

Incl 6307

Govt. of (1885) Madras.
MARINE.

N. 1756 W of 29th July 1885

B

S.C.

Communicated for
the information of the C. &
P.W.D. and the S.E.I. Circle.

Cd.

18-7-85

W

26-7-85

J - B.H.

18 W 29/7

18/11/8

30/7

The C. & P.W.D. &
S.E.I. Circle.

N. 1756 W of 29th July 1885

JUNE.

Cocanada Groynes.

Communicating to the Cocanada Harbour
Groynes' Committee, for information and such
action as may be necessary, certain papers regard-
ing the use of concrete blocks for strengthening
the northern groyne base.

27/7

29TH JUNE 1885, No. 273, MARINE.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following papers:—

Note by the Chief Engineer, Public Works department, dated Ootacamund, 13th May 1885.

With advertence to proceedings of Government in the Marine department, under date 20th April 1885, No. 162, the undersigned has the honor to observe that no orders appear to have been passed on the recommendation made in paragraph 1 of the Master Attendant's letter, dated 23rd March 1885, respecting the use of larger material in the construction of the groynes at Cocanada.

2. In the notes printed with proceedings of Government in the Public Works department, under date 23rd March 1885, No. 722 W., the undersigned had occasion to bring to notice that the stones now being used for those groynes were far too small.

3. It is a matter of considerable importance that all possible endeavours should be made to secure material of much larger size for the construction of the groynes in question, especially in the case of the northern groyne; and the undersigned has the honor to suggest that early orders be passed in accordance with Captain Taylor's recommendation.

(Signed) J. SHAW-STEWART, Col., R.E.,
Chief Engineer, Public Works Dept.

No. 113 E.

Transferred to the Marine department.

OOTACAMUND,
13th May 1885.

(Signed) J. SHAW-STEWART, Col., R.E.,
Secretary to Govt., P.W.D.

From J. H. TAYLOR, Esq., Lieut., R.N.R., Master Attendant, Madras, to the Chief Secretary to Government, dated Madras, 16th June 1885, No. 5017.

Administrative department.

In returning Marine reference, No. 1018, dated 27th May 1885, I have the honor to report that, as soon as I received the instructions of Government upon the necessity of strengthening the base of the north groyne of Cocanada, I put myself in communication with Mr. Thorowgood, in order to obtain his assistance in regard to the formation and expense of concrete blocks. That he has kindly given me, though owing to pressure of work, and the duties that devolved upon him owing to Mr. Beardmore's sickness and death, not so quickly as he could have wished. I still believe that concrete offers the only solution of the difficulty as it certainly must be the cheapest.

2. The materials mentioned by Mr. Therowgood are all on the spot except cement. He says—

“I vary the proportions of materials for the concrete blocks on these works slightly, according to where they are required to be placed, but the following may be taken as fair specimen of the proportions:—

	Parts by measures.
“Portland cement	1
“Sand	2½
“Crushed stone	5¼ to 7
“(a) Large stone lumps placed in the block moulds by hand ..	2¼

“For small blocks, such as you mention, of 1 to 2 tons, it would be advisable not to use the large lumps of stone (a), but take seven parts of crushed stone.

“As to the number of cubic feet in 1 and 2 ton blocks, it is generally reckoned that 16½ cubic feet of concrete go to 1 ton, so that a 2 ton block would be about 33 cubic feet or 4' 0" × 3' 0" × 2' 9": while bearing in mind that small blocks cost a little more per cubic yard than large ones, I think 2 ton hand-made blocks should be made *here* for about 13 or 14 rupees each.”

Then to this must be added the expense of the mould, which could be the cheapest wood available, and of which the materials would resell.

	RS.
At Rupees 15 ..	8,250
	4,125
Total ..	12,375

3. If, therefore, the cost is estimated at Rs. (15) fifteen the 2 ton, and 2,200 feet the length of the work to be protected, we arrive at 550 blocks of 4 feet, half that for the upper tier of 1 ton blocks, say roughly 13,000 rupees.

4. To provide this sum, it will be necessary to compare the several items of the present financial position. The work has been delayed owing to the unexpected sinking of the south wall, and the necessity of building good stone boats. As far as the south wall is concerned, I think the Chief Engineer might be asked his opinion as to the advisability, or otherwise, of carrying it out as far as originally intended. A well protected north mole seems to embrace nearly all that is required, after a certain distance from the shore is gained. A saving might perhaps be effected under this head without impairing the efficiency of the work. However the amount is not a large one, and could be made, if Government approved, the subject of a separate advance.

ORDER—dated 29th June 1885, No. 273, Marine.

Communicated to the Chairman, Cocanada Harbour Groynes' Committee, for information and such action as may appear necessary.

(True Extract.)

E. F. WEBSTER,
Chief Secretary.

To the Master Attendant, Madras.
„ Chairman, Cocanada Harbour Groynes' Committee.
„ Public Works department.

Exd. J. Wright.

P. W. D.

Govt. of (1885) Madras.
MARINE.

—

Communicated for the
formation of the Chief Engineer
P. D. and the S. E. I Circle.

(Signed) J. S.

Issued

Recd.

Encl.

G.O., 29th June 1885, No. 273.

No. 1756 W. P. D. 29th July 1885.

JUNE

The C. S. P. W. D.

