

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 653 (W) Press
Mis.

Dated 26-2-1877.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
26th February 1877. No. 653.*

Read the following letters :—

No. 643. From Major H. M. VIBART, R.E., Officiating District Engineer, Presidency, to Major-General G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Fort St. George, 23rd December 1876, No. 5,033.

HIS GRACE the Governor before leaving Madras expressed a wish to have the deposit above Government House bridge on the right bank of the Cooum removed to a depth of 2 feet below the water.

1 Estimate.
1 Specification.

I have examined the place, and it seems to me it would be hardly desirable to remove the stuff, as the smell would undoubtedly be very offensive and the work very costly; as a depth of 3 or 4 feet of material would have to be removed, conveyed to a distance and buried in pits excavated for the purpose.

2. I beg to propose that in place of removing the deposit we should raise the foreshore 1 foot 6 inches or 2 feet with sand, and that the surface thus formed should be planted with nanal grass; a few tufts of which at present grow near the spot. I herewith have the honor to forward an estimate, and will, if desired, send in a sketch showing the limits of the proposed raising.

No. 643-A. From the same Officer, dated Fort St. George, 25th January 1877, No. 5,486.

With reference to your memorandum, No. 52, dated 9th January 1877, I have the honor to submit an estimate, amounting to Rupees 8,200, for removing the silt from the foreshore of the river Cooum west of Government House bridge, together with a specification report.

1 Estimate.
1 Specification.
1 Sketch.

2. The sketch of the river is herewith re-submitted. You will observe that the cost of proposed work is high.

3. I beg to point out that in removing the stuff very offensive smells will arise; and that even if the work is eventually carried out the present time is hardly a fit one, sickness, including cholera, being so rife.

4. If my proposal to raise the bank some 18 inches in place of removing it is negatived as tending to restrict the waterway of the Cooum, I would suggest that the surface of the bank should be levelled up with say 6 inches of sand and the whole planted with nanal. But I beg to point out that when the river is in flood, the bank raised 18 inches will not very materially interfere with the flood-discharge of the river; and in the dry season the surface of the bed near Government House bridge, exposed to the sun, will be greatly diminished.

*Proceedings of the Madras Government, Public Works Department,
26th February 1877. No. 653.*

No. 643-B. From Surgeon-Major W. R. CORNISH, F.R.C.S., Sanitary Commissioner for Madras, to Lieutenant-Colonel J. MULLINS, R.E., Secretary to Government, Public Works Department, dated Madras, 13th February 1877, No. 112.

I HAVE the honor to forward herewith, for the consideration of Government, a letter from Major Vibart, District Engineer, regarding the propriety of letting in sea-water into the Coom at the next high tides. (This communication I regret to state has been inadvertently set aside and overlooked under pressure of other important business.)

2. While agreeing generally in the proposal to keep up the level of the Coom so far as may be practicable by operations such as suggested by Major Vibart, I would at the same time beg to call attention to the very foul condition of that portion of the canal between Cochrane's basin and the General Hospital bridge. Owing to the dam placed across the Coom near the above bridge, this portion of the canal is now nearly dry (receiving only sewage from the Black Town drains) and offensive in the extreme to all who have to reside in or pass by the neighbourhood.

3. I would beg to suggest that this is a good opportunity to bale out the little water there may be remaining in this length of the canal and then to excavate the bed of the canal to a proper depth.

4. Mr. Burrows, the Municipal President, informs me that there is a portion of the People's Park which requires raising in level, and that he is prepared to receive the excavated mud and to cover it over with dry earth to prevent any offence. The smell is bad enough now, and I don't think it would be increased by clearing out the canal as proposed, while if this were done the Coom water might with advantage be let into the bed.

5. There would probably be no objection to this work being done in connection with the Famine Relief operations now in progress.

6. The deposits in and about the mouths of drains emptying into the Coom might also be removed with advantage; at a later period probably, when the bed is dryer than it is now.

