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G.O.M. 1449-W

Dt. 27.5.1887

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1449

GOVERNMENT OF MADRAS.

# PUBLIC WORKS DEPARTMENT.

**Buildings and Roads.**
**Civil Works.**

READ—the following letter from the Honorable R. W. BARLOW, C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government, Marine Department, dated Madras, 13th May 1887, No. 692 :—

I have the honor to forward, herewith, for the information of Government, copy of a letter from the Superintendent, Madras Harbour Works, No. 123, dated 6th May 1887, with a plan * and a sheet * of cross sections, reporting upon the progress made on the Madras Harbour Works during the month of April 1887.

* Originals to be returned.

ENCLOSURE.

From F. N. THOROWGOOD, Esq., M. INST. C.E., Superintendent, Madras Harbour Works, to the Chairman, Harbour Trust Board, Madras, dated Madras, 6th May 1887, No. 123.

I have the honor to submit the following report of progress on these works during the past month of April, with a plan showing the state of the works on April 30th and a sheet of cross sections to be referred to hereafter.

2. *North Pier work.*—Only 905 tons of stone were deposited in the base or foreshore of the north pier in April, and most of this was large stone to form the hearting of the wave-breaker to the new length of work. The superstructure of this pier was only advanced 6 feet during April, as it is necessary to protect all the standing wall before the 1st of May (when cyclones may be expected till May 31st), and in order to carry on the work of depositing wave-breaker blocks at the end of the pier it is necessary to turn the titan crane through 90°. This turning was effected on Easter Monday, April 11th, and from that date to the 28th April the titan crane and the special wave-breaker crane were engaged in putting 30-ton blocks over the side. There were 229 blocks thus disposed of, and the cranes were withdrawn on the 28th. The special wave-breaker crane will, however, be kept at work during the day time throughout May (except in bad weather) to make up to its full section the protective work along the old wall of the pier. The whole length of new work (475 feet) is now thoroughly protected and cramped together ready for a heavy sea.

3. *South Pier work.*—There were 4,590 tons of rubble deposited in the south pier base and foreshore during April, but this material was more for making up low places where stone had been previously tipped rather than advancing the base in length. Many concrete blocks have to be removed from the site of the old pier head before much can be done in advance.

4. The superstructure of the south pier was advanced by a length of 12 feet, and on the 12th April the titan was turned round to deposit wave-breaker blocks to protect the new work. Having placed 92 of these blocks in position the crane was brought home for safety on the 27th.

5. *Remarks on rubble foundations.*—The quantity of stone required to form the rubble bases of the two piers will considerably exceed the amount estimated for. This is rather a serious matter, as the north pier base is not completed and yet 186,650 tons have been used in its formation against 182,260 estimated for the complete work. At the south pier 169,517 tons were estimated for the complete work, and 145,695 have been already used while much remains to be done. The only explanation which I can offer for this excess is that owing to the disturbed state of the sea near the ruined walls the rubble has been displaced more than was the case in the original work. But lest this should be considered an element of weakness I must explain that the base of the finished walls are protected with blocks of 30 tons over the whole surface, and these prevent the sea scouring out the stone foundation.

6. I append a set of cross sections taken in March over the submerged base, and in a red dotted line is shown the *theoretical* outline of the slope. Where (as in sections 2,600 and 2,750 north pier and 3,375 south pier) the base seems to be in excess of the theoretical line, the reason of this is that the sea has washed down the slope flatter than it was originally made, and more stone has had to be added to the top. These may be taken as typical sections and I trust show that the work is being done with great accuracy.

7. *Concrete blockmaking.*—During April a new contractor was installed to supply the labor for blockmaking and at a lower rate per cubic yard than heretofore. There was naturally some difficulty in getting to work at first with new hands, but I trust that in time work will be carried on as smoothly as before. During April 202 blocks were made representing about 5,600 tons of concrete.

8. *Pallávaram quarries.*—The work at Pallávaram has been going on sufficiently well to keep blockmaking going, but not so as to keep the boats for tipping rubble thoroughly well employed. The strong southerly winds have, however, been such as to prevent much work being done, whether the stone supply were larger or not. There were 9,300 tons of stone supplied from the quarry in April.

9. I have not yet been able to settle the claims of the estate of the late contractor for this work, as up to this date no legal representative has appeared.

10. *Various matters.*—I have mentioned in a special letter that it will be advisable to obtain some English cement locally, as the supply now on hand will, I fear, run out before the first consignment of that indented for on February 2nd arrives in Madras. This matter has been disposed of at the date of this report.

