Public Works (1899) Department.

9/ 9/

G.O., No. 525
526
527 I.

DATED 26 June 1899

7/11/21

F.E.I.

28/6/99

[Despatch Abstract.]

Navigable Canal from Masulipatam to Manjinapudi Salt Factory.

Estimate of Rs 54,540 for excavating ——, sanctioned with remarks, and a copy of Pro: ordered to be forwarded to the Govt of India

Navigable canal from Masulipatam to Manjinapudi Salt Factory

Forwarding a copy of Pro: of this Govt. sanctioning

LL 29/6

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

an estimate of Rs 54,540 for excavating a —— and requesting the approval of the Govt of India to the proposed Classific of the estimate.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

IRRIGATION.
ACCOUNT.

Government (1899) of Madras.
PUBLIC WORKS.

Recd. } 1899. *Enclosures*
Regd. *Spare copies*

G.O., Nos. 525, 526 I., 26th June 1899.

JUNE.

Navigable Canal from Masulipatam to Manginapudi Salt Factory

Forwarding copy of Proceedings of this Government sanctioning an estimate of Rs. 54,540 for excavating a —, and requesting the approval of the Government of India to the proposed classification of the estimate.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

Read—the following papers:—

From the Superintending Engineer,	II Circle,	dated	6th November 1893,	No.	1867 K.S.
To the ,, ,,	II ,,	,,	17th ,, ,,	,,	191 K.S.
From the ,, ,,	II ,,	,,	24th ,, ,,	,,	2042 K.S.
Note by the Chief Engineer for Irrigation,		,,	30th ,, ,,	,,	193 I.
To the Superintending Engineer,	II Circle,	,,	30th ,, ,,	,,	200 K.S.
From the ,, ,,	II ,,	,,	5th December ,,	,,	2161 K.S.
,, ,, ,,	II ,,	,,	2nd January 1894,	,,	2340 K.S.
Revenue Department transfer endorsement,		,,	24th October ,,	,,	4126, Mis.
To the Superintending Engineer,	II Circle,	,,	1st November ,,	,,	164 K.S.
From the ,, ,,	II ,,	,,	17th ,, ,,	,,	1923 K.S.
To ,, ,,	II ,,	,,	22nd ,, ,,	,,	184 K.S.
From ,, ,,	II ,,	,,	6th December ,,	,,	2086 K.S.
,, ,, ,,	II ,,	,,	28th March 1895,	,,	2945 K.S.
To ,, ,,	II ,,	,,	13th April ,,	,,	53 K.S.
From ,, ,,	II ,,	,,	3rd August 1898,	,,	2338 K.S.
Office-note to the Revenue Department		,,	5th ,, ,,	,,	273.
,, from ,, ,,		,,	26th September ,,	,,	—
To the Superintending Engineer,	II Circle,	,,	30th ,, ,,	,,	172 K.S.
To the ,, ,,	II ,,	,,	7th March 1899,	,,	45 K.S.
From the ,, ,,	II ,,	,,	15th ,, ,,	,,	94 I.
To the ,, ,,	II ,,	,,	20th ,, ,,	,,	54 K.S.
From the ,, ,,	II ,,	,,	25th ,, ,,	,,	104 I.
,, ,, ,,	II ,,	,,	27th ,, ,,	,,	105 I.

No. 91 I.

Note by the Chief Engineer for Irrigation.

The excavation of a navigable canal to connect the Manginapudi Salt Factory with the Kistna Delta system of canals at Masulipatam first came under discussion in 1865. An estimate of Rs. 61,720 was prepared for a salt-water canal from the factory to below the tidal lock and sanctioned by Government, but owing to want of funds the work was not carried out. In 1874, a revised estimate, amounting to Rs. 68,580, was sanctioned and Rs. 20,000 allotted in the following year. A portion of the work was done and the project was then dropped for some reason which cannot now be ascertained. In 1890, the matter was again brought before Government and the relative advantages of a fresh-water canal, a salt-water canal and a tramway discussed. The Chief Engineer for Irrigation reported in favour of a salt-water canal, which it was supposed at that time would be cheaper in first cost and which had the great advantage that it would be open all the year while a fresh-water canal would have to be closed for three months. This opinion was accepted * and the Public Works Department was ordered to prepare plans and estimates, but the mode of raising funds to cover the cost of maintenance and the interest on capital was left unsettled until the issue of G.O., No. 1036 R., dated 10th October 1892, in which Government accepted a proposal to levy the necessary funds by a system of tolls.

