

(1) Number of pages 22-20
(2) Date of repair 15-12-88
(3) Initials of the Referencer lony ✓

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

p-w-D

DEPARTMENT

G.O. No.	318-w	Press.
B.P. No.		Mis.
Dated	5-2-1887	198.

626

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following letter from the Hon. R. W. BARLOW, C.S., Chairman, Harbour Trust Board, to the Secretary to Government, Public Works Department, dated Madras, 31st January 1887, No. 2050 :—

I have the honor to forward, for your information, copy of letter, No. 535 M., dated 7th January, from the Superintendent, Madras Harbour Works, reporting upon the progress made during the month of December, together with tracing of harbour in original, which please return.

ENCLOSURE.

From F. N. THOROWGOOD, Esq., M. Inst. C.E., Superintendent, Madras Harbour Works, to the Chairman, Harbour Trust Board, dated Madras, 7th January 1887, No. 535 M.

I have the honor to submit the following report of progress on these works during the past month of December, together with a plan, to facilitate description of what has been done. No attempt was made at work on the two breakwaters until December 13th, as the weather did not appear settled before that date; in fact, on December 9th there was a heavy sea running (the result of a cyclone somewhere south of Madras I believe) which prevented access to either pier of the harbour.

2. *North Pier Works.*—It will be remembered that the titan crane was withdrawn from the north pier end in October last. It had been working on a temporary line of rails of a 20-feet gauge. Before resuming work it was necessary to build in a permanent road of a 16-feet gauge on which both the titan and the wavebreaker crane could advance and retire from the new work to the old and from thence to shore. This involved a great deal of levelling up of masonry, the new work being 11 inches higher than the old, and the building in of a solid and even incline of 1 in 200 for the cranes to advance upon. This work was commenced on December 14th, and all possible pressure was put on to get it done quickly (Christmas day being the only day on which a rest was taken), but the sea was at times so splashy that the progress was much interfered with. By December 31st the incline was nearly completed, but the rails for the crane road were not built in. While this work was in progress, the temporary chain ties extending from the old to the new work were withdrawn and rail cramps were substituted in every row of blocks (formerly they were only placed in alternative rows until a heavy sea had brought the work to its bearings), thereby making the whole of the new work as complete as possible. It will not be possible to bring the cranes on this new piece of masonry for a few days as the cement must have time to set thoroughly. The newly-built portion is shown in neutral tint on the plan. The masonry of this inclined plane contains 155 cubic yards, and as it diminishes by this amount, the concrete "capping" to be subsequently added; the cost of this work has been charged to the sub-head "capping."

3. Very little work was done in the north pier base, as during the first half of the month the weather was bad and boats were hauled up. There were, however, 4,253 tons of stone tipped, and the whole of this was deposited on the advanced curved work of the north pier, levelling up the base where it was lowered by the seas of November 8th, 9th and December 9th.

4. The heap of wavebreaker blocks at the extreme end of the north pier having subsided slightly after the seas of November and December, the wavebreaker crane was moved out on the 20th, and dropped blocks into all vacant spaces and by this means brought the section of the wavebreaker up to its full dimensions at the outer end. There were 60 blocks deposited in this way, and then the crane had to be withdrawn to allow the masonry incline to be built in as already described.

5. *Concrete Blockmaking, &c.*—On December 2nd the blockmaking machinery was again set to work and 205 blocks of 30 tons each were turned out during the month. There were 125 blocks (for the south pier) taken from the north to the south block ground, and to make room, as a temporary measure, blocks are being stacked under the wavebreaker crane on shore. With regard to the work of blockmaking, I propose to invite fresh tenders for labor before April 1st, 1887, the man who at present does this work having received three months' notice to stop.

6. *South Pier Works.*—The only work done at the south pier was that of building in the masonry incline by which the titan will advance from the old to the new work. This has taken up 120 cubic yards of rubble-in-cement and, as described at the north pier, new rail cramps have been substituted for the former chain ties. This work has been carried on under more sheltered conditions than the north pier and is now hard enough to be used. The titan was advanced on December 31st to the foot of the incline and has now to be turned through 90° and advanced forward for building. Unfortunately we have a large heap of old concrete blocks to remove (knocked over in the cyclone of May 1886) before much progress can be made at the south pier superstructure, as the blocks lie on the new line of foundations. I am anxious not to blast them with dynamite if it can possibly be avoided, as each block recovered and placed in the wavebreaker represents a saving of nearly 160 rupees.

