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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W. DEPARTMENT

G.O. No.	60	Press.
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Dated	11-1-1881	197

Not to be folded or roughly handled

60/1
GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

11th January 1881, No. 60 W.

Buildings and Roads.
Civil Works.

Read the following paper:—

No. 49. 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, 5th January 1881, No. 75 W.

I HAVE the honor to submit the following report of the progress on these works during December 1880, together with a brief summary of the work done in the past year.

2. *North Pier Superstructure.*—No advance whatever has been made at the north pier during December, as every available day has been utilised for relaying the rails and sleepers which were washed off in November. By the end of the month the repairs to the road were completed and work is now resumed at full speed.

3. Careful observations taken since the storms of November show that the settlement of the outer end of the pier is no more than was expected to take place, the level of the top of the blocks being in no case lower than the original design. The rubble base on the outer side of the pier has subsided slightly and evenly, but on the inner side there is no appreciable change.

4. *North Pier Rubble Base.*—The weather has interfered a great deal with the deposit of rubble base, but more work was done than in November. There were 12,372 tons deposited, of which 8,245 tons were carried by the two steam hoppers. The whole of this is for the foundation of the extreme end of the pier which is of great width, and consequently takes more material for each foot of advance than formerly. The base of the north pier ought to be completed during the current month.

5. *Concrete Block-making.*—Block-making in the yard was of necessity suspended for the latter half of the month of December, as there was no room to stack any more blocks, and the state of the sea and absence of rails on the piers prevented the removal of blocks from yard to sea. There were 202 blocks made up to the 13th of December and the greater number of these are for the north pier head. With the exception of a portion of the head, on which I am awaiting Mr. Parkes's decision on the spot, all the blocks for the north pier should be completed in five weeks from this date.

6. *Quarries.*—The outturn from the quarries has not been very large during December for various reasons. From Ambatūr, on the Madras Railway, there were 12,368 tons of laterite received, and from Pallāvaram, on the South Indian Railway, 12,399 tons of granite, giving a total for the month of 24,767 tons. In the month of December 1879 only 18,368 tons of stone were received on the works.

7. *South Pier Superstructure.*—At the south pier work was resumed on the 20th December, but was interrupted greatly by the sea before the end of the month. There were, however, forty-eight blocks set after the 20th, advancing the pier by a length of 28 feet, and making the total length from the commencement 3,139½ feet. Since January 3rd the weather has been more favorable for work and the pier is advancing rapidly.

8. *South Pier Rubble Base.*—A very small amount of work was accomplished at the south pier base in December on account of bad weather, which rendered the cargo boats unmanageable. There were 8,785 tons of stone deposited, of which the two steamers only conveyed 188 tons.

9. *Protective Works north of Harbour.*—The revetment for protecting the coast to the north has been completed as far as the Police Tannah, and it is now being extended further northward. During December 424 tons of large boulders were deposited in this work. The work at present in hand is hardly sufficiently advanced to need reference to the Harbour Committee, as directed in the Order of Government, No. 2,823 W. of December 7th, but I hope shortly to be able to put on more pressure. On this subject I shall be glad to learn Mr. Parkes's wishes, it being a point that he has particularly investigated, and as he will arrive here on January 6th no delay will ensue by awaiting his suggestions.

10. *Stores received on Works.*—During December the following stores were received from England:—
by ship *Red Tauntlet*, 2,134 casks Cement.
S.S. *Poonah*, with diving dresses and apparatus.

11. *Expenditure.*—The expenditure up to the end of December 1880 has been Rs. 48,40,550 subject to some corrections and adjustments in detail.

12. *Plans and Sections.*—The usual lithographic plan and cross section are submitted herewith, and I regret that I have not been able to get any soundings on the bases since December 4th, and I am therefore unable to show the precise extent of the rubble foundations. The high water line for December 31st is shown in a line of black cross dots, that of the previous month being in plain dots.

13. *General Summary for 1880.*—The advance of the two piers in 1880 has been much greater than in any previous year, but has not come up to the rate which I hoped to achieve when the year began.

14. The north pier has been advanced by a length of 1,235 lineal feet, and the south pier by 1,420 lineal feet, giving a total for both piers of 2,655 feet in twelve months. Both the piers now terminate in $7\frac{1}{2}$ fathoms water.

15. There have been 381,790 tons of stone sent down to the works in the year, and 291,878 tons have been deposited in the rubble bases.

16. The number of concrete blocks made has been 4,934, and the number set in the piers has been 4,616.

17. The year 1881 commences with everything in readiness for a rapid advance to completion, as the yards are full of well seasoned blocks; there is abundance of good cement and new diving dresses and apparatus have just arrived. The locomotive engines, steam cranes, hopper barges, and all the rest of the plant are in good order, and I trust that in April 1881 the north pier will be finished.

No. 50.

ORDER THEREON, 11th January 1881, No. 60 W.

ORDERED to be recorded.

(True Extract).

To the Superintendent, Madras Harbour Works.
" Secretary, Madras Harbour Works Committee.
" Marine Department.

Exd. S. T. Austin.

Spare Copies

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

BUILDINGS AND ROADS.
CIVIL WORKS.

Cantt. of (1881) Madras
PUBLIC WORKS.

To

THE SUPERINTENDENT, MADRAS
HARBOUR WORKS.

cc. cc. cc.

Dated January, 1881.

Issued

Print.

Print.

G. O., 1164 January 1881, No. 69 W.

JANUARY.

No. 49-50.

Madras Harbour Works.—Progress Re-
port of the — for December 1880, recorded.

No. 45 W.

From

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS.

To Colonel R. M. Sankar, C. B. R. E.,
Secretary to Government P. W. Dept.,
Buildings and Roads
Fort Saint George

MADRAS, 5th January 1881.