* G.O., No. 225 R., dated 12th January 1892.

2. It was proposed to meet the first cost of the work from "Salt" funds, but the Government of India on being asked for an allotment replied in letter No. A/3517, dated 14th August 1893, that the cost of the canal is properly chargeable to the head, "43. Minor Works and Navigation," which is a Provincial head of account and not to "5. Salt," and that the fact of the work being required in the interests of the Salt Department is not a sufficient reason for charging its cost to the latter head.

3. In November 1893, the Superintending Engineer reported that he had made estimates for both a fresh-water and a tidal canal; that the complete estimate for the former came to Rs. 61,500, while the cost of earthwork alone of the tidal canal (allowing the same rate as for the other canal, though probably a higher rate would be required owing to the bed being on a much lower level) came to Rs. 51,300. Moreover, a bridge would be required over a certain road and a lock, costing probably Rs. 24,000, might be necessary to prevent the destructive action of the tides. On the Buckingham canal the erosion and silting caused by the tides has been so great that the reaches had to be locked in, and probably, the same course would have to be adopted on the proposed tidal canal or very heavy charges for maintenance incurred. With regard to the comparative usefulness of the two lines of canal the Superintending Engineer reported that the Assistant Commissioner preferred a fresh-water canal for the reasons, (1) that it would bring fresh water to the factory, (2) be a shorter line for boats proceeding up the Masulipatam canal, (3) time would not be lost by passage through the tidal lock. The objection that the canal would be closed for three months in the year was not considered of importance as the other canals would be closed at the same time. The question was referred by Government to the Board of Revenue who, in Proceedings, No. 102, dated 12th January 1894, reported that from the point of view of the Salt and Abkári Department there is no objection to the construction of a fresh-water instead of a salt-water tidal canal from Masulipatam to the Manginapudi Salt Factory.

4. The estimate for a fresh-water canal was approved generally, but Government desired that arrangements should, if possible, be made, (1) to keep the canal open all the year, and to effect this it was suggested that there should be a pair of gates at the head of the canal to confine the water when the Masulipatam canal is emptied, (2) that the canal should be used for irrigation so that the revenue from this source might be a partial set-off against the cost of the work. The designs have accordingly been to some extent altered. The estimate now submitted is for a canal 8 miles $2\frac{1}{4}$ chains long and 17 feet bed-width with bed level the same as the still-water reach above Masulipatam and depth 5 feet; but in order to maintain this depth the banks of the existing canal will have to be raised $1\frac{1}{2}$ feet for a couple of miles. With the canal full only 2,500 acres of land are commanded. The present Superintending Engineer objects to the scheme altogether for the following reasons:—

> "(*a*) The last reach of the Masulipatam canal from which the canal will take off is a dead level reach at present used only for navigation. It does not now silt, being still-water. The length of the reach is 6 miles. If water is sent down for irrigation purposes, heavy silting will result owing to the low velocity.
>
> (*b*) The same remark applies to the proposed canal. It will probably be necessary to close it for clearance once in three years.
>
> (*c*) The irrigation under the proposed canal (assuming that water for the purpose will be available) being at the tail end of the system will, in times of scarcity, suffer from want of water. There will be a conflict of interests. Water will be drawn off to the detriment of navigation.
>
> (*d*) Percolation of fresh water from the canal into the factory may injuriously affect the brine.
>
> (*e*) The land which it is proposed to irrigate being very sandy soil a very low duty will be got from the water, probably about half what would be obtainable from land available elsewhere.
>
> (*f*) None of the above objections apply to a tidal canal which could be taken right through the centre of the factory, whereas salt will now have to be carted from the factory to the canal."

