Archives I—10,006—16-8-77.

(1) Number of pages 30
(2) Date of repair 24-10-86
(3) Initials of the Referencer

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W DEPARTMENT

G.O. No. 776 W
B.P. No.
Press.
Mis.

Dated 14—3-1879 ~~197~~.

V.S.M

Not to be folded or roughly handled

776 W
1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

14th March 1879, No. 776 W.

Buildings and Roads.
Civil Works.

Read the following papers :—

No. 185. From F. N. THOROWGOOD, Esq., M.I.C.E., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, Buildings and Roads, dated Madras, 3rd March 1879, No. 72 W.

I HAVE the honor to submit the following report of progress on these works during the month of February 1879.

2. NORTH PIER SUPERSTRUCTURE.—The weather during the past month has been favorable for work and 160 blocks were set in the superstructure advancing the pier by a length of 95 lineal feet. The total length of blockwork from the point B being now $1,445\frac{1}{4}$ feet. The upper surface of the rubble base at this distance is rather higher than is required, and the divers have hard work to excavate and remove the laterite boulders. This has retarded the progress during the latter part of the month.

3. In the work of excavating the foundation for the lower courses, a strong diving staff is required. Unfortunately I am unable to put all my force of divers to work at present, owing to the want of diving dresses for which I indented on 1st October 1878. At this season of the year the delay caused by the want of these dresses is likely to prove serious, and as yet I have received no advice of their having been despatched from England, but it is to be hoped that the telegram from Government of 22nd January will prevent much further delay.

4. RUBBLE BASE.—During February the work of depositing rubble base was carried on briskly by the *Salisbury* and by cargo boats. The total amount of laterite deposited has been 15,793 tons, and of this quantity 6,875 tons were deposited at the North Pier by the steamer *Salisbury*.

5. This vessel is now working very hard generally making five trips daily, each trip depositing about 120 to 140 tons of laterite. She discharges alternately at the North and South Piers.

6. BLOCKMAKING.—Blockmaking by machinery was carried on at the Royapooram yard up to the 18th February, and during that period 196 blocks were made, after which this work had to stop for want of Portland cement. There was an ample supply of General Morgan's cement in store, and I had reckoned upon being able to use it during the time that the ship *James Aiken* was withholding its cargo. Twenty blocks were made with General Morgan's cement, but they all cracked after two days and had to be broken up as useless. We have now about 400 tons of this cement in store, but up to the date of this report it is found to be unfit for use.

7. The cargo of 318 tons from the *James Aiken* is now available and blockmaking is resumed for a time, but it is to be feared that another stoppage will occur before the next consignment arrives from England, as the Indian cement appears to improve very slowly indeed. General Morgan's attention has been seriously called to this, as his supply has failed at a critical time and when I had reckoned upon its serving to keep up the manufacture of blocks at the usual rate.

8. QUARRIES.—The quarries on both railways have been working well during the past month. From Umbathoor there have been received 22,633 tons of laterite and from the South Indian Railway quarries 10,151 tons, giving a total quantity of stone supplied to the works of 32,784 tons or 1,366 tons per working day. This is approximating the rate that will be ultimately required, and arrangements are already made for increasing the supply during the current month.

9. SOUTH PIER SUPERSTRUCTURE.—The work of setting blocks has been carried on steadily during February; 272 having been successfully placed in the superstructure, advancing the work by a length of 166 feet. The total length of blockwork at the South Pier is now 976½ feet from the point E. Work has been retarded at this pier also by want of the diving dresses referred to in paragraph No. 3.

10. The total number of blocks set in both piers during February is 432, a greater number than have been set in any previous month since the work commenced.

11. SOUTH PIER RUBBLE BASE.—The rubble base of the South Pier is now well made up for some distance in advance of the blockwork, and it is daily being extended. During February 13,746 tons of stone were deposited, and of this quantity 6,044 tons were brought from the North Pier by the *Salisbury*. The remainder was thrown out from cargo boats and from the top of the Titan crane.

12. PROTECTIVE WORKS NORTH OF HARBOUR.—The shore to the north of the harbour has not altered much during the past month, but protective works are still carried on where there appears to be any tendency to settle in the laterite revetments. The groynes to the north also are being extended. For these purposes 371 tons of laterite boulders have been employed making a total amount used since May 1878 of 10,902 tons.