S. E. I Circle

Cocanada Groynes.

Communicating to the Cocanada Harbour
Groynes' Committee, for information and such
action as may be necessary, certain papers regard-
ing the use of concrete blocks for strengthening
the northern groyne base.

With order

29TH JUNE 1885, No. 273, MARINE.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following papers:—

Note by the Chief Engineer, Public Works department, dated Ootacamund,
13th May 1885.

With advertence to proceedings of Government in the Marine department, under
date 20th April 1885, No. 162, the undersigned has the honor to observe that no
orders appear to have been passed on the recommendation made in paragraph 1 of
the Master Attendant's letter, dated 23rd March 1885, respecting the use of larger
material in the construction of the groynes at Cocanada.

2. In the notes printed with proceedings of Government in the Public Works
department, under date 23rd March 1885, No. 722 W., the undersigned had occasion
to bring to notice that the stones now being used for those groynes were far too small.

3. It is a matter of considerable importance that all possible endeavours should
be made to secure material of much larger size for the construction of the groynes in
question, especially in the case of the northern groyne; and the undersigned has the
honor to suggest that early orders be passed in accordance with Captain Taylor's
recommendation.

(Signed) J. SHAW-STEWART, Col., R.E.,
Chief Engineer, Public Works Dept.

No. 113 E.

Transferred to the Marine department.

OOTACAMUND,
13th May 1885.

(Signed) J. SHAW-STEWART, Col., R.E.,
Secretary to Govt., P.W.D.

From J. H. TAYLOR, Esq., Lieut., R.N.R., Master Attendant, Madras, to the
Chief Secretary to Government, dated Madras, 16th June 1885, No. 5017.

Administrative department.

In returning Marine reference, No. 1018, dated 27th May 1885, I have the
honor to report that, as soon as I received the instructions of Government upon the
necessity of strengthening the base of the north groyne of Cocanada, I put myself
in communication with Mr. Thorowgood, in order to obtain his assistance in regard
to the formation and expense of concrete blocks. That he has kindly given me,
though owing to pressure of work, and the duties that devolved upon him owing to
Mr. Beardmore's sickness and death, not so quickly as he could have wished. I still
believe that concrete offers the only solution of the difficulty as it certainly must be
the cheapest.

2. The materials mentioned by Mr. Therowgood are all on the spot except cement. He says—

"I vary the proportions of materials for the concrete blocks on these works slightly, according to where they are required to be placed, but the following may be taken as fair specimen of the proportions:—

	Parts by measures.
"Portland cement	1
"Sand	2 1/3
"Crushed stone	5 1/4 to 7
"(a) Large stone lumps placed in the block moulds by hand ..	2 1/4

"For small blocks, such as you mention, of 1 to 2 tons, it would be advisable not to use the large lumps of stone (a), but take seven parts of crushed stone.

"As to the number of cubic feet in 1 and 2 ton blocks, it is generally reckoned that 16 1/2 cubic feet of concrete go to 1 ton, so that a 2 ton block would be about 33 cubic feet or 4' 0" x 3' 0" x 2' 9": while bearing in mind that small blocks cost a little more per cubic yard than large ones, I think 2 ton hand-made blocks should be made *here* for about 13 or 14 rupees each." Then to this must be added the expense of the mould, which could be the cheapest wood available, and of which the materials would resell.

	RS.
At Rupees 15 ..	8,250
	4,125
Total ..	12,375

3. If, therefore, the cost is estimated at Rs. (15) fifteen the 2 ton, and 2,200 feet the length of the work to be protected, we arrive at 550 blocks of 4 feet, half that for the upper tier of 1 ton blocks, say roughly 13,000 rupees.

4. To provide this sum, it will be necessary to compare the several items of the present financial position. The work has been delayed owing to the unexpected sinking of the south wall, and the necessity of building good stone boats. As far as the south wall is concerned, I think the Chief Engineer might be asked his opinion as to the advisability, or otherwise, of carrying it out as far as originally intended. A well protected north mole seems to embrace nearly all that is required, after a certain distance from the shore is gained. A saving might perhaps be effected under this head without impairing the efficiency of the work. However the amount is not a large one, and could be made, if Government approved, the subject of a separate advance.

ORDER—dated 29th June 1885, No. 273, Marine.

Communicated to the Chairman, Cocanada Harbour Groynes' Committee, for information and such action as may appear necessary.

(True Extract.)

John W. Wright

Chief Secretary.

To the Master Attendant, Madras.
 " Chairman, Cocanada Harbour Groynes' Committee.
 " Public Works department.

Exd. J. Wright.

Incl 6307

Govt. of 1885 Madras.
MARINE.

No. 1756 W of 29th July 1885

B

S.L.C.

Communicated for
the information of the L. E.
P. W. D. and the S. E. I. Circle.

Issued

Recd. 18/7/85

Encl.

Cd.

18.7.85

G.O., 29th June 1885, No. 273.

No. 1756 W of 29th July 1885

JUNE.

Cocanada Groynes.

Communicating to the Cocanada Harbour
Groynes' Committee, for information and such
action as may be necessary, certain papers regard-
ing the use of concrete blocks for strengthening
the northern groyne base.

J - B/K

29/7

30/7

30/7

The L. E. P. W. D.

S. E. I. Circle.