5. It will be seen from the above that there is still a conflict of opinion regarding the project. I fully agree with the Superintending Engineer that it would be a mistake to attempt irrigation from the proposed canal. It is not [illegible] the proper line, or at the proper level, for effective irrigation and the land commanded is of poor quality, while there is more good land available elsewhere than the canals can supply. If irrigation is to be extended in the neighbourhood of Masulipatam it should apparently be by means of a channel taking off above the Akumurru lock. If the provision for sluices be omitted the estimate will be reduced to Rs. 54,540. There will also be less loss of water by percolation as the full supply depth will be 4 feet

instead of 5. With regard to the opinion that percolation of water from the canal may effect the brine probably a small drain would prevent this. The level at which water will be held up in the canal is only a couple of feet above the present dry weather water-level. The estimate includes a provision of Rs. 2,820 for gates at head of the canal. These may serve to keep a sufficient depth of water for a short time after the Masulipatam canal is emptied. I do not think it possible that they will keep it up for the whole time of the closure as the canal will be in sandy soil for seven miles. As the cost of the canal would apparently not be much more than half that of a tidal canal the work is recommended for sanction. As it is not proposed to use the canal for irrigation the cost should be met from Provincial funds.

Ootacamund,
26th April 1899.

(Signed) W. HUGHES,
Chief Engineer for Irrigation.

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

Order—No. 525 I., dated 26th June 1899.

The estimate, amounting to Rs. 54,540, for a navigable canal from Masulipatam to the Manginapudi Salt Factory is sanctioned subject to the approval of the Government of India.

2. This sanction is registered as No. 22 I of 1899–1900 and classified as shown below, the work not being considered of sufficient importance to justify the maintenance of Capital and Revenue Accounts for it:—

Provincial.
43. Minor Works and Navigation.
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.
Kistna Eastern Division.
Original Works.
Excavating a navigable canal from Masulipatam to Manginapudi Salt Factory.

	RS.
Estimate	54,540

3. Ordered that a copy of these Proceedings be forwarded to the Government of India with a request that, with reference to paragraph 9, Chapter IX, Volume II, Public Works Department Code, its approval to the proposed classification of the estimate for the work may be communicated at an early date.

[Here enter No. 526 I., dated 26th June 1899.]

(True Extract.)

(Signed) W. HUGHES,
Joint Secy. to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
„ Superintending Engineer, II Circle. with 20 enclos
„ Examiner, Public Works Accounts.
„ Revenue Department.

Endorsement—No. 526 I., dated 26th June 1899.

Forwarded.

(By order.)

(Signed) W. HUGHES,
Joint Secy. to Government,
Irrigation Branch.

Exd A. F. Eccleston.

Public Works (1899) Department

CURRENT No. 441

From The Chief Engr for Irrign

Order

No. 912.

Dated 26. April 99.
Received } 3. 6. 99
Registered }
Enclosures ~~31 (9 plans)~~ 80 (1 book of 9 plans)
Spare copies.

SUBJECT.

Excavation of a navigable canal from Masulipatam to Manginapudi Salt factory. Recommending for sanction estimate for Rs 54,540 for the ~~[illegible]~~

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

A

H.G.
~~Hon'ble Mr. Arundel~~
~~Hon'ble Mr. Winterbotham~~

PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

5

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Issue

Re - Navigable canal from Masulipatam to the Munjinapudi Salt Factory.