13. HOPPER BARGE "HOBART."—The Steamer *Hobart* arrived at Calcutta on 14th February, and the Commander with permission of the Superintendent of Marine placed her in the Calcutta Docking Company's dock. On the 20th the dock was emptied and the damaged doors of the *Hobart* examined. It is estimated that the repairs will take about fourteen days to complete and the estimated cost is Rupees 5,000. I am now awaiting a detailed account of how this estimate is arrived at, as it appears to me at first sight to be excessive.

14. STORES RECEIVED ON WORKS.—During February the S.S. *Merkara* arrived from England with 200 deal planks for general use on the works, and on the 28th the *James Aiken* which arrived in the Roads on 10th December 1878 commenced to discharge her cargo of 1,780 casks of Portland cement. Of this number there are many damaged casks, but until the whole cargo is delivered I am unable to state what is the number.

15. RAILWAY SLEEPERS.—I have requested the Forest Department to let me know whether they can arrange for the supply of sleepers to the works, and have given full particulars of the requirements, but have not as yet received any reply. Meanwhile, with the approval of the Harbour Committee, I have been getting sufficient sleepers from Cuttack and from Palghat to keep the work going on without delay.

16. EXPENDITURE.—The total expenditure on the works up to the end of February is Rupees 24,85,498, subject to corrections in detail.

17. PLANS AND SECTIONS.—Accompanying this report are two sections of the piers and one general plan with soundings taken by Mr. Beardmore, as shown on the plan accompanying the report for January.

18. GENERAL.—The work is now going on at a near approach to the estimated rate, and, if no stoppage occurs from want of cement or of diving dresses, there seems every prospect of the estimated rate of progress being attained. Concrete blocks are now taken from both block platforms, the South Pier platform having been used ever since 20th February when the Goliath crane was placed under steam and commenced its work of lifting the blocks and placing them on trucks.

19. In conclusion, I would respectfully ask that some little time may be allowed after the end of the month before the progress report and plans are submitted. In the earlier stages of the work it was not difficult to submit these on the 1st or 2nd

of the month, but it is almost impossible now to summarise all the various amounts of work done and to plot and trace the surveys, &c., before the 5th or 6th of the month following that to which the report applies.

No. 185-A. Endorsement of the Officiating Chief Secretary to Government, Marine Department, dated Fort St. George, 6th March 1879, No. 577.

From J. H. TAYLOR, Esq., Lieutenant, R.N.R., Secretary, Harbour Works Committee, to the Acting Chief Secretary to Government, Marine Department, dated Madras, 4th March 1879.

I HAVE the honor to forward the accompanying proceedings of the Harbour Works Committee, dated 3rd instant, for the information of Government and their orders thereon.

PROCEEDINGS of a Meeting of the Harbour Works Committee held on Monday, the 3rd March 1879, at 5 P.M.

PRESENT.

Colonel W. FAREWELL.
Captain J. H. TAYLOR.
R. C. WALKER, Esq.
A. MACKENZIE, Esq.

Mr. Thorowgood reports that the Government has desired him to apply to the Forest Department for sleepers; that he has done so, but not received an answer. In the meantime he is buying sleepers for immediate wants from Palghat at Rupees 3 to Rupees 3-1-0 delivered in Madras.

RESOLVED—The Committee approves of these temporary purchases, pending reply from Forest Department.

Mr. Thorowgood reports that he will shortly be in want of cement and that 3,000 tons has been ordered from England by telegram. That he has 400 tons of General Morgan's cement, but which is not sufficiently weathered to use. That he made up twenty blocks of this cement the other day and all fell to pieces. The cost of cement and labor on those twenty blocks is about Rupees 3,000. Mr. Thorowgood suggests that this cost shall be deducted from General Morgan's bills.

RESOLVED—Mr. Thorowgood to inform General Morgan that the Committee propose to deduct the cost of cement and labor in respect of above twenty spoiled blocks from the bills now unadjusted, unless he can give satisfactory explanation, or show good grounds for exemption from the charge.

Captain Taylor mentions that Mr. Parkes has requested him to bring forward the question of moorings, and lays plan on the table. The system shown in the plan has been approved in the Marine Department. The estimated cost is 3½ to 4 lakhs.

Mr. Parkes having personally attended and explained the plan—

RESOLVED—That this plan be forwarded to Government through the Marine Department for favorable consideration.

FORWARDED to the Public Works Department for consideration and disposal.

(Signed) C. G. MASTER,
Offg. Chief Secy.

No. 186. ORDER THEREON, 14th March 1879, No. 776 W.

ORDERED that the following telegram be sent to the Secretary of State:—

"Your despatch number two, 30th January. Have stores been despatched? Urgently required."

