

(1) Number of pages.....

(2) Date of repair.....

(3) Initials of the Referencer.....

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	45	(w)	Press.
~~B.P. No.~~			~~Mis.~~
Dated	14-5.		1877.

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

14th May 1877, No. 45 W.

Buildings and Roads.

Civil Works.

Read the following paper :—

No. 87. From Lieutenant-Colonel R. B. KENNEDY, R.E., District Engineer, Malabar, to the Chief Engineer, Buildings and Roads Branch, dated Calicut, 1st May 1877, No. 14.

Reference—No. 1,208, dated 7th April 1877.

WITH reference to above, I have the honor to forward an original letter from Mr. W. Maylor, the Contractor who constructed the Calicut pier, which I do without further remark, as the subject has been already well discussed.

2. The fortnightly survey ordered in G.O., No. 1,209, dated 7th ultimo, is ready, and only awaits the report from the Range Officer to be forwarded; there is, I may however say, scarcely any difference in the appearance of the beach since I last wrote.

ENCLOSURE No. 1.

From W. MAYLOR, Esq., to the District Engineer, Malabar, dated Red Hills, Madras, 28th April 1877.

In reply to your letter of the 24th instant, I have the honor to inform you that, in order to ascertain the nature of the bed of the sea opposite the old Custom-house at Calicut, the following apparatus and appliances will be necessary :—

A piece of sheet-lead, about 6 inches square, attached at the four corners to a log-line so as to ascertain depth of water covering soft mud; when the lead rests upon this, it will be known by the diminished weight; a piece of bamboo or iron rod should be pushed through the mud until it reaches sand or rock, and measuring the traces of mud on the bamboo will show the thickness or depth of mud. Then by screwing in a test screw, attached to iron rods, through sand into clay, the screw will become very hard to turn after it is embedded a few feet; when the screw first enters the clay, extra force is required to turn it, and, upon withdrawing it, portions of the clay will be found adhering to the screw. If rock is met with, the screw will then turn perfectly easy, as it will not bite the rock; and, to make sure that it is not a small boulder or log of wood, other trials should be made a little distance off. Two boats will be required with a platform of planks on the top, and these boats will have to be securely moored during the trial. There is generally a disagreeable swell in the Calicut roads about this time of the year, and I fear it will be difficult to keep the boats sufficiently steady.

I have ventured to trouble you with these details in case you would like to have the ground tested by your own people, and I will gladly lend you the required apparatus. The hire of two boats for about a fortnight would probably amount to Rupees 30, and hire of eight good men about Rupees 60, and an Overseer, say, Rupees 60. After adding cost of ropes and tackle, I should think the trial would cost Rupees 200 to Rupees 300. In case you require more skilled supervision, the cost of this would also have to be added.

I have no doubt whatever of the presence of rock. Even in the old Chart, dated 1816, prepared by Lieutenants C. W. Montrion and A. D. Taylor, of the late Indian Navy, I see rocks are shown opposite the old Custom-house and Light-house about 50 yards from the beach. Native fishermen will also tell you that they object to throw their nets near these, as they are liable to be torn by getting entangled in the rocks.

PUBLIC WORKS DEPARTMENT, 9TH MAY 1877, No. 45 W.

Whilst it is quite possible to fix the piles in rock, you will be aware that it will be a very troublesome and costly operation. Cast-iron cylinders about 3 feet diameter in several lengths, and in semi-circular pieces bolted together, would have to be lowered on to the sand, which would then have to be removed from the interior until the cylinder rested on rock; the hole would then have to be jumped or bored to a depth of at least 2 feet. Assuming that about half the number, or say 32 piles, have to be so fixed in rock, I estimate the probable cost including staging, tackle, tools, and labor at about Rupees 10,000. To remove the materials of the pier from the present site would cost probably Rupees 4,000, and to replace breakages and re-erect the pier say Rupees 16,000, to which should be added cost of rock-boring, or, say, Rupees 30,000 in all.