From Major H. M. VIBART, R.E., Officiating District Engineer, Presidency, to Surgeon-Major W. R. CORNISH, F.R.C.S., Sanitary Commissioner for Madras, dated Fort St. George, 6th February 1877, No. 5726.

I HAVE the honor to draw your attention to the low state of the Coom with the view of urging you to address Government on the subject.

2. Since New Year's day to 5th February (yesterday) the level of the water fell 7 of a foot about 8½ inches or nearly 1 inch daily; and before the end of May I fancy there will be hardly any water whatever in the Coom.

3. I believe there will be unusually high tides in the course of three weeks, and by that time the level of the Coom will be below mean sea level. I would propose that at that time the bar at the mouth should be cut down to mean sea level, when a large quantity of sea water would flow into the Coom. This was done in August and September last with advantage.

*Proceedings of the Madras Government, Public Works Department,
26th February 1877. No. 653.*

4. I took advantage of the high tide on the 29th evening and let the sea water into the fort ditch; and although the rise was only 0.3 foot = 3.6 inch, still the result was that, on the 1st February, the level of the ditch was no lower than it had been on the 29th, three days previously. Had it not been for this influx into the ditch, the level of the water on the 1st would have been 20.43 in place of 20.52, a difference of more than an inch.

No. 644. ORDER THEREON, 26th February 1877, No. 653.

CIVIL WORKS, No. 53.

THE District Engineer, Presidency, is directed to take steps for immediately cutting the bar at the mouth of the Coom for the purpose of—

1st,—letting out the foul water now in the river;

2ndly,—admitting fresh sea water;

3rdly,—ultimately retaining water at a higher level than at present.

To let out as much foul water as possible, the bar should be cut down and kept as low as may be practicable during three tides.

After the third tide the bar may be allowed to reform gradually to about present water-level, while above that level the bar should be kept cleared for four tides more.

2. The length of bar to be cut must be regulated by the labor which may be obtainable. A greater length than can be managed should not be cut.

3. The District Engineer will consider what measures should be taken to secure the minimum amount of labor which will suffice to make a material impression upon the present contents of the river, and, if other sources of supply fail, he will arrange with Captain Clarke for the temporary diversion of labor from the Junction Canal.

4. The bar should be reclosed at high-water of the second tide after the highest springs.

5. An estimate should be submitted for sanction as soon as possible.

(True Extract.)

Colonel,

Acting Joint Secretary to Government.

To the District Engineer, Presidency.

„ Revenue Department.
„ Financial Department.
„ Sanitary Commissioner.

Exd. E. C. Shunker.

Spare Copies

Read the following:—

Letter from the District Engrs. Presidency
No. 5486 of 25th Jan'y 1877

Letter from the Sanitary Commr. Madras
No. 112 of 13th Feb'y 1877.

FOR ORDERS.

Wunderlin St. Col. R.R.

Receipts Gvt. P.W.D.
The Pochams canal system
See suggestion to the
Sand being lowered to
M.S.L. and fresh sea
water being thus let in
can bring in water to clear it
at high water so as to keep
as much water as possible

The Command at Pondicherry
be removed until the drains
have been abolished in canal
discharge

2/12.

1877

FOR ORDERS.

My dear Millier

Will you read this
at once. I suppose it
should go to Waddell
I am sorry that I
should not have
any - & then if he

as possible in the Comm.

The

Recd 23-2-77

Gr. 17.2.77 RLB-22-2-77

not quick. However some
-thing ought to be done
to that shape

Emps
R. S. Ellis

Rev. 23-2-77
Cir. G. 2.77 Rtd-22-2-77

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the

Read the following:—

From

The Dist. Eng. Presidency (M.O. No. 5033 of 23rd Dec. 1876)

do do do

5286. 25th Jan'y 1877

From

The Sanitary Commissioner (M.O. No. 112 of 13th Feb'y 1877)

Myself because I
think the High tide is ~~stopped~~
Memory. M. 24/2

His Grace the

Governor's Council
sanctioned the cutting of
the Coram Bar to mean
sea level so as to admit
fresh sea water at
flood tides, care being
taken to close the open-
ing ^{immediately after} high water
~~when necessary~~, so as to
retain as great a depth
as possible in the Coram.

