1. Number of pages 26
2. Date of repair 13-7-
3. Initials of Referencer

M.R.O. 1—32 400—22-11-60

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Cons - 23-6-57

G.O. No. 211 Press Mis.

535-86

Dated 22-6- 18 57.

Not to be folded or roughly handled

Fort Saint George, Public Works Consultation of 23rd June 1857.

No. 85. Read the following letter from Colonel C. E. FABER, Chief Engineer; to H. FORBES, Esq., Acting Secretary to Government, dated 25th May 1857, No. 622.

SIR,

Consequent upon the rapid and exceeding erosion of that part of the North Beach situated between the Custom House and Clive's Battery groynes (numbered respectively 15 and 16 in the Lithographed plan so frequently placed before Government) where an extensive plateau had been recovered from the sea, to the great accommodation of the trade of the Port, I instructed the Superintending Engineer of the Central Circle to inspect, and report upon the state of affairs in that locality.

2. Captain Collyer has promptly carried my orders into effect, and in doing myself the honor to forward a copy of his report, I beg leave to state that concurring generally with that Officer in attributing the erosion of the beach leeward of the Custom House groynes to the undue height and solidity of the stalk of that work which thus intercepts the litteral movement of the sand and forms a high bank to windward, I have in Extract Proceedings of this date No. 621, (forwarded herewith) directed the Executive Engineer to reduce the height of the stalks of groynes Nos. 15 and 13 by dismantling the upper two or three feet of the structure, so as to let the sand travel to the northward.

3. In para. 5 of his report the Superintending Engineer has proposed to encourage the deposit of this current borne sand of the construction of an intermediate Dwarf groyne between Nos. 15 and 16, to serve as a secondary to the former during the South West, and to the latter during the prevalence of the North East monsoons. Whilst however there seems to one to be no doubt that this would be correct professional practise, (and the measure further recommends itself for adoption as the material taken from the stalk of No. 15 can be used for the purpose) I yet do not feel at libery to direct the immediate construction of this work in consequence of the Master Attendant's objections to increasing the number of groynes out of regard to the safety of Boats landing with Passengers and Cargo.

4. It is difficult to over-rate the commercial value and the General convenience to the community of the spacious plateau, on which these unexpected inroads have been made, and without some such structure as that suggested by Captain Collyer, the preservation of the platform seems impracticable. It is however for the Government to decide whether an intermediate groyne to Nos. 15 and 16 shall or shall not be established, and I have to solicit an early decision for my immediate guidance.

5. The late action of the high southerly winds seems to open the question whether a too great saliency has not been given to No. 14, (or the Arbuthnots) groyne, and it is an enquiry for consideration practically, whether groynes 15 and 16 shall be prolonged, to be in keeping with No. 14, or whether the latter (which it had been recommended by Colonel A. Cotton to extend yet further as a surf experiment,) shall be shortened by dismantling its present head. For a thoroughly effectual protective system, there seems to be no doubt that the groynes on the North beach are placed too far asunder.

6. I beg leave to send for the convenience of reference my own plan* of the Madras coast which now represents in a thick black line the encroachments which have caused the present application for the early orders of Government.

* To be obligingly returned.

No. 86. ORDER THEREON, No. 1211; dated 22nd June 1857.

Before passing any orders on the proposed construction of an intermediate dwarf groyne between the Custom House and Clive's Battery groynes numbered 15 and 16 respectively, the Right Honorable the Governor in Council desires to be furnished with the Master Attendant's opinion referred to by the Chief Engineer in the foregoing communication, taking exception to the increased number of groynes as interfering with boats landing goods or passengers. The Chief Engineer will at the same time be good enough to state what would be the cost of the additional dwarf groyne he has recommended.

(Signed) H. FORBES,
Acting Secretary to Government.

From

Captain G. C. Collyer.
Superintending Engineer Central Circle.

To,

Colonel C. E. Faber
Chief Engineer.

Sir,

In obedience to your instructions, I yesterday in company with Lieutenant Colonel J. Cotton inspected the portion of the beach between Clive's Battery and the Light house groin.

2. Between Clive's Battery groin No. 16 and the Master Attendants' groin No. 15, the distance is 307 yards, towards the centre of this space the Sea has carried away the sand formerly deposited there, and the road constructed upon it, to within a few feet of the Bulwark.

