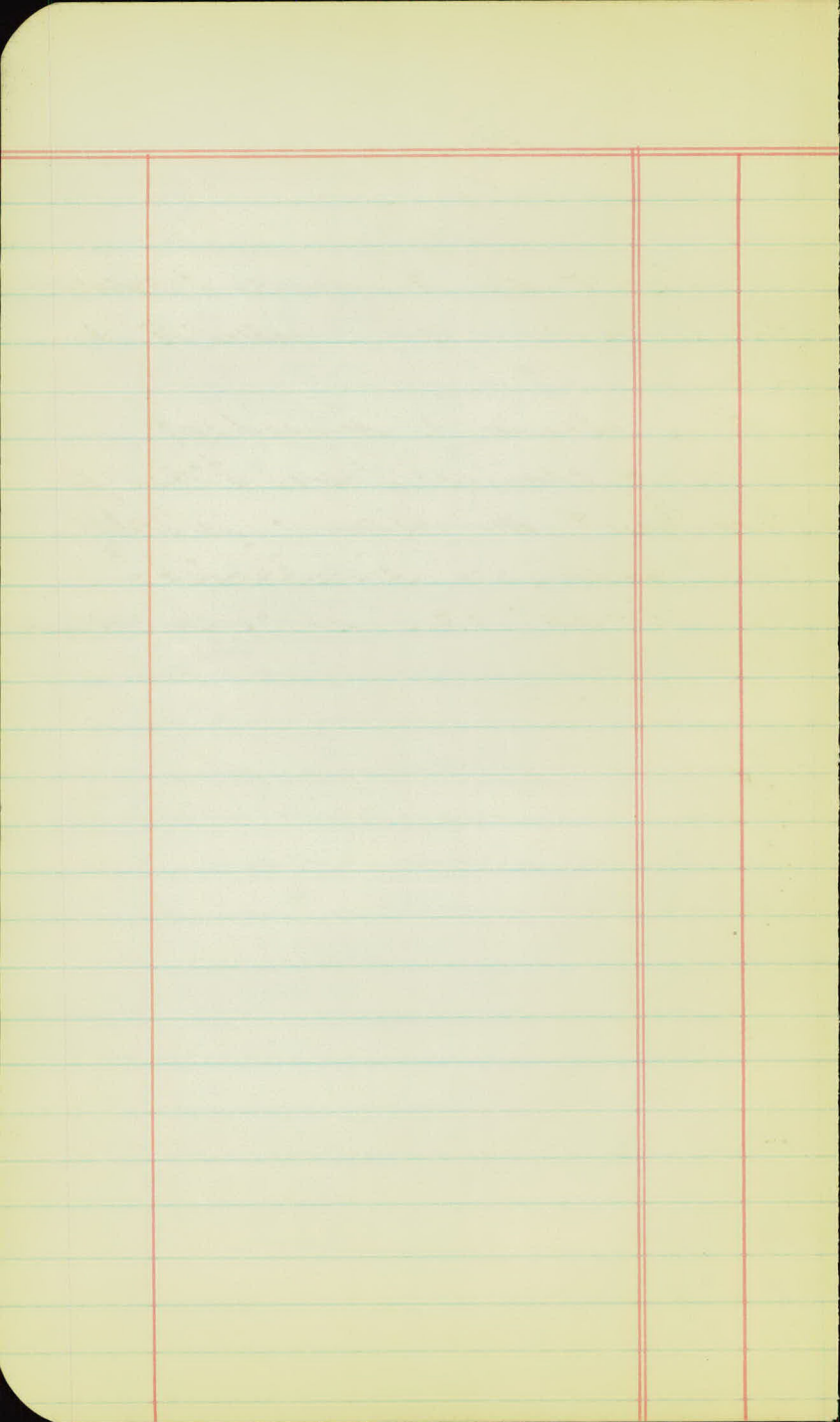
I told contractor to
figure out a way to
drive center piling with out
blocking red.

Sat. May 24,

Fair - Cool.

Started to drive piling
in center pier above from
south end to center.

First three piles drove
down to ground so I had
a 30' test pile put down.
Makin working a crew of
7 men, excavating east
abutment and building
west coffer dam.



Mon May 26
Fair & Cool

Crew of 9 men filling
cofferdam for west
abutment.

Pile drivers finished
driving center pier. Piling
did not go down very
far, average penetration
of about 13.5 feet. Each
pile drove very hard
from a depth of about 6'
to last blow.

Mac on job and wants
a 2' thick wall under west
abutment where it is in
water.

Tue May 27.

Fair weather.
Makin working full
crew on excavation of
center pier.

Pile driver drove 10
20 ft piles in west
abutment, but had to quit
at 10:00 A.M. because we
ran out of 20' piles.

Wed May 28

Fair - cool

Bridge crew excavating
center pier.

Pipe drivers not
on job. no piling.

Had crane come over
and establish 2 new
benches, the others having
been destroyed by
pile driver. found skew
of pavement to be 862.90
which is the skew. I have
been using for cut off.

Thur. May 29

Fair - cool

No pile driving.
Two carloads of filling
delivered this morning
and they expect to drive
tomorrow.

Helped Mohin lay
out the form patterns for
the arches.

Circumscribed radii checked
about $\frac{1}{2}$ " low uniformly.
Mohin seemed to think
that they could be installed
to proper grade and alignment
and I told him that would
be what we would expect.

Fri May 30 -

On job at 7:00 A.M.
but pile drivers did
not show up.

Left at 10:00 AM to go
to East Ave.

Sat May 31.

Drove fishing in
west abutment.

Not getting much penetration
but fished above very
hard.