2. The Government will be glad to have further information as to the cause of the recent failure of Morgan's cement. It is observed that the Harbour Committee have

requested General Morgan to show cause why the cost of the damaged blocks should not be deducted from the unadjusted bills. The result of this reference will be awaited. So far as the Government can at present judge, the failure has resulted more from over haste in the preparation and use of the cement than from any deficiency in its quality.

3. With reference to the last paragraph of the Superintendent's letter, the Government trust that exertions will be made to keep the monthly Progress Reports up to date.

(True Extract.)

Colonel, R.E.,
Ag. Secy. to Govt., P.W.D.

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

Exd .E. C. Shunker.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [1879] Madras.

PUBLIC WORKS.

To

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

Dated March 14th.

Issued

Recd. Ent.

G. O., 14th March 1879, No. 776 W.

MARCH.

Nos. 185-186.

Madras Harbour Works—Orders on Proceedings, Harbour Committee, dated [illegible] instant and Progress Report for February 1879 of the —.

No. 72 W.

P1
776 W
4

From

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS,

To Colonel J. H. M. Shaw-Stewart R.E.
Acting Secretary to Government,
Public Works Department,
Buildings & Roads.

MADRAS, 3rd March 1879.

SIR,

I have the honor to submit the following report of progress on these works during the month of February 1879.

North Pier Superstructure

2. The weather during the past month has been favourable for work and 160 blocks were set in the superstructure advancing the pier by a length of 95 lineal feet.— The total length of blockwork from the point B being now 1445½ feet. The upper surface of the rubble base at this distance is rather higher than is required and the divers have hard work to excavate and remove the laterite boulders. This has retarded the progress during the latter part of the month.—

3. In the work of excavating the foundation for the lower coursed a strong diving

staff is required. Unfortunately I am unable to put all my force of divers to work at present owing to the want of diving dresses for which I indented on 1st October 1878. At this season of the year the delay caused by the want of these dresses is likely to prove serious, and as yet I have received no advice of their having been despatched from England, but it is to be hoped that the telegram from Government of January 22nd, will prevent much further delay.—

Rubbl

4. During February the work of depositing rubble base was carried on briskly by the "Salisbury" and by cargo boats.— The total amount of laterite deposited has been 15793 tons, and of this quantity 6875 tons were deposited at the North Pier by the steamer "Salisbury".—

5. This vessel is now working very hard generally making 5 trips daily, each trip depositing about 120 to 140 tons of laterite. She discharges alternately at the the North and South piers.—

pr 776W

Blockmaking

6. Blockmaking by machinery was carried on at the Royapooram yard up to the 18th February, and during that period 196 blocks were made, after which this work had to stop for want of Portland cement.— There was an ample supply of General Morgan's cement in store and I had reckoned upon being able to use it during the time that the ship "James Aiken" was withholding its cargo. 20 blocks were made with General Morgan's cement but they all cracked after two days and had to be broken up as useless. We have now about 400 tons of this cement in store but up to the date of this report it is found to be unfit for use.—

7. The cargo of 318 tons from the "James Aiken" is now available and blockmaking is resumed for a time, but it is to be feared that another stoppage will occur before the next consignment arrives from England, as the Indian cement appears to

to improve very slowly indeed. General Morgan's attention has been seriously called to this, as his supply has failed at a critical time and when I had reckoned upon its serving to keep up the manufacture of blocks at the usual rate.–

Quarries

8. The quarries on both railways have been working well during the past month. From Umbathoor there have been received 22633 tons of Laterite and from the South Indian Railway quarries 10151 tons, giving a total quantity of stone supplied to the works of 32784 tons or 1366 tons per working day. This is approximating the rate that will be ultimately required and arrangements are already made for increasing the supply during the current month.–

South Pier Superstructure

9 The work of setting blocks has been carried on steadily during February; 272 having been successfully placed in the superstructure, advancing the work by a length of 166 feet. The total length of blockwork at the South pier is now 976½ feet from the point E.– Work has been retarded at this pier also by want of the diving dresses referred to in paragraph No. 3.–

10. The total number of blocks set in both piers during February is 432, a greater number than have been set in any previous month since the work commenced.