The

The work should be taken
in hand at once and an
estimate submitted for it
as early as possible.

2. The dam across the
Canal at the Hospital
Bridge must be carefully
maintained until arrange-
ments are made for abolish-
ing the drainage now dis-
charged into it.

3. The Cochrane Canal
question will be dealt
with in other orders.

W.H.
22.2.77

W.H.
23-2-77

MEMORANDUM.

Letter Number ⁵⁰³³ ~~154~~ dated ~~23 Dec 1876~~
dated the 23 Dec 1876
from the District Engineer of Punjab

Mr Dist Engineer with
reference to supply
a sketch illustrating
plus proposition

W.H.
22.12.76

The work should be taken

6x
Specification to accompany
the Estimate for raising the foreshore
of the South Bank of the Coom -
West of Govt House Bridge.
Amount of Estimate Rs 3,500.

It is proposed to raise the fore shore
from the Bridge to the Chintadrepettah
Sewer 2 feet.

From the Sewer to the end of the
Napier Park 18 inches.

The whole to be one uniform level,
and planted with Manal grass.

McBridey Lt. Col.
Asst. Engineer, S. Range.

Henry Stuart Maj. R.E.
Offg. District Engineer
Secidamoy.

Fork St. George 3
25 Dec. 1863

Geo. G.

P.W.D.

600076

No. 9377

2

No 372 of 1876-77.

77

Estimate for Spaining the South Bank of the
Cocum River west of the Government Bridge.

Quantity.	Description of work.	Rate				Amount.		
		Wages	Amat	Prov	Car	Wages	Amat	Prov
7050 cu ^{ft}	Sand.	"	7	3		319	4	8
1540 square	Planting Naval grass.	"	1	6		114	6	0
	For watchmen and watering the canal for two months.							
2 hr	Men.	5	0		e	10	0	0
2 "	Women.	3	0			6	0	0
Totals.						335	4	14
Total Wages.						115	1	6
Total Amount.						3500	0	0

W. B. Biddle.

707

Asst. Engineer

St. Rouse.

22/12/76.

Wm. H. George
23^d Dec 1876

Comptroller
20-12-76

Henry M. Stuart
Offg. District Engineer
Residence

P 26th July/77 J. B. L. 648

P.W.D.
26 DEC 76
No. 9377

Estimate for opening the
South Bank of the Lower
River west of the Government
Bridge.

W. 372 of 1896-77.

Dated 22 3 November 1896.
Perf.

Estimated amount Rs 3500/-

P. 26. July 11 J. S. L. 643

Ar 16-2-77

N^o 5033

No. 5033,

From,

The Offg. District Engineer,
Presidency.

To,

The Chief Engineer, and
Secretary to Government
M.D.

Sir,

His Grace the Governor, before leaving
Madras expressed a wish to have the de-
posit above Gort House Bridge on the
right bank ^{of the Cooupe} removed to a depth of 2
feet below the water. I have examined
the place, and it seems to me it would
be hardly desirable to remove the stuff:
as the smell would undoubtedly be
very offensive, and the work very costly,
as a depth of 3 or 4 feet of material
would have to be removed, conveyed
to a distance and buried in pits ex-
cavated for the purpose.

2. I beg to propose that in place
of removing the deposit we should
raise

raise the fore shore 1.6", or 2 feet, with
sand, and that the surface thus
formed should be planted with *Manac*
grass; a few tufts of which at pre-
sent grow near the spot. I herewith
have the honor to forward an esti-
mate, and will if desired send in
a sketch showing the limits of the
proposed raising.

I have the honor to be

Oliver,

Yours most obedient servant

Henry M. Wheat Major 632.

