

- (1) பக்கங்களின் எண்ணிக்கை 24
 (2) புதுக்கித் திருப்பிய நாள் Self - 90
 (3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் 60

தமிழ்நாடு ஆவணக் காப்பகம்.

(136)

தமிழ்நாடு அரசு

P.W.D. துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	<u>1661</u>	அச்சகம் பலவகை
நாள் :	<u>17 - 6 - 1891</u>	<u>198</u>

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

12 Sheets

வண. எ-1-18,006-15-6-87.

[Signature]

1641
17TH JUNE 1891, No. 1641 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

From H. IRWIN, Esq., C.I.E., Consulting Architect to Government, to the
Chief Engineer, Public Works Department, dated Chepâk, 8th June 1891,
No. 938.

With reference to G.O., No. 437 I., Public Works, dated the 22nd May 1891,
I have the honour to report that not having been informed of the decision come to by
Government regarding the cutting of the Cooum bar, I had it cut on the 24th May
1891 and admitted 6" of water which covered a good deal of the flats which were
exposed and certainly has for the present considerably reduced the offensive smell.
I had also made arrangements to cut the bar again during these high tides and an
additional height of 3" has been gained. I did this being in charge of the Cooum
conservancy. I hope that no ill effects will be the result, as, at present, it is a
great improvement over the previous condition. It has also increased the facilities
for navigation and cleared the canal near Chepâk of a great deal of very offensive
matter.

ORDER—dated 17th June 1891, No. 1641 W., Public Works.

Recorded.

2. As the bar has now been opened without apparent ill effects, it should be
kept open as long as practicable at a reasonable cost.

(True Extract.)

[Signature]

Major, R.E.,
Under-Secy. to Govt., P.W.D.

To the Consulting Architect to Government.
" Local and Municipal Department.
" Chief Engineer for Irrigation.

6120
Receipt
P. D. 11
Exd. A. D. Xavier.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1891} Madras.
PUBLIC WORKS.

Dated June, 17th.

I. eccl.

Encl.

G.O., 17th June 1891, No. 1641 W.

JUNE.

Cooom Bar

Report of the Consulting Architect to Government of having opened the — recorded, with the remark, that, as the bar has now been opened without any apparent ill effect, it should be kept open as long as practicable at a reasonable cost.

1641/2
18TH MAY 1891, No. 417 I., PUBLIC WORKS.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Irrigation.

Read—the following paper :—

G.O., dated 13th May 1891, No. 424, Revenue.

Read—the following Proceedings of the Board of Revenue (Separate Revenue), dated 15th April 1891, Mis. No. 1182.

Resolution—dated 15th April 1891, Mis. No. 1182.

In continuation of Board's Proceedings, Mis. No. 413, dated 13th February 1891, and of Board's Proceedings, Mis. No. 996, dated 1st April 1891, the Board begs again to draw the attention of Government to the want of water in the Buckingham canal, caused by the closing of the bars at Ennore, Pulicat, Karingali, Adyar, Cocum and Covelong.

2. The work of keeping open the various bars would seem to be essentially the duty of the officer in charge of the canal. It is essential to the efficiency of that work as a means of communication.

3. The greatest difficulty is now felt in the transport of salt owing to the want of water. Between Covelong and Madras communication is reported to have ceased.

4. The Board need not dilate on the effect of such a state of things on the success of the system of outstorage of salt, which has been recently introduced by Government, "opening bars is under the Salt Act a licensee's work;" but the Board submits that the bars referred to are those of backwater which require to be kept open solely to secure the brine supply of factories and it would be entirely unfair to saddle the licensees with the work in this case, seeing that, though it is calculated under certain circumstances to assist the brine supply, it is also essential to the utility of a large public work. The Board has before it estimates for Rs. 3,660 and Rs. 3,500 for opening the Ennore and Covelong bars, respectively, and if Government so orders, it will be done at the licensees' expense.

5. It may be remarked, however, that the immediate effect of this must be a considerable increase in the price of salt which is certainly not desirable. The Board requests that definite orders may be passed once for all as to whether this work is now and in future to be a charge upon the licensees or upon the State.