7. *Pallavaram Quarries.*—As the sea was unsettled during the early part of the month, no rubble was deposited from boats and consequently the demand for stone was small. There was 11,402 tons quarried and sent to Madras in December, of which about 4,000 tons was clean stone for blockmaking. The railway lines at the quarry were kept in excellent order, but nevertheless one case of derailment occurred on a sharp curve. No harm was done as the speed was very slow. The work at Pallavaram has sustained a great loss by the death of the contractor, G. M. Kazim Ali Nakoy, who was very able and was, moreover, always on the spot personally managing the coolies, which is a great advantage. At present, to avoid disputes which, however, may yet arise, I have allowed the late contractor's father to carry on the work precisely as the son was doing. This plan will answer until I can clear out or measure up the stone quarried, which is a very large quantity distributed over nearly two miles of line. It is imperative that no stoppage of work should occur yet, and on that account I have informed the Board that it is advisable to reduce the stone supply in May (a stormy month) and not before.

8. By June 1st, the quarry will be in a state for a public competition in tendering, and I would propose calling for tenders in April. The late contractor had constructed about two miles of railway, with eight bridges and culverts, heavy rock cuttings and high embankments; but this work was included in his price per ton for stone. The line was not quite completed at his death, and it should be borne in mind that the late contractor's representatives might make a claim on this account, as any fresh hand taking the work would of course be saved the construction of a very awkward piece of railway line. Up to the present date work has been carried on as if nothing had happened, even to the using of dynamite, gunpowder, detonators, &c., all of which have to be supplied by me and deducted from contractor's bills. It should be my endeavour so to arrange that no delay shall occur in the event of a change of contractors at the end of May.

9. *Protective Works to the North.*—The slight protective work to the north of the harbour mentioned in my November report was completed for the present in December, 2,842 tons of stone having been used for the purpose. A separate report will shortly be presented to the Harbour Trust Board, and is only delayed by want of the cross sections (nearly completed) necessary for framing an estimate. The wall of Carlton House I propose to replace by a strong open fence with uprights of old rails. I understand that the Officers' mess occupying the house approve of this. I purposely have not yet attempted to repair any other fallen walls, as I do not at all admit that the cost of so doing should fall on the estimate for restoring the Madras harbour.

10. *Stores received during the month.*—The S.S. *Dacca* arrived in December with 150 tons of Portland cement, 13 bales of canvas and an assortment of carpenters' tools, turning chisels, bench vices and galvanized blocks. The S.S. *India* also brought 180 tons of Portland cement.

11 I also received 311 sleepers from Mr. A. Brown of Tellicherry and 402 from Palghat supplied by a merchant named Ragavachary. Those supplied by the latter are the cheaper of the two, being Rs. 4-12-0 per broad gauge sleeper delivered on the harbour works. They are of excellent quality.

ORDER—dated 5th February 1887, No. 318 W., Public Works.

Recorded.

(True Extract.)

Captain, R.E.,
Under Secy. to Govt., P.W.D.

To the Chairman, Madras Harbour Trust Board, with plan.
" Marine Department.
" Consulting Engineer for Railways.

Exd. P. L. Pereira.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1887) Madras.
PUBLIC WORKS.

Dated February, 5th.

Recd.

Encl.

G.O., 5th Feb. 1887, No: 318 W.

FEBRUARY.

Madras Harbour Works

Report of the progress on the — during
December 1886, recorded.

V. & Co. H. T.
No. 2

Harbour Trust Board Office,

MADRAS, 31st January 1887.

No. 2050

FROM

The Honorable R. W. Barlow C.S.

CHAIRMAN, HARBOUR TRUST BOARD,

MADRAS,

TO

Colonel J. O. Heated R.E.

Secretary to Government
Public Works Department

SIR,

I have the honor to forward
for your information copy of letter No: 535 m
dated 7th January, from the Superintendent
Madras Harbour Works, reporting upon the
progress made during the month of
December. Together with tracing of Harbour
in original which please return.

