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 $\frac{10}{1383}$ dt. 20-5-1887

A. Maw

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From the Honorable R. W. BARLOW, C.S., Chairman, Harbour Trust Board, Madras, to the Chief Secretary to Government, Marine Department, dated Madras, 4th May 1887, No. 505.

In continuation of my letter, No. 383, dated 25th April 1887, and in reference to G.Os., No. 1001 W., dated 4th April 1887, and No. 1179 W., dated 29th April 1887, I have the honor to submit, herewith, for the information of Government, extract of the proceedings of a meeting of the Harbour Trustees, held on the 29th April 1887, and confirmed at a special meeting held last evening, copy of which proceedings I also forward.

2. The views of the Trustees regarding the proposed north-east entrance are fully expressed in these resolutions, and copies have been communicated to Captain Taylor for his information and guidance.

3. He starts for London this evening, and takes with him the plans referred to, copies of which I have, however, requested the Superintendent to prepare for the information of Government, and they will be forwarded to you at an early date.

4. I also forward copy of a letter received from the Superintendent, No. 168, dated 2nd May 1887, together with the short memorandum, therewith forwarded, explanatory of the four designs above referred to. It will be observed that Mr. Thorowgood, while raising no engineering difficulties regarding plans Nos. III and IV approved by the Board, does not consider a north-east entrance necessary, partly because the harbour, as originally designed, will, he contends, give sufficiently smooth water, and partly for nautical reasons. As regards the former of these conclusions, the Trustees, most of whom, like myself, knew the harbour in 1881, are unanimously opposed, while the latter may be safely left to the committee now sitting in London.

ENCLOSURES.

EXTRACT of proceedings of the Harbour Trust Board, at a meeting held at the offices of the Board on Friday, the 29th day of April 1887.

In opening the proceedings of the meeting, the Chairman stated that in accordance with the resolution No. 2 passed by the Board at their last meeting, a telegram had been despatched to Government regarding the wish of the Board to be represented upon the committee now sitting in London, to discuss the question of changing the place of entrance to the harbour, from the east face to the north-east corner; that a telegram had been received from the Secretary of State in reference thereto; and that Mr. Thorowgood, who was present, would explain to the Board certain suggestions he had to make, with regard to what, in the present condition of the harbour, he considered the best plan for carrying out the wishes of the Board for a north-east entrance.

The Secretary then read the telegram despatched to the Chief Secretary to Government after last meeting, stating that "At meeting last evening read G.O., 1001, Works. Resolved that the Board are unanimously of opinion that the Trust should be represented upon the London committee appointed to consider the question of the north-east entrance to the harbour. The Board suggest that Captain Taylor should be appointed to represent them and

that the proceedings of the committee be stayed by telegraph pending his arrival"; and read also letter from the Chairman, No. 383, dated 25th April, addressed to the Chief Secretary, confirming the telegram, and further explaining the Board's wishes.

Read telegram from the Secretary to Government, Public Works Department, dated Ootacamund, 28th April 1887, stating: "Taylor permitted by Secretary State to go home next mail as witness, not as member of committee. Should take statement from Board on following points:—Whether in opinion of Board north-east entrance is essential; best means of carrying out this object; and whether Board think any change in sanctioned design is desirable, and if so what change."

Resolved, first,—that the Board unanimously adhere to their former resolution No. 2, dated 16th December 1886, that a north-east entrance is absolutely essential to the success of the harbour.

The Superintendent then submitted a plan showing, marked respectively in blue and yellow lines and in red tint—

In blue, No. II.—The plan submitted with his letter, No. 600 M., dated 31st January 1887.

In yellow, No. III.—An entrance immediately adjoining the present termination of the new work on the northern arm.

In red tint, No. IV.—An entrance approximately from half way between the north-east angle of the northern arm and the existing opening.

The Superintendent explained that to carry out plan No. II would necessitate the removal of the whole of the work built at the north pier during several months past, involving the removal of thousands of tons of material and great delay.