Read—also the following telegram from the Board of Revenue (Separate Revenue), dated 27th April 1891 :—

Board begs early orders regarding opening Ennore bar. Transport and manufacture reported likely to stop unless prompt measures adopted.

Read—also the following Proceedings of the Board of Revenue (Separate Revenue), dated 27th April 1891, Mis. No. 1372 :—

Read—the following letter from W. A. FOWLER, Esq., Assistant Commissioner of Salt and Abkari Revenue, Chingleput Sub-division, to the Deputy Commissioner of Salt and Abkari Revenue, Central division, dated 24th April 1891, No. 1832 :—

In continuation of this office No. 1585, dated 1st April 1891, submitting an estimate for opening the Ennore bar, I have the honour to report that the water in the

channels of the Ennore factories is getting lower and lower and that the tide gauge register now reads six below zero. As the channel clearing estimates only provide for clearing the channels to a depth of 3 feet below zero, there will, even after the channels have been cleared out, be only $2\frac{1}{2}$ feet (roughly) of water, which is not sufficient to float a 40-ton boat.

2. I beg, therefore, that early orders may be passed on the estimates in question and on the channel clearing estimates, or else all transport and sales will come to a standstill.

Resolution—dated 27th April 1891, Mis. No. 1372.

The following telegram will be despatched to the Secretary to Government, Revenue Department:—

Board begs early orders regarding opening Ennore bar. Transport and manufacture reported likely to stop unless prompt measures adopted.

Order—dated 13th May 1891, No. 424, Revenue.

The Board of Revenue will be informed that orders to open the Pulicat and Ennore bars have been issued in the Public Works Department and that, as regards the Covelong bar, the Chief Engineer for Irrigation is of opinion that the advantage of opening it would not be commensurate with the cost, as the influx of water, which it would be possible to secure, would not have any appreciable effect on the navigation of the canal south of Madras.

2. With reference to para. 5 of its Proceedings, dated 15th April 1891, No. 1182, the Board will be informed that the cost of "opening bars" will be charged to the licensees or the Government according as the object is to improve the brine supply of the factories or the navigation of the canal.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

ORDER—dated 18th May 1891, No. 417 I., Public Works.

Communicated to the Superintending Engineer, II Circle.

(True Extract.)

(Signed) G. T. WALCH,
Ag. Secretary to Govt., P.W.D.

To the Chief Engineer for Irrigation.

- " Superintending Engineer, II Circle.
- " Executive Engineer, Buckingham canal.
- " Examiner, Public Works Accounts.
- " Revenue Department.

Cary *Archibald*

Exd. A. D. Xavier.

Spare Copies

1641
3

IRRIGATION.

Govt. of {1891} Madras.
PUBLIC WORKS.

Dated May, 18th.

Recd.

Encl.

G.O., 18th May 1891, No. 417 I.

MAY.

2631c

Opening of Certain Bars

Orders in the Revenue Department relating to the — and the adjustment of the cost.

1641/4
22ND MAY 1891, No. 437 I., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

READ—the following papers :—

G.O., dated 19th February 1891, No. 157 I., Public Works.

From the Executive Engineer, Buckingham Canal Division, to the Superintending Engineer, II Circle, dated 14th March 1891, No. 1769.

In reply to your endorsement No. 294 B.C., dated 25th February 1891, on G.O., No. 157 I., of 1st March 1891, I have the honour to say that I have recently inspected the bars at Ennore, Karunkali and Pulicat, and am of opinion that it will take an enormous outlay, the amount of which it is quite impossible to estimate accurately, to open and keep them open at this time of the year. The season is altogether an abnormal one and the bars are now closed owing to the absence of land floods during last north-east monsoon. The Pulicat bar was not closed for many years, and both it and the Ennore bar were cut last year in the expectation of being thoroughly opened by north-east monsoon floods which, as a matter of fact, never came.

2. I forward copy of letter from Captain Power, in which he enters particularly into the case of the Covelong bar. I cannot find out that this department has ever been saddled with the duty of opening bars for the purpose of supplying brine to salt factories, and would suggest that this work might very well be done by the Salt Department and the cost in any case debited to that department. The work of opening and keeping open bars is of a nature in which local experience and close personal supervision can be the only safe guide.

