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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W. DEPARTMENT

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Dr. A

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

30th May 1881, No. 1,356 W.

Buildings and Roads.
Civil Works.

Read the following paper :—

No. 66. Report by the Chief Engineer and Master Attendant on the Port of Negapatam.

COLONEL BEATTY, Superintending Engineer, Third Circle, brought to notice in his letter, No. 1,708 T.J., of 6th November 1880, that, owing to the neglect of the planting along the inner side of the sand-spit separating the backwater from the sea, &c., at Negapatam, there was a risk of the Kodamurti river finding a new mouth for itself to the south at the narrow portion of the spit nearly opposite the Taluk Cutcherry, and subsequently with reference to G.O., No. 2,843 W., of 9th December 1880, submitted with his No. 2,202 T.J. of 5th February 1881, two estimates aggregating Rs. 1,030 for execution of the needful work.

2. Further correspondence with the Master Attendant led to the conclusion that it would be desirable, before taking action on these proposals, to have the port inspected and reported by the undersigned.

3. On the 10th instant we were enabled to visit the place, and found, as stated by Colonel Beatty, that the injury to the plantation along the inner side of the sand-spit, as also the neglected condition of the groynes upon the maintenance of which the retention of the mouth in its present position chiefly depends, was mainly, if not entirely, due to the fact that there is at present no convenient place for the boats engaged in the trade to haul up within the limits of the port.

4. It would appear that, owing to the unusual demands during the famine, a great impetus was given to boat building, and at present there are no less than 140 of these, a number greatly in excess of the present demands of the port.

5. They are for the most part crowded on a spot of ground immediately opposite the salt depôt, and others bring up along the east shore of the backwater north of this. From the boats being thus pulled up on the shore and from no doubt the pilferings of the boatmen, the brushwood and other vegetation, which previously had been so sedulously cultivated and upon the maintenance of which so much depends, has suffered seriously, and, if the present condition of matters is allowed to continue, there can be little doubt that the result feared by Colonel Beatty will be brought about.

6. To secure the sand-spit from dangerous erosion we have arrived at the following conclusions :—

- (1.) Another place must be found for hauling up the boats engaged in the trade.
- (2.) No boat should be allowed to take the shore on the east side of the backwater between the end of the Vedarniem canal and the mouth of the harbour without the permission of the Port Officer.

- (3.) The work of planting, &c., as provided for under the estimate sent up by Colonel Beatty should be carried out as expeditiously as possible. We would recommend that the three departments whose interests are concerned—Salt, Custom, and Marine—should jointly entertain two gardeners and a peon under orders of the Port Officer to preserve and improve the plantations and prevent injury to groynes and banks.
- (4.) An estimate should be framed for establishing two new groynes about 50 feet long each between the end of the Vedarni canal and the existing groyne opposite the salt depôt, and this latter, as also the four more existing groynes on the east side of the backwater as far up as a point immediately opposite the bastion, should be thoroughly repaired.
- (5.) Projecting portions of the west shore at the salt depôt should be removed and the channel here deepened.
7. The combined action of these works would be to send such freshets as may come down the Kodamurti river and all ebb water more directly towards the present mouth and prevent dangerous encroachment on the sand-spit east.
8. To provide a proper basin for the boats is the next point. This can be accomplished either by forming a basin of sufficient size on the west shore immediately south of the basin, or again south of the lighthouse and close to the custom house. The latter we would recommend as being in every way convenient and there is ample space available for the work.
9. There would be no need to excavate the bottom to a greater depth than two feet below the level of low water spring tides, and the *déblais* would turn to most profitable use in filling up much uneven and low ground in the immediate neighbourhood of the lighthouse and otherwise in improving the locality.
10. The basin must be made rectangular in form immediately behind the revetment wall which should be preserved, and if there be funds forthcoming might have a low revetment all round in steps.
11. It will be important in connection with this work to divert the sewage which at present discharges here and send it well into the stream.
12. We take this opportunity to observe that the pavement constructed by the South Indian Railway for receiving and stacking coal immediately to the south should be dismantled for at least 15 feet from the face, as the latter projects too far into the stream and practically acts as a groyne diverting the current to the east side.
13. As regards the present mouth of the port it appears to us that, if the measures previously recommended be carried out, it will not be necessary to extend the existing revetment on the north further seaward; a wing revetment of much the same character as the present one should however be thrown back for about 80 feet in length in a north direction so as to counteract the effects of the set of the sea during the north-east monsoon and by which there is a tendency to take the existing revetment in rear and undermine it.
14. A small groyne was placed on the opposite side of the mouth on the sand-spit, but as it is in disrepair and quite useless it should be removed.
15. We have little doubt that the measures now recommended and which are comparatively inexpensive will meet all the requirements of the port and sufficiently fix the mouth for the future; but if in spite of these the sand-spit continues to be encroached on and threatens to become dangerously eroded, it will be necessary to throw out a long groyne (say 100 feet in length perpendicular to the coast line) about 300 feet south of the present mouth and establish several short groynes of rough stone at intervals along the seashore so as to accumulate and retain the sand travelling from the south. No groyne should in any case in our opinion be thrown at to the north of the existing mouth.
16. In reference to these concluding observations and as an inexpensive measure calculated to show the beneficial effect of groynes so placed, we would recommend that a short solidly constructed groyne (say 60 feet in length) run out perpendicularly on the sea face of the sand-spit at 150 feet south of the present mouth be