That plan No. III would also necessitate considerable delay, and as the site of the proposed north-east entrance must be open before the present one could be closed, it was necessary in this plan to entirely remove the *debris* of the old wall, from the present entrance up to the proposed end of the north pier, before the southern arm could be brought across, and be allowed to close the present entrance; this would occasion great delay in protecting the existing harbour upon the northern half of the eastern face.

No. IV, in red tint.—This plan had the advantage of enabling work to be carried on without interruption upon the present plan, until the southern arm reached the existing opening, by which time the northern pier would have advanced sufficiently to itself afford considerable protection to the enclosed space, the portion of old wall, it would be necessary to remove, could by then have been cleared away, leaving the proposed opening free from all obstruction, and it would only then remain to advance the southern arm in a direct line across the existing opening in the plan submitted with his letter, No. 600 M., dated 31st January 1887, the relative positions of the pier heads of the northern and southern arms in each plan being identical; this plan No. IV had the advantage also of carrying the entrance further to seaward giving a minimum depth of 8 fathoms in the entrance and from the proposed line the southern arm would take, enabling vessels to enter from a more easterly position, thereby allowing them to keep much further to seaward, and clear of the line of rollers upon their full length.

The matter was discussed at considerable length, and the Superintendent stated further that with regard to the cost of the respective schemes, No. IV would be more economical than No. II, but that he had not prepared an estimate for design No. III, the cost of which would probably not differ greatly from the cost of No. IV.

Captain Taylor suggested that the difficulty might be overcome by making an entrance in shore of the north-east angle of the northern arm, continuing the works on the existing plan, which plan would involve no delay, be economical, and have only the disadvantage of placing the entrance nearer inshore than the proposed entrances Nos. III and IV; he pointed out that against this disadvantage it must be remembered that the sea to the north of the harbour always retains its present depth, and is amply sufficient for all practical purposes. It was, however, considered by the Board that the near vicinity of the shore was a fatal objection to this proposal.

Resolved, secondly, with regard to the best means to be adopted—that the Board, after examining the several plans submitted by the Superintendent, consider the designs Nos. III and IV would be the most suitable; subject to any modifications that the Home Committee may make. The Board consider it undesirable to take up more than is absolutely necessary of the work already built.

Resolved, thirdly,—that in the opinion of the Board the sanctioned design should be altered only in so far as is necessary to provide a north-east entrance without taking up more than necessary of the work already built.

EXTRACT of proceedings of the Harbour Trust Board, at a special meeting held at the offices of the Board on Tuesday, the 3rd day of May 1887, at 4-30 P.M.

Read G.O., No. 1179 W., dated 29th April 1887, communicating telegram from the Secretary of State, dated 27th April 1887, "Harbour Committee already formed and at work—

Admirals Salmon, Nares and Cooda, but Taylor may come as witness," * * and stating that Captain Taylor should be instructed to proceed to England by next mail, taking with him a statement of the views of the Board on the leading principles upon which the work is in future to be carried out, and should clearly understand to what extent he is authorised to pledge the Board before the committee.

Read letter, No. 469, dated 2nd May 1887, from the Chairman, Harbour Trust Board, to the Superintendent, Madras Harbour Works, communicating the resolutions of the Board respecting the proposed north-east entrance, at their last meeting, and requesting that he would draw up a memorandum explanatory of the various designs then submitted by him.

Read the Superintendent's reply thereto, No. 108, dated 2nd May 1887, and descriptive memorandum annexed. Examined plans Nos. I, II, III and IV therewith submitted.

The Trustees then proceeded to the head of the northern arm of the harbour, and held a consultation with the Superintendent, and after discussing on the spot at considerable length the respective designs for a north-east entrance, returned to the Board's offices.

Read the minutes and confirmed the proceedings of the last meeting of the Board having reference to the question of the proposed north-east entrance, and resolved that, having now examined the spot, the Board are unanimously inclined to give the preference to design No. III on the grounds that it will give within the harbour a larger area of deep water anchorage, and that it will facilitate the exit entrance and mooring of vessels.

A copy of the Board's proceedings will be communicated to Captain Taylor for his information and guidance.