Moline's crew laid off

Sun. June 1

Fair & warm

Finished drying filling
in west abutment.

Clear Mohr on job
but his crew is still off
waiting for the pile drivers
to get out of the way.

Went home at 2:50
P.M. and drew up detail
of special wall under
west abutment.

Mon. June 2

Fair - hot

Stopped at office on
way out and showed
Mac the detail of wall
He told me to leave
out the north end

Wed. June 3.

Water building form
for west abutment
Bell always working
in east abutment

I reported on job but
had to come home and
go to bed very sick
Dick person suspecting
piling

Wed June 9

Labours

at home all day

in bed sick.

Mother working on
fours

His drawers finished
today.

Thu June 5th

Monday - warm
Back on job today and
started checking ponds
found that #1 was 13"
long on south end.
Mac came out and we
dug out the old hut which
had been covered by
Mehie's crew.

We found that Mehie
had used wrong stake and
he agreed to remove end
of floor and make it
perfect.

Fri. June 6
Cloudy - cool

Arrived on job at 7:00
A.M. Mohr had half of
his crew changing west
abutment form and the other
half starting to construct
form for center pier.

Crane came out and I
helped him to set additional
subs.

Resumed checking of west
abut. form and found that
top elev. was 6" low.

Mec came out and ordered
contractor to change it.

Mec said the mix for the
west abut will be as follows

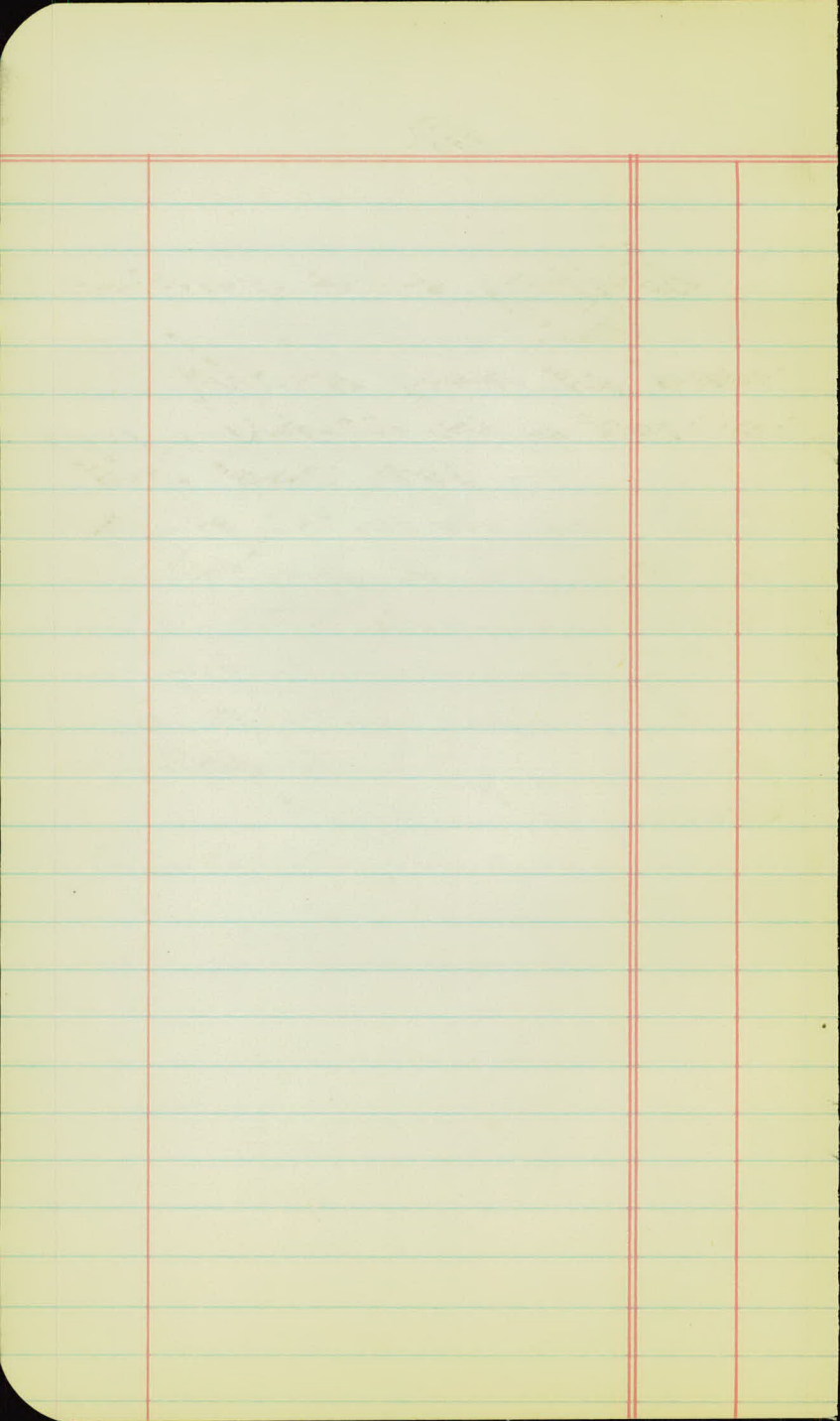
Con. 2 Sand 5.2 Stone 8
This is a 1-2-4 mix
allowing 30% on the sand.

Sat June 7
Fair - Cool

Poured west abutment
today. Worked 22 min a
total of $12\frac{1}{2}$ hrs.

Ran behind a total of
74 sax of cement.

Using a mix of 2-5.2-8
Only 1 delay of 20 minutes
account of broken pump



Mon. June 9
Fair - hot.

Stripping forms from
west abut.

Found it very badly
focketed with rock.