3. I am unable to account for the decided set of the current upon this part of the beach, but I am of opinion that the erosion of the beach not being compensated by the fresh deposition of sand to supply the place of that removed, is caused partly by the height of the groin No. 15 + preventing the travelling of the superfluous sand,

and

and by its having been run out too far at once, I do not mean that the groins are gener. by too long, provided the system was complete, but that under existing circumstances they are so. As it now is the groin № 15 is high, it has a considerable quantity of sand heaped against it on the weather side, and has deep water almost up to the Bulwark, a distance of about 90 yards on the lee side.

4. There is a marked difference in between the state of the beach here and at Arbuthnot's groin № 14, that groin is very low, especially at its landward end, the sand has passed over it, and the erosion there is comparatively little. The light house groin № 13 presents the same appearance, with the same effects as the Custom house groin № 15.

5. Having the effects of Arbuthnot's groin as a guide, and Lieut.t Colonel Cotton's opinion I propose to lower the Custom house groin at first two feet or even three feet if necessary, to enable the sand now heaped up uselessly on the South side to travel Northwards, and again to intercept this I propose to construct a groin of not more than 30 yards in length at first midway between the two

groins

groins 15 and 16, the stone taken from the groin will go far to make such a groin, and it will arrest the destructive process now going on and will be a secondary groin, at the same distance from its primary groins as those on the sea face of the Fortress are.

6. The Master Attendant may possibly have some objection to urge to this as being attended with more or less danger to boats landing. There is no doubt truth in this but as there is a good beach between groins 14 and 15 and as I believe that there will also by the proposed groin soon be a beach accumulated here, I would recommend it be ordered to be carried out.

7. The stalk of the Light house groin might be lowered in the same way and a small groin be constructed half way between 13 and 13½.

8. I have the honor in conclusion to bring to your notice, that a Plan for a boat breakwater and pier was prepared by me, and I believe submitted by you to Government for their consideration, I do not know whether the same was submitted by Government to the Master Attendant

or

or to any other party for their opinion, but if some such work were carried out all the objections urged by the Master Attendant to groins would cease to exist.

I have the honor to be Sir
(Signed) G. L. Corfield Captain
Supt. Engr. Central Circle

Fort Saint George
23d. May 1857.

(True Copy)
A. E. Setter Colonel
Chief Engineer

Encl to Desp

Enclosure in Letter
From
The Chief Engineer
To
The Colonial Secretary
P.W.D.

Public Office
Port Louis
23rd May 1857

Copy of a letter from
Captain C. Collyer R.E. Superintending
Engineer Circle reporting the
result of the inspection of the
Reef forton of the Black River
Lighthouse Detached and
the Light House grounds.

No 621

Extract from the Proceedings of the Chief Engineer in the Department of Public Works.

Under date the 25th May 1857

Read again Report from the Supt Engineer C. Circle of P.W. on the action of the sea on the South Beach between Groins 15 and 16.

Also Inter Letter from Supt Engr of 23 May 57

Resolved that a copy of the foregoing Letter from the Supt Engineer be forwarded for the information and guidance of Captain Rawlins in Executive charge of Groins, with instructions to commence stopping the stalks of the Custom House and Light House groins to a depth of from 2 to 3 feet agreeably to Captain Collyers directions without delay, and to report weekly on the progress of removal, and on the effect of the measure in enabling the sand to travel Northward, and arrest the present erosion Seaward of Groins 13 and 15, but especially the latter.

2. Resolved further however, that regard being had to the previous favorable representation of the Master Attendant as to the increased danger to the Landing of Passengers and Cargo from curtailing the present

number of groins, the actual construction of the dwarf or boundary groin between Nos 15 & 16 as suggested in para 5 of the Superintending Engineer's report be deferred, until the orders of Government for which immediate application will be made are received.

To
Capt. Rawlins

(Sd.) Edward
Signed C. E. Fisher Col.
Chief Engineer

(True Copy)
Alex. Fisher Colonel
Chief Engineer

137

Central Office of P.W.
Fort Saint George
25th May 1857

No. 622.

From The Chief Engineer

To The Secretary to Govt. P.W.D.

Sir.

Consequent upon the rapid and exceeding erosion of that part of the North Beach situated between the Custom House and Olives Battery (numbered respectively 15 and 16 on the Lithographed Plan so frequently placed before Government) where an extensive plateau had been recovered from the sea, to the great accommodation of the trade of the Port, I instructed the Superintending Engineer of the Central Circle to inspect, and report upon the state of affairs in that locality.

