Archives I – 10,006—16-8 77.

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(2) Date of repair 27-2-87

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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W.D DEPARTMENT

G.O. No. / B.P. No.	2286-W	~~Press.~~ / ~~Mis.~~
Dated	16-9-1881	~~197~~ .

Not to be folded or roughly handled

2286/1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

16th September 1881, No. 2,286 W.

Buildings and Roads.
Civil Works.

Read the following paper:—

No. 114. From F. N. THOROWGOOD, Esq., M. Inst. C.E., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, dated Madras, 5th September 1881, No. 42 W.

I have the honor to submit the following report of the progress on these works during the past month of August.

2. North Pier Superstructure.—I have already reported that Mr. Parkes did not approve of the plan I had adopted for rebuilding a portion of the north pier head, and before I had received the Government Order upon my last Progress Report (No. 2,077 W. of August 20th, 1881,) I had commenced to take up the three rows of blocks therein referred to. I am now happy to state that the work is rebuilt in strict accordance with Mr. Parkes's wishes, and no further delay need be anticipated except by reason of unfavorable weather.

3. There has been a very persistent and troublesome ground swell throughout August which has interfered much with work at the pier ends, but with much difficulty we have managed to take up the fifteen blocks, the arrangement of which Mr. Parkes did not like, and have replaced them, laid on their sides. The main feature of this alteration consists in exposing no blocks at the end of the pier except "headers," or blocks with their greatest length at *right angles* to the face of the work, whereas in the system which I had built previously there was one row of "stretchers," or blocks with their greatest length *parallel* to the face of the work.

4. At the north pier now preparations will be made for turning round the Titan, so as to construct the wing wall or horn as shown on the plan. This will be a task of no small difficulty.

5. Quarries.—As reported last month and approved by Government, the Ambatúr quarry is practically closed, but it may be necessary to obtain a few trains of gravel for the work on the beach. Arrangements can easily be made with the Railway Company to run a train when necessary. No laterite has been supplied during August. From Pallávaram quarries 4,202 tons of granite have been received, which has been sufficient for the requirements of the works. The working at the quarry is now reduced to a minimum, but the quarry lines are retained in proper order.

6. SOUTH PIER SUPERSTRUCTURE.—The ground swell has interrupted the work at the south pier to a very great degree, as with the seas coming from the southward the end of the pier gets the full force of the waves, which frequently mount over the top and prevent access to the Titan. There were 129 blocks set in the pier head during August, advancing the work by a length of 42¾ lineal feet, and making the total length of the pier 3,900½ feet from the commencement. The width of the opening between the ends of the piers is now 590 feet.

7. SOUTH PIER RUBBLE BASE.—The rubble base of the south pier requires very little more stone, but as the blockwork advances there are sure to be some hollow places discovered which need filling up. In August 2,700 tons of granite were added to the base, the greater portion of which was tipped from boats, but some was thrown in from the end of the pier itself.

8. PROTECTIVE WORKS NORTH OF HARBOUR.—The extension of the revetment northward has been carried on as rapidly as circumstances will admit of. It is impossible to dispose of a large amount of stone boulders on this work at present, as there is no room for more coolies to work until the temporary line of railway is extended, and when that is done the difficulty will be to obtain sufficient wagons without taking them away from the beach improvement work. In August there were 910 tons of granite stone deposited in the extension of the revetment. In the meantime the sea is encroaching further away to the north, about two miles from the north pier of the harbour, and where to carry out any protective work expeditiously would be nearly impossible. All these encroachments are carefully watched and noted.

9. STORES RECEIVED ON WORKS.—We have received the following stores in August:—

Per S.S. *Mongolia*, Diving apparatus.
" S.S. *Madura*, 29 Swivels for buoys (from Calcutta).

10. MOORINGS.—I regret that I have not yet completed the drawings which I intended to submit to Government, explaining the difficulties which arise in handling the screwing gear for the moorings. I trust that in a few days they will be completed.