3. I would therefore ask for definite orders whether I am to open and keep open at all cost the various bars asked for by the Salt Department and to forward estimates on completion of the works, as I regard it useless to attempt estimate for them beforehand. Until receipt of orders from you, I have instructed the sub-divisional officer to take no steps in the matter, as it seems to me very doubtful whether the possible benefit derived will be at all proportionate to the outlay involved.

ENCLOSURE.

From the Officer in charge, Southern Sub-division, to the Executive Engineer, Buckingham Canal Division, dated 8th March 1891, No. 445.

In reference to your endorsement No. 1707, dated 3rd February 1891, I have the honour to report that the opening of a single bar is a formidable job and will require my undivided attention for some days before opening, which must be either at full or new moon; consequently I can only open one bar at a time, and as the Covelong salt factory is much in need of fresh sea water, I will commence operations at that bar first and will open at new moon on the 9th of April next. It will take until about the 3rd or 4th proximo to have excavation, groyne, and ring bund ready for opening. Contractors L. Narayanaswami Naidu and Co. have much experience at bar work. I have written to them to ascertain if they will undertake it; if so and you could superintend the opening on the 9th April, I will be set free to open the Pulicat bar on the same date; if not the latter will have to be deferred until full moon on the 24th April and Ennore bar to 8th May. Of course, I will superintend preliminary operations and it will be only necessary for you to be there the day previous and opening day.

2. The probable cost of opening one bar will be about Rs. 6,000. It will remain open from one to five weeks dependent on winds; if high southerly wind, it will close in a short time. There is no possibility of keeping a bar open except at an enormous outlay, but sufficient water will be obtained at an opening for salt purposes.

3. As there is a deal of correspondence in your office relative to opening bars, it is needless for me to enter into details; suffice to say that Mr. Vincent was present at last opening of Covelong and expressed himself to me to the effect that he was not aware it was such a difficult piece of work and not only difficult but a risk of expenditure incurred by the chances of failure. The low level of water in backwater at Covelong now enhances the difficulties.

From the Superintending Engineer, II Circle, to the Executive Engineer, Buckingham Canal Division, dated 25th March 1891, No. 336 B.C.

[Your No. 1769 of 14th March 1891.]

I do not gather from the Proceedings of the Board of Revenue that their object in asking that bars may be opened was to obtain a better supply of brine for their salt factories, but to maintain sufficient water for navigation. I quite agree with you in considering that, if brine be the object, the cost of cutting the bars should be met by the Salt Department unless it can be shown that the construction of the canal has interfered with the supply.

2. Whether the bars should be cut to improve the navigation is a point on which I am unable to give an opinion in the absence of any information on the present navigable condition of the canal either from yourself or your sub-division officers, but, speaking generally, it appears to me that deepening the canal in those places which have got shoaled up is the proper remedy.

3. As you state, after, I presume, consulting your records and obtaining the opinion of your sub-division officers, who have had much experience of the working of the canal, that the cost of opening the bars would in all probability be incommensurate with the benefits to be derived thereby, i.e., better navigation, I presume, as well as a better supply of brine, I am of opinion that they need not be opened.

No. 337 B.C.

Copies of the correspondence are forwarded to the Chief Engineer for Irrigation with reference to G.O., No. 157 I., dated 19th February 1891.

25th March 1891.

(Signed) J. HANNAN,
Suptg. Engineer, II Circle.

No. II/23 B.C.

MEMORANDUM.

Cutting and keeping open various bars in the Chingleput district.

[From Superintending Engineer, II Circle, dated 25th March 1891, No. 337 B.C.]

It is absolutely necessary for consideration of the question that it should be stated what approximately are the levels with reference to M.S.L. of the backwaters near the bars, both now and at the lowest.

2. It should also be reported which of the bars have been opened by the department during the past five years, and on what dates and what was the cost, and whether the result was an appreciable improvement to navigation.

