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MADRAS RECORD OFFICE.

Government of Madras.

Public Works **DEPARTMENT.**

G.O. No. 1382	(W)	~~Press~~
		~~Mis.~~ <i>mis</i>
Dated 23-4-	1877.	

Not to be folded or roughly handled

From

F. N. Thoroughgood Esq: C.E.

Superintendent

Madras Harbour Works

To

The Acting Joint Secretary to Government
Buildings & Roads Branch.
Fort St George.Madras 3rd April 1877.

Sir,

I have the honour to report the following amount of progress on these works for the month ending Saturday March 31st, and to state that it is owing to the absence with permission of several of my staff at Easter that the date of this report is two days later than usual.

North Pier

2. The Titan crane has been at work setting blocks on all days when the weather has been smooth enough, but during the last week of the month the sea was frequently too rough for the divers to work.

3. The number of blocks set in the built work of the pier during the month is 120,

and

and the total number set 267. - The extreme length from A on plan to the end of the block work is now 1145½ feet. The commencement of the block work is marked on the plan and on the pier by the letter B, and if it be always borne in mind that this point is 278 feet from the point A, I think it will be a better point to quote measurements from in future, as I do in my reports to Mr. Parkes. -

4. The following is a comparative table of the advance of the pier since the first concrete blocks were set by the Titan on December 18. 1876. -

Date	Distance from point B.	Distance advanced in the month
1876	Feet	Feet
Decr 18	0	0
" 31	45	145
1877		
Jan'y 31	96	51
Feb'y 28	182	86
March 31	297½	115½

5. The depth of water at the end of the Pier is now 14½ feet below mean sea Level, and the construction of the Pier is now three courses in height instead of two. The top course has however

3
however, to be scapped down considerably to allow the Titan and Locomotive to advance - In a week I hope to have reached sufficiently deep water to set the Abutment. -

6. The base of the Pier is still being tipped by catamarans and masula boats, and the total quantity deposited by these means is now about 4486 tons. The stone is chiefly taken from the upper portion of the "false start" by the Rajapooram sewer outfall. I do not deem it advisable to take this bank down lower than within 2 or 3 feet of High Water mark, lest in the S. W. monsoon the sea should encroach on the road there. - When, therefore, this source of supply for the base is exhausted, I must get as much as I can from the Palaveram district, as I am directed not to use the Madras Railway more than I can help, until the pressure of grain traffic is passed. (G. O. No. 672, dated February 28. 1877).

Concrete Blocks

7. The making of concrete blocks by steam machinery has been carried on as quickly as possible, but on several occasions the work has been stopped for want of stone from Shinnampett. The delay being in getting the wagons from Shinnampett

Chinnamapett to Rajaportam not in collecting the stone. The total amount of stone received from Chinnamapett is now 3043 tons of which 1654 tons have been received during this month. The greatest number of blocks made in a day at present is 9 (representing nearly 250 tons of material), but when the yard is clear of the irregular shaped blocks for the Abutment so as to admit of the proper system of working 12 blocks a day will be turned out easily, and subsequently perhaps 18 blocks on each block-ground. This last number will all depend upon the stone supply.

8. The total number of blocks now made for the construction of the North Pier is 649, and of these 168 have been made during the month of March against 94 made during February.

9. I have not yet set any of the blocks made from General Morgan's cement, because they are not of the proper age to carry the weight of the Titan. I hope to set some however during the month of April.

The

Harbour Committee
and Contracts

10. The Harbour Committee met twice at this Office during the month, namely on the 5th and 26th March. The chief matters touched on were the supply of stone to the South Pier particulars of which have been reported to Government through the Secretary to the Committee.

11. It appeared at the second meeting that they disapproved of my having accepted Mr. Woolley's tender to supply 2000 tons of large stone to the South Pier at Rs. 4 per ton, without having first submitted the price to them as a Committee.

12. There followed on this the G.O. No. 959 dated March 20th, telling me to advertise for the stone. I had however taken Mr. Woolley's offer immediately on receiving it so as to have no delay, and he had been tipping large stone for 10 days before I received or knew the contents of the G.O.