UNDER date the

READ the following

From	Supg Engr, II Circle,	No 1867 K.S.,	d. 6. 11. 93
To	do	191 K.S.,	d. 17. 11. 93
From	do	2042 K.S.,	d. 24. 11. 93
Note by the Chief Engr for Irrigation		193 I,	d. 30. 11. 93
To	Supg Engr. II Circle	200 K.S,	d. 30. 11. 93
From	do.	2161 K.S.,	d. 5. 12. 93
From	do.	2340 K.S.,	d. 2. 1. 94
Rev Dept transfer Endorsement		4126 Mis,	d. 24. 10. 94
To	Supg Engr, II Circle.	164 K.S.,	d. 1. 11. 94
From	do	1923 K.S.,	d. 17. 11. 94
To	do	184 K.S.,	d. 22. 11. 94
From	do.	2086 K.S.,	d. 6. 12. 94
From	do.	2945 K.S.,	d. 28. 3. 95
To	do.	53 K.S.,	d. 13. 4. 95
From	do.	2338 K.S.,	d. 3. 8. 98
Office note to the Rev Dept		273,	d. 5. 8. 98
Do. from	do.	—	d. 26. 9. 98
To	Supg Engr. II Circle	172 K.S.,	d. 30. 9. 98
To	do.	45 K.S.,	d. 7. 3. 99
From	do.	94 I,	d. 15. 3. 99
To	do.	52 K.S.,	d. 20. 3. 99
From	do.	104 I,	d. 25. 3. 99
From	do.	105 I,	d. 27. 3. 99
Note by the Chief Engr for Irrigation		91 I,	d. 26. 4. 99

Urgent

Print

9 May the 1899 No. 525 I.

The Estimate, amtg. to Rs 54,540,

5P Issue
W.H.
I. I.
29 5 99
99 I
29/5

for a navigable canal from Masulipatam to the Manginapudi Salt Factory is sanctioned subject to the approval of the Govt of India.

2. This sanction is registered as No. 22 I of 1899-1900 & classified as shown below, the work not being considered of sufficient importance to justify the maintenance of Capital & Revᵉ. Accounts for it: —

Provincial
43. Minor Works & Navign.
Minor Works for which neither Capital nor Revᵉ. Accounts are kept, P.W.D.
Kistna Eastern Dⁿ.
Original works.
Excavating a navigable canal from Masulipatam to Manginapudi Salt Factory.
Estimate, Rs 54,540

This money was intended for irrigation works.

60

No. 91. I

3. The Financial Dept having sanctioned an additional assignment of Rs 1.15 lakhs for the current year under "Provincial. 43. Minor Works & Navgn.", the Supt. Eng, II Circle, will report as soon as possible how much of the amount available could be utilized on the work now sanctioned. Early arrangements should be made for the commencement of the work & for its vigorous prosecution.

3 4. Ordered that a copy of these Procs: be forwarded to the Govt of India with a request that, with reference to para 9, Chapter IX, Vol II, P.W.D. Code, its approval to the proposed classification of the Estimate for the

work may be communicated
at an early date.

Endorsement No: 526 Dated 26-6-99.

Circulated

Forwarded.

3/5/99

W.H.
4.5.99

I think the estimate should be sanctd. & the work be carried out in order to increase the salt trade from Manginapudi. A tramway would not answer the purpose, – first because it wd. have to be worked by Govt. – a new departure of doubtful policy, –, and secondly & chiefly because the special value of the canal is that boats once loaded up with salt at the factory would be able to travel throughout the canal system and also reach the railway at Bezwada without breaking bulk. It was for this reason the canal was urgently pressed for by the salt merchants when I was Collector. The closing of the canal for three months is of no importance for all the canals are then closed & boat traffic ceases.

A.A. 20.5.99.

The Hon. Mr. Arundel knows this locality. His views on the proposal should be obtained. I would only observe, at present, that a light tramway does not seem to have been considered. It would have the advantage over the canal of being workable during the dry season, when I suppose the canal would be closed.

A.S.H.
18.5.99

The Consulting Engineer stated the cost of a tramway to be worked by coolies or bullocks at Rs 5400 a mile exclusive of bridging – See paper flagged K.

W.H.
19.5.99.

The Estimate is sanctioned accordingly, and the ~~above~~ draft order is appd.

A.S.H.
23.5.99

To
The Chief Engr. for I.
Supdg. Engr. II Circle
Ex. P.W.
Rev. Dept.

with enclosure H.W. 24-5-99

27/5/99

27/5/99

No. 91. J

Note by the Chief Engineer for Irrigation.