3. There is nothing in the Proceedings of the Board of Revenue with G.O., No. 157 I., dated 19th February 1891, to show that the object of cutting the bars asked for is to obtain a better supply of brine for the salt-pans; but it should be stated, if known, whether it has ever been customary with the Salt Department to cut the bars in question in order to secure a better supply of brine.

9th April 1891.

(Signed) G. T. WALCH,
Chief Engineer for Irrigation.

1641/5

From W. JOPP, Esq., Officiating Superintending Engineer, II Circle, to the Chief Engineer for Irrigation, dated 12th April 1891, No. 21 B.C.

Referring to G.O., No. 157 I., of 19th February 1891, on Proceedings of the Board of Revenue, Mis. No. 413, dated 13th February 1891, which is understood to mean that it is advisable to open and keep open the various bars and in the interest of navigation on the Buckingham canal, I have the honour to state that the Executive Engineer reports that the cutting of the bars would not, in present circumstances, be advantageous to navigation, as the low tide level is 6 inches lower than the water level in the canal.

2. If the canal water level falls below the low tide level, it will be a question to decide whether it would be best to cut the bars, a very costly and tedious undertaking, or to undertake such clearances of silt from the canal as to keep it navigable which would be less costly.

3. The latter course would probably be best and as, owing to the present drought, the water level is likely to fall lower, your early instructions are requested.

4. I may remark that the Executive Engineer reports that during his recent detail inspection of the canal, he has observed no impediment to traffic for want of water, although the traffic is unusually heavy.

Proceedings of the Board of Revenue (Separate Revenue), dated 1st April 1891, Mis. No. 996.

C. S. CROLE, Esq., C.S.

Read—the following letter from J. A. P. SNEYD, Esq., Deputy Commissioner of Salt and Abkari Revenue, Central Division, to the Secretary to the Commissioner of Salt, Abkari and Separate Revenue, dated Kistnapatam, 22nd March 1891, No. 1031.

I have the honour to forward copy of a letter from the Inspector, Madras Depôt Circle, complaining against the obnoxious smell emitted from the Buckingham canal opposite the depôt and to request that the Sanitary Commissioner may be addressed on the subject.

ENCLOSURE.

From Mr. M. C. BORGAN, Inspector of Salt and Abkari Revenue, Madras Depôt Circle, to the Assistant Commissioner of Salt and Abkari Revenue, Chingleput Sub-division, dated Madras, 7th March 1891, No. 220.

I have the honour to bring to your notice the insanitary state of the canal within the depôt limits.

2. The obnoxious and detestable stench emitted from the canal is, I think, due to the following reasons:—

- (1) The closing of the bar near the Marina.
- (2) The shallowness of the canal.
- (3) Stagnation.
- (4) The inlet of a municipal drain.
- (5) The burrows made into the silt by the large number of fish.

3. I would ask that the Board be addressed on the matter with a view to their addressing the Government Sanitary Engineer so that the evil be remedied before it is too late. In my bungalow, it is simply insufferable. If this is allowed to continue any longer, we shall be attacked either with cholera or typhoid fever.

No. 1206.

Copy submitted to the Deputy Commissioner, Central Division, with the request that the Board may be addressed on the subject.

(Signed) W. A. FOWLER,
Assistant Commissioner.

Resolution—dated 1st April 1891, Mis. No. 996.

In its Proceedings, Mis. No. 413, dated 13th February 1891, the Board suggested the opening of the Cooum and other bars in view to facilitating the transport of salt from the out-factories to Madras and the Railway. Previous to the introduction of the out-storage system the condition of the "Buckingham canal," except during the transport season, was a matter of little importance to the Salt depôt. But this is no longer the case, and the canal is now required to be kept passable for loaded boats all the year round. The description of its present condition given in the letter above read is not overdrawn, and the Board trusts that Government may see its way to directing steps to be taken to let water into it at an early date.

(True Copies and Extract.)

(Signed) EDMUND MILLETT,
Assistant Secretary.

No. 2226, Revenue.

Transferred to the Public Works Department in continuation of G.O., dated 17th February 1891, No. 1116.

OOTACAMUND,
8th April 1891.

(Signed) C. A. GALTON,
Secretary to Government.