From F. N. THOROWGOOD, Esq., M.Inst.C.E., Superintendent, Madras Harbour Works, to the Chairman, Harbour Trust Board, dated Madras, 2nd May 1887, No. 108.

In reply to your letter of this date, No. 469, I have the honor to submit the following.

2. I send herewith a tracing similar to that which was before the Board on April 29th, on which are shown—

- | | |
|----------|---|
| Proposal | I (Madras Committee, 1883), red lines. |
| Do. | II (Superintendent's modification, 1887), blue lines. |
| Do. | III (Alternative proposal by Superintendent), yellow lines. |
| Do. | IV (do. do. do.), red tint. |

I also, for clearness sake, forward a small plan of each of these designs separately, marked I, II, III, IV. With these plans is a short descriptive statement of each, which I trust meets the requirements of your paragraph No. 2.

3. In reply to your 3rd paragraph, I am inclined to prefer the (No. III) design in yellow lines for many reasons, but there is a strong objection against it practically, namely, that it involves deciding *at once* on stopping work at the north pier, whereas with design No. IV (in red color) work could go on during June and throughout the season as before. This, with all the machinery and diving staff on hand and with blocks ready for another 150 feet of north pier, is a very serious consideration.

4. I must ask you to record, and I should like the committee in England to be aware, that I do not myself wish for a north-east entrance, nor do I think it essential to the success of the harbour. On the contrary I do not at all feel sure that, in a heavy rolling swell, vessels would not feel a north-east entrance worse to navigate than the easterly one, as they would enter with their lengths parallel to the crests of the waves. Moreover, as I have stated before, I cannot but believe that those who so strongly advocate closing the eastern entrance forget what this harbour was like in September 1881, when some 13 native craft, some of large size, anchored comfortably in the northern half of the harbour, and two large sailing ships* lay calmly at moorings in the southern half. At this time the entrance was 100 feet wider than the proposed eastern entrance will be, and the walls were 6 feet lower than those now proposed.

Doubtless a north-east entrance will give smoother water, but at a cost of some 20 lakhs of rupees, and, to my thinking, of a very doubtful entrance. I therefore must record that I should prefer adhering to the design of August 1884 now under consideration.

MADRAS HARBOUR.

DESCRIPTION of different proposals for a north-east entrance to accompany plans and tracing.

Proposal No. I (in red lines on tracing).—This is the design proposed by the special committee in Madras, 1883, and reported unfavorably upon by Sir John Hawkshaw's committee, 12th March 1884, in Westminster.

As proposed by the Madras committee, it was supposed to be built of random blocks over the existing lines of ruined piers. At the present time such a system is out of the question, as the plant is not adapted for such work.

The objections to this design are (1) that 400 feet of the newly built work, with wave-braker complete, would have to be taken up; (2) that the concave arm towards the east is a weak point; (3) that two entrances will have to exist at the same time; and (4) that its cost is too great.

Roughly speaking, the cost of this scheme (now that the entrance is nearly closed) I estimate at Rs. 65,47,000 as compared with Rs. 45,90,051 of the design now under construction.

Proposal No. II (in blue lines on tracing)—is a modification of the above so as to avoid the concave curve. I estimate its cost at Rs. 66,00,000.

Proposal No. III (in yellow lines on tracing).—This design does away with the necessity of taking up any of the new superstructure work, and proposes to build a pier head at the present termination of the new work, north pier. At the same time it means suspension of work at this pier and consequent slow progress at one pier only.

The south pier is to be carried across the eastern entrance and extended as shown. The drawback to this design is that the whole of the ruined work and much of the new rubble base has to be removed, and for a time the harbour would be perfectly open to the north-east.

I estimate the cost of this design at Rs. 61,00,000.

Proposal No. IV (in red tint on tracing).—This is the plan which finds most favor with the Harbour Trust Board. Its advantages are (1) that only a very small portion of the old ruined wall and rubble have to be cleared away; (2) that during construction there will never be more openings than the proposed entrance through which the sea can come; and (3) that it allows of work being proceeded with as at present at least for four months or more.

The cost of this design I estimate at Rs. 62,95,001.

MADRAS,
2nd May 1887.