Mac on job and told
me to test the rock for size
also told me to proportion
aggregates as follows

2-5.2-7

Took sample of rock to
shop and got the following
results.

Passing	1 1/2"	screen	100%
"	3/4"	"	53%
"	1/4"	"	3%
"	1/8"	"	1%

Mac said this was O.K.,
so I gave contractor permission
to continue hauling rock.

Tue June 10

Crew of men building
forms for center pier
and west wings.

Was on job all day
and went over forms as
they were built.

Wed June 11

Had a small
creek building form for
center pier.
Made a test cylinder

Thur. June 12

Poured west wings
today.

Also had a force
working on joints for
center pier

Fri June 13

Showers.

Worked from 4 AM
until 6:30 P.M. pouring
auto-pier.

Weather was very bad
on account of the heavy
showers in the afternoon
very hard to keep a
uniform mix of wet
aggregate.

Got 73 sacks of cement.

Sat June 14
Nat.

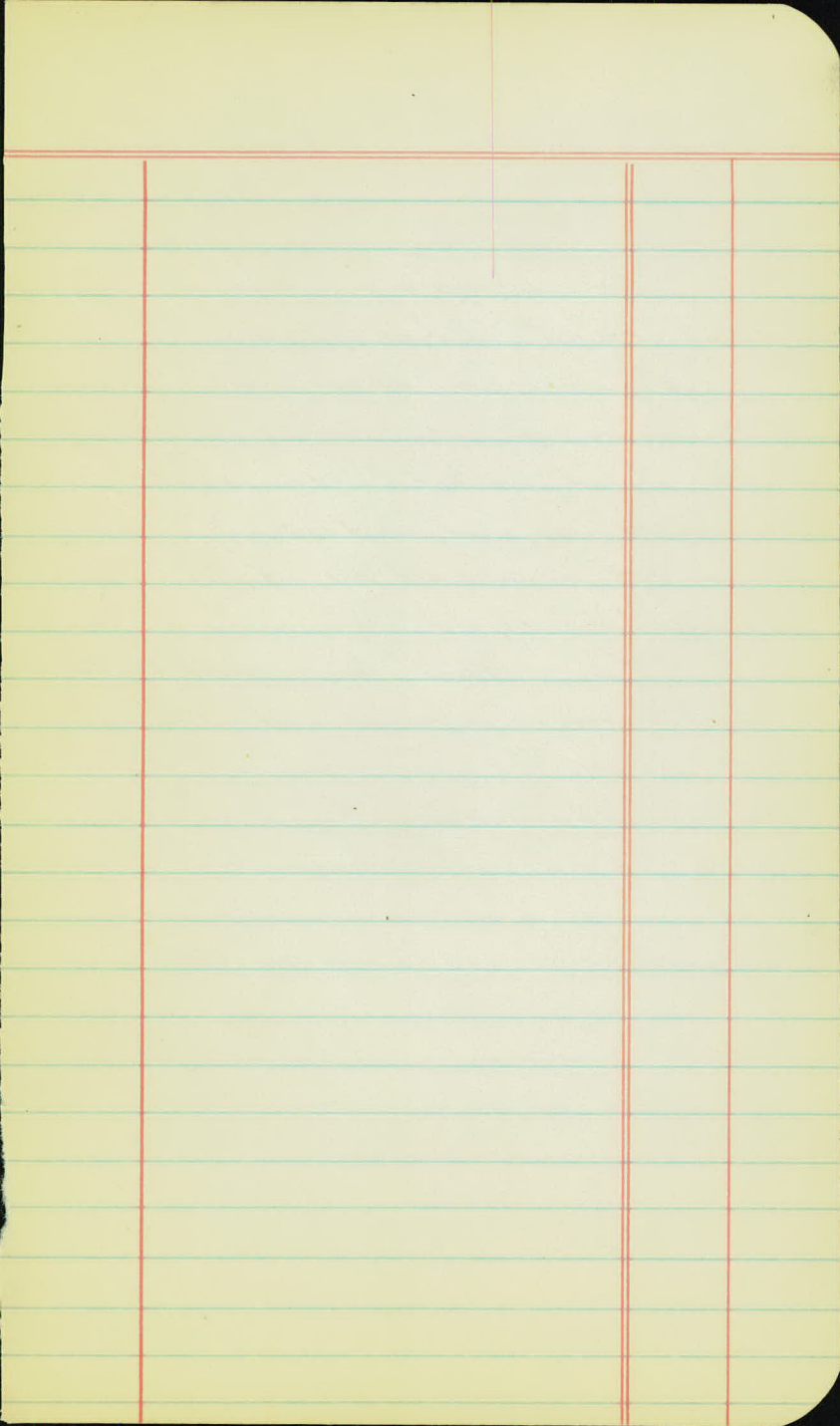
crew working on form
for east abutment.

I checked form in the
A.M. and found that shell
had been built too high.
whether it changed.

checked again in P.M. and
found it O.K.

Mac cut this morning
and proportioned the mix
as follows

Cement 2 sand 4.8 - Rock 7



Monday June 16
Shelburne.

Poured the east
abutment today, worked
from 5 A.M. until 5:45
P.M.

Dick Persons reported to
job this morning and
will be on hand as
mat'l checker and after
Mac on job today and
said that we could run
conduit up thru wall, we
having forgotten to place
it in abutment.

Contractor did not
relish the idea of a mat'l
checker.

Tue June 17

Finished building forms
for east footings label
started to pour them at
11:30 A.M.