SIR,

I have the honor to submit the
following report of the progress on
these works during December 1880,
together with a brief summary of
the work done in the past year.

North Pier Superstructure.

2. To advance whatever has
been made at the North Pier during
December, as every available day has
been utilised for re-laying the
rails and sleepers which were washed
off in November. By the end of
the month the repairs to the road
were completed and work is now
resumed at full speed.

3. Careful observations taken
since the storms of November show
that the settlement of the outer-
end of the pier is no more than
was expected to take place, the

level of the top of the blocks being in no case lower than the original design. The rubble base on the outer side of the pier has subsided slightly and evenly, but on the inner side there is no appreciable change.

North Pier Rubble Base

4. The weather has interfered a great deal with the deposit of rubble base, but more work was done than in November. There were 12,372 tons deposited, of which 8245 tons were carried by the two steam hoppers. The whole of this is for the foundation of the extreme end of the pier which is of great width, and consequently takes more material for each foot of advance than formerly. The base of the North Pier ought to be completed during the current month.

Concrete Blockmaking

5. Blockmaking in the yard was of necessity suspended for the latter half of the month of

12⁶⁰/₄
December, as there was no room to stack any more blocks, and the state of the sea and absence of rails on the pier prevented the removal of blocks from yard to sea. There were 202 blocks made up to the 13th of December and the greater number of these are for the North Pier Head. With the exception of a portion of the Head on which I am awaiting Mr. Parker's decision on the spot, all the blocks for the North Pier should be completed in 5 weeks from this date.

Quarries

6. The outturn from the quarries has not been very large during December for various reasons. From Ambathoor on the Madras Railway there were 12,368 tons of latirite received, and from Pallavaram on the South Indian Railway 12,379 tons of granite, giving a total for the month of 24,767 tons. In the month of December 1879 only 18,368 tons of stone were received on the works.

South Pier Superstructures

At the South Pier work

was resumed on the 20th December but was interrupted greatly by the sea before the end of the month. There were, however, 48 blocks set after the 20th, advancing the pier by a length of 28 feet, and making the total length from the commencement 3139³/₄ feet. Since January 3rd the weather has been more favourable for work and the pier is advancing rapidly.

South Pier Public Works

8. A very small amount of work was accomplished at the South Pier base in December, on account of bad weather which rendered the cargo boats unmanageable. There were 8785 tons of stone deposited, of which the two steamers only conveyed 188 tons.

Protective Works North of Harbour

9. Therevetment for protecting the coast to the North has been completed as far as the Police Tannah, and it is now being

extended further Northward - During December 424 tons of large boulders were deposited in this work. The work at present in hand is hardly sufficient to need reference to the Harbour Committee as directed in the order of Government of 28th 282.3 W of December 4th, but I hope shortly to be able to put on more pressure. On this subject I shall be glad to learn Mr. Parkes's wishes, it being a point that he has particularly investigated and as he will arrive here on January 6th no delay will ensue by awaiting his suggestions.

Stores received on work -

10. During December the following stores were received from England. By ship "Red Gauntlet" 2134 caskiment S.S. "Donah" with diving dresses and apparatus.

Expenditure

11. The expenditure up to the end of December 1880 has been Rs. 48,40,550, subject to some corrections and adjustments in detail.

Plans and
Sections

12. The usual lithographed plan and one section are submitted herewith, and I regret that I have not been able to get any soundings on the bases since December 4th and I am therefore unable to show the precise extent of the rubble foundations. The high water line for December 31st is shown in a line of black cross dots, that of the previous month being in plain dots.

13. The advance of the two piers in 1880 has been much greater than in any previous year, but has not come up to the rate which I hoped to achieve when the year began.

General
Summary for
1880.

14. The North Pier has been advanced by a length of 1235 lineal feet, and the South Pier by 1420 lineal feet, giving a total for both piers of 2655 feet in 12 months. Both the piers now terminate in $7\frac{1}{2}$ fathoms water.

15. There have been 3,81,790 tons

of stone sent down to the works in the year, and 2,91,848 tons have been deposited in the rubble bases.

16. The number of concrete blocks made has been 44,341, and the number set in the piers has been 4616.

17. The year 1881 commences with everything in readiness for a rapid advance to completion, as the yards are full of well seasoned blocks, there is abundance of good cement, and new diving dresses and apparatus have just arrived. The locomotive engines, steam cranes, hopper barges and all the rest of the plant are in good order, and I trust that in April 1881 the North Pier will be finished.

I have the honor to be,
Sir,

Your most Obedt. Servant

J. H. Meadows, M. Inst. C.E.
Superintendent
M. A. Works

J. H.
Meadows

Sb. No. 2823 N. 7-12-80.
4 - 2857 N. 9-12-80.

Buildings and Roads

From
The Superintendent
Madras Harbour Works

102/5 W
Dated 5th January 1881

Enclosures two plans.

Progress Report
Submitted - for the month
of December 1880

C. 7.1.81. A.M.

h. to W

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 11th Jan'y/81
Read the following:—

From
The Superintendent,
Madras Harbour Works. (H.E. No. 75 Wd/5 Jan'y/81)

Recorded.

M

Plt S.
7/1/81

S. M. H. Works.
Secy. M. H. W. Committee
Marine Dept. 20/10
21-1-81

20/1

42

Cont. of (1870) 30-10-15.

PUBLIC WORKS.

12-1-80

To

By

For

Recd.

For

C.O. 11-1-80. C.O.W.

Vol. 49 to 50

M. H. Wood's Progress
Report of the
for December 1880,
Recorded.

End 2 wd.

W
/S