

Marine (1898) Department.

✓ G.O., No. 489 m

DATED 13-6-98

[Despatch Abstract.]

Land : Meeting the Collector of Madras
to defer action for the present in the
matter of acquiring the — at Cassimode
threatened with erosion by the sea

[M. 6.
500-22-8-97.]

Recd &
Indexed.

17/6/98

The Collector, Exadros
Ch H J. Board

H. b. b. b. g.

BACK PAPERS.

G. O.	No.	Department.	Date.
-	357		7-5-98

FURTHER PAPERS.

G. O.	No.	Department.	Date.
.	553	Mar.	30-6-98

EXTRACT of Proceedings of the TRUSTEES OF THE HARBOUR
OF MADRAS, at a Meeting held at the Offices of the
Board on Friday the 27th day
of May 1898.

7. Read G.O. Marine, No. 357, dated 7th May 1898, directing publication in the Fort St George Gazette of notification under the Land Acquisition Act No. I of 1894, in respect of certain land at Cassimode threatened with erosion by the sea, to be acquired on behalf of the Harbour Trust Board.

Read also draft letter to the Secretary to Government, Marine Department, requesting, that for reasons given, in the Chairman's letter No. 714, dated 13th May, the draft notification sanctioned may be cancelled, as the Trustees have repudiated all responsibility for erosion, and for the maintenance of the protective revetment.

Resolved that the draft letter is approved.

True Extract

HARBOUR TRUST
MADRAS-1 JUN. 98
SECRETARY'S OFFICE

C. P. S. S. S.

Secretary,
Harbour Trust Board.

Harbour Trust Office,

MADRAS, 27th May 1898.

Despatched 1st June

No. 948

FROM

J. H. Atkinson Esq I.C.S.,

CHAIRMAN, HARBOUR TRUST BOARD,

MADRAS.

TO

W. B. deWinton Esq,

SECRETARY TO GOVERNMENT,

Marine Department,

SIR,

I have the honour to acknowledge the receipt of your letter dated 7th May 1898 No. 357 Marine, and to request that the notification sanctioned in accordance with my letter No. 4625 dated 26th January 1898 may be cancelled.

2. At that date the Harbour Trustees had not, as they have since, carefully considered the whole question of their responsibility for erosion, and for the protection of the foreshore to the north of the Harbour; but as submitted in my letter No. 714 dated 13th instant the Board has now repudiated all responsibility in the matter, and therefore cannot proceed with the acquisition of the land as previously proposed. I request that the Collector of Madras may be instructed to take no further steps in the matter.

I have the honour to be,

Sir,

Your Obedient Servant,

J. H. Atkinson
Secy.

J. H. Atkinson
Chairman,
Harbour Trust Board.

*Recd by 357 Madras
7th May 98*

*& sent to Madras
with the reference
to the Governor
General, but
spare copy put up*

Recd by 706/15

810

Marine (1898) Department.

CURRENT No. 643

Spare copy

Order

From

The Chairman,
Harbour Trust Board,
Madras.

No. 714.

Dated 13th May 1898.

Despatched 14th „

Received „

Enclosures : Estimate, Form E. No. 121.

„ „ E. No. 125.
Plan and Cross Sections.

Spare copies : three.

SUBJECT.

PROTECTIVE REVETMENT NORTH
OF THE MADRAS HARBOUR.

Repudiating all responsibility on the part of
the Harbour Trust Board; and submitting estimate
for repairs, Rs. 64,879, for such action as Govern-
ment deems necessary.

Removed from
1898
130-6-98

[illegible]

5. When in or about 1880 Royapuram appeared to be endangered by the attack of the sea, the theory was at once advanced that the originating cause of the danger lay in the Harbour Works. The Harbour Trust Board believes that this theory was accepted without any critical examination of its correctness, or consideration of the consequences that would flow therefrom. Government itself was constructing the Harbour, and Government was in the last resort the guardian of the lives and property of the inhabitants of Madras, and it seems not improbable that in deciding to undertake the expense of protecting the sea face of Royapuram, the Government of the day was influenced as much by a recognition of the fact that no individual or public body could carry out the necessary protective works as efficiently as itself, as by a deliberate and considered admission of responsibility.

6 The precedent having once been set, was followed unquestioningly: Government itself continuing to extend the protective revetment so long as the Harbour Works remained in its direct control, and the Harbour Trust Board accepting the obligation as binding on it. In 1881 an extension was given to the principle of responsibility, Harbour funds being for the first time debited with the cost of protecting property not from actual erosion, but from the real or fancied risk of it, and in pursuance of this new departure, at one time or another 24 acres of landed estate have been acquired, not because it had been washed away or damaged, but merely because its security was supposed to be endangered. Out of this extent about 10 acres remain intact to this day, so groundless were the fears then entertained. And here it is well to draw attention to the remark in para. 2 of the Report of the Committee appointed under G.O., 24th December 1881, No. 3186W. "It is to be noted first of all, that long before the Harbour Works were commenced, there had been continual erosion and loss of land by the encroachment of the sea, and some of the claimants for compensation had, by 1876, when the Harbour Works were commenced, lost a considerable part of the land which they imagined or say they imagined, was in their possession. *Vide* G. O., 8th March 1882, No. 601W.