No. 87 I.

Note by the Chief Engineer for Irrigation.

Orders have already issued for doing all that may be done towards opening and keeping open the Ennore and Pulicat bars.

2. The Executive Engineer, Buckingham Canal, will report on the question of attempting to open the Covelong bar, but it seems unlikely that any opening of it now possible would have such an effect on the navigation of the canal south of Madras as would warrant the large expenditure that would have to be incurred; admission of even a small quantity of sea water there would doubtless considerably improve the brine supply to the neighbouring salt-pans, but that it is a matter to be dealt with by the Salt Department.

3. As regards the complaint dealt with in the last of the Board's Proceedings above quoted, viz., "the insanitary state of the canal" in and near Madras, it must be pointed that this department is in no way responsible for the "obnoxious and detestable stench emitted from the canal," which is due to the fact that a large quantity of the sewage of Madras is poured into it and into the Cooum; as long as this continues to be the case and till also the masses of sewage matter which have already accumulated are removed, the stench complained of will be a recurrent nuisance every dry season, when the water in the canal and the Cooum falls low and the great heat quickens the generation of foul gases. To admit sea water into the Cooum and so into the canal in its present state would not improbably aggravate the evils now complained of; it did so in 1870, when, according to Dr. Cornish, then Surgeon-General—

"The remedy" suggested was tried on one occasion within the Surgeon-General's recollection,

but instead of abating the nuisance only increased it. On this occasion (1870) the sea water was let in at a time when the sea was full of species of oscillatoria producing the phenomenon of phosphorescence. These minute creatures died by myriads under the changed conditions of their existence, and produced so fearful a stench that many persons having to pass

1641
6

near the river on any portion of its tidal length were attacked by sickness. Fortunately, heavy rain fell early in June of that year sufficient to force open the bar and remove the offensive matter."

OOTACAMUND,
15th May 1891.

(Signed) G. T. WALCH,
Chief Engineer for Irrigation.

To the Acting Secretary to Government,
Public Works Department, Irrigation Branch.

ORDER—dated 22nd May 1891, No. 437 I., Public Works.

Government approves the action taken by the Chief Engineer for Irrigation as regards the Ennore and Pulicat bars, and leaves him to deal with the question of opening the Covelong bar as may appear advisable on the further information which it is noticed is to be supplied by the Executive Engineer, Buckingham Canal.

2. Government accepts the view that it is not advisable to now open the Cooum bar, as such a course would probably add yet another to the offensive effluvia from which Madras is suffering.

(True Extract.)

(Signed) G. T. WALCH,
Ag. Secretary to Govt., P.W.D.

To the Chief Engineer for Irrigation.
" Superintending Engineer, II Circle.
" " " " V "
" Revenue Department.
" Public Department.

" *prop. architect to Govt*

Exd. C. A. Moonisawmy.
Spare Copies

IRRIGATION.
Govt. of {1891} Madras.
PUBLIC WORKS.

Dated May, 22nd.

To.

Encl.

G.O., 22nd May 1891, No. 437 I.

MAY.

Opening of certain bars
Orders regarding the —.

To D.D.

164/7

There is no separate
provision in the M.
Provincial Budget
for Coom Conservation.
A lump sum
allotment of Rs. 2500
has been given to the
C.A. division for
"Provincial - Miscellaneous
Public Improvements"
the cost of cutting
the bar is met
from this grant.

C.
7.6.91

E. L. Niles & Co.
returned to M.C.S.

D.D.
22-7-91-

Office of the Consulting Architect to Govt.
Chepauk, Madras,
8th June 1891

C. J. C.
Consulting Architect
to the Government of Madras,

Engineer
Public Works Department.

In reference to G.O. No. 437 I.
of the 22nd May 1891. I have the honor
having been informed of the
by Government regarding the
bar I had it cut on the 24th
fted 6" of water which covered
flats which were exposed and
the present considerably reduced
it. I had also made arrange-
ment again during these high
in a height of 3 inches has been
being in charge of the Coom
so that no ill effects will be
as at present, it is a great improve-
ment over the previous condition. It has also in-
creased the facilities for navigation and cleared
the

IRRIGATION.
Govt. of Madras.
PUBLIC WORKS.