Offg. District Engineer

Residence

Fort Schuyler
23 Dec. 1876

Local

1. The first of these is the
 fact that the system is
 not self-sustaining. It
 requires constant
 attention and
 adjustment. The
 second is that the
 system is not
 flexible. It is
 rigid and does
 not adapt to
 changing
 conditions. The
 third is that the
 system is not
 efficient. It
 wastes time and
 resources. The
 fourth is that the
 system is not
 secure. It is
 vulnerable to
 attack. The
 fifth is that the
 system is not
 scalable. It
 cannot handle
 large amounts
 of data. The
 sixth is that the
 system is not
 reliable. It
 often fails. The
 seventh is that the
 system is not
 user-friendly. It
 is difficult to
 use. The eighth
 is that the
 system is not
 cost-effective. It
 is expensive to
 maintain. The
 ninth is that the
 system is not
 secure. It is
 vulnerable to
 attack. The
 tenth is that the
 system is not
 scalable. It
 cannot handle
 large amounts
 of data. The
 eleventh is that
 the system is not
 reliable. It
 often fails. The
 twelfth is that
 the system is not
 user-friendly. It
 is difficult to
 use. The
 thirteenth is that
 the system is not
 cost-effective. It
 is expensive to
 maintain. The
 fourteenth is that
 the system is not
 secure. It is
 vulnerable to
 attack. The
 fifteenth is that
 the system is not
 scalable. It
 cannot handle
 large amounts
 of data. The
 sixteenth is that
 the system is not
 reliable. It
 often fails. The
 seventeenth is that
 the system is not
 user-friendly. It
 is difficult to
 use. The
 eighteenth is that
 the system is not
 cost-effective. It
 is expensive to
 maintain. The
 nineteenth is that
 the system is not
 secure. It is
 vulnerable to
 attack. The
 twentieth is that
 the system is not
 scalable. It
 cannot handle
 large amounts
 of data.

Sept 7. 1881. 11. 11. 11. 11.

P.W.D.
26 DEC 76
No. 9377

From
The District Engineer
Presidency
to the Chief Engineer
at Fort

dated 23rd Dec 76
Recd
Encl No 5033

Submits Estimate
for works for training
the South Bank of
the Coomb River, near
the Fort Howard Bridge

Memo. No. 1439 of 27/30/12/76

N. 143.

Recd - 23-2-77
Ar 16-2-77 (Ld 22-2-77)

No 401 of 1876-77.

10X

Specification to accompany the Estimate for removing the Silt of
the fore shore of the River Coomb. west of Government House
Bridge to a depth of 2' below water. 20.50.

Amount of Estimate. Rupees. 8,200

The fore shore in question is being formed of silt
accumulated by the Chintampettah and Kisplicane
sewers which discharge into the river at this point.

It is proposed to remove this silt to a depth
of 2' throughout the whole portion of the fore shore present
and in plan.

The silt on being removed will be carted to the
South Beach some where near the Victoria Bridge and
then buried in trenches dug in the sand.

It will be necessary to have a depth of 18"
of sand as a covering to the silt when deposited in the
trenches consequently the trenches or pits must in no case
be less than 1 1/2 feet in depth.

Fort Saint George
26th
27 January 1877

H. W. Baddley Lieut. R.E.
Assistant Engineer

Henry West Major R.E.
District Engineer
Residence

P.W.D.

200177

No. 776

2

No 401 of 1876-77.

Estimate for removing the Silt from the low shore of the River
Coom and burying it 18" below the surface of the sand on the
South Beach. vide District Engineer's No 5366 of 19 January 1877.

Quantity	Description of work.	Rate			Amount.		
		Per Cubic Yard	Per Cubic Yard	Per Cubic Yard	Per Cubic Yard	Per Cubic Yard	Per Cubic Yard
13333	Excavation and cartage of Silt.	76	00		6249	13	6
20,000	Excavation of sand for pits for burying the Silt.	1	00		1250	00	
7,000	Filling in and levelling over Silt-pits.	9	00		328	2	0
					7827	15	6
	Summies at 5 per cent.				372	0	6
	Total Proper.				8200	00	0

Port Saint George.
26 January 1877

McBaddeney, Lieut R.E.
Assistant Engineer
Port Range.

Henry West Major R.E.
Offg. District Engineer
Residency

Comd. C.