7. Before leaving this part of the subject, it may be well to say that, so far as the Harbour Trust Board is aware, there is absolutely no evidence, other than the "*post hoc ergo propter hoc*" argument that the erosion observed at Royapuram in 1880 was either wholly or partly caused by the Harbour Works, and even that old fallacy could not be applied in this case, since the erosion had been observable before the Harbour was commenced. So far as there was any hypothesis at all, it is believed to have been somewhat to the effect that the current when passing from south to north in front of the Harbour formed an eddy round that structure, and was thus diverted on to the beach to the north in such force as to produce the disastrous results observed. But it is out of the question to suppose that an ocean current could be diverted by an insignificant structure like the Madras Harbour, and what eddy there is, is quite powerless to produce the results observed.

8. The Board has now initiated experiments and is taking evidence to test the direction of the currents north of the Harbour, and finds that, so far as these experiments have gone, the evidence is that there is no current from the eastern face of the Harbour towards Royapuram or Cassimode, but that the general trend is in a direction parallel to the shore, so that the current passing the Harbour mouth does not impinge on the beach anywhere at all.

9. In my letter No. 3458, dated 18th March, I mentioned that the Board had already spent or been debited with a total sum of Rs. 7,98,038 on the construction and repair of protective works: and in addition a sum of Rs. 18,593 has been expended in the purchase of land that had either been washed away, or was supposed to be threatened with erosion. This very heavy expenditure has been thrown on the trade of the port, not from any proved liability, but on account of a mere theory never substantiated and hardly even formulated. And now the height of absurdity is reached when the Municipal Commission and the Madras Railway endeavour to saddle the Board with responsibility for the effects of a slight storm—on December 25th—when both wind and sea came from the N. E. and when the damage which occurred is entirely attributable to those two forces, as was similar damage observed elsewhere on the coast on the same date. It is intolerable that the trade of the port should continue to be called on to protect the property of others from the acts of Providence.

10. In the above paras, I have indicated the grounds on which the Harbour Trust Board considers that Harbour Funds should never from the first have been burdened with the cost of protecting Royapuram and Cassimode from the sea. But the mistake was made, and it is perhaps too late now to amend it. The present position of affairs is that, there is a long protective revetment, which requires immediate repair, and future maintenance; and that beyond the northern end of the revetment the sea is continuing its encroachments. The immediate question is who is responsible for the repairs to, and maintenance of, the revetment; and who is responsible to protect the land to north from the sea? The Harbour Trust Board repudiates responsibility in either case.

11. The Board was on the point of taking Counsel's opinion on the question of responsibility for upkeep of the protective revetment, when fortunately it received notice of a suit from the owner of a godown, on account of damage thereto in the storm of December 25th last. The issues in this case cannot be here discussed, but it is not unlikely that the case will be decided on a side issue and not on the general question of responsibility; and I venture therefore to offer a few remarks on this general question.

12. The liability of the Board to construct the protective revetment may have been held to be established by one or both of only two suggested hypothesis. One of these is that referred to in para. 7 above, and as there stated, the Board maintains that there never was any proof of this hypothesis and that what evidence there is tends to disprove it.

13. The other and more recent hypothesis is to the effect that the erosion is due to the obstruction offered by the Harbour to the normal littoral drift of sand, the northward drift to north of the Harbour continuing uninterruptedly, while no sand can come from the south to supply the place of what has gone. The attractiveness and plausibility of this hypothesis is due simply to the patent fact that large quantities of sand have banked up against the south arm, while none is visible to the north of the Harbour so far as the protective revetment extends. But the theory is open to criticism in a dozen directions. Thus it assumes that the sandy foreshore or beach that is visible where no revetment exists is fed and maintained solely by sand carried in suspension along the sea margin. But there is absolutely no ground of which the Harbour Trust Board is aware for holding that sand is not also brought in in considerable quantities from the deeper water beyond the surf line, and the farther spaces of the deep sea; and the Board believes that Sir A. Rendel has given his opinion in favour of this contention. That there is a movement of sand in deep water is certain, and can be proved indisputably, as, for instance, by the constant discolouration of the water in depth, up to 9 fathoms to S. E., E. and N. E. of the Harbour in all but the calmest weather. This discolouration must be due to sand, and the action of tides, currents and wind must bring the sand to the shore.