included in the programme of works which we have above suggested for early execution at this port.

9th May 1881.

(Signed) J. H. TAYLOR, Captain, R.N.R.,
Master Attendant, Administrative Department.
(Signed) R. H. SANKEY, Colonel, R.E.,
Chief Engineer, P.W.D.

No. 67.

ORDER THEREON, 30th May 1881, No. 1,356 W.

THE Government accept the several recommendations made by the Chief Engineer and Master Attendant for the improvement of the port of Negapatam, and direct that the Superintending Engineer sees without delay to the preparation of the estimates required in communication with the several interested departments.

2. The Consulting Engineer for Railways will, at early convenience, report on the suggestion made in paragraph 12 for retiring slightly the outer portion of the pavement used as a coal platform by the South Indian Railway which now interferes with the waterway.

(True Extract.)

Captain, R.E.,
Ag. Under Secy. to Govt., P.W.D.

To the Superintending Engineer, Third Circle.
„ Consulting Engineer for Railways.
„ Revenue Department.
„ Marine Department.

Exd. E. C. Shanker.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1881) Madras.

PUBLIC WORKS.

To
The SUPERINTENDING ENGINEER,
THIRD CIRCLE,
&c., &c., &c.

Dated May 30th.

Found

Recd.

Encl.

G. O., 30th May 1881, No. 1356 W.

MAY.

Nos. 66-67.

Port of Negapatam.—Accepts the several recommendations made by the Chief Engineer and Master Attendant for the improvement of the —

Report by the Chief Engineer and Master Attendant on the Port of Negapatam.

Colonel Beatty Superintending Engineer Third Circle brought to notice in his letter No. 1708 S.J. of 6th November 1880 that owing to the neglect of the flanking along the inner side of the sand spit separating the lagoon from the sea at Negapatam, there was a risk of the Kodamuti river finding a new mouth for itself to the south at the narrow portion of the spit nearly opposite the Salug Cutberry, and subsequently with reference to S. G. No. 2843 of 9th December 1880 submitted with his No. 2202 S.J. of 5th February 1881 two estimates aggregating Rs 1030 for execution of the needful work.

2. Further correspondence with the Master Attendant led to the conclusion

that it would be desirable before taking action on these proposals to have the fort inspected and reported by the undersigned.

2. On the 10th instant we were enabled to visit the place, and found as stated by Colonel Beatty that the injury to the plantation along the inner side of the sand-spit as also the neglected condition of the groynes upon the maintenance of which the retention of the mouth in its present position chiefly depends, was mainly if not entirely due to the fact that there is at present no convenient place for the boats engaged in the trade to haul up within the limits of the port.

3. It would appear that owing to the unusual demands during the famine a great impetus was given to boat-building, and at present there are no less than 140 of these, a number

greatly in excess of the present demands of the port.

5. They are for the most part crowded on a spot of ground immediately opposite the Salt depot, and others being up along the east-shore of the lake water north of this. From the boats being thus pulled up on the shore and from no doubt the pullings of the boatmen the brushwood and other vegetation which previously had been so sedulously cultivated, and upon the maintenance of which so much depends, has suffered seriously, and if the present condition of matters is allowed to continue there can be little doubt that the result feared by Colonel Beatty will be brought about.

6. To secure the sand spit from dangerous erosion we have arrived at the following conclusions.

(1) Another place must be found for hauling up the boats engaged in the trade.

(2) No boat should be allowed to take the shore on the east side of the back water between the end of the Vedarnieu Canal and the mouth of the harbor without the permission of the Port Officer.