South Pier Rubble Base

11. The rubble base of the South pier is now well made up for some distance in advance of the blockwork and it is daily being extended. During February 13746 tons of stone were deposited and of this quantity 6046 tons were brought from the North Pier by the "Salisbury". The remainder was thrown out from cargo boats and from the top of the Titan crane.–

Protective Works North of Harbour

12. The shore to the North of the Harbour has not altered much during the past month, but protective works are still carried on where there appears to be any tendency to settle in the laterite revetments. The groynes to the North also are being

extended. For these purposes 371 tons of laterite boulders have been employed making a total amount used since May 1874 of 10,902 tons.—

Hopper Barge "Hobart."

13. The steamer "Hobart" arrived at Calcutta on February 14th and the Commander with permission of the Superintendent of Marine placed her in the Calcutta Docking Company's Dock. On the 20th the dock was emptied and the damaged doors of the Hobart examined. It is estimated that the repairs will take about 14 days to complete and the estimated cost is Rs 5000.— I am now awaiting a detailed account of how this estimate is arrived at, as it appears to me at first sight to be excessive.—

Stores Received on works

14. During February the S.S. "Merkara" arrived from England with 200 deal planks for general use on the works, and on the 28th, the "James Aiken" which arrived in the Roads on December 10th 1874, commenced to discharge her cargo of 1780 casks of Portland cement. Of this number there are many

damaged

damaged casks but until the whole cargo is delivered I am unable to state what is the number.—

Railway Sleepers

15. I have requested the Forest Department to let me know whether they can arrange for the supply of sleepers to the works, and have given full particulars of the requirements, but have not as yet received any reply. Meanwhile, with the approval of the Harbour Committee I have been getting sufficient sleepers from Cuttack and from Palghaut to keep the work going on without delay.—

Expenditure

16 The total expenditure on the works up to the end of February is Rs 24,85,498, subject to corrections in detail.—

Plans & Sections.

17. Accompanying this report are two sections of the piers and one general plan with soundings taken by Mr Beardmore, as shewn on the plan accompanying the report for January.

General

18. The work is now going on at a near approach to the estimated rate

and if no stoppage occurs from want of cement or of diving dresses there seems every prospect of the estimated rate of progress being attained. Concrete blocks are now taken from both block platforms, the South pier platform having been used ever since February 20th when the Goliath crane was placed under steam and commenced its work of lifting the blocks and placing them on trucks.—

19. In conclusion I would respectfully ask that some little time may be allowed after the end of the month before the progress report and plans are submitted. In the earlier stages of the work it was not difficult to submit these on the 1st or 2nd of the month, but it is almost impossible now to summarise all the various amounts of work done and to plot and trace the surveys &ca before the 5th or 6th of the month following that to which the report applies.—

I have the honor to be,
Sir
Your most Obedient Servant,—

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

Buildings & Roads.

From
The Superintendent
Madras Harbour Works

GO 22-1-79 No 261 W

No 72 W.
Dated 3rd March 1879

No of Enclosures 3

Pro 9 14-3-79 No 776 Wn

Progress

Submits Report of — during
February 1879.

Cir 5/3 Rel 12/3.

Madras 4th March 1879
776

From

J. H. Taylor Esqr Lieut R.E. 9
Secretary Harbour Works
Committee
Madras

To

C. G. Master Esquire
Acting Chief Secretary to Government
Marine Department
Fort Saint George

Sir

I have the honor to forward the accompanying Proceedings of the Harbour Works Committee, dated 3 instant, for the information of Government, and for their orders thereon.

I have the honor to be
Sir
your most obedt Servant
J H Taylor
Secretary Harbour Works
Committee
Madras

Marine (1879) Depart
(Harbour Works Committee)

From
The Secy Harbour Works Committee

Dated 4 } March/79
Recd. 6 }

No. 181

Enclo

Forwarding Proceedings of the Committee dated 3 Instant –

With Enclosure

No. 577

Forwarded to the Public Works Department for consideration and disposal. –

Chester
Offg Chief Secy

Fort St George
8 March /79

RD	7-1-79	No. 62 W.
"	22-1-79	" 261 W.
"	3-2-79	" 364 W.
"	25-2-79	" 579 W.

Cir 12/3

Cir 8/3 R 612/3

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776 W
10

Proceedings of a meeting of the Harbour Works Committee, held on Monday the 3 March 1879, at 5 P.M.

Present

Colonel Farewell
Captain J. H. Taylor
R. C. Walker Esquire
A. Mackenzie Esquire

Mr. Thorogood reports, that the Government has desired him to apply to the Forest Department for sleepers, that he has done so, but not received an answer. In the meantime he is buying sleepers for immediate wants from Palghat at Rupees (3-0-0) three to Rupees (3-1-0) three and anna one, delivered in Madras.