I have the honor to be

Sir

Your most obedient servant

W. Barlow

Chairman

R. W. Barlow
Harbour Trust Board

No 535/m.

8/2

4

From

The Superintendent

Madras Harbour Works

To

The Chairman

Harbour Trust Board

Madras.

Madras 7 January 1887

Sir

I have the honor to submit the following report of progress on these works during the past month of December, together with a plan to facilitate description of what has been done. No attempt was made at work on the two breakwaters until December 13 as the weather did not appear settled before that date in fact on December 9 there was a heavy sea running (the result of a cyclone somewhere south of Madras I believe) which prevented access

access to either pier of the Harbour.

2. It will be remembered that the Titan crane North Pier
Works was withdrawn from the North pier end in October last. It had been working on a temporary line of rails of a 20 feet gauge. Before resuming work it was necessary to build in a permanent road of a 16 feet gauge on which both the Titan and the Wreckbreaker crane could advance and retire from the new work to the old and from thence to shore. This involved a great deal of levelling up of masonry the new work being 11 inches higher than the old and the building in of a solid and even incline of 1 in 200 for the cranes to advance upon. This work was commenced on December 14th and all possible pressure was put on to get it done quickly (Christ. mas day being the only day on which a rest was taken) but the sea was at times so splashy that the progress was much interfered with. By December 31st the incline was nearly completed, but the rails for the crane road were not built in. while this work was in progress

progress the temporary chain ties extending from the old to the new work were withdrawn & rail cramps were substituted in every row of blocks (formerly they were only placed in alternative rows until a heavy sea had brought the work to its bearings) thereby making the whole of the new work as complete as possible. It will not be possible to bring the cranes on this new piece of masonry for a few days as the cement must have time to set thoroughly. The newly built portion is shown in red tint on the plan. The masonry of this inclined plane contains 155 cubic yards, and as it diminishes by this amount the concrete "capping" to be subsequently added, the cost of this work has been charged to the Sub-head "Capping".

3. Very little work was done in the North pier base, as during the first half of the month the weather was bad and boats were ^{hauled} up.

There were however 4253 tons of stone tipped

1 tipped and the whole of this was deposited
2 on the advanced curved work of the North pier
leveling up the base where it was lowered by
the seas of November 8th and December 9th
4. The heap of wavebreaker blocks at the
extreme end of the North pier having subsi-
ded slightly after the seas of November and
December the wavebreaker crane was moved
out on the 20th and dropped blocks into all
vacant spaces and by this means brought
the section of the wavebreaker up to its full
dimensions at the outer end. There were 60
blocks deposited in this way and then the
crane had to be withdrawn to allow the
masonry incline to be built in as already
described

5 On December 2nd the blockmaking ma- Concrete Block-
chinery was again set to work and 205 making 12
blocks of 30 tons each were turned out during
the month. There were 125 blocks (for the South
pier) taken from the North to the South
block

46
block ground and to make room, as a temporary
measure blocks are being stacked under the
Wavebreaker crane on shore. With regard to
the work of blockmaking I propose to invite
fresh tenders for labour before April 1st 1887
the man who at present does this work having
received 3 months notice to stop.

South Pier Works

b The only work done at the South pier was
that of building in the masonry incline by which
the Titan will advance from the old to the new
work. This has taken up 120 cubic yards of rat-
ble in cement and as described at the North
pier, new rail cramps have been substituted
for the former chain ties. This work has been
carried on under more sheltered conditions
than the North pier and is now hard enough
to be used. The Titan was advanced on Dec
31st to the foot of the incline and has now
to be turned through 90° and advanced forward
for building. Unfortunately we have a large
heap

heap of old concrete blocks to remove (knocked
over in the cyclone of May 1886) before much
progress can be made at the South pier su-
perstructure, as the blocks lie on the new line
of foundations. I am anxious not to blast
them with dynamite if it can possibly be
avoided as each block recovered and placed
in the wavebreaker represents a saving of
nearly 100 rupees.