25-1-77

P 26: Feb 7/77 P.B. No. 643

24. Apr. 1871. 166 No.
 7 Jan. 1876. 12.
 3 Aug. " 1992
 22 Sep. " 2536.

P.W.D.
 26 JUN 77
 No. 776

Date 26th
 31 January 1877
 Spec. = 31

No. 401 of 1876-77.

Estimate for masonry the
 will form the face above of
 the River between and bridge
 of 18' below the surface of the
 sand on the double bank.

Estimate of masonry. 5200.

P. 26: July/77 J.O. 42643

Ln 15.3.77

No. 2

No. 5486,

3rd

12x 3

The Offg. District Engineer
 Presidency.

To

The Chief Engineer
 S.M.

Sir,

With reference to your memorandum No.
 52 of 9 Jan. 1877, I have the honor to submit
 an estimate amounting to Rs 8,200 for removing
 the silt from the fore shore of the River between
 west of Fort House Bridge together with a
 specification report.

Enc.

1. Estimate.
1. Specification.
1. Sketch.

2. The Sketch of the River is herewith re-
 submitted. You will observe that the cost
 of proposed work is high.

3. I beg to point out that in removing the
 stuff, very offensive smells will arise, and
 that even if the work is continually carried
 out the present time is hardly a fit one -
 sickness including cholera being so rife.

4. If my proposal to raise the bank some
 18' in place of removing it, is negatived
 as tending to restrict the waterway of the
 River.

Coorum, I would suggest that the surface of
the bank should be levelled up with say
6" of sand, and the whole planted with
Nanial. But I beg to point out that when
the river is in flood, the bank raised 18"
will not very materially interfere with the
flood-discharge of the river, and in the
dry season the surface of the bed near
Govt House Bridge, exposed to the sun,
will be greatly diminished.

I have the honour to be

^{Yours}
Your most obedient servant

Henry W. Taylor
Major

Offg District Engineer
Residency

Fort St. George

25 Jan'y. 1877

E. G. P.

P.W.D.

26 JAN 77

No. 776

Dated 25th Jan 1877

Brook

The Chief Engineer,
28th

The District Engineer,
Broadway

From

Enc 5th 1486
I enclose with this
estimate
amounting to Rs 1000
for removing the sill
from the fore shore of
the River Coom and
of putting down a bridge
with new works.

Submitted and estimate
of the work

1 Stated sent to C.
Presiding. with
Rs. 5000-00
14.7.77

No. 39

Rev- 23-2-77

in 15.7.77 Rev 22-2-77

No. 5726

From

The Chief Engineer,
Presiding

To

The Sanitary Commissioner,
Madras.

Sir,

I have the honor to draw your attention
to the low state of the Coom with the view
of urging you to address Govt on the subject.
2. Since New Year's day to 5 Feb (yesterday)
the level of the water fell $\frac{1}{2}$ of a foot about
 $8\frac{1}{2}$ inches, or nearly $\frac{1}{2}$ inch daily; and
before the end of May, I fancy, there will
be hardly any water whatever in the Coom.
3. I believe the unusually high
tides in the course of 3 weeks, and by that
time the level of the Coom will be below
mean sea level. I would propose that at
that time the bar at the mouth should be
put down to mean sea level when a large
quantity of sea water would flow into
the Coom. This was done in August

and September last with advantage.

4. I took advantage of the high tide on the 29th evening and let the sea water into the Fort Ditch; and although the rise was only $.03 \text{ ft} = .36 \text{ inch}$ still the result was that, on the 1st February the level of the Ditch was no lower than it had been on the 29th - 3 days previously. Had it not been for this influx into the Ditch, the level of the water on the 1st would have been 20.43 in place of 20.52 - a difference of more than an inch.

I have the honor to be

Sir,

Your most obedient servant

Arthur Robert

Off District Engineer
Residence of

Fort St. George
6th Feb 1877

Co. G.
17.

P. 26: Feb 17/77 I. D. L. 643

D.W.D.
145377

No. 1567

P. 26: Feb 17/77 I. D. L. 643

No. 618

No. 112

OFFICE OF SANITARY COMMISSIONER,

MADRAS, 13 February 1877.