(Signed) F. N. THOROWGOOD,
Superintendent, Madras Harbour Works.

Transferred to the Public Works Department.
(By Order.)

OOTACAMUND,
13th May 1887.

(Signed) W. S. MEYER,
Asst. Secy., M.D.

From the Honorable R. W. BARLOW, C.S., Chairman, Harbour Trust Board
Madras, to the Chief Secretary to Government, Marine Department, dated
Madras, 11th May 1887, No. 639.

In continuation of my letter, No. 505, dated 4th May 1887, I have now the honor to submit, for the information of Government, the four plans of the Madras Harbour referred to therein, showing the various proposals for constructing a north-east entrance, submitted to the Board by the Superintendent at their meeting of 29th April.

Transferred to the Public Works Department.
(By Order.)

OOTACAMUND,
17th May 1887.

(Signed) W. S. MEYER,
Asst. Secy., M.D.

ORDER—dated 20th May 1887, No. 1383 W., Public Works.

Ordered to be forwarded to the Secretary of State for India.

(Here enter No. ¹⁰/₁₃₈₃ W., dated 20th May 1887.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chairman, Madras Harbour Trust Board,
„ Marine Department.

Exd. P. L. Pereira.
Spare Copies

1383
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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1887) Madras.
PUBLIC WORKS.

Dated May, 20th.

Recd.

Encl.

G.O., 20th May 1887, No. 1383 W.

MAY.

Madras Harbour

Correspondence containing the views of the Madras Harbour Trust Board on the question of a north-east entrance for the —, ordered to be forwarded to the Secretary of State.

Print the following papers:-
V. & Co. H. T. No. 1

CURRENT NO. 364

Harbour Trust Board Office,
MADRAS, 4th May 1887.

No. 505

1503/4

FROM

The Honorable P. W. Barlow C.S.
CHAIRMAN, HARBOUR TRUST BOARD,
MADRAS,

TO

The Honorable H. E. Stokes C.S.
CHIEF SECRETARY TO GOVERNMENT,
Marine Department.

SIR,

Ootacamund

In continuation of my letter No. 383 dated 28th April 1887, and in reference to G.O. No. 1001 W dated 14th April 1887, and No. 1179 W dated 29th April 1887, I have the honor to submit herewith for the information of Government extract of the Proceedings of a meeting of the Harbour Trustees, held on the 29th April 1887, and confirmed at a special meeting held last evening, copy of which Proceedings I also forward.

20th May/87, No. 1383 W
Paper
Civil Works

11/5/87

11/5/87

2. The views of the Trustees
regarding the proposed North
East Entrance are fully expressed
in these resolutions, and Copies
have been communicated to
Captain Taylor for his informa-
tion and guidance.

3. He starts for London this
evening, and takes with him the
plans referred to, Copies of which
I have, however, requested the
Superintendent to prepare for
the information of Government,
and they will be forwarded
to you at an early date.

4. I also forward Copy of a
letter received from the Super-
intendent No. 108 dated 2nd May
1887, together with the short Memo-
randum, therewith forwarded,
explanatory of the four designs
above referred to. It will be observed
that Mr. Thorogood, while
raising no engineering difficulties
regarding plans No. III and IV -
approved

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raising no engineering difficulties
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approved

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consider a North East Entrance
necessary, partly because the ¹³⁸
Harbour as originally designed
will, he contends, give sufficient
ly smooth water, and partly
for nautical reasons. As regards
the former of these conclusions,
the Trustees - most of whom, like
myself, knew the Harbour in
1881 - are unanimously opposed,
while the latter may be safely
left to the Committee now sitting
in London.

I have the honor to be

Sr

Your most Obedient servant

W. Moorlan
Chairman

Harbour Trust Board

P. Sec

Madras 2/4

Madras Harbour 138

Description of different proposals for a
North East entrance to accompany
plans and tracing.

Proposal No I (in red lines on tracing).

This is the design proposed by the Special Committee in Madras 1883, and reported unfavourably upon by Sir John Hawththaw's committee 12th March 1884 in Westminster.