(3) The work of planting sea as provided for under the estimate sent up by Colonel Beatty should be carried out as expeditiously as possible. We would recommend that the three departments whose interest are concerned, Salt, Customs and Marine should jointly entertain two gardeners and a peon ^{orders} under of the Port Officer to fence and improve the plantations and prevent injury to groynes and banks.

(4) An estimate should be framed for establishing two new groynes about 50 feet long each between the end of the Vedarnieu Canal and the existing groyne opposite the Salt Depot, and this latter as also the four more existing groynes on the east side of the harbor water as far up as a point immediately opposite the bastion, should be thoroughly repaired.

(5) Projecting portions of the west shore at the Salt Depot should be removed and the Channel here deepened.

6. The combined action of these works would be to send such freshets as may come down the Rodarnasti river and all ebb water more directly towards the present mouth and prevent dangerous encroachments on the sand spit east.

7. To provide a proper basin for the boats is the next point. This can be accomplished either by forming a basin of sufficient size on the west shore immediately south of the basin or again, south of the light-house and close to the Custom House. The latter we would recommend as being in every way convenient and there is ample space available for the work.

8. There would be no need to excavate the bottom to a greater depth than two feet below the level of low water spring tides and the "déblais" would turn to most profitable use in filling up much

uneven and low ground in the immediate neighbourhood of the light house and otherwise in improving the locality.

10. The basin must be made rectangular in form immediately behind the revetment wall which should be preserved, and if there be funds forthcoming might have a low revetment all round in steps.

11. It will be important in connection with this work to divert the sewage which at present discharges here and send it well into the stream.

12. We take this opportunity to observe that the pavement constructed by the South Indian Railway for receiving and stacking coal immediately to the south should be dismounted for at least 15 feet from the face as the latter projects too far into the stream and practically acts as a groyne diverting the current to the east side.

13. As regards the present mouth of the port it appears to us that if the measures

previously recommended be carried out it will not be necessary to extend the existing revetment on the north further seaward; a wing revetment of much the same character as the present one should however be thrown back for about 80 feet in length in a north direction so as to counteract the effects of the set of the sea during the S.E. monsoon, and by which there is a tendency to take the existing revetment in rear and undermine it.

14. A small groyne was placed on the opposite side of the mouth on the sand spit, but as it is in disrepair and quite useless it should be removed.

15. We have little doubt that the measures now recommended and which be comparatively inexpensive will meet all the requirements of the port and sufficiently fix the mouth for the future; but if in spite of these the sand spit continues to be encroached on and threatens to become dangerously eroded it will be necessary to throw

out a long groynes (say 100 feet in length perpendicular to the coast line) about 300 feet south of the present mouth, and establish several short groynes of rough stone at intervals along the sea-shore so as to accumulate and retain the sand travelling from the south. No groyne should in any case in our opinion be thrown out to the north of the existing mouth.

No. In reference to these concluding observations, and as an inexpensive measure calculated to show the beneficial effect of groynes so placed we would recommend that a short solidly constructed groyne (say 60 feet in length), run out perpendicularly in the sea face of the sand-spit at 150 feet south of the present mouth be included in the programme of

works

1756
works which we have above suggested for early execution at this port.

J. H. Taylor

Captain R. H. R.

Master Attendant
Administrative Department

C. M. Sankay Colonel R. H.
Chief Engineer F. H. D.

9th May 1881

also
the

P. H. C. No 3205

Recd. 30.5.81

No 13564.

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 30. May 1881.

Read the following:—

Report by the Chief
Engineer and Maistee
Attendant on the
Port of Nagapattam

(H.C. No. - 49th May/81)

The Government
accept the several
recommendations
made by the Chief
Engineer and Maistee
Attendant for the
improvement of the
port of Nagapattam
and direct that the
Supdy. Engineer
see without delay
to the preparation
of the estimates

Required in comm-
-munication with
the several interested
Departments.

2. The Consulting
Engineer for Railways
will at early con-
-venience report on
the suggestion made
in para 12 for re-
-sizing slightly the
outer portion of the
pavement such
as a Coal platform
by the S. I. Railway
which now interferes
with the waterway.

S.E. 3^d. Circle
C.E. for Rgs.
Rev. Sept
Marine-Bo-

Att

Sept. 9/5/80

Cir 10/5/80 H. B.

3205

Govt. of (1881) Madras.
PUBLIC WORKS.

To

Dated

Issued

Rept.

Encl.

G. O. 30 May 1881, No. 1356 W

Nos. 66-67

Port of Negapatam
Accepts the several re-
commendations made by the
Chiefs & Masters attending
for the improvement of the

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