The excavation of a navigable canal to connect
the Manginapudi Salt Factory with the Kistna
Delta System of canals at Masulipatam
first came under discussion in 1865. An estimate
of Rs 61,720 was prepared for a salt water canal
from the factory to below the tidal lock and
sanctioned by Government, but owing to
want of funds the work was not carried out.
In 1874, a revised estimate, amounting to Rs.
68,580, was sanctioned and Rs. 20,000 allotted
in the following year. A portion of the work
was done and the project was then dropped
for some reason which cannot now be ascertained.
In 1890, the matter was again brought before
Government and the relative advantages of a
fresh-water canal, a salt-water canal and a
tramway discussed. The Chief Engr. for Irrigation
reported in favour of a salt-water canal,
which it was supposed at that time, would
be cheaper in first cost and which had the
great advantage that it would be open all
the year while a fresh water canal would have
to be closed for 3 months. This opinion was
accepted* and the Public Works dept. was ordered
to prepare plans and estimates, but the mode of

* G.O. No. 225 R dy 12th Jany. '92

~~Mode of~~ raising funds to cover the cost of maintenance and the interest on Capital was left unsettled until the issue of G.O. No 1036 Q, dated 10 Octr 92, Flag Q in which Government accepted a proposal to levy the necessary funds by a system of tolls.

2. It was proposed to meet the first cost of the work from "Salt" funds, but the Government of India on being asked for an allotment replied in Letter No $\frac{A}{3517}$, dated 14th August 1893, Flag R that the cost of the canal is properly chargeable to the head "43. Minor Works and Navigation," which is a Provincial head of account and not to "5 – Salt" and that the fact of the work being required in the interests of the Salt Department is not a sufficient reason for charging its cost to the latter head.

3. In November 1893, the Superintending Engineer reported that he had made estimates Flag A. for both a freshwater and a tidal canal; that the complete estimate for the former came to Rs 61,500, while the cost of earthwork alone of the tidal canal (allowing the same rate as for the other canal, though probably a higher rate would be required owing to the bed being on a much lower level) came to Rs 51,300. Moreover, a bridge would be required over a certain road and a lock, costing probably Rs 24,000 might be necessary

necessary to prevent the destructive action of the tides. On the Buckingham Canal the erosion and silting caused by the tides has been so great that the reaches had to be locked in, and probably, the same course would have to be adopted on the proposed tidal canal or very heavy charges for maintenance incurred. With regard to the comparative usefulness of the two lines of canal the Superintending Engineer reported that the Assistant Commissioner preferred a fresh water canal for the reasons, (1) that it would bring fresh water to the factory, (2) be a shorter line for boats proceeding up the Masulipatam Canal, (3) time would not be lost by passage through the tidal lock. The objection that the canal would be closed for three months in the year was not considered of importance as the other canals would be closed at the same time. The question was referred by Government to the Board of Revenue who, in Proceedings No. 102, dated 12 Jany 1894, Flag V reported that from the point of view of the Salt and Abkari Department there is no objection to the construction of a fresh-water instead of a saltwater tidal-canal from Masulipatam to the Mangirapudi Salt Factory.

4. The estimate for a fresh water canal was approved generally, but Government desired

desired that arrangements should, if possible, be made (1) to keep the canal open all the year and to effect this it was suggested that there should be a pair of gates at the head of the Canal to confine the water when the Masulipatam Canal is emptied, (2) that the canal should be used for irrigation so that the revenue from this source might be a partial set-off against the cost of the work. The designs have accordingly been to some extent altered. The estimate now submitted is for a canal 8 m. 2¼ ch. long and 17 ft. bed-width with bed level the same as the still-water reach above Masulipatam and depth 5 ft.; but in order to maintain this depth the banks of the existing canal will have to be raised 1½ ft. for a couple of miles. With the Canal full only the 2500 acres of land are commanded. The present Superintending Engineer objects to the scheme altogether for the following reasons:-

Flag V

“(a) The last reach of the Masulipatam Canal from which the canal will take off is a dead level reach at present used only for navigation. It does not now silt, being still water. The length of the reach is 6 miles. If water is sent down for irrigation purposes, heavy silting will result owing to the low velocity

What a singular statement. Still water must inevitably deposit more silt than water in motion – The quantities of silt being the same.
Mt
20.5.99

(b) The same remark applies to the proposed Canal. It will probably be necessary to close it for clearance once in three years.