13. I regret extremely that this proceeding should have appeared to be at variance with the wishes of the Harbour Committee, but I confess the only thought in my mind was promptness. As to the price of Rs. 4.

per

per. ton I think that no one can be dissatisfied with that on so small a quantity as 2000 tons. -

14. I have inserted advertisements for the supply of 100 tons of teakwood timber, tenders for which I shall receive on April 16th.

15. The vessels reported as having arrived last month have discharged their stores of cement, rails and other things. The S. S. Glamis Castle has also arrived bringing iron nuts, iron pipes, and some blocks and tackle which have been greatly needed for the last six months. - General Morgan has also supplied about 43 tons of his cement.

16. In the block making yard I have had a small cabin built for the diving apparatus for the divers use. - The P. & O. Company want the materials of which the two godowns at present used as workshops are built. I therefore have commenced to build a separate carpenter's and smith's shop. The boiler house is roofed in with corrugated iron, but it is not yet finished, being stopped by the want of galvanized rivets and washers. -

South River 17. On the 23rd March an Engine was run safely down from Egmore station to the beach and the trip was satisfactory. Several trips were made at different speeds across the bridge over the canal, but what settlement there was appeared to be only due to the joints of the timber tightening under the first pressure that had come upon them. Mr. White, Chief Engineer, and Mr. Fox, Assistant Engineer, of the South Indian Railway, were present on this occasion. - But on the subject of testing this bridge, I am instructed in G.O. No 10477 of March 29th 1877, received from the Consulting Engineer for Railways. -

18. Since then ballast trains have been running to the beach, and the ballasting of the line has been carried on throughout. -

19. The driver of the Engine has been ordered to whistle as little as possible, but I fear that some fencing will have to be put up to keep the people from crowding on the line. It must be remembered however that for the conveyance of stone three trains a day will suffice if the proper number of wagons are attached whereas at present the ballast train is constantly running

running. No stone has been brought along the line at the present date.

20. The South Surf bank is at present being advanced with stone from the old groynes at Ellice's battery and with the stone already mentioned as supplied by Mr. Doolley. The number of tons (approximately) deposited is 928; and the length advanced is 50 feet beyond the line of High Water. The state of affairs at the end of March is shown on the plan.

21. In order to clear a road for laying the railway to the bank, I was obliged to take down some godowns before the owners had had time to remove their rice. This doubtless put the owners (Messrs Wilson & Co.) to considerable inconvenience. I shall be glad to learn if Government consider that a claim for payment of the cost of removing the rice should be entertained. I have at present replied that I will ask Government for instructions on the point.

22. The work of the two Marine Surveyors Lieutenants Hammond & Pascoe R.N. has been stopped since March 26th by the failure of the boiler of the steam launch which I had hired

South Surf
Bank

Marine
Survey

Screw Hoppers
Hobart &
Salisbury

Observations
on the sand,
see V. 24

for their use and for that of Lieutenant Jarrad, previously in October 1876. To repair the boiler will take some time, and I have nothing further to offer them as a suitable surveying craft. At present however the surveyors could not be at work as the weather is unsuitable.

23. During the last month the four Engineers of the screw hoppers sent in three months' notice of their intention to resign. This is in accordance with the terms of their agreement. I have written to Mr. Parker acquainting him with this, and after consulting with the Master Attendant, I proposed that four other men should be sent out on a three years term of service. The present Engineers came out for only one year.

24. The prevailing wind during the month has been from the Southward, but occasionally there have been days with fresh E. N. E. wind. On these days the sand to the South of the North pier has been cut away more than with a southerly wind. On the 31st the surface of the sea had a marked northerly current, (i.e. to the North). This was not perceptible at the bottom to a diver 12 fms below the surface.

the

10th The water was at this time thick with sand in
suspension, so that the diver could not see.
20th 25. On March 2nd (the water being clear), I
went out with a diver to inspect the two cubes
or crates (2. b. x 2. b x 2. b) deposited on the 5th and
5th January. They were both overturned presumably
by the cable of some vessel. The crate set in
5 1/2 fathoms on January 5th was overturned
towards the Eastward, but it bore no mark of
violence upon it. The sand around it was hard
and firm and no accumulation was perceptible
to the North or to the South. At a distance of
about 3.0' from the crate, on the shore side of
it, there was an accumulation of from 3. to 14
inches in height, which sloped away gradually
north and south and westward. It is hazardous
to say how this was caused, as the fact of the
crate being knocked over, destroys any certain
theory, for the crate might have been dragged
for a few feet shoreward scraping up sand, and then
have been dragged away again by a cable.
Lie But it is possible that the wash of sand from
the shore outwards, may have been checked by
the crate and so caused the accumulation.