11. There are now four of the shallow water moorings screwed down and the buoys are shackled on to the chains. On August 25th the two steamers moved from the south to the north of the iron pier, and on the 27th we commenced screwing down the fifth mooring. A strong swell however arose and the work had to be abandoned, nor have we yet been able to resume operations with this screw. It will evidently be advisable to work only in the southern half of the harbour until the change of monsoon occurs. We are still in want of the shackles for fastening the buoys to the bridle chains, and have had to forge on these works the ones at present in use. The four buoys that are now in position are freely used by sailing vessels.

12. BEACH IMPROVEMENT WORKS.—I trust that the work of reclaiming and forming the beach and building jetties will now proceed more regularly. I have been hardly able to spare any hands for this recently, which circumstance, coupled with much difficulty in obtaining any money for the conduct of the work, has been a source of delay. The difficulty as to money has since been entirely removed. In August 1,235 tons of granite were deposited in the two jetties, and the pile driving engine is in position for work at the south jetty. The swell on the beach interferes with work at this jetty considerably.

13. EXPENDITURE.—The total expenditure on the works has been Rs. 57,23,878-3-0 up to August 31st, and the sum expended during the past month has been Rs. 1,15,393-6-5.

14. PLANS AND SECTIONS.—The plan forwarded herewith shows the line of high water mark on July 31st and August 31st, and it will be observed that there has been a very slight encroachment of sea on the north side of the harbour, with a slight receding on the south side. I have very little doubt that throughout the northern half of the harbour there has been a considerable and general deepening, but I will not venture on any positive statement until I have completed the survey which Mr. Beardmore and I are now conducting. When this is plotted we shall see the

contour lines of the bottom and be independent of speculation as to whether the general area is shoaling or deepening. Our last survey was in September and October 1879, so there are the changes of two years to be recorded.

2286/2

No. 115. ORDER THEREON, 16th September 1881, No. 2,286 W.

Recorded.

(True Extract.)

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

To the Superintendent, Madras Harbour Works.
" Master Attendant.
" Marine Department.

Exd. S. T. Austin.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1881} Madras.

PUBLIC WORKS.

To

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS,
&c., &c., &c.

Dated September, 16th.

Issued

Recd. *Encl.*

G. O., 16th September 1881, *No.* 2,286 W.

SEPTEMBER.
Nos. 114-115.

Madras Harbour Works.—Progress Report for August 1881, recorded.

No. 42 W. 2286/3

FROM

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS,

To Colonel R. H. Sankey, C. B. R.E.
Secretary to Government Dept.
Buildings & Roads
Fort St. George

MADRAS, 5th Sept. 1881.

Sir,

I have the honor to submit the following report of the progress on these works during the past month of August.

North Pier Superstructure

2. I have already reported that Mr Parkes did not approve of the plans I had adopted for rebuilding a portion of the North Pier Head, and before I had received the Government Order upon my last Progress report (No 2077 W of 20th August 1881) I had commenced to take up the three rows of blocks therein referred to I am now happy to state that the work is rebuilt in strict accordance with Mr Parkes's wishes and no further delay need be anticipated except by

reason

reason of unfavourable weather.-

3. There has been a very persistent and troublesome ground swell throughout August which has interfered much with work at the pier ends, but with much difficulty we have managed to take up the 15 blocks the arrangement of which Mr. Parkes did not like and have replaced them laid on their sides. The main feature of this alteration consists in exposing no blocks at the end of the pier except "headers" & blocks with their greatest length at right angles to the face of the work whereas in the system which had been previously there was one row of "strekers" or blocks with their greatest length parallel to the face of the work.

4. At the North Pier now preparations will be made for turning round the Titan so as to construct the wing wall or horn as shown on the plan.

This

Quarries

This will be a task of no small difficulty.

5. As reported last month and approved by Government the Ambathur quarry is practically closed but it may be necessary to obtain a few trains of gravel for the work on the beach. Arrangements can easily be made with the Railway Company to run a train when necessary. Laterite has been supplied during August from Pallavaram quarries 4202 tons of granite have been received which has been sufficient for the requirements of the works. The working at the Quarry is now reduced to a minimum, but the quarry lines are retained in proper order.-

South Pier Superstructure

6. The ground swell has interrupted the work at the South Pier to a very great degree, as with the seas coming from the Southward the end of the pier gets the full force of the waves, which frequently mount over the top and prevent access to the Titan. There were 129 blocks set in the Pier Head during

during August advancing the work by a length of 42¾ lineal feet and making the total length of the pier 3900½ feet from the commencement. The width of the opening between the ends of the piers is now 590 feet.

