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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W DEPARTMENT

G.O. No.	4748(W)	Press.
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Dated	13-12-1878	1972

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GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

13th December 1878, No. 4,748 W.

Buildings and Roads.
Civil Works.

Read the following paper:—

No. 142. From F. N. THOROWGOOD, Esq., M. INST. C.E., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, Buildings and Roads, dated Madras, 2nd December 1878, No. 49 W.

I HAVE the honor to report the following amount of progress on these works during the month of November 1878.

2. NORTH PIER SUPERSTRUCTURE.—Work was stopped at the North Pier on four days of last month owing to bad weather and heavy seas, namely, on the 5th, 6th, 18th, and 19th. On the night of the 4th November the heavy seas which ran along the north side of the pier undermined a portion of the work where the section is only three courses in depth. The result of this was a slight settlement in the north row of blocks and an opening of the centre joint of the pier, which necessitated the relaying of a portion of the road on which the blocks travel. The necessary repairs were carried out in one day, and that part of the pier which had settled has since been thoroughly well protected with foreshore of large granite boulders. The outer length of 600 feet of the pier, four courses in depth, was not in any way affected by the heavy seas which constantly swept over it on the 4th, 5th, and 6th November. During November 192 blocks were set by the divers advancing the work by a length of $113\frac{3}{4}$ lineal feet, and making the total length of block work from the point B $1,326\frac{1}{4}$ feet on the 30th.

3. RUBBLE BASE.—The work of depositing the rubble base has been carried on briskly by the cargo and masula boats and by the other usual means. During the past month 12,183 tons were thus deposited and on no occasion was delay caused through want of laterite in the base, although the roughness of the sea frequently prevented the boats from working. The base is kept well in advance of the block work, and a red and white buoy in charge of the Marine Department is moored beyond the furthest limit of the rubble as a warning to the ships in the roadstead.

4. BLOCK-MAKING.—Block-making by machinery has been carried on during the greater part of the month, at the rate of 10 blocks daily. From December the same machinery will be made to turn out 12 or 14 blocks every day, which will reduce the cost of making per block considerably; 194 superstructure blocks were made in the past month, the cement used being of English manufacture.

5. The block-making platform at the South Pier is complete for a length of 223 feet, and work will commence at the rate of 8 blocks per day from the 2nd December. These blocks will be made by manual labor, the stone used coming from the South Indian Railway quarries, ready broken into the required sizes.

6. QUARRIES.—The laterite quarry at Ambathoor has been worked to a greater extent than in any previous month, and it will shortly be necessary to open up the new district for the working of which tenders will be received on 2nd December. The result of the tenders will be mentioned in my report for December. During November 14,050 tons of laterite have been brought down by the Madras Railway, and since the 25th there have been three trains running daily.

7. The quarries on the South Indian Railway have kept up a sufficient supply of stone for block-making and other purposes by sending down two trains of 23 wagons daily. A total quantity of 7,670 tons of stone has been received from these quarries. The gross amount of stone and laterite received on the works during November has been 21,720 tons.

8. SOUTH PIER SUPERSTRUCTURE.—The four days of bad weather which caused delay at the North Pier prevented work from being carried on at the South Pier. But the sand accumulation over the base was in a great measure cleared away. Unfortunately on the 7th, some of the top gearing of the Titan gave way at a point which was extremely difficult to get at for repairs, consequently it was not until the 20th that work could be re-commenced. There have been 34 blocks set in November advancing the pier by a length of $28\frac{1}{2}$ lineal feet, and making the total length of block work from the point E, 599 $\frac{1}{4}$ feet. It is now one year since the first block was set at the South Pier and in that time 599 $\frac{1}{4}$ feet have been built, whereas in the first year's block setting at the North Pier only 356 feet were accomplished. The steady advance of the South Pier now continues.

9. RUBBLE BASE.—The broken water at the sides and end of the South Pier has interfered much with the formation of the rubble base, but more work has been done than was the case in October. A total quantity of 1,560 tons of stone of various sizes has been tipped in the base during November.