As proposed by the Madras Committee it was supposed to be built of random blocks over the existing lines of ruined piers - At the present time such a system is out of the question as the plan is not adapted for such work.

The objections to this design are, (1) that 400 feet of the newly built work, with wavebreaker complete, would have to be taken up - (2) that the concave arm towards the East is a dead point, (3) that two entrances will have to exist at the same time and (4) that its cost is too great.

Roughly speaking the cost of this scheme (now that the entrance is nearly closed) I estimate at Rs 65,47,000 as compared with Rs 45,90,051 of the design now under construction.

Proposal No II (in blue lines on tracing).

Is a modification of the above,

so as to avoid the concave curve - I estimate its cost at Rs. 66,00,000

Proposal No. III (in yellow lines on tracing)

This design does away with the necessity of taking up any of the new superstructure work and proposes to build a pier head at the present termination of the new work, North pier. At the same time it means suspension of work at this pier and consequent slow progress at one pier only.

The south pier is to be carried across the eastern entrance, and extended as shown.

The drawback to this design is that the whole of the ruined work and much of the new rubble base has to be removed, and for a time the Harbour would be perfectly open to the North East.

I estimate the cost of this design at Rs. 61,00,000

Proposal No. IV (In red tint on tracing).

This is the plan which finds most favour with the Harbour Trust Board. Its advantages are (1) that only a very small portion of the old ruined wall and rubble have to be cleared away (2) that during construction there will never be more openings than the proposed entrance through which the sea can come, and (3) that it allows of work being proceeded with as at present at least for 14 months or more.

The

^{8/15}
The cost of this design I estimate at Rs. 62,95,001.

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J. N. Thorngood

Supt. Madras Harbour Works

Madras Harbour Works Office

2nd May 1887

1 True Copy 1

C. P. S. S. S. S.

Secretary
Harbour Trust Board.

cup

N^o 108

Madras 2nd May 1887

From

The Superintendent

Madras Harbour Works

To

The Chairman

Harbour Trust Board

Madras

Sir

In reply to your letter of this date N^o 469, I have the honour to submit the following.

I send herewith a tracing similar to that which was before the Board on April 29th on which are shown:—

Proposal I (Madras Committee 1886) Red Lines

" II (Supt's modification 1887) Blue do

" III (Alternative proposal by Supt) Yellow do

" IV (— ditto — do) Red ditto

I also, for clearness' sake, forward a small plan of each of these designs separately, marked I, II, III, IV. With these plans is a short descriptive statement of each which I trust meets the requirements of your paragraph N^o 2.

In reply to your third paragraph, I am inclined to prefer the (N^o III) design in yellow lines for many reasons, but there is a strong objection against it practically namely that it involves deciding at once on stopping work at the North Pier, whereas with design

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N^o IV (in red colour) work could go on during June and throughout the season as before. This, with all the machinery and diving staff on hand and with blocks, ready for another 150 feet of North Pier is a very serious consideration.

4 I must ask you to record, and I should like the Committee in England to be aware, that I do not myself wish for a North East entrance, nor do I think it essential to the success of the Harbour. On the contrary I do not at all feel sure that, in a heavy rolling swell, vessels would not feel a N. E. entrance worse to navigate than the Easterly one, as they would enter with their lengths parallel to the crests of the waves. Moreover, as I have stated before, I cannot but believe that those who so strongly advocate closing the Eastern entrance forget what this Harbour was like in September 1854, when some 18 native craft some of large size anchored comfortably in the Northern half of the Harbour, and two large sailing ships* lay calmly at moorings in the Southern half. At this time the entrance was 100 feet wider than the proposed Eastern entrance will be, and the walls were 6 ft. lower than those now proposed. Doubtless a N. E. entrance will give smoother water, but at a cost of some 20 lacs of rupees and to my thinking, of a very doubtful entrance. I therefore must record that I should prefer adhering to the design

of

1383/10 8/7
of August 1884, now under consideration

I have the honour to be
Sir

Your most obedient Servant

(S^d) J. N. Thorngood
Supt^r Madras Harbour Works

(True Copy)

C. P. J. J. J.

Secretary
Harbour Trust Board.