4 P

(c) The irrigation under the proposed Canal (assuming that water for the purpose will be available) being at the tail end of the system will, in times of scarcity, suffer from want of water. There will be a conflict of interests. Water will be drawn off to the detriment of navigation.

(d) percolation of fresh water from the Canal into the factory may injuriously affect the brine.

(e) the land which it is proposed to irrigate being very sandy soil a very low duty will be got from the water, probably about half what would be obtainable from land available elsewhere

8. None of the above objections apply to a tidal canal which could be taken right through the centre of the factory whereas salt will now have to be carted from the factory to the Canal”

5. It will be seen from the above that there is still a conflict of opinion regarding the project. I fully agree with the Superintending Engineer that it would be a mistake to attempt irrigation from the proposed Canal. It is not on the proper line, or at the proper level, for effective irrigation and the land commanded is of poor quality while there is more good land available elsewhere than the canals can supply. If irrigation is to be extended in the neighbourhood of

Masulipatam

Masulipatam it should apparently be by means of a channel taking off above the Akumurru lock. If the provision for sluices be omitted, the estimate will be reduced to Rs 54,540. With regard to the opinion that percolation of water from the Canal may affect the brine probably a small drain would prevent this. The level at which water will be held up in the Canal is only a couple of feet above the present dryweather water-level. The estimate includes a provision of Rs 2820 for gates at the head of the Canal. These may serve to keep a sufficient depth of water for a short time after the Masulipatam Canal is emptied. I do not think it possible that they will keep it up for the whole time of the closure as the canal will be in sandy soil for seven miles. As the cost of the Canal would apparently not be much more than half that of a tidal canal the work is recommended for sanction. ~~but it should not be charged to the Kistna Delta System.~~ As it is not proposed to use the Canal for irrigation the cost should be met from Provincial funds

W.H.

Chief Engineer for Irrigation.

Ootacamund
26 April 1899

To The Joint Secretary to Govt,
P.W.D. Irrigation Branch

11-4-99

n C

There will also be less loss of water by percolation as the full supply depth will be 4ft instead of 5.

C.E.I
11-4-99

nC

Public Works (1899) Department.

CURRENT No. 76 K.S.

Sent to be checked. Son
W.H.
11.4.99

to C.E.I
11/4/99

From the Superintending Engineer
II Circle

No. 105 I

Order E.I

Submitted in continuation of note + papers re – canal of the Salt factory outside Bunder –

The C.E. Mr. Hamer apparently objects to any fresh water canal – but the E.E. petitioners + Govt. seem to be at cross purposes – what Govt. wanted was a canal to connect Bunder with the salt factory to be available for traffic all the year round, if at the same time this canal can bring in some Revenue by irrigation let it do so. If the extra expense of making it a fresh water canal is more than the Revenue warrants Govt. would presumably go back to the tidal canal.

Previous papers are
R.No. 74 K.S. of 1899
with E.I
5/4/99

Dated 27th March 1899
Received 29 – do –
Registered
Enclosures ~~two~~ two
Spare copies

SUBJECT.

Ryots of Polhapalli and Mandavaram Villages — Forwards information, a full report on the allegations of the — in connection with the Maudenappedi Canal taking off above the Aukumarru Lock

S.E.I. The estimates have been checked and the total amount of estimate ~~increased~~ has been reduced from Rs 58,600 to Rs 58,700 57,820, owing to errors found in the detailed est. for Earthwork.

19/4/99

29/3/99

17/4/99

BACK PAPERS.

No.	Date.
I 54 K.S.	20 - 3 - 99.

