

(1) Number of pages 20
(2) Date of repair 13.1.87
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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W DEPARTMENT

G.O. No.		Press.
B.P. No.	913 W	Mis.
Dated	4.4.1881	197

Not to be folded or roughly handled

02-01

No. 2906

913/1

OFFICE OF THE SUPERINTENDENT OF WORKS,

BUCKINGHAM CANAL,

Camp, Chepauk, 1st January 1881
Sept 1-2-81

From

THE SUPERINTENDENT OF WORKS,

BUCKINGHAM CANAL,

To

THE CHIEF ENGINEER,

PUBLIC WORKS DEPARTMENT,

Madras.

Sir,

No Enclosure.

I have the honor to inform you that the Estimate referred to in your Memo No 138 of the 20th Instant for making a cut through the shore of the Pulicat Lake between Seltipett and Jonangapolliam will be forwarded to you during the first 10 days in February 1881.

I have the honor to be
Sir

Your most Obedient Servant
A. A. Dwyer, Captain. R.E.
Superintendent of Works
Buckingham Canal.

Dec 26

(1) Number of pages
(2) Date of receipt
(3) Initials of the Receiver

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU
DEPARTMENT

FILE NO.	2906
DATE	1-2-81
INITIALS	

Not to be folded or roughly handled

From

THE SUPERINTENDENT OF WORKS,

BUCKINGHAM CANAL,

To

THE CHIEF ENGINEER,

PUBLIC WORKS DEPARTMENT,

Madras.

Dated 31st January 1881.

Despatched 1st February 1881

No. 2906

ENCLOSURE.

Estimate for making
a cut through the shore
of the Pulicat Lake between
Shettipett and Jonangapollam
Informs that the —
will be forwarded during
the first 10 days in
February 1881—

C. No. 1926.

Letter No. 3570.

Dated the 21st March 1881.

From the Supo. of Works.

Buckingham Canal.

Note of Review.

The Estimate with Sur-
vey, Long. & Cross Sections
& specification for the
Division of Canal along
East border of Pulicat Lake
between the 38th Mile stone
at the Northern End of the
Second or Shettipett Cut
& 43 miles 5 furlongs, near
Jonangapollam, amounts
to Rs. 70,000.

The Estimate provides for
excavating Canal to an average
depth of 8 ft, ordinary sur-
facing, sectioning & dam-
ping spoil bank, surfacing
& planting slopes &c. a 6 ft.
wide tow path at 4.50 ft
above M.S.L. has also been
provided.

Contingencies, Supo.
& sundries, have been
charged at 9 per Cent.

The Rates given in the
Estimate are moderate.

31st March 1881.

J. H.

C. No. 1926

P. W. Secretariat.

913/4

Note by Budget Section.

Work

Remarks and References.

Division of canal
along east border of
Pulicat Lake between the
35th mile stake at the northern
end of second or Shettypett
Cut, 4 1/2 miles, 5 furlongs near Jougaholheim.

Fund - Provincial, Irrigation and Navigation,
Class Original Works.

Amount of estimate	Rs. 70,000
Expenditure in previous year	" "
Allotment in current year	" "
Balance required to complete	" 70,000

Total Rs. 70,000

Note of available funds.

If approved, the work may be
ordered to be proceeded with from
the grant of Rs. 165,972 for the Buck-
ingham Canal in the Royal Budget
for 1881/82.

31/3/81

B.P. flem
Budget Superintendent

Note by Budget Section.

913 W

No. 3510

OFFICE OF THE SUPERINTENDENT OF WORKS,

BUCKINGHAM CANAL,

Camp, Kormandel 21 March 1881.
Desd 25- do

From

THE SUPERINTENDENT OF WORKS,

BUCKINGHAM CANAL,

To

THE CHIEF ENGINEER,

PUBLIC WORKS DEPARTMENT,

Madras.

SIR,

Enclosures 4

I have the honor to forward
herewith the Survey with Longitudinal
and Cross sections as well as Report and
Estimate for the northern Deviation in the
Pulicat Lake between the 38th milestone at
the northern end of the Second or Thattipatt
Cist and 43 M. 5 F. where at Jonangapallam
the Pulicat Lake water-spread proper is left.

2 On the 1st December 1880 you
forwarded to me a Petition from Boatmen
asking for this reach to be cut, and I
replied to it stating that the work was
highly desirable. As an instance of this

12
I may mention ^{that} southerly winds are now prevalent but moderate generally in the early morning, and that in consequence when I left Jonangapiollim yesterday morning I found 18 other boats which had been weather-bound there by the strong southerly wind over the Lake section took the same opportunity as I did of a lull in the wind to cross the Lake section with an enclosed canal such as now estimated for no such inconvenient delay would have occurred. The state of things is far worse during the westerly winds.