10. SEA ENCROACHMENT NORTH OF HARBOUR.—The sea has ceased to encroach to the north of the harbour, and the groynes that have been thrown out are catching large quantities of sand. The roadway in front of Mr. Coleman's house will soon be completed with a width of 30 feet. The protective works are still carried on, and for this purpose 2,300 tons of laterite have been used in November, making a total quantity devoted to these works since May of 8,593 tons. It is not improbable that Mr. Parkes on his arrival at Madras may propose a more substantial form of protecting wall against future encroachments.

11. EXPENDITURE.—The total expenditure on the works (subject to slight correction in detail) is Rupees 22,90,868 up to 30th November.

12. PLANS AND SECTIONS.—Accompanying this report I have the honor to forward one general plan and an elevation of each pier.

13. GENERAL.—I am glad to be able to report that as a whole the work is now going on with steady progress and satisfactorily. The advance of the South Pier will I trust be more rapid than heretofore now that we are beginning to get out of the troublesome difficulty with sand. The return of the two Hopper Barges to Madras will shortly take place and then the several departments of the whole work will be fully employed.

No. 143. ORDER THEREON, 13th December 1878, No. 4,748 W.

ORDERED to be recorded.

(True Extract.)

Colonel, R.E.,
Secretary to Government, P.W.D.

To the Superintendent, Madras Harbour Works.
„ Marine Department.

Exd. E. C. Shunker.
Spare Copies

BUILDING AND ROADS
CIVIL WORKS.

★
Govt. of (1878) Madras.

PUBLIC WORKS.

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS.

Send to order 1878.

1878

1878

C.O. 1878

EXHIBIT

No. 143-148.

1878

No. 149 W

From

THE SUPERINTENDENT,

MADRAS HARBOUR WORKS.

To

Colonel C. A. Ford R. E.
Secretary to Government P.W. Deptt,
Buildings and Roads,
Fort Saint George,
MADRAS, 23 December 1878.

SIR,

I have the honor to report the following amount of progress on these works during the month of November 1878.

North Pier -
Superstructure

2. Work was stopped at the North pier on 4 days of last month owing to bad weather and heavy seas, namely on the 5th, 6th, 18th and 19th. On the night of the 14th November the heavy seas which ran along the north side of the pier undermined a portion of the work where the section is only three courses in depth. The result of this was a slight settlement in the north row of blocks and an opening of the centre joint of the pier which necessitated the relaying of a portion of the road on which the blocks travel.

Travel. The necessary repairs were carried out in one day, and that part of the pier which had settled has since been thoroughly well protected with foreshore of large granite boulders. The outer length of 600 feet of the pier, four courses in depth, was not in any way affected by the heavy seas which constantly swept over it on the 14th, 15th and 16th November.

During November 1902 blocks were set by the divers advancing the work by a length of $113\frac{3}{4}$ lineal feet, and making the total length of blockwork from the point B. 1326 $\frac{1}{2}$ feet on the 30th -

3. The work of depositing the rubble base Rubble Base has been carried on briskly by the cargo and masula boats and by the other usual means. During the past-month 12,188 tons were thus deposited and on no occasion was delay caused through want of laterite in the base, although the roughness of the sea frequently prevented the boats from working. The base

is kept well in advance of the blockwork, and a red and white buoy in charge of the Marine Department is moored beyond the furthest limit of the rubble as a warning to the ships in the roadstead. -

Blockmaking 4. Blockmaking by machinery has been carried on during the greater part of the month, at the rate of 10 blocks daily. From December the same machinery will be made to turn out 12 or 14 blocks every day, which will reduce the cost of making per block considerably. 194 superstructure blocks were made in the past-month, the cement used being of English manufacture.