11. The diving boats were hauled up for repairs after April 12th and the whole of the diving staff were told off to dismantle the timber bridge over the canal, near the General hospital. This bridge was built under my charge in April 1877 and is now no longer necessary. In two weeks the whole of it has been cleared away and the piles drawn. Some of the piles which could not be drawn were cut off at a depth of from 3½ to 6 feet below the bed of the canal. The timber of which this bridge was built is now in the Harbour Works yard and is thoroughly serviceable.

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Transferred to the Public Works Department.

(By Order.)

OOTACAMUND,
21st May 1887.

(Signed) W. S. MEYER,
Asst. Secy., M.D.

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ORDER—dated 27th May 1887, No. 1449 W., Public Works.

Recorded.

(True Extract.)

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

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

Exd. P. L. Pereira.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [1887] Madras.

PUBLIC WORKS.

Dated May, 27th.

Read.

Encl.

G.O., 27th May 1887, No. 1449 W.

MAY.

**Madras Harbour Works**

Report of progress on the — during April 1887, recorded.

No 123.

1449
3

From

The Superintendent
Madras Harbour Works

To

The Chairman
Harbour Trust Board.
Madras.

Madras May 6 1887.

Sir.

I have the honour to submit the following report of progress on these works during the first month of April, with a plan showing the state of the works on April 30 and a sheet of cross sections to be referred to hereafter.

North Pier Work 2. Only 905 tons of stone were deposited in the base or foreshore of the North Pier in April, and most of this was large stone to form the hearting of the wavebreaker to the new length of work. The superstructure

of

of this Pier was only advanced 6 feet during April, as it is necessary to protect all the standing wall before the 1st of May (when cyclones may be expected till May 31st), and in order to carry on the work of depositing wavebreaker blocks at the end of the Pier it is necessary to turn the Titan crane through 90°. This turning was effected on Easter Monday April 11th and from that date to the 28 April the Titan crane and the special Wavebreaker crane were engaged in putting 30 ton blocks over the side. There were 229 blocks thus disposed of, and the cranes were withdrawn on the 28th. The special wavebreaker crane will however be kept at work during the day time throughout may (except in bad weather) to make up to its full section the protective work along the old wall of the Pier. The whole length of new work (475 feet) is now thoroughly protected and cramped together ready for

for a heavy sea.

South Pier Work 3. There were 2590 tons of rubble deposited in the South Pier base and foreshore during April, but this material was mostly for making up low places where stone had been previously tipped rather than advancing the base in length. Many concrete blocks have to be removed from the site of the old Pier head before much can be done in advance.

4. The superstructure of the South Pier was advanced by a length of 12 feet, and on the 12 April the Titan was turned round to deposit wavebreaker blocks to protect the new work. Having placed 92 of these blocks in position the crane was brought home for safety on the 27th.

Remarks on Rubble Foundations 5. The quantity of stone required to form the rubble base of the two Piers will considerably exceed the amount estimated for. This is rather a serious matter, as the North

of this Pier was only advanced 6 feet during April, as it is necessary to protect all the standing wall before the 1st of May (when cyclones may be expected till May 31st), and in order to carry on the work of depositing wavebreaker blocks at the end of the Pier it is necessary to turn the Titan crane through 90°. This turning was effected on Easter Monday April 11th and from that date to the 28 April the Titan crane and the special Wavebreaker crane were engaged in putting 30 ton blocks over the side. There were 229 blocks thus disposed of, and the cranes were withdrawn on the 28th. The special wave-breaker crane will however be kept at work during the day time throughout May (except in bad weather) to make up to its full section the protective work along the old wall of the Pier. The whole length of new work (475 feet) is now thoroughly protected and cramped together ready for

for a heavy sea.

South Pier Work. 3. There were 4590 tons of rubble deposited in the South Pier base and foreshore during April, but this material was more for making up low places where stone had been previously tipped rather than advancing the base in length. Many concrete blocks have to be removed from the site of the old Pier head before much can be done in advance.

4. The superstructure of the South Pier was advanced by a length of 12 feet, and on the 12 April the Titan was turned round to deposit wavebreaker blocks to protect the new work. Having placed 92 of these blocks in position the crane was brought home for safety on the 27th.