Had to change form
slightly $\frac{3}{4}$ of striking
location, all change added
0.71 cu. yds to concrete
volume

Req. 107 sac of cement
Used 115 " " "
+ 8

Wed June 18

On job at 2:30 P.M.
after having spent the
morning at home working
on arch ring detail.
Took some measurements
on the concrete of center
pier and found it off.
Went to office and
found my figures by
which I got 75' at the
top of pier were wrong.
Went on job in
evening with Mac and
checked the pier over
again. For our measurements
see field book.

Thurs. June 19

Worked in office most of day trying to get a radius to present center pier, found it to be a hopeless task.

Out to job again with Mac in the evening and took levels on pier.

Fri June 20
Hot.

Crane on job all day setting 3" stakes for setting such floor, also tied in center pier for levels and size.

Mac on job this morning and we had a conference with the McPhail Bros. as to what was to be done. Finally agreed that the only thing to do was to chip off enough concrete to make a uniform 3" and use gravel with screener and bolter.

Oscar wanted the correct elevations at his site and I went to the office to check them. I found them off and corrected them. Graham then checked me.

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Sat June 21

Fair & Hot

Was on job in a.m.
In the p.m. I was sent
by Mac. to the office of
J. P. Wolf, to help design
a new arch, to fit
existing conditions.

Under the supervision
of Mr. Wolf we designed
an arch which will be
46.18' wide and which
according to Mr. Wolf will
fit the conditions.

Sunday June 22
Fair - Hot

Arrived at the office
at 8:00 A.M. and worked
until 1:00 P.M. figuring
elevations on the new
arch.

They were independently
checked by Graham.

Monday June 23

Fair Hot.

On job with Legue's party staking out the inner arch.

Went to office in P.M. to work on filing plan.

Got figures on the concrete walls from Mac. as follows.

Cement	2
Sand	4.8
Rock	6.0

Per. batch.

Tue. June 24

Fair - Warm

Worked in office most
of day on filling plan
Crank's party. In job
all day.

Out working on forms
for west wing walls
and arch rings

Wed. June 25

Fair - warm

Worked in office in
A. M. met Mac on job
at 1:30 P.M. and went
over job with him.

Had a discussion with
Oscar about size of stone
in arch ring facing
stone and it was finally
decided to leave it to
Mr Coates to decide.

Told Oscar to strip forms
on center pier, so as to
get sheeting for arch ring
started at a lower level.

Thurs. June 26
Fast - Warm

Bored west wing wall
to day 64²⁴ cu. yds. and
ran about 19 sax of cement.
Electrician on job to set
conduit in wall. He
wanted to put full box
in outside of masonry, but
Mac said that we should
stick to the plans.

Dick Persons checking
mat'l, and Paul Crane &
party. Lining up 3' joints
on arch for observations.

Friday June 27
Fair & Hot.

Crew of 13 men work
ing on forms for arches.
Paul finished setting grade
points at 3' intervals on
arch.

We found that Miller's
template fit good with
description of S.E. corner.

Told Miller that he
could strip the west wing
walls if he would keep
them supported. We agreed
to do this.

Sat. June 28

Sp. Windy

3 carpenters starting up
the west arch, 10 laborers
building east arch.

MacSon got this morning
and looked over the fit of
the arch at the S.C. where
over canal.

We finally decided to
go ahead as we were not
fit the arch ring stones in
to hide any defect.

Mac gave Oscar permission
to put starting and square
flooring board marks we
rubbed out after removal
of forms. Oscar agreed to
do this.

Mon. June 30

Fair - Warm

Crew working on arch
forms.

I worked in office from
8:00 A.M. - 4:30 P.M. then out
to job, found every thing
O.K.

Tue. July 1

Task Overrun

Worked in office all day and went out to job at 4:30, West arch is shuted up and steel is being placed.

Carpenters working on S. E. wing wall form Oscar tells me that he checked along of west arch and found it about 1" high. I will have survey party on job tomorrow.

Wed July 2

Fair Shot

On job all day today
and had Crane & party
taking lumber on west arch
found that it was off from
1/4" to 2"

Brought the notes in to
go over them with Mac
but did not find him.

2 stone cutters on job
today cutting arch ring
stones, I asked Oscar if
he did not think he was
taking a chance, as this stone
may be rejected, He said
that the stone on hand would
have to be used, as f-stone
was not available.

Southwest wing form was being
built out about the footing, wall
prepared, the length and found
it to be 20' 10 1/2" instead of
21' 0 1/2" as shown on plans

Thurs. July 3

Went over arch form with Mac, and he ordered the form raised in several places near the N.W. corner.

Mr. Coates is coming out Sunday to look over the stone job I had Oscar lay some of the cut Mat'l. up for his inspection.

Survey party on job in P.M. and started to check elevations on west arch.

Had some conversation about the ring stones laying on their natural bed. Inq. decided that they should be cut to fit. Mac said that part of the space could be taken up with mortar.