7. As the sea was unsettled during the Pallavaram
early part of the month no rubble was de- Quarries
posited from boats and consequently the
demand for stone was small. There was
11,402 tons quarried and sent to Madras
in December of which about 4000 tons was
clean stone for blockmaking. The railway
lines at the quarry were kept in excellent order
but nevertheless one case of derailment occurred
on a sharp curve. No harm was done as
the speed was very slow. The work at Pallavaram
has sustained a great loss by
the death of the contractor G. M. Razim Ali

8p 5
Stakry who was very able and was more
over always on the spot personally managing
the coolies which is a great advantage. At first
sent to avoid disputes which however being
yet wise I have allowed the late contractor
father to carry on the work precisely as this man
was doing. This plan will answer until I can
clear out or measure up the stone quarried which
is a very large quantity distributed over nearly
2 miles of line. It is imperative that no stop-
page of work should occur yet and on that
account I have informed the Board that it is
advisable to reduce the stone supply in May
(a stormy month) and not before.

8. By June 1st the quarry will be in a state
for a public competition in tendering and I
would propose calling for tenders in April.
The late contractor had constructed about 2
miles of railway, with 8 bridges and culverts,
heavy rock cuttings and high embankments
but.

but this work was included in his price per
ton for stone. The line was not quite comple-
ted at his death and it should be borne
in mind that the late contractors represen-
tatives might make a claim on this account
as any fresh hand taking the work would
of course be faced the construction of a
very awkward piece of railway line. Up to
the present date work has been carried on
as if nothing had happened, even to the
using of dynamite, gun powder, detonators
etc. all of which have to be supplied by
me and deducted from contractors bills.
It should be my endeavour so to arrange
that no delay shall occur in the event of a
change of contractors at the end of May.

9 The slight protective work to the North
of the Harbour mentioned in my November
report was completed for the present in
December, 2842 tons of stone having been
used for the purpose. A separate report will
shortly be presented to the Harbour Trust
Board.

Protective
works to the
North

Board. and is only delayed by want of the cross
Sections (nearly completed) necessary for for-
ming an estimate. The wall of Carlton House
I propose to replace by a strong open fence
with uprights of old rails. I understand that
the officers mess occupying the house approve
of this. I purposely have not yet attempted
to repair any other fallen walls, as I do not
at all admit that the cost of so doing should
fall on the estimate for restoring the Harbour
Harbour.

Goods received 10.
during the month

The S.S. "Dacca" arrived in December
with 150 tons of Portland Cement, 13 bales of
Canvas and an assortment of Carpenters
tools, turning chisels, bench vices and galva-
nized blocks. The S.S. "India" also brought
180 tons of Portland Cement.

11. I also received 311 sleepers from Mr. A
Brown of Tellicherry and 402 from Pelyphant
supplied by a merchant named Rajawachan
Thos.

Those supplied by the latter are the cheaper
of the two being Rs 4.12. per broad gauge
 sleeper delivered on the Harbour Works. They
are of excellent quality.

I have the honor to be

Sir

Your most obedient servant

(Signed) F. L. Throgmorton Esq.

Superintendent Madras Harbour
Works.

(True copy)

C. Pinissent

Secretary

Harbour Trust Board.

8 B & P
cl works
No 318 W & 5 July 1887

P.W.C. No 7445
MARINE DEPARTMENT.
FROM
THE CHAIRMAN,
HARBOUR TRUST BOARD,
MADRAS.

Recorded

W.C.V.
2.2.87

Lu
3/2/87

To
THE CHIEF SECRETARY TO GOVERNMENT,
Public Works Marine Department.

DATED 31st January 1887
RECEIVED 1.3.87
ENCLOSURE 2 (with plan)
No. 2050

SUBJECT.

Forwarding for information
copy of letter No 535 M. from
the Supt of Harbour Works
reporting upon the Progress
made in Decr 86.

Chairman M. H. T. M. J.
with plan ✓
Marine Dept ✓
Comd. Engineer 14/2

Ans. 3.2.87 L.S. 187

W. Thorne

744

Govt. of Madras.

PUBLIC WORKS.

Dated

7/2/87

Recd.

Encl.

G.O. 5746 1886 No. 3184

Madras Public Works.

Report of the progress
of the — during
Decr 86, recorded.

70
5-

Sp/ce
52