3 In selecting the line I have carefully avoided all the irrigated land and have made arrangements by piping and deepening portions of the East bank to receive the drainage of the fields into

13 213 3/4
the canal so that the water may not stagnate on them and spoil the crops.
4 The section of the canal as laid down by you is 20 feet width at about 3 feet below lowest tide with slopes of one in four, in regard to this section I think such flat slopes are desirable as the soil is soft and friable but further experience may prove the possibility of a steeper slope from about 6 inches below low tide level to the bottom — as I think that tidal action and wash of boats hardly disturbs the slopes below low water mark in which case an additional width of ten feet of bed can be easily given hereafter by widening the bed 5 feet on each side and giving one in two instead of one in four to the lowest two and a half feet of water slopes, this will make a vastly better section for navigating

boats of considerable width and depth past each other. I have not however been able to ascertain certainly whether my idea as to the stability of slopes of the section I allude to is correct, but it appears to me from the look of the existing cuts to be so.

5 The tow paths on each side will be at three feet above high tide level and on the east side the flood bank will be 8 feet above mean sea level, and on the west side towards the Lake it will be 10 feet above mean sea level or 4.10 feet above the highest known flood, with its outer slope of only one in six it will stand the wash of the water more especially as it will be planted up, mangrove bushes being planted at the toes of the slopes to break the wash of the waves.

6 This cut will eventually

18 2 1/2
form a portion of the long isolated reach from the Koromandel opening into the Pulicat Lake at about 27 M to the Doongrajpatam drainage crossing at about 67 M. The gauge readings at the ends of this reach show High Tides of 3.00 ft and 3.50 ft above mean sea level and low Tides of 1.60 feet and 1.40 feet below mean sea level. But tidal action is found to diminish very greatly after a few miles from an opening of a canal so that to all intents there will be little or no rise and fall in this reach which runs from 11 to 16 1/2 miles from a tidal opening however to be on the safe side I have allowed for a low Tide of 0.75 feet below mean sea level and set the bed at 4.00 below mean sea level and for a High Tide of 1.50 feet above mean sea level and set the tow paths at 4.50. The readings at the gauges at Thetipett and Jomangapollund

show at the actual extremities of this section during the past year high tide levels of (MSL + 4.34) and (MSL + 4.15) feet and Low Tides of (MSL - 0.80) feet and MSL. ~~foot~~ but from these little idea can be formed as to the readings when the Canal is closed in-as-much as that being near the open Lake they are far more affected by wind than tide now which will not be the case in the close reach proposed; as an instance of this I may mention that during an hour while a short sharp storm of westerly wind with a little rain was occurring on the 11th of September last the water level at the Thetipett gauge ran up one foot, the gauge is situated in a short reach between two bays on the east coast of the Lake into which doubtless the wind blowing across the Lake pushed the water piling it up and sending into both ends of the Thetipett cut which

is only $1\frac{1}{2}$ miles long.

97
27/8

7. I much regret the delay which has occurred in bringing forward this estimate which is almost entirely due to the heavy work thrown on the whole Establishment, which is already short handed, in carrying out, measuring, sanctioning and inspecting the emergent work necessary to put the canal in working order after last monsoon.

8 I have the honor to inform you that the work referred to in this estimate is marked out and could be commenced immediately if sanctioned against the allotment for new works for the year 1881-82.

I have the honor to be
Sir,

Your most obedient servant
A. A. A. A.
Superintendent of Works, Buckingham Canal

From

THE SUPERINTENDENT OF WORKS,
BUCKINGHAM CANAL,

To

THE CHIEF ENGINEER,
PUBLIC WORKS DEPARTMENT,
Madras.

Dated 21st March 1881

No. 3510

ENCLOSURE 4.

Survey, Sections and
Estimate with Specification
Report for Diversion of
Canal along East border
of Pulicat Lake for Rs 70000.
Towards the —

A/c

N^o 913W

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT

UNDER date the 4 April 81

Read the following:—

From

The Sup^o of Works } (H.B. N^o 3510 d/21st March/81)
Buckingham Canal

The estimate amount-
ing to Rs 70000 for the
diversion of the canal
along the east border
of the Pulicat lake be-
tween the 38th mile stone
at the northern end of
the Second or Shettipett
cut and 43 miles 5 furlongs
near Ponaghapalliem is
sanctioned.

2. The work will be
provided with from the
grant for the Buckingham
canal in the Provincial
Budget of 1881-82.

3. This sanction is
registered

registered as Provincial No.
4 B of 1881-82 and
classified as 33 Irrigation
and Navigation - ori-
ginal works.

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345
Dtt

1/4/87

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Sup^y of Works, B. and
with 3 incls ✓
Resd. P.W. Dept. ✓
Dated
1/4/87

C. I. 4. B. 6. 6.

1926

Govt. of (1881) Madras.

PUBLIC WORKS.

To

Dated

Issued

Recd.

Encl.

G. O. 4 April 1881, No. 913 W.

Nos.

Buckingham Canal
Sanctions estimate for
the diversion of the —
along the east border of
Pulicat Lake between the
38-mile stone at the northern
end of the second or Mullip
cut and 43 miles 5 furlongs
near Zonaghapolliem.