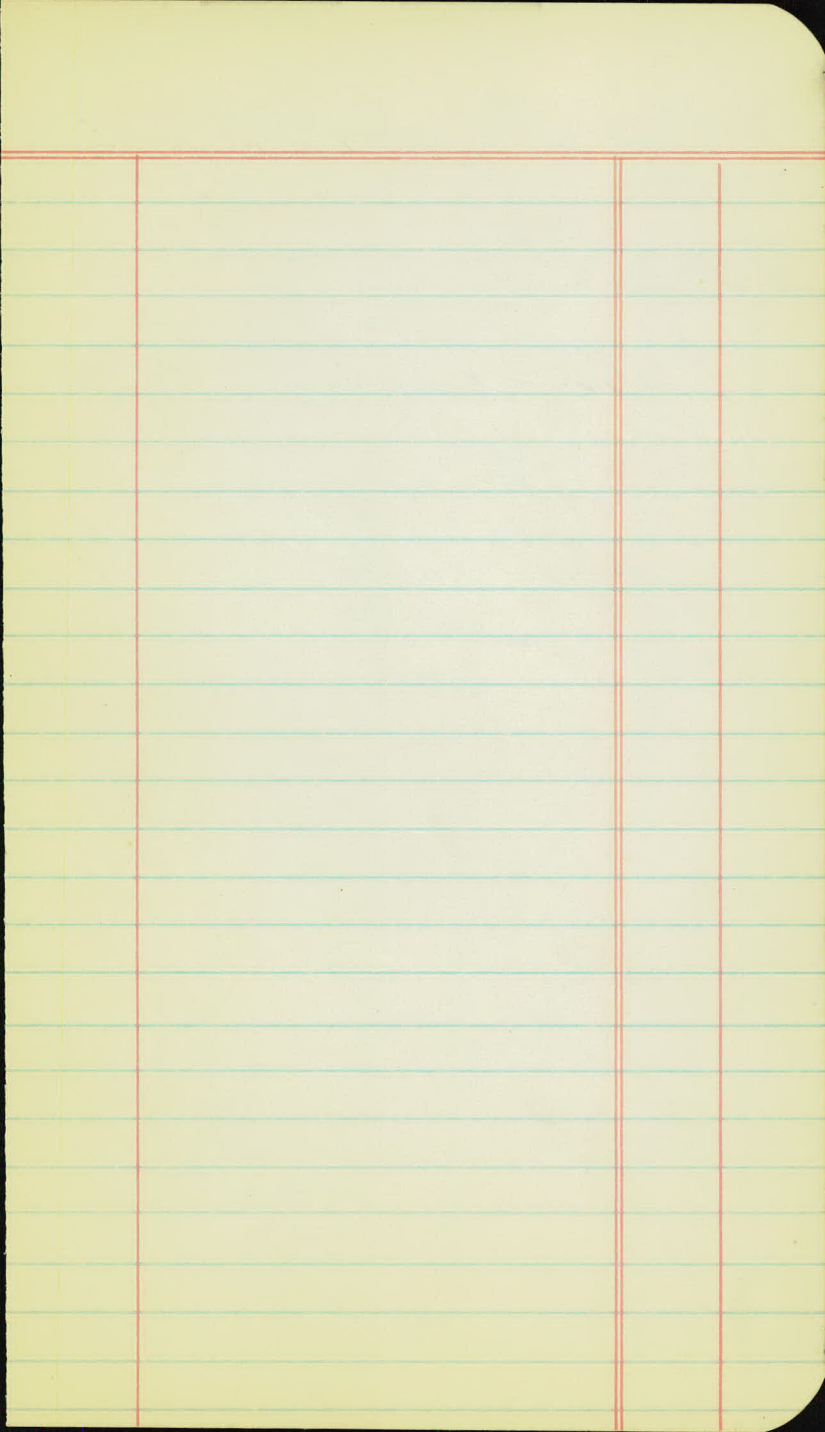
Fri July 4

4th of July

No work

Sat July 5

No work.



Mon. July 7

Figs - Mat.

Four stone cutters on job today cutting arch ring stones. One other mason packing up stone work at S.W. Cor. told masons to move over to north side.

Lucas says that he will use 2' double on top of the arch to cover complete shortage of lap on the steep slope.

Lucas telephoned that if there should be any variation in the arch at the center pier, he would have it rubbed out. Had both arch frames moved slightly to fit elevations.

Fri July 8
Fair very hot.

Worked in office all day
on plans for Proj 30-118.
Went out to Ridge at
4: P.M. with Mr. and
Gary Lucas the slope on
the arch was stone as ordered
by Mr. Lepton.
I checked bulkheads on
arch and told Lucas to
have them up so as to be
vertical to the curve.

5 stone cutters
3 carpenters
8 laborers.

Wed July 9
Very - hot.

Worked in office until
3:00 P.M. Figured the volume
of concrete in each arch
by fours.

Went out to project at
3 P.M. and found every thing
O.K. Men were placing stone
on north face of west
arch.

Carpenters and helpers
building forms for east
wing.

Remainder of crew setting
steel.

Thurs. July 10 - 30

Wash. & Hot.

Worked in office today
making up list for
widening of St. Wabasha
St. River vent.

Went to bridge in A.M.
and checked steel in place.
found that 2 counter joists
on east side of west arch
were about 1" too short, ordered
them fixed. Warned Oscar
about getting arch ring stones
vertical to the arch.

Law quit at 2 P.M. 9/4
of extreme heat, temperature
was about 100° F. at the
bridge site.

Fri. July 11
Fair - hot

Contractor still cutting
and placing ring stones on
west arch

Carpenters putting forms
for east wings.

Having trouble in getting
stone from the quarry last
enough to supply the cutters
Ted Oscar that ring stones
which were too long must
be cut off, and I agreed
to do this