South Rubble

7. The rubble base of the South Pier requires very little more stone, but as the block work advances there are sure to be some hollow places discovered which need filling up. In August, 2700 tons of granite were added to the bar, the greater portion of which was tipped from boats, but some was thrown in from the end of the pier itself.

Protective work of No

8. The extension of the revetment Northward has been carried on as rapidly as circumstances will admit of. It is impossible to dispose of a large amount of stone builders on this work at present, as there is no room for more cranes to work until the temporary line of railway is extended, and when that is done the difficulty will be to obtain sufficient wagons without taking them away from the Beach Improvement work. In August there were 910 tons of granite stone deposited in the extension of the revetment. In the meantime the sea is encroaching further away to the North about 2 miles from the North Pier of the Harbour, and where to carry out any protective work expeditiously will be nearly impossible. All these encroachments are carefully watched and noted.

Stores received on works.

9. We have received the following stores in August.

Per S.S. "Mongolia" Diving apparatus
" "Madura" – 29 swivels for Buoys (from Calcutta).

Moorings

10. I regret that I have not yet completed the drawings which I intended to submit to Government explaining the difficulties which arise in handling the towing gear for the moorings – I trust

trust that in a few days they will be completed.

11. There are now four of the shallow water moorings screwed down, and the buoys are shackled on to the chains. On August 25th the two steamers moved from the South to the North of the Iron Pier, and on the 27th we commenced screwing down the fifth mooring. A strong swell however arose and the work had to be abandoned, nor have we yet been able to resume operations with this screw. It will evidently be advisable to work only in the Southern half of the Harbour until the change of monsoon occurs. We are still in want of the shackles for fastening the buoys to the bridle chains, and have had to forge on these works the ones at present in use. The four buoys that are now in position are freely used by sailing vessels.

Beach Improvement Works.

12. I trust that the work of reclaiming and

and forming the beach and building jetties will now proceed more regularly. I have been hardly able to spare any hands for this recently, which circumstance coupled with much difficulty in obtaining any money for the conduct of the work has been a source of delay. The difficulty as to money has since been entirely removed. In August 1225 tons of granite were deposited in the two jetties, and the pile driving engine is in position for work at the South Jetty. The swell on the beach interferes with work at this jetty considerably.

Expenditure

13. The total expenditure on the works has been Rs 57,23878. 3. up to August 31st and the sum expended during the past month has been Rs 115393. 6. 5.

Plans & Sections

14. The plan forwarded herewith shows the line of High Water mark on July 31st and August 31st and it will be observed that there has been a very slight encroachment of sea on the North side of the Harbour, with a slight receding on the South

South side. I have very little doubt that throughout the Northern half of the harbour there has been a considerable and general deepening, but I will not venture on any positive statement until I have completed the survey which Mr Beardmore and I are now conducting. When this is plotted we shall see the contour lines of the bottom and be independent of speculation as to whether the general area is shoaling or deepening. Our last survey was in September and October 1877, so there are the changes of two years to be recorded.

I have the honor to be,
Sir
Your most obedt servant

F. N. Harrowsord. M. Inst. C.E.
Superintendent
Madras Harbour Works

f.6. No. 2077 W. 20-8-81.
" 2184 W 2-9-81.

From
The Superintendent
Madras Harbour Works

No 4211
Dated 5th September 1881

No of Enclosures 3 (a)

* Large Plan retained at Harbr 13-9-81

(a) 2 tracing watercolr copies

Progress Report
Submit for — August 1881

A/cs 5

No 2286 W

6

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 16th Septr 1881

Read the following :—

2286/8

From the Supt. M. H. Works No. 4211 dt 5th Sept 81.

Recorded

Attd
10/9/81

Supt. M. H. Works V
Master attendant V
Marine Departt V

Despd
23/9/81

2254

5096

Govt. of (1881) Madras.

PUBLIC WORKS.

To

Dated

Issued

Recd. Encl.

G.O. 16 Sept 1881, No. 2286

Nos. 14 to 15

Inundation Works

Progress Report for August
1881, recorded

Sent. in Receipt
Regr.