* Maria
Mofussilite

eng

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EXTRACT of Proceedings of the HARBOUR TRUST BOARD, at a
Meeting held at the offices of the Board on
Friday the 29 day
of April 1887.

Present.

The Honorable R. W. Barlow. C. S.
Chairman

The Honorable S. R. Turnbull.

Mr. J. McC. Lintock.

Mr. G. L. Chambers.

Mr. J. R. Hunter.

Mr. G. D. Coleman.

Lt. J. H. Taylor R. N. R.

Captain W. L. C. Baddely R. E.

Mr. George Stung.

Mr. Cowasjee Eduljee Panday

V. Mahomed Sheriff Sahib Bahadur

Mr. R. Ryf.

S. Venkatakrishnamah chetty Esq.

*In opening the Proceedings of the
meeting the chairman stated that in*

1383/12 8p9
in accordance with the resolution No
2 passed by the Board at their last
meeting, a telegram had been despatched
to Government, regarding the wish of the
Board to be represented upon the Com. now
now sitting in London, to discuss the
question of changing the place of entrance
to the Harbour, from the East face to the
North East corner; that a telegram had
been received from the Secretary of State
in reference thereto; and that Mr. Shornood,
who was present, would explain to the Board
certain suggestions he had to make, with
regard to what, in the present condition
of ^{the} Harbour, he considered the best plan
for carrying out the wishes of the Board
for a North East Entrance.

The Secretary then read the telegram
despatched to the Chief Secretary to Govern-
ment after last meeting, stating that it

At meeting last evening Read G. O. 1001

Works Resolved that the Board are

unanimously of opinion that the Trust

should be represented upon the London

Committee, appointed to consider the question

of the North East Entrance to the Harbour.

The Board suggest that Captain Saylor

should be appointed to represent them

and ^{that} the Proceedings of the Committee be

stayed by telegraph pending his arrival,

and ^{read also} letter from the Chairman No 383

dated 25 April, addressed to the Chief

Secretary, confirming the telegram, and

further explaining the Board's wishes.

Read telegram from the Secretary

to Government Public Works Department,

dated Colacumund 28 April 1887. Stating

:- "Saylor permitted by Secretary state to

go home next mail as witness, not as

member of Committee - Should take

Statement

1383/14 8p10

"Statement from Board on following
"points:- whether in opinion of Board
"North East entrance is essential; best
"means of carrying out this object; and
"whether Board think any change in
"Sanctioned design is desirable, and if
"so what change."

Resolved, first-That the Board -
unanimously adhere to their former
resolution No 2 dated 16 December 1886,
that a North East entrance is absolutely
essential to the success of the Harbour.

The Superintendent then submitted
a plan showing, marked respectively in
blue and yellow lines and in red ink.

In blue No II. The plan submitted
with his letter No 600 In dated 31st January
1887.

In yellow No III an entrance immediately
adjoining the present termination of the
New

1383/14 8p10
"Statement from Board on following
"points:- whether in opinion of Board
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1383/2 Apr 11
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North East angle of the Northern arm and
the existing opening

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to carry out plan No II would necessitate
the removal of the whole of the work built
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of tons of material and great delay

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this plan, to entirely remove the debris of
the old wall from the present entrance
up to the proposed end of the North Pier,
before the Southern Arm could be brought
across

across, and be allowed to close, the present entrance; This would occasion great delay in protecting the existing Harbour upon the Northern half of the eastern face.

No IV in red tint. This plan had the advantage of enabling work to be carried on without interruption upon the present plan, until the Southern arm reached the existing opening, by which time the Northern Pier would have advanced sufficiently to itself afford considerable protection to the enclosed space, the portion of old wall, it would be necessary to remove, could by then have been cleared away leaving the proposed opening free from all obstruction, and it would only then remain to advance the Southern arm in a direct line across the existing opening to the position

857/2 Apr 13

position shown, to afford exactly the same protection to the enclosed space as was provided in the plan submitted - with his letter No 600 M dated 31st January 1887, the relative positions of the Pier heads of the Northern and Southern arms in each plan, being identical; this plan No IV had the advantage also of - carrying the entrance further to seaward giving a minimum depth of 8 fathoms, in the entrance and from the proposed line the Southern arm would take, - enabling vessels to enter from a more easterly position, thereby allowing them to keep much further to seaward, and clear of the line of rollers upon their full length.