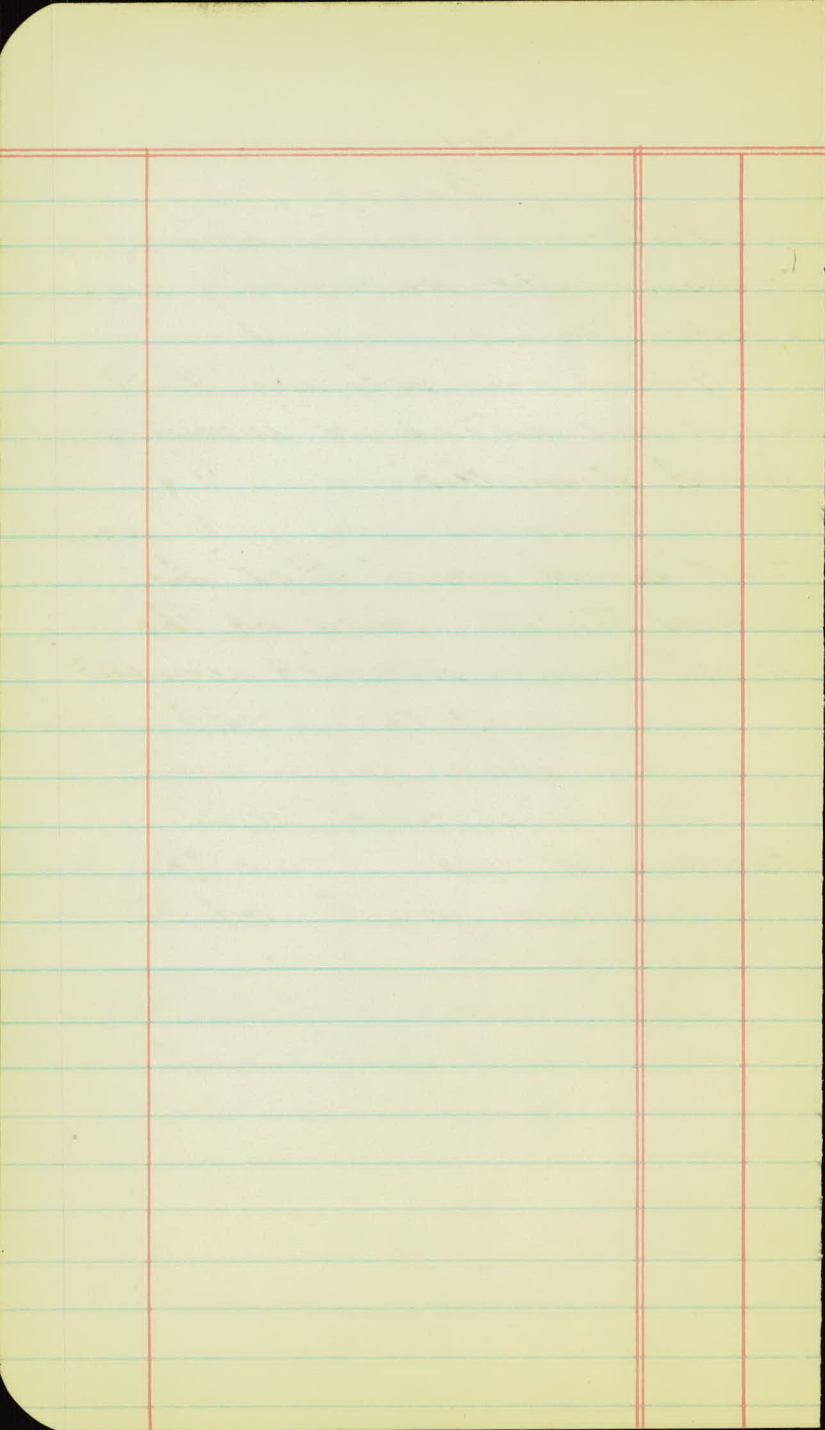
Sat, July 12

Cloudy + Cool

Placing stone on
west arch rings today
and building forms for
east wings.

Everyone but the 3
carpenters quit at noon
because the stone cutters
would not work on
Saturday afternoon.

I reminded Oscar
about the conduit and
suggested that he get the
men out on Monday to
put it in place.



Mon. July 14
Fair - Cool.

Placing ring stones
to day and building east
wing forms.

Crane on job in P.M.
and we checked wing forms
found them O.K.

Mr Coates on job in
P.M. and said that he
liked the No. side of the
west arch. Made several
criticizms of the south side
but this was fixed up.

Mr. Coates and Mac.
decided to use _____ in the
construction joints of the
masonry

Mac reminded us that
the expansion felt, must run
thru the horizontal as well as
the vertical joints and
I see is placing it there
now.

Tue. July 15

Fair Warm

Finished up east wing
forms and also finished
ring stones on W. face
of west arch.

Checked over forms
again and found them
O.K.

Worked in office most
of the day on plans
for Proj 30-MB

Wed July 16

Fair - Hot.

Poured east wings
today 65,94 cu. yds.

Sax/Reg. 416 used 409, -7

Macon job in P.M. and
told me to decrease sand
to 4.25 per batch for next
pour.

Contractor intends to
pour the first pour of
west arch tomorrow
After I had him clean off
the spring line 3 times
he told me that he would
take any variation off
when the forms were
removed by rubbing
this to hold true in case
of concrete gunning under
arch ring stones also.

Finish ring on west
arch today

Thurs July 17
Kerry - Hot

Made pour No 1 today
63.33 yds reg, 405 sap
used 409 sap

I cut the sand down
this morning to the following
amount 2 Sand 4.25 Rock 6.0
per batch.

Finished pouring at
3:00 P.M. and spent remainder
of day building bulkheads
for next pour.

Oscar says that he
will fill the rock expansion
joint with pecoria for 60"
1 1/2" deep.

Friday July 13

Very hot.

Made pour #2 of west arch today. Reg. 298 Sack of cement and were used 337 sack

Poured #6.57 Cu. Yds.

The reason for this overrun is the 1:2 mix grout used on the form.

Mac out today and was not satisfied with work performed yesterday on account of rock pockets at top corner.

Finished pouring at 3:30 P.M. and spent rest of day getting ready for Pour No. 3 tomorrow.

Summited Oscar about 2' down to go into bag pour to make up shortage of sap.

Soak test cylinder #3 in water today

Sat. July 19

Fair - Hot.

The arch ring stone work was completed today.