14. To lay any stress on the fact that there is, generally speaking, no sandy foreshore along the toe of the protective revetment, whereas there is such a foreshore both to north and south of it would be absolutely fallacious. When there are neither groynes nor revetment there is always a sandy foreshore; when there are groynes whether with or without revetment, there is accumulation of sand in the neighbourhood of the groyne: when there was a revetment only, there was sometimes a narrow sandy foreshore, sometimes none at all, the sea washing the foot of the revetment, precisely as it does now opposite Royapuram and Cassimode. In a plan called "A new and improved plan of Madras and its suburbs, executed in the years 1837, 33 and 39, with all the additions and improvements up to the end of the year 1842, by Thomas Hill, Surveyor," the Madras shore is shown protected only by a revetment without groynes, and at that time the sea line is shown at the toe of the revetment the whole way from the south end of Fort St. George to the site of Olive's battery, and it may with propriety be inferred that if that revetment had been continued to this day, without the addition of groynes, and without any Harbour having been constructed, the same phenomenon would have been observable. What then becomes of the theory that the absence of a sandy foreshore along the toe of the present protective revetment is due to the obstruction offered by the Harbour to the northward littoral drift of sand?

15. The pith of the matter is this that in no way can responsibility be fixed on the Harbour Trust Board, except by advancing theories, which are pure theories unsupported by evidence and open to criticism on every side. The one obvious and unassailable fact is that erosion of the Madras beach has been going on from time out of mind; and the Harbour Trust Board therefore considers that it cannot be held responsible to prevent or make good this erosion.

16. In G. O. No. 367 M., dated 19th March 1898, it was held in the case of a certain encroachment by the sea at Tellicherry that it was the duty of owners of property to protect each his own property, but for convenience sake and to ensure efficient protection, Government decided to carry out the necessary works itself, collecting an equitable share of the cost from those concerned. The Harbour Trust Board requests that Government will apply the same principles in the case of Royapuram and Cassimode.

17. The Board's Engineer prepared an estimate amounting to Rs. 64,879 for repair of the revetment, and this was considered at the Board's meeting on 29th April, but it was decided that the Board could no longer acquiesce in the very heavy charge that the present state of affairs entails upon the trade of Madras: and I have the honour therefore to forward these estimates with the connected plans, sections and specifications for such action as Government deems necessary. I also forward a copy of the Harbour Trust Board's resolution, and would add that, in the opinion of the Board, it is urgently necessary that the revetment be repaired at the earliest possible date.

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18. Apart from all other grounds for questioning the propriety of charging the Harbour Trust Board with the cost of this protective revetment, it is clear that under the Madras Harbour Trust Act 1885 (Act 11 of 1886), the Board cannot legally devote any part of its revenues to this purpose. The preamble of that Act states that it is enacted "to make provision for the regulation, conservancy and improvement of the Harbour of Madras." In section 2 (3) "Harbour" is defined as meaning "the artificial Harbour at Madras consisting of the enclosing groynes and the enclosed space, and the corresponding foreshore east of the beach road and all buildings, structures, or appliances provided by the Governor in Council or the Trust Board for the purposes of the Harbour and of the vessels using it together with the moorings therein laid down by the Governor in Council or the Trustees." By no latitude of construction can this definition be held to include the protective revetment. Section 60 empowers the Board to "execute such works as they determine to be necessary or expedient for the purposes of the said Harbour," and section 61 enumerates six classes of works that may be so executed. The 6th of these classes is as follows:—"(6) the construction of such breakwaters and other works without the limits of the Harbour as shall be expedient for the protection of the said Harbour, and all such other works and appliances as may be, in the opinion of the Board, expedient for carrying out the purposes of this Act." The protective revetment is certainly not wanted for the protection of the Harbour, and the purpose of the Act having been declared to be "the regulation conservancy and improvement of the Harbour," the Trustees are of opinion that that revetment is certainly not expedient for carrying out the purposes of the Act. There is no other provision in the Act under which the protective revetment could legally have been constructed by the Trustees, and they consider therefore that they cannot now legally spend any part of the funds entrusted to them on extension, repair or maintenance of the revetment.

I have the honour to be,

Sir,

Your obedient servant,

J. N. ATKINSON,

Chairman,

Harbour Trust Board.

Extract of Proceedings of the Trustees of the Harbour of Madras, at a Meeting held at the Offices of the Board, on Friday the 29th day of April 1898.

12. Read letter from the Board's Engineer, No. 81, dated 23rd April, submitting an estimate in D. P. W. form, as directed, for repairs to the protective revetment.

Resolved, that this estimate, amounting to Rs. 64,879, will be submitted to Government, with a request that the works therein provided for, or such other works as Government considers necessary, may be carried out by Government, or by whosoever Government considers responsible. This Board repudiates all responsibility; but is of opinion that the work is of an urgent nature.

(True extract.)

C. PINSENT,

Secretary, Harbour Trust Board.

Extract of Proceedings of the Trustees of the Harbour of Madras, at a Meeting held at the Offices of the Board, on Friday the 13th day of May 1898.

2. Read draft letter to the Secretary to Government, Marine Department, submitting, for reasons given, that the Harbour Trust Board should not be held responsible for the protection of the foreshore of Madras to north of the Harbour.

Read minutes by Trustees. Approved as amended.

(True extract.)

C. PINSENT,

Secretary, Harbour Trust Board.