This matter was discussed at considerable length, and the Superintendent stated further, that with regard to the cost of the respective

138/2 Sp 16
respective schemes No II would be
more economical than No II, but that
he had not prepared an estimate for
design No III, the cost of which would
probably not differ greatly from the cost of
No IV

Captain Saylor suggested that the
difficulty might be overcome by making
an entrance in shore of the North East
Angle of the Northern Arm, continuing
the works on the existing plan, which
plan would involve no delay, be economical
and have only the disadvantage of
placing the entrance nearer in shore
than the proposed entrances Nos III & IV;
he pointed out that against this dis-
advantage it must be remembered
that the sea to the north of the Harbour
always retains its present depth, and is
amply sufficient for all practical purposes.

True Extract

Consent

Secretary

Harbour Trust Board

1887/20 1/16
EXTRACT of Proceedings of the HARBOUR TRUST BOARD, at a
Special Meeting held at the offices of the Board on
Tuesday the 3rd day
of May 1887, at 4.30 P.M.

Present.

The Honorable R. W. Barlow C.S.
Chairman.

The Honorable S. R. Turnbull.

Mr. J. McQuintock.

Mr. G. L. Chambers.

Mr. J. R. Hunter.

Mr. G. D. Coleman.

Mr. J. H. Taylor R.N.R.

Captain W. L. C. Baddley R.E.

Mr. George King.

Mr. W. J. Eales.

Mr. Kowasjee Eduljee Panday.

Mr. Mahomed Sheriff Sahib.

Mr. R. Ry.

S. Venkata Krishnaiah Chetty
Garn - }

Read G.O. No 1179 W dated
29th April 1887, Communicating
Telegram from the Secretary of
State dated 27th April 1887,
"Harbour Committee already
formed"

formed and at work Admiral
Salmon, Vares and Coode but
"Taylor may come as witness" x
and stating that Captain Taylor
should be instructed to proceed
to England by next mail taking
with him a statement of the
views of the Board on the leading
principles upon which the work
is in future to be carried out,
and should clearly understand
to what extent he is authorized
to pledge the Board before the
Committee.

Read letter No. 1469 dated
2nd May 1887, from the Chairman
Harbour Trust Board to the
Superintendent of the Harbour
Works, Communicating the
resolutions of the Board res-
pecting the proposed North East
Entrance, at their last meeting,
and requesting that he would
draw up a memo explanatory
of the various designs then

submitted by him

Submitted by him 8/5/87

Read the Superintendent's
reply thereto No. 108 dated 2nd
May 1887, and descriptive memo-
randum annexed. Examined
plans Nos. I, II, III and IV therewith
submitted.

The Trustees then proceeded
to the head of the Northern
arm of the Harbour, and
held a consultation with the
Superintendent, and after dis-
cussing on the spot at Con-
siderable length, the respective
designs for a North East
Entrance, returned to the
Board's offices

Read the minutes and
Confirmed the Proceedings of
the last meeting of the Board
having reference to the question
of the proposed North East
Entrance, and Resolved that,
having now examined the
spot, the Board are main-
taining

unanimously inclined to give
the preference to design No. III
on the grounds that it will
give within the Harbour, a
larger area of deep water
anchorage, and that it will
facilitate the exit entrance,
and mooring of vessels.

A Copy of the Board's Pro-
ceedings will be Communicated
to Captain Taylor for his infor-
mation and guidance.

Ans /
p/h. 3890/87

True Extract

Consent

Secretary
Harbour Trust Board.

Ans 364/87
3

100- 3-5-87
- 170- 26-4-87
Lt 302- Imped 1-
24 Sept. 20/4

10/5
P. 18
Ootacamund, 13th May/87

Transferred to the Marine

works Department

/By order

AM

W. Meyer
Super to Secy.

GO. 1001 Wd/4.4.87

" 1179 Wd/29.4.87

" 1283 Wd/11.5.87

" 8/1283 Wd/11.5.87

CURRENT NO. 3890
MARINE DEPARTMENT.