Dated May, 22nd.

Recd.

Encl.

G.O., 22nd May 1891, No. 437 I.

MAY.

Opening of certain bars
Orders regarding the —.

[Faint handwritten notes, possibly bleed-through from the reverse side of the page.]

C.A.W.

16/1/91

I says he has no wish
Heaven control of the
Coorum bar to send
CA report to the Govt. &
explain how the mis-
understanding arose
& suggest that the
Coorum bar be kept open
as long as practicable without
incurring great expense

A.H.

13/1/91

Office of the Consulting Architect to Govt.
Chennai, Madras.
8th June 1891

C.S.C.
Consulting Architect
to the Government of Madras.

Engineering
Public Works Department.

In reference to G.O. No. 157 I
of the 22nd May 1891. I have the honor
having been informed of the
by Government regarding the
bar I had it cut on the 24th
the 6" of water which covered
flats which were exposed and
the present considerably reduced
I. I had also made arrange-
bar again during these high
in the height of 3 inches has been
I being in charge of the Coorum
so that no ill effects will be
resent, it is a great improve-
ment in condition. It has also in-
creased the navigation and cleared
the

IRRIGATION.

Govt. of {1891} Madras.
PUBLIC WORKS.

Dated May, 22nd.

Recd.

Encl.

G.O., 22nd May 1891, No. 437 I.

MAY.

Opening of certain bars

Orders regarding the —.

P. W. D.

1661/10

Office of the Consulting Architect to Govt.
Chopauk, Madras.

8th June 1891

No. 938

From

Henry Swin, Esq., C.I.E.,
Consulting Architect
to the Government of Madras.

To

The Chief Engineer
Public Works Department.

In,

Enclosures.

With reference to G.O. No. 437 I. Public Works dated the 22nd May 1891. I have the honor to report that not having been informed of the decision arrived at by Government regarding the cutting of the Corum bar I had it cut on the 24th May 1891 and admitted 6" of water which covered a good deal of the flats which were exposed and certainly has for the present considerably reduced the offensive smell. I had also made arrangements to cut the bar again during these high tides and an additional height of 3 inches has been gained. I did this being in charge of the Corum Cusseraney. I hope that no ill effects will be the result as at present, it is a great improvement over the previous condition. It has also increased the facilities for navigation and cleared the

The canal near Chapak of a great deal of very offensive
matter.

I have the honor to be
Sir
Your most Obedient Servant

Henry Inwie
Consulting Architect
to Government.

1661
11

Current 6203

Public Works Department.

From

THE CONSULTING ARCHITECT

TO THE GOVERNMENT OF MADRAS,

To

THE Chief Engineer
P.W.D.

No. 938

Dated 8th

Received 9th June 1891.

No. of ENCLOSURES.

Subject.

Reporting for having
opened the Coom Bar.

Notes see by E. J. C. J.
returned to H. C. J.
22-7-91 J. S. P.

over
9.6.91
Barrington
Ald
12/6

40. 11. 1891
28. 11. 1891
11. 11. 1891
22. 5. 91
K. K.
No. 1641 dated 17 June 1891

14/11 Recorded. 28

2. As the bar has
now been opened without
apparent ill effects,
it should be kept
open as long as prac-
-ticable at a reasonable
cost.

Ald.
The C.A. 17/5

" L. M. Sept. 11

" C.E. for L. V. 11
Sept 11
note Pub. Dept. 20/6

The draft of G.O. 437
dated 22nd May/91 was
prepared by Mr. Welch
who was at the time not
aware that the Control
of the Coom Bar vested
in the Consulting Architect
in succession to the
Executive Eng^r. Presidency.

04. 7. 4/6
A. M. 13/6/91
10/11/91
Ald.
W
with order

1641
12

G.O., 17th June 1891, No. 1641 W

Cosum B. & Co.

Regarding the Captivity
of having opened
the ————, recorded with
^{as the bar has now been opened without any difficulty}
the result that it should
be kept open as long
as practicable at a
reasonable cost.

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14

12

920 17/6.