Whether the pier be removed or not, I think short groynes, such as you propose, should be constructed to protect the beach road, as well as the adjacent buildings from the constant encroachments of the sea.

I intended, as soon as I have completed my present bridge contracts, to go to England, say, in July next; but, if Government wish me to do the pier work, I will arrange to remain a few months longer, and in that case would it not be better for some disinterested person to test the ground; otherwise it may be said by persons who do not know my antecedents as well as you do that I have an interest in magnifying difficulties.

I must, however, in conclusion, candidly confess that I think it is a pity to spend so much money on such an object. The pier has proved very useful for some years where it is, as all the large exporters of coffee, ginger, and such like delicate produce can testify. Before the pier was constructed such produce had to be sent to vessels lying about three miles from land in small boats taking about one ton each, and it was then a very common thing to see such valuable produce saturated with salt water in pushing off the boats from the shore and whilst they were lying alongside the ship; besides, since the Suez Canal was opened for traffic, the produce is sent to Europe in steamers, and it is now necessary to load them in a few days, which it would be difficult or impossible to do without a pier, whereas formerly it took weeks to load sailing vessels.

Natives do not care to use the pier partly on account of the toll which is levied and partly because native craft, as a rule, lie comparatively close to the shore, and small boats can easily convey the goods such a short distance.

I fear you will consider me tedious in mentioning all these details, especially as the question of the removal of the pier will be left to wiser heads than mine; but, as the whole matter is so familiar to me, I considered it only right to state some of the things I know. I cannot help thinking that, if some competent person had taken the trouble to explain to His Grace the Governor when at Calicut (who is, I believe, no novice in engineering matters) all the particulars of the case, the question would not have risen to its present state.

No. 88.

ORDER THEREON, 14th May 1877, No. 45 W.

ORDERED to be recorded.

(True Extract.)

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

Buildings.

No 14

Malabar Distt: Eng's office
Calicut 1st May 1877

From

The District Engineer
Malabar

To
The Chief Engineer
Roads & Buildings
Madras

Sir,

Reference No. 1208 d/y 7th April 1877.

With reference to above, I have the honor to forward an original letter from Mr. W. Maylor the Contractor who constructed the Calicut Pier, which I do without further remark, as the subject has been already well discussed.

2. The fortnightly Survey ordered in G. O. No. 1209 dated 7th Ultimo is ready, and only awaits the report from Range Officer to be forwarded - there is I may, however say, scarcely any difference in the appearance of the Beach since I last wrote.

I have the honor to be

Sir,
Your most obt. Servant

Att: W. Keene Lt. Col.

Distt. Engineer, Malabar

Roads & Buildings

P.W.D.

4/1/77

NR

From

The District Engineer
Malabar

No 14

Dated 1st May 1877.

To

Engr. I. ✓

Cabinet. P.W.D.

Forwards an Original letter
from Mr Mayor on the
cost of the removal and
reconstruction of the Pier
and states that the survey
of the beach line will
be forwarded shortly -

P. W. DEPARTMENT.

Read the following:—

Letter from the District Engineer
Malabar No 14 d/ 1st May 1877.

FOR ORDERS.

Isolated for information

cc Mrd Colonel R.E.

Secy. to Govt. P.W.D.

Money in protection works

customs

The extra started from

Particular of substitution of

river is a serious

expense - Rec. 7/5

HA

Md
16/5

7. Apr 1877 No 1209. 1208.
24 Nov. 1876. 3157.

GO. 14th May/77 I Bk. 87

Ar 8/5/77 Rn/5/77

Copy



Govt. of 1877 Madras

PUBLIC WORKS.

To The N. E. Malabar

Dated

Issued

Recd.

Encl.

G. O. No. 164 Key 1877, No. 45W

No. 87-88

Calicut Pies Letter from
the D. R. Malabar forward-
ing an original letter from
M. S. in the practice
of opening and
reconstructing the
recorded

Contd. in Reg.

FOR ORDERS.

No 45144 14 Aug 1877

Recorded

21/8/77

Dr Malabar
Marine Dept.

Recd 24. 8. 77