2 Captain Collyer has promptly carried my orders into effect, and in closing myself the honor to forward a copy of his Report, I beg leave to state that I concurring generally with that officer

leeward of the Custom House. Grain to the undue height and solidity of the stalk of that work which thus interrupts the littoral movement of the sand and forms a high bank to windward. I have in Extract-Proceedings of this date, (forwarded herewith) directed the Executive Engineer to reduce the height of the stalks of Groins Nos 12 and 13 by dismantling the upper two or three feet of the structure, so as to let the sand travel to the northward.-

3 In para 5 of his Report the Superintending Engineer has proposed to encourage the deposit of this current borne sand by the construction of an intermediate Groyn between Nos 14 & 15, to serve as a Boundary to the former during the South West, and to the latter during the prevalence of the North East-Monsoons.- Whilst however there seems to me to be no doubt that this would be correct professional practice, (and the measure) further recommends itself for adoption as the material taken from the stalk of No 15 can be used for the purpose) I yet do not feel at liberty to direct the immediate construction of this work, in consequence of the Master Attendants objections to increasing the number of groins out of regard to the safety of boats landing with Passengers and Cargo.-

4 It is difficult to over rate the commercial value and the general convenience to the community of the spacious platform on which these undetected inroads have been made and without some such structure as that suggested by Captain Colleys, the preservation of the platform seems impracticable.- It is however for the Government to decide whether an intermediate groin to Nos 15 and 16 shall or shall not be established, and I have to solicit an early decision for my immediate guidance.-

5 The late action of the high southerly winds seems to open the question whether a too great saliency has not been given to No 14, (or the abutment) groin, and it is an enquiry for consideration practically, whether groins 15 and 16 shall be prolonged, to be in

keeping with Nº 4, or whether the latter (which it had been recommended by Colonel A Cotton to extend yet further as a surf experiment,) shall be shortened by dismantling its present head. For a thoroughly effectual protective system, there seems to be no doubt that the groins on the North Beach are placed too far asunder.-

6. I beg leave to send for the consideration of Reference my own Plan to be shewn as shewn of the Madras Coast, which now represents in a thick black line the encroachments which have caused the present application for the early orders of Government.-

I have the honor to be
Sir
Your most Obed.t
Hble Servt
Chas Blane
Chief Engineer

Central Offices of Ord.
Fort St George
25th May 1837

Comp.d Chief

For Cons 92

P.W.O. Works Dept. Mutiny 1861-

From the Chief Engineer 25 May 1857

Via Kurrachee Mr Barkers

Punjaub Schedule Rain Gauge

Communication re Meteorological

Instrument

Instrument is Rain Gauge

Meteorological

Letter Recd Intimating

that the Supt Punjaub

Cons: 2d October/55 No 53655

Rec'd 1st May 1857 Copd

Dft to Cons 23d June.

1061

From

The Chief Engineer

To

The Secy to Govt Punjab

Dated 25th

Rec'd 27th May 1857

No 622

Cons. 31 March

No 1211. 22nd June

Forwarded for the

early orders of Govt as Referd

from the Supt Engr Cis on

the encroachments of the

sea on the North Beach

between the Customs House &

Mint Battery. Draining with

an expression of his concurrence

generally with Capt

Collyers recommendation

1085.

Cons 3d June No 12 to 17 & 20

Public Works Depart.

No. 1211

Extract from the Minutes of Consultation

Under date the 2nd June 1857

Read the following

letter from the Chief Engineer

(Referred to 25 May 57 No. 622)

Before passing

any orders on the proposed

construction of an inter-

mediate dwarf groyne

between the Custom House

and Clines' Battery groynes

numbered 15 & 16 respectively

the Right Hon. the Gov. in

Council desires the fur-

nished with the Marker

Attendant's opinion

referred to by the Chief

Engr. in the foregoing com-

munication, stating

his reception to the increased

number of groynes as proposed

with boats landing goods or passengers
The Chief Engr will at
the same time be
good enough to state
what would be the
cost of the additional
dwarf groyne he has
recommended.

[illegible]

G. Copies to the Chief Engr.
Oct 25.

C. 2d Cont. / 57 No 53 to 55.

Public Works 1857 2d Sept.
Do Com 23d June.

No 1211.

Contract Mins of Com.
of 22d June / 57.

Cir Chief 22nd 23rd June 57 &
No 1321 in C. of July

Desiring to be furnished with the Mr Attys opinion in taking exception to the undermentioned number of Granites on the Custom House Block as unfit for carrying with Coals Landing goods, or Passengers, before receiving orders for the Construction of an Intermediate Dwarf Granite between the Custom House & Chiefs Building Granites Numbered 15 & 16 Respectively.

No 55 & 86

C 17 June — Rec'd