Made four #3 & 4 of west arch today.

Oscar had no surplus on the job altho. he had said that he would have.

We had 2 laborers and 2 cement finishers on the job to take care of the conc.

Dick Persons left on his vacation today and was replaced as mat'l checker by Harold Wilke.

Finished pouring at 7 P.M.

I gave contract to strict instructions about constantly wetting concrete.

Sunday July 20

Fair Job

One man on job
sprinkling

I was on job twice
to check up on him
and found every thing O.K.

Mon. July 21
Cloudy - Cool

Went to the office
this morning and got
permission from Mac to
increase the sand in the
mix to 4.5.

Mac wants arch ring on
south end of east arch
changed to break up
slump. Oscar is having
this done.

Went out to the bridge
after lunch told Oscar
that he would not have
enough mat's on hand
to pour tomorrow but
he claims he will. Told
him that we would not
allow mixed mat's to be
used.

Thu. July 22

Fair Warm.

Poured sec. #1 of east
arch today 63.35 yds.

Req. 405. sack and 390. sack
- 15.

Mec. on job in A.M.
and ordered extra pieces of
steel placed on S.E. and
N.W. cor. of east arch on
account of req. steel being
too far from the rock.

Stone mason on job
to lay up rest arch
ring stones at S.E. side
of arch to take out sag
I had him do it twice
and I am not satisfied
yet. Will have mec. look
at it tonight.

Increased sand today
mix as follows

Cem. 2 Sand 4.5 Rock 6

Wed July 23

Fair A.M. Showers P.M.

Poured No. 2 of east
arch today, and ran a
+25 sack of cement.

Stone mason on job
and reset the ring stones
to fit the measurements
which I took off of the
detail.

Carpenters started to
build wall forms today.

Wilke on job today as
mat'l. checker.

Thurs. July 24

Fairly hot.

Pour #3 of east arch

We ran over on cement
on account of the steel being
buckled up, we had to
make the slab thicker to
cover it.

Every thing running
smoothly.

Wilke checking mat I.

Fri. July 25

Fair - Hot 100°

Poured the key of east arch this morning and used 2 extra sacks of cement. Key started to crack 45 minutes after being poured. Went back and tamped it with 4x4s until it started to set up.

Then floated it again with a mix of grout. It is O.K.

Sat July 26.

Fair - Very hot
Worked in office all
morning. Went out to
the job at noon and
found crew quitting $\frac{1}{2}$
of the heat.

Crew busy cleaning up
and building wall forms
setting steel etc.

Sunday July 27

Fairly hot

One man keeping
concrete wet.

Monday, July 28

Fair - Cool

Worked in office

most of day on final
est. Proj 30-51

Oscar had 3 stone cutters
on job cutting stone for
rail capping

Carpenters building
wall forms, and setting of
new setting steel, chiseling
up etc.

Gave Oscar permission
to remove uprights on first
bents of West arch.

Tue. July 29
Fast - Cool

In office most of
the day.

Went out to the bridge
at noon, and met Mac
then a misunderstanding
Oscar removed the first
beams on the east arch,
also, but he says they
were loose.

Same crew as yesterday
and same work.

I am leaving for
a weeks vacation tonight
will return on Thur Aug
7th

Thur. Aug 7,

Fair & hot.

Arrived on job at 1:00 P.M. and started checking abey forms for walks. found them narrow in some places and had them corrected using a string line and straightened them as well as possible. Went to office and got a transit which I will use in the morning.

Wac out this after-noon and looked at forms.

Fri Aug 8

Fair & hot.

Poured walls over west
arch today.

I held the crew up
from 7 to 9 o'clock getting
the forms straight with
the transit. Finally got them
straight, but there was
bulging in them which
appeared after they were
full of concrete.

Bill Malone said he
would cut them down
to make them look better.

M.A. Buxton checking
mat'l today

Sat Aug 9

Fair - Cool.

Poured walls over east arch today and had some trouble with the forms having too large openings.

Had Martin put more men on to work the concrete.

Mac was out today and I showed him the bulges in yesterday's pour. He was of the opinion that they could not be rolled out.

M.A. Beaton checking mat'l today.

See book No. 2

Mat'l on hand June 26.

Rock 100 Yds
Sand 50 Yds.
Cement 150 50x

Lumber
West Arch.

$$36 \text{ pcs. } 8'' \times 8'' \times 12' = 2312$$

$$36 \text{ '' } 2'' \times 6'' \times 20' = 720$$

$$40 \text{ '' } 2'' \times 6'' \times 20' = 800$$

$$5 \text{ '' } 6'' \times 6'' \times 52' = 780$$

$$J. 130' \text{ '' } 2\frac{1}{2}'' \times 12'' \times 10' = 3250$$

$$J 52 \text{ '' } 2\frac{1}{2}'' \times 12'' \times 8' = 1040$$

$$8 \text{ '' } 12'' \times 12'' \times 52' = 4992$$

$$40 \text{ '' } 2'' \times 6'' \times 52' = 2080$$

15,974

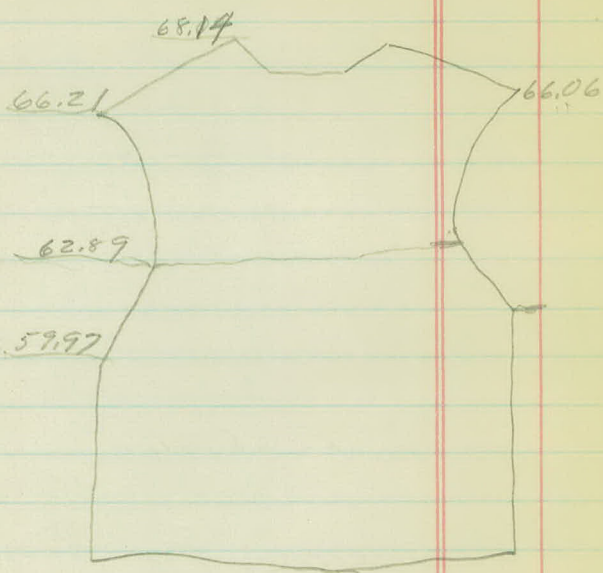
$$\begin{array}{r} = 6 \\ 2 \\ \hline 130 \end{array}$$