The

26. The crate set in 7 1/2 fathoms was also
overturned but towards the shore. It also
bore no mark of violence upon it. Precisely
the same appearance was presented with this one,
the sand having accumulated very slightly on the
landward side.

27. On the occasion of visiting these crates
there was no current and the water very clear.
The bottom is reported so hard that the diver
could not kick his heavy shoe into it.

28. Further reports shall be submitted on
these and other observations as opportunities
occur, but at the present time all operations
with the diver are stopped by bad weather.

I have the honor to be
Sir,

Your most obedient servant

J. N. Harwood.

Superintendent
Albany Harbor Works

G.O. No 672-28-2-77
 " 812-9-3-77
 " 959-20-3-77
 " 1077-29-3-77

Roads & Buildings

From Superintendent
 Madras Harbour Works

N.B.
 Dated 2nd April

No of Enclosures 2

Progress Report
 Forwards for the month of
 March 1877.

G.O. 23rd April 77 N.B. No 530

Progress Report of the Madras Harbour
 Works for March 1877.

FOR ORDERS.

The Woolley contract is under
 & the safe way of working the
 train would seem to be to allow
 the engine to work in advance
 then so as to ensure the speed
 being low enough to have a bell
 on the engine & whistle
 whistling for the train.

Warrant Colonel.
 Secy to Govt. Mr. D.
 Buildings & Roads Branch.

The Woolley contract is not
 satisfactory -
 Would not a bell on the
 engine as in America be preferable
 & wholly & remove the necessity
 of fencing? (S)

The report seems as
 satisfactory as can be
 with present.
 The obtaining material
 for the North pier has
 from Talavaram seems
 some questionable policy -
 as necessary for building
 cost for trial carriage?
 present.
 I think if there is
 Liborn claims any compensation

g. = Letter for moving their Rice
it sh^d. be submit^{ted} in writing
I am advised at present
to require that they move
in the list. L.D.

[illegible]

3508
FOR ORDERS

Mr. D. S. S. S.
Mr. H. H. S.
Mr. S. S. S.

Harbor
2 Plans
sent to Mr.
Sarnel
Returned & given
to Librarian

46 23rd April/77 No 1382

No 1383 Public Works Department 17

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 23rd April 1877.

Read the following:—

from

The Supt. Madras Harbour
Works

(No. 13 of 2nd April 1877)

The report is, in
the opinion of Government,
as satisfactory as could
be expected, except in the
matter of the contract with
Mr. Woolley. Separate orders
will be passed regarding
this contract, which is,
however, understood to have
ended.

2. His Excellency doubts
whether it would be good

policy to obtain material
for the base of the North
Pier from Palaveram. He

supposes that to do this cart
will have to be substituted
for rail carriage. *It is*

Thoroughgood will report
more fully upon this point.

The Government
do not ^{think} consider that there
is any necessity for fencing
off the beach railway.

It would be better to pro-
hibit whistling and to
adopt the American plan
of having a bell on the
Engine; ^{while} ~~which~~ to ensure
the maintenance of a suf-
ficiently low speed, men

carrying flags should
walk in advance of the
train.

4. His Excellency in
Council does not at present
consider that Messrs Wilson
& Company are entitled
to compensation for the
removal of their godowns.
Any claim which that
firm may think fit to
make should be submitted
in writing.

21/4/77 EX7

Supt. M.H. Worker
C. E. for *By* *in* *of*, Despatch 23-4-77
Marine Dept.
Secy. Harbour Committee

Atty

Desp 3-5-77

Copy



Sect. of 1877 Madras.
PUBLIC WORKS.

To *The Secy of Indian Harbours*
W. H. H. H.

Dated

Issued

Recd.

Encl.

G. O. *23 April* 1877, No. 1382

Nos. 530-531

Madras Harbour Works.
Passing orders as the
report of the progress
of the — during the
month of March 1877—

Ch. P. in P. O.