From

Sanitary Commissioner, Madras,

To

The Secretary to Government
Public Works Department.

Sir,

I have the honor to forward herewith for the consideration of Government a letter from Major Vibart, District Engineer regarding the propriety of letting in sea water into the Coom at the next high tides. (This communication I regret to state has been inadvertently set aside and overlooked under pressure of other important business).

2. While agreeing generally in the proposal to keep up the level of the Coom as far as may be practicable by operations such as suggested by Major Vibart, I would at the same time beg to call attention to the very foul condition of that portion of the Canal between Cochrane's basin and the General Hospital bridge. Owing to the dam placed across the Coom near the above bridge this portion of the Canal is now nearly dry (receiving only sewage from the Black Town drains) and offensive in the extreme to all who have to reside in or pass by the neighborhood.

3. I would beg to suggest that this is a good opportunity to bale out the little water there

there may be remaining in this length of the Canal
and then to excavate the bed of the Canal to a proper
depth.

Mr. Burrows the Municipal President
informs me, that there is a portion of the people's park
which requires raising in level, and that he is prepared
to receive the excavated mud and to cover it over with
dry earth, to prevent any offence. The smell is bad enough
now and I don't think it would be increased by clearing
out the Canal, as proposed, while if this were done the
Coom water might with advantage be let into the bed.

There would probably be no objection to this
work being done in connection with the Famine Relief
operations now in progress.

The deposits in and about the mouths of
drains emptying into the Coom might also be removed
with advantage, at a later period probably, when the
bed is dryer than it is now.

I have the honor to be
Sir,
Your most obedient servant
J. R. C.
Sanitary Commissioner, for
Madras.

24 Aug 1871. 14674.
13 Aug - 76 - 1992
22 Sep - 2536.

P.W.D.
1455377

1455377

Subject
Requests that the
Sea-water may be
admitted to the Comm in
the great high tides.

No. 112.

Dated 13 Feb 1877.

E.V.

from.
The Sanitary Comm
to the Secretary to Govt.
Public Works Dept

P. 26 Feb 77 L. L. 840

No 643 B.

Recd - 23-2-77

Cir 16-2-77 Feb-22-2-77

No 53

Md

Proceedings of the Madras Port
Board the following

From the Deputy Secy (H.E. No 5033 of 23 Dec 76)
No 5206 of 25 Jan 77

From the Sanitary Commis (No 112 of 13 Feb 77)

The District Engineer
Presidency is directed
to take steps for immediate
cutting the bar at the
mouth of the Cooum for
the purpose of
letting out the foul
water now in the river
and admitting fresh sea
water
ultimately retaining
water at a higher level
than at present
To let out as much foul
water as possible the bar
should be cut down & kept
as low as may be practicable
during tides
After the tide the bar
may be allowed to reform

M. K.

gradually to about present
water level, while above
that level the bar should
be kept cleared for 4 tide
more.

2. The length of bar to be cut must be regulated by the labour which may be obtainable - A greater length than can be managed should not be cut.

3 - The District Engineer
will consider what measure
should be taken to secure
the maximum amount
of labour which will suffice
to make a material im-
provement upon the present
contents of the river and
if other sources of supply fail
he will arrange with
Captain Clarke for the

Temporary diversion of labour
from the Junction Canal
L - The bar should be reclosed
at high water of the 2nd
tide after the highest
spring.

by 25/2

5 - An estimate should be submitted for sanction as soon as possible

by.

To Mr. Geo. S. Presby ✓
" Reading Dept ✓
" Lib. Dept ✓
" Sanitary Com. ✓
Sept 28-2-77

9344
1877
of 1877
PUBLIC WORKS.

To *The N. E. Presidency*

Dated

Issued

Recd.

Encl.

G. O. *25 Feb* 1877, No. *653*

Nos. *643-44*

Bar at the mouth of the
Coorem Passing orders
in the subject of cutting
the —

Sent in Reg.