48 pcs.	8" X 8" X 10'	= 2568
12 "	8" X 8" X 12'	= 768
75 "	2 1/2" X 12" X 10'	= 3975
30 "	2" X 6" X 20'	= 600
		<hr/>
		7911

$$\begin{array}{r} 862.90 \\ + 4.59 \\ \hline 867.49 \\ + 7.52 \\ \hline 875.01 \end{array}$$

$$\begin{array}{r} 4.60 \\ \hline 62.89 \end{array}$$

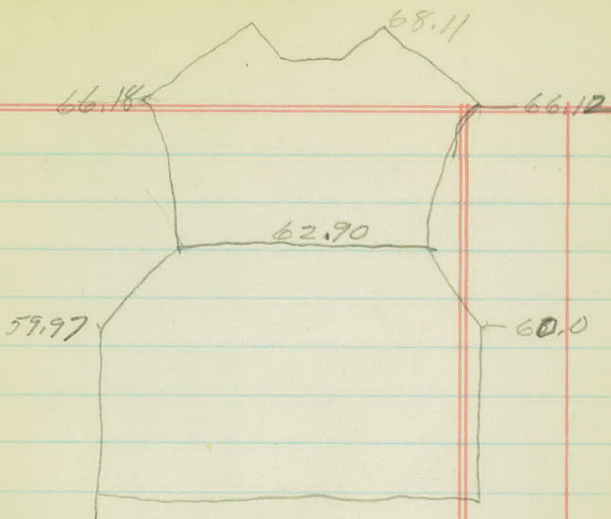
67.



No. Look 50.

$$\begin{array}{r} 66.21 \\ 62.89 \\ \hline 3.32 \end{array}$$

$$\begin{array}{r} 66.06 \\ 62.89 \\ \hline 3.17 \end{array}$$



To. Look No.

$$\begin{array}{r} 862.90 \\ 4.86 \\ \hline 867.76 \\ 7.76 \end{array}$$

62.90

1.60

$$\begin{array}{r} 67.66 \\ 1.60 \\ \hline \end{array}$$

$$\begin{array}{r} 67.76 \\ 35 \\ \hline 68.11 \\ 67.76 \\ 4.86 \\ \hline 2.90 \end{array}$$

$$\begin{array}{r} 67.76 \\ 11.58 \\ \hline 66.18 \end{array}$$

$$\begin{array}{r} 67.76 \\ 4.86 \\ \hline 62.90 \end{array}$$

$$\begin{array}{r} 11.75 \\ 56.5 \\ \hline 68.25 \end{array}$$

Special Wall
Under West Abut.

V.O. # 2

Concrete 14.70 C.V. $\frac{2.5}{1.7}$
Excavation
Sheeting

$\frac{2.5}{2.0}$ - 11

$\frac{2.5}{2.0}$ - 10

$\frac{2.5}{1.7}$ - 15

$\frac{2.3}{1.7}$ - 20

$\frac{2.3}{1.8}$ - 25

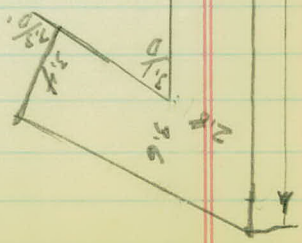
$\frac{2.3}{2.2}$ - 30

$\frac{2.3}{2.8}$ - 35

$\frac{2.3}{2.9}$ 40

- 45

52' 8 1/2"





Standard Memorandum Book

Ruled \$ and Cts.	Ruled Faint	Ruled \$ and Cts. Indexed Through	Size	No. of Leaves
6310	6311	6310 $\frac{1}{2}$	5 $\frac{7}{8}$ x 3 $\frac{5}{8}$	48
6312	6313	6312 $\frac{1}{2}$	"	96
6316	6317	6316 $\frac{1}{2}$	6 $\frac{3}{4}$ x 4 $\frac{1}{2}$	48
6318	6319	6318 $\frac{1}{2}$	"	96
6320		6320 $\frac{1}{2}$	"	144
6322	6323	6322 $\frac{1}{2}$	7 $\frac{1}{2}$ x 4 $\frac{3}{4}$	48
6324	6325	6324 $\frac{1}{2}$	"	96
6326		6326 $\frac{1}{2}$	"	144
6328	6329	6328 $\frac{1}{2}$	8 $\frac{1}{2}$ x 5 $\frac{1}{2}$	48
6330	6331	6330 $\frac{1}{2}$	"	96
6332		6332 $\frac{1}{2}$	"	144

Specify by Number, the Book desired

Made in U. S. A.

B&PN^o 6322

$$\begin{array}{r} 62.90 \\ 4.76 \\ \hline 67.66 \\ 11.66 \\ \hline 66.00 \end{array}$$
$$\begin{array}{r} 124 \\ \hline 67 \\ 57 \end{array}$$

Don't

#3 Pour #1 west Arch
Placed in water 7/18/30

#4 Pour #4 west arch
Placed in water 7/20/30

#5 Pour #1 east arch
in water 7/23/30

#6 Pour No 3 east arch
in water 7/24/30