Resolved – The Committee approves of these temporary purchases, pending reply from Forest Department.

Mr. Thorogood reports that he will shortly be in want of Cement. and that 3000 tons has been ordered from England by Government – That he has 400 tons of General Morgan's Cement, but which is not sufficiently weathered to use. That he made up 20 blocks of this cement the other day, and all fell to pieces. The cost of cement and labour on these 20 Blocks is about Rupees (3000) Three thousand. Mr Thorowgood suggests that this cost shall be deducted from General Morgan's bills.

Resolved — Mr Thorowgood to inform General Morgan that the Committee propose to deduct the cost of cement and labour in respect of above 20 spoiled blocks from the bill now unadjusted, unless he can give satisfactory explanation, or show good grounds for exemption from the charge.

Captain Taylor mentions that Mr Parkes has requested him to bring forward the question of moorings, and lays plan on the table. The system shown in the plan has been approved in the Marine Department. The estimated cost is (3½) three and half to (4) four lakhs.

Mr

or 5/3 R 612/3

776W

Mr Parkes having personally attended and explained the plan,

Resolved — That this plan be forwarded to Government, through the Marine Department, for favourable consideration.

A Mackenzie

Robt Walker

W Taylor

In the g 14-3-79 No. 776 W

Cir 12/3

Cir 5/3 RC 12/3

776 W
12

Letter from the Supt. Madras Harbour Works No. 72 W d/ 3rd March 1879.

FOR ORDERS.

I think Mr. 7 should see Exect. Engr.'s ~~& last~~ reports up to date [illegible]

Tel. to S. of S. again to know if they have been despatched.

I think it would have been expedient to [the extent to which Genl. Morgan's cement has been actually used in the construction of blocks laid in position] or rather "the cause of the recent failure of"

There is no reason to doubt the goodness of the cement hitherto used — I understand the failure was from overhaste in preparing & moving March/79. B.C. 8/3

In despatch dated 30th January 1879, the Secretary of State informed this Govt. that the diving dresses &c indented for in October 1878, would be provided "at the earliest possible date."

[illegible]
Col: R.E.

5/3.

Asst. Secy. to Govt. PWD.

Desp. 24-3-79

FOR ORDERS.

[illegible]

Despatched 10-3-79

[illegible] 5/3 RC12/-

No. 776 W ~~Public Works Department.~~

776W B&R / 13 Cl works

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 14th March/79

Read the following :—

From, The Superintendent Madras Harbour Works	(H.C. No. 72 A Dy 3rd March 1879.)
Endorsement of the Marine Departt.	(" " 577 [illegible] 6th — do.)

Ordered that the following telegram be sent to the Secretary of State.

"Your despatch number two, 30th January Have Stores been despatched x urgently required".

The Government will be glad to have some further information as to the cause of the recent failure of

General

A.H. 11/3

~~General~~ Morgan's Cement.

It is observed that the Harbour Committee have requested General Morgan to show cause why the cost of the damaged blocks should not be deducted from the unadjusted bills. The result of this reference will be awaited. So far as the Govt. can at present judge, the failure has resulted more from over haste in the preparation and use of the Cement i.e. than from any deficiency in its quality.

With reference to the last para: of the Superintendent's letter, His Grace the Governor in Council is of opinion that exertions should be made to keep the monthly Progress Reports up to date.

Supdt. M. H. Works A
Harbour Committee B
Marine Departt.

30

Desp. 24-8-79

~~General~~ Morgan's Cement.

It is observed that the Harbour Committee have requested General Morgan to show cause why the cost of the damaged blocks should not be deducted from the unadjusted bills. The result of this reference will be awaited. So far as the Govt. can at present judge, the failure has resulted more from over haste in the preparation and use of the Cement, ~~i.e.~~ than from any deficiency in its quality.

With reference to the last para: of the Superintendent's letter, His Grace the Governor in Council is of opinion that exertions should be made to keep the monthly Progress Reports up to date.

Supdt. M. H. Works A
Harbour Committee B
Marine Departt C

30

Despd 24-3-79

Cn 1918
~~2014~~

Govt. of (1879) Madras.

PUBLIC WORKS.

Very urgent

Sent to Press
17-3-79

To

Dated

Issued

Encl.

Encl.

G.O. 14 March 1879, No. 776 W.

Nos. 185-186

Madras Harbour Works

Orders on Proceedings Harbour Committee dated 3rd Instant and Progress Report for February 1879 of the —

Cont