

MADRAS RECORD OFFICE.

Government of Madras.

Marine DEPARTMENT.

G.O. No.	230	Press
		~~MIS.~~
Dated	16 - 6 -	1888

Not to be folded or roughly handled

Handwritten signature/initials

11

Fort Saint George, Marine Consultation, 22nd June 1858.

No. 1. From Mr. S. PARKES, Civil Engineer; to the Chief Secretary to Government, Public Works Department, dated 15th May 1858.

SIR,

Motives of humanity have induced me to lay before the Government a very simple plan for the alleviation of such calamities as your Roadstead has recently been visited with according to public reports.

Although a stranger to Madras personally, I am not a stranger to its absolute maritime requirements and difficulties, together with the various attempts which have been made to relieve them.

The rough sketch plan, which I enclose, will exhibit the only form of Harbour that would be practicable in your position both for Ingress and Egress and likewise for shelter when inside.

If constructed wholly and solely of broken Trap stone exactly similar to what is used for macadamised Roads it will endure for ever and effectually resist the action of the Wind and Waves.

I would commence upon the Beach at the point next the Town. Thus it will be self extending and can be performed by the most menial labour of the place.

Convict and criminal labour can also be made available; one good Overseer is all that is required upon the Pier Works to see that the stones are thrown down into the required shape as per plan.

The main Breakwater would be $3\frac{3}{4}$ miles in length, and should not be less than 100 feet in breadth on its surface and carried to about 10 feet above high water mark and slope downwards to an angle of about 35 degrees.

The contents of this Pier would be, say 19,800 feet long, 120 feet average width and 40 feet average depth, total 95,040,000 cubic feet, which at the rate which such broken Trap stones can be purchased and delivered in Bombay, namely $3\frac{3}{4}$ Rupees per 100 cubic feet, would amount to Rupees..... 35,61,000.

The contents of the smaller Pier, say $1\frac{1}{2}$ mile or 7920 feet long, 80 feet surface or 100 feet average width and 30 feet average depth—Total 23,760,000 cubic feet—Value Rupees..... 8,92,000

Total Cost Rupees 44,56,000.

Thus for the comparatively small sum of about $44\frac{1}{2}$ lakhs of Rupees, Madras could be provided with a magnificent Harbour of refuge, which would be large enough to contain the shipping for several generations and endure throughout all time.

Timber works will not stand, neither will Brick-work or Masonry work, which could not be constructed in such a Roadstead even if it would stand and besides which it would be far more extensive.

The greatest possible amount of force which the most violent Hurricane could bring to bear against the outer Pier would be equal to $95\frac{3}{4}$ lbs. per superficial foot; thus the total or Hurricane Pressure would be equal to a force of $11,137\frac{1}{2}$ Tons, and the weight of my proposed largest Pier would be about 17,183,581 Tons, thus giving a resistance equal to about one thousand five-hundred and forty-two and a half times greater than the pressure.

The waves will not wash away a compact mass of such broken stones if properly laid—but large heavy burdens they will wash away and frequently carry them great distances.

The experiment is a very simple and inexpensive one and could easily be tried, say by projecting a small portion of the large Pier in the direction shewn for a few hundred yards from the Beach and gradually extend it as prudence and experience may suggest.

Fort Saint George, Marine Consultation, 22nd June 1858.

Your late Chief Engineer Colonel A. Cotton will remember me and Doctor Lowe, recently appointed by His Lordship to the Sappers and Miners, is my Brother-in-Law. He is now near Clapee.

Owing to the general suspension of Public Works, I have recently left the Honorable Company's Service and expect to go to England by the 4th of June Mail, and will lay the proposals before the Honorable Court of Directors.

No. 2.

ORDER THEREON, No. 230; dated 16th June 1858.

The Right Honorable the Governor in Council resolves to offer to Mr. S. Parkes, the thanks of the Madras Government, for his excellent Report on the form of Harbour which, in his view, is best adapted to the requirements of the Madras Roadstead.

2. Mr. Parkes, it is observed, was induced to submit his Plan to this Government, in consequence of his having been made acquainted with the results of the late disastrous gale of the 5th May at Madras, and it is his intention to lay his proposal before the Honorable the Court of Directors on his return to England.