5. The block making platform at the South Pier is complete for a length of 228 feet, and work will commence at the rate of 8 blocks per day from the 2nd December. These blocks will be made by manual labour, the stone used coming from the

the South Indian Railway quarries, ready broken into the required sizes. -

6. The laterite quarry at Ambathoor has been worked to a greater extent than in any previous month, and it will shortly be necessary to open up the new district for the working of which tenders will be received on December 2nd. The result of the tenders will be mentioned in my report for December. During November 11,050 tons of laterite have been brought down by the Madras Railway, and since the 25th there have been three trains running daily -

Quarries

South Pier-
Superstructure

these quarries. The gross amount of stone and laterite received on the works during November has been 21,720 tons. -

8. The four days of bad weather which caused delay at the North Pier prevented work from being carried on at the South Pier. But the sand accumulation over the base was in a great measure cleared away - Unfortunately on the 7th some of the top gearing of the Titan gave way at a point which was extremely difficult to get at for repairs, consequently it was not until the 20th that work could be recommenced. There have been 34 blocks set in November advancing the pier by a length of $28\frac{1}{2}$ lineal feet, and making the total length of blockwork from the point E 599 $\frac{1}{2}$ feet. It is now one year since the first block was set at the South Pier and in that time 599 $\frac{1}{2}$ feet have been built, whereas in the first year's block-setting at the North Pier, only 356 feet were

7. The quarries on the South Indian Railway have kept up a sufficient supply of stone for blockmaking and other purposes by sending down two trains of 28 wagons daily. A total quantity of 7670 tons of stone has been received from these

were accomplished. The steady advance of
the South Pier now continues. —

9. The broken water at the sides and end of the South Pier has interfered much with the formation of the rubble base, but more work has been done than was the case in October. - A total quantity of 1560 tons of stone of various sizes has been tipped in the base during November. - Rubble

10. The sea has ceased to encroach to the north of the Harbour, and the groynes that have been thrown out are catching large quantities of sand. The roadway in front of Mr. Coleman's house will soon be completed with a width of 30 feet. The protective works are still carried on, and for this purpose 2300 tons of latrite have been used in November, making a total quantity devoted to these works since May of 8593 tons. It is not improbable that Mr. Parkes on his arrival at Madras may propose a more substantial form

form of protecting wall against future en-
croachments.

Expenditure

11. The total expenditure on the works (subject to slight correction in detail), is \$2290,868 — up to November 30th. —

Plans of Sections.

12. Accompanying this report, I have the honor to forward one general plan, and an elevation of each pier. —

General

13. I am glad to be able to report that as a whole the work is now going on with steady progress and satisfactorily. The advance of the South pier will I trust be more rapid than heretofore now that we are beginning to get out of the troublesome difficulty with sand. The return of the two Hopper Barges to Madras will shortly take place and then the several Departments of the whole work will be fully employed. I have the honor to be

I have the honor to be

Yours most ^{Sir} obedient Serv^t

24th Nov 1862

Superintendent,
Madras Harbour Works

13-26
Buildings & Roads.

From The Superintendent
Madras Harbour Works

449 W
Dated 2nd December 1878

No of Enclosures 3 Plans.

25-11-78-20649312

Progress Report

Submit progress report of the
works during November 1878

Per Dept

Letter from the Superintendent,
Madras Harbour Works, No 449 W of 2nd Dec 78.

Circulated
for information.

Edmond Selous
Secretary to Govt.
Per D.

4th Dec 78.

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to Mr. [unclear]
by [unclear]
to [unclear]

5-28
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No 4748 W 713 Recd

124 1/2
clarified

Recorded

AT 13/2

Recd. L. Senior 4748 H. - 12/1000 5000
Capt. J. H. L. Marked
Maine. Dpt. 14
37
Sept 11-12-78

6-25
9

no 4748 W 7/13 Recd

134 1/2
1/10/13

Recorded

227 13/10

Recd in Service from H. - 12/12/13

Capt. H. L. Mather
Officer - Dept.

37

Dec 11-12-78

Cap 1326

Dept. of (1878)  PUBLIC WORKS

1/4 - 2 1/2 - 13-12-78

The Light Machine Works

Detail

Lead

Lead

C. B. Green, 1748

Net

Mrs. Mrs. M. M. M. M.
Representative of the
Lawyer M. M. M. M.

127