Remarks on Rubble Foundations. 5. The quantity of stone required to form the rubble bases of the two Piers will considerably exceed the amount estimated for. This is rather a serious matter, as the North

North Pier base is not completed and yet 186,650 tons have ban used in its formation against 182,60 estimated for the complete work. At the South Pier. 1,69,517 tons were estimated for the complete work, and 1,45,695 have been already used while much remains to be done. The only explanation which I can offer for this excess is that owing to the disturbed state of the sea near the ruined walls the rubble has been displaced more than was the case in the original work. But lest this should be considered an - element of weakness I must explain that the base of the finished walls are protected with blocks of 30 tons over the whole surface, and these prevent the sea scouring out the slope foundation

6. I append a set of cross sections taken in March over the submerged base, and in a red dotted line is shewn the Theoretical outline of the slope. Where (as in sections 2600 and 2750 North Pier and 3375 South Pier) the base seems to be in excess of the theoretical line, the reason of this is that the sea has washed down the slope flatter that it was originally made, and more stone has had to be added to the top. These may be taken as typical sections and I trust shew that the work is being done with great accuracy.

Concrete blockmaking

7. During April a new contractor was installed to supply the labour for block-making and at a lower rate per cubic yard than heretofore. There was naturally some difficulty in getting to work at first with new hands, but I trust that in time work will be carried on as smoothly as before. During April 202 blocks were made representing about 5,600 tons of concrete.

Pallavaram Quarries

8. The work at Pallaveram has been going on sufficiently well to keep blockmaking going, but not so as to keep the boats for tipping

tipping rubble thoroughly well employed. The strong southerly winds have however been such as to prevent much work being done, whether the stone supply were larger or not. There were 9 000 tons of stone supplied from the quarry in April.

9. I have not yet been able to settle the claims of the estate of the late contractor for this work, as up to this date no legal representative has appeared.

10. I have mentioned in a special letter that it will be advisable to obtain some English cement locally, as the supply now on hand will I fear run out before the first consignment of that indented for on February 2nd arrives in Madras. This matter has been disposed of at the date of this report.

11. The diving boats were ~~handled~~ hauled up for repairs after April 12th and the whole of the diving staff were told off to dismantle the timber bridge over the canal, near the General Hospitals. This bridge was built under my charge in April 1877 and is now no longer necessary. In two weeks the whole of it has been cleared away and the piles drawn. Some of the piles which could not be drawn were cut off at a depth of from 3½ to 6 feet below the bed of the canal. The timber of which this bridge was built is now in the Harbour Works yard and is thoroughly serviceable.

I have the honour to be
Sir
Your Most obedt Servant
(Signed) F. H. Thorowgood
M. Inst. C.E.
Superintendent Madras
Harbour Works.

/True copy/

C. Pinhorn
Secretary.
Harbour Trust Board.

1665

CURRENT NO. 396 Rec

Harbour Trust Board Office.

MADRAS, 13th May 1887.

No. 692

FROM The Honorable R.W. Barlow C.S.

CHAIRMAN, HARBOUR TRUST BOARD,

MADRAS,

To

The Honorable A. E. Stokes C.S.

CHIEF SECRETARY TO GOVERNMENT,

Marine Department.

Sir

I have the honor to forward herewith for the information of Government, copy of a letter from the Superintendent Madras Harbour Works No. 123 dated 6th May 1887 with a* plan and a* sheet of cross sections, reporting upon the progress made on the Madras Harbour works during the month of April 1887.

* originals to be returned

I have the hono. to be

Sir

Your most obedient Servant

R W Barlow

Chairman

Harbour Trust Board

Rec.

cwg

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W. 41 — 23 — 2 — 87.

G.O. 1190 W. 2-5-87

P6

Ootacamund, 21st May/87

Transferred to the Public Works Department

By order

W. S. Meyer
Asst. Secy.

No. 1449 W. 27th May/87

Recorded.

CURRENT NO. 396

~~MARINE DEPARTMENT.~~

P.W.C. No. 4017

FROM

THE CHAIRMAN,

HARBOUR TRUST BOARD,

MADRAS,

TO

THE CHIEF SECRETARY TO GOVERNMENT,

Marine Department.

Ootacamund

DATED 13th May 1887.
RECEIVED ~~15~~ 27.5.87

ENCLOSURE S. 3

No. 692.

SUBJECT.

Submitting for the information of Govt. Progress report of the Madras Harbour Works during the month of April 1887.

With order

Chairman H. T. Bd. with the plans
Marine Dept.
Consg. Engr. Gt. Rys.
Newspapers —

3/6/87

1049/9

4017

Govt. of [1887] Madras.

PUBLIC WORKS.

Dated 17/5/87

Rec'd. Encl. 16 Encls.

G.O. 27th May 1887, No. 1449

Madras Harbour Works

Report of progress on the
during the month of
April 1887, recorded.

90/6

27/5