3. Mr. Parkes is no doubt aware that the plan of a Break-water at Madras to afford complete protection to the Shipping has been designed by Colonel A. Cotton. The plan, as explained in Colonel Cotton's Memo: of 3rd January 1857, was forwarded to the Honorable Court of Directors, but failed to obtain their approval.

4. The Right Honorable the Governor in Council resolves however again to solicit the attention of the Court to the subject. He is convinced that some such work as Mr. Parke's Harbour or Colonel Cotton's Break-water is indispensably necessary to render Madras a safe Port. Without it a Pier would be of comparatively subordinate importance. It would not, for example, have had any effect in preventing the Shipwrecks on the Storm of the 5th Ultimo. To give it its full value it must be protected by Harbour Works or by a Break-water, whilst under shelter of such Works a Pier, if needed at all, might be of a much less costly character than that projected by Messrs: Saunders and Mitchell.

5. The Government further resolve to forward copy of Mr. Parkes' letter and of its enclosure to the Marine Board, and, through the Department Public Works, to the Chief Engineer, for their information.

(Signed) T. PYCROFT,

Chief Secretary.

Exd. J. A. Wilson.

Ordered to be communicated to the Marine Board and, through the Public Works Dept., to the Chief Engineer for any remarks they may wish to offer on Mr. Parkes' scheme.

brought to the notice of the Marine Board and, through the Public Works Dept., to the Chief Engineer for any remarks they may wish to offer on Mr. Parkes' scheme.

report on the form of Harbour which, in his view, is best adapted to the requirements of the Madras Roadstead.

2. Mr. Parkes, it is observed, was induced to submit his plan to this Government, in consequence of his having been made acquainted with the results of the late disastrous

Marine Depart.
28th

No 230

Extract from the Minutes of Consultation
Dated 16th June 1858.

Read the following letter
from Mr. S. Parker - Civil
Engineer.

(Here enter 15th May 1858. No. 188)

H
W

The Right Honourable the Governor informed per-
solved to offer to Mr. S. Parker
the thanks of the Madras
Government for his excellent
report on the form of Har-
bour which in his view is
best adapted to the re-
quirements of the Madras
Roadstead.

2. — Mr. Parker, it is
observed was induced to sub-
mit his plan to this Govern-
ment, in consequence of his
having been made acquainted
with the results of the late
disastrous

disastrous gale of the 5th May
at Madras - and it is his intention
to lay his proposal before the
Honorable the
Court of Directors on his
return to England.

3. - Mr. Parker is no
doubt aware that the plan
of a breakwater at Madras
to afford complete protection
to the shipping has
been designed by Colonel
A. Cotton. The plan was
explained in Colonel Cotton's
Memo. of 3rd January 1857
was forwarded to the Honorable
Court of Directors
but failed to obtain their
approval.

4. - The Right Honorable
the Governor informed
resolves however, again to
solicit the attention of the
Court to the subject. He
is convinced that some such
work as Mr. Parker's Harbour

or

or Colonel Cotton's breakwater
is indispensably necessary to
render Madras a safe Port.
Without it a pier would be
of comparatively subordinate
importance. It would
not for example have had
any effect in preventing
the shipwrecks on the
storms of the 5th May -
To give it its full value
it must be protected by
harbour works or by a
breakwater - whilst under
shelter of such works a
pier, if needed at all,
might be of a much
less costly character than
that projected by Messrs.
Saunders and Mitchell.

5. - The Government
further resolve to forward
copy of Mr. Parker's letter
and of its enclosure to the
Marine Board, and thro'
the Department Public
Works

Works to the Chief Engineer
for their information. —

J.P.

Mr. S. Parker
Rectory Grove
Clapton
London.

Marine Board with a Sketch

Dept. Pub. Works.

Sept 24th

L 20-11 6/6

M. J. Hall

Memorandum
June 21st 1858.

Received from the
Secretary of War for India
dated 19th January 1858

9/2/1858

1859.

8254

March 1858

21st June 1858
Memorandum, 1858. Department.

No. 230

Extract Mins. Cons.

Dated 16th June 1858