FROM P. 18 3890

THE CHAIRMAN,

HARBOUR TRUST BOARD,

MADRAS,

To

29

THE CHIEF SECRETARY TO GOVERNMENT,

Marine Department.

DATED

RECEIVED

ENCLOSURE

No.

505
GOVERNMENT OF MADRAS

SUBJECT.

Submitting for the
information of Govern-
ment an extract of the
Proceedings of the Harbour
Trust Board at their
meetings held on
29th April and 3rd
May 1887, in reference
to the proposed North
East Entrance

V. & Co. H. T.
No. 1

33/19
CURRENT NO. 3890
Harbour Trust Board Office,
MADRAS, 11th May 1887.

No. 639

FROM

The Honorable R. C. Barlow B.S.

CHAIRMAN, HARBOUR TRUST BOARD,

MADRAS,

To

The Honorable W. E. Stokes B.S.

as CHIEF SECRETARY TO GOVERNMENT,

Marine Department.

Sir,

In continuation of my letter
No. 505 dated 4th May 1887, I have now
the honour to submit for the informa-
tion of Government, the four plans of the
Madras Harbour referred to therein,
showing the various proposals for
constructing a North East Entrance
submitted to the Board by the Superinten-
dent at their meeting of 29th April.

I have the honour to be
Sir

Your most obedient servant

W. E. Stokes

Chairman

Harbour Trust Board

P. sec

1385
24

CURRENT NO. 386
MARINE DEPARTMENT.

FROM

P.W.C. No. 38914

THE CHAIRMAN,

HARBOUR TRUST BOARD,

MADRAS,

To

THE CHIEF SECRETARY TO GOVERNMENT,

Marine Department.

DATED

RECEIVED

ENCLOSURE

No. 639

SUBJECT.

Forwarding 4 plans
of the Madras Harbour
with reference to N.E. entrance

N 20

Noted and 17th May 1887
Transferred to the Public
Works Dept.

By order
of Mr. Meyer
Asst Secy.

CHIEF SECRETARY
13 MAY 87

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the

Read the following

From the Chairman Madras Harbour Trust No. 505
84.5.87
Endorsement from the Marine Dept 8/13 May 1887.
From the Chairman Madras Harbour Trust No. 639 8/17.5.87
Endorsement from the Marine Dept 8/17.5.87

N1

Ordered to be
forwarded to the Secy.
of State for India.

H.S. No. 10 w 20 May 1887
10/1383
By Mr. Hon. the Secy. for I.
Myford.

In continuation
of our despatch No. 12534
dated 11 May 1887, and
with reference to our
Landship Telegram
of the 29 March 1887,
in

+ Reporting Capt. Taylor
departure of vessel
arrived from Madras

To the Chairman No. H. 7. 1887
" Marine Dept.

3/15

intimating that the question
of the Harbour entrance
would be reconsidered
and referred to a Committee
in London, and requesting
to be informed of arrange-
ments proposed in view
thereto, we have the
honor to forward
the accompanying copy
of a letter from the
Chairman Harbour
Trust Board, with
enclosures, containing
the Board's views on
the question.

No. 100 P. P. Hutchins

His Grace the Duke of Devon

P. Q. 13634 20 May 1857

Print and put
Printed for the
Master of the
H.M. 20 May 1857

H.C.

Printed in the
of the
1857
20 May 1857
20 May 1857

3890 v.

Govt. of Madras.

PUBLIC WORKS.

Dated

W. W.

Recd-28/5/83-6

Recd.

Encl.

G.O. No. 20 1887, No. 1383

10

1383

Madras Harbour

Correspondence containing the
views of the Madras Harbour
Trust Board on the question
of a North East Entrance
for the — ordered to be
forwarded to the Secy.
of State

Forwarding correspondence
containing the views of the
Madras Harbour Trust
Board on the question
of a North East
Entrance for the
Madras Harbour