FURTHER PAPI

No.	Date.

Superintending Engineer's Office, II Circle,
Bezwada, Dated 27th March 1899.

No. 105 I.

29 MAR. 1899
76 K.S.

From

J. Hannan
Superintending Engineer,
II Circle,

To

The Chief Engineer
for Irrigation.

Sir,

Enclosures. 2

With reference to your memo $\frac{II}{54 Ks.}$ of 20th March/99, I have the honor to report as follows.

The canal referred to by the petitioners is the one referred to in my No 2338 of 3rd August 1889. viz: a canal taking off above the Akumuru Lock—. I made a mistake by oversight in this letter which I wish to correct. After the words "The proposals shortly were" read "Instead of taking off a fresh water canal from boat basin" for "Instead of taking off a salt water canal from below the tidal lock"——. My objections to the proposed canal from ~~above~~ Akumuru lock, are fully set forth in this letter and of course apply more fully, still to the fresh water canal from the boat basin as set forth in my letter No 104 I. dated 25th March/99

R 76 Ks/99

undoubtedly if it is proposed to utilise the canal to the Manginapudi Salt factory for irrigation as well as for Navigation, then it should take off from above the Akumuru Lock.

The proposals for this latter canal were approved in your memo $\frac{II}{53}$ of 13th April/95 as already stated in my letter No 2338 of 3-8-89.

My own opinion is and always has been that the proper thing to do was to construct a tidal canal but in your memo $\frac{II}{172K0}$ of 4-10-98 it is stated that the question of a fresh water or a tidal canal was already decided by Government and definite instructions were given to me to resubmit Mr Martin's estimate for the fresh water canal from the boat-basin making the necessary modifications for making it available for irrigation and it has been accordingly modified and resubmitted.

I beg to return the petition under reference.

I have the honor to be
Sir,
Your most obedient servant,

Superintending Engineer II circle.

I think this is a mistake a canal from above the lock might be a better irrigation canal, but would not effect the object aimed at by Govt.

The petitioners say that the proposal submitted would "seclude" some 10 or 12 villages from cultivation. It was not clear whether this state meant that existing cultivation would be thus secluded or only that the other proposed canal would enable some 10 or 12 villages more to be cultivated – It would now appear the the latter.

Ow 9·1 / Ltr 16/99

No. 1 Encls to no 105 I

No Enclo to ~~[illegible]~~ no 93 I.

blic Works (1899) Department.

CURRENT No. 55 K.S.

SUPG. ENGINEER'S OFFICE, No. 90 I, 11 MAR 99, P. W. D. SECOND CIRCLE.

CHIEF ENGINEER FOR IRRIGATION. 16 MAR. 1899 No. Rbg 25

SUPG. ENGINEER'S OFFICE, No. 1129 I, 25 MAR 99, P. W. D. SECOND CIRCLE.

From The Ryots of Pothapalli, Machavaram &c villages

~~**Order**~~ No 45 KS d/7. 3. 99

Forwarded to the Supg Eng, II Circle, for report.

/ By order /

R.M.H. Reid

for Asst Chief Engr for Irrigation

[illegible]
6/3/99

No. -

Dated

Received } 6. 3. 99.
Registered }

Enclosures

Spare copies

SUBJECT.

Channel from Ramarazupalem to Mauginapudi — Pray for the excavation of a — with a tunnel at Pothapalli —

29 MAR 1899
1/76 K.S.

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Da
276 Ks	27-3-99

[illegible]

No. 2 [illegible]

P

…UR IRRIGATION
6 MAR 1899
55 K.S.

To

The Superintendent Engineer
2nd Circle, Bezwada
Kistna District.

The humble representation of villagers
of Pothepalli and Machavaram &c

Most honored sir,

We most humbly beg to bring to your notice that after having petitioned you, several times about the Ramarazupallem Branch Chilakalapudi Channel which had its origin and far back as 1867, you were pleased to order the excavation of a Channel from Ramarazupallem to the fresh water Canal for the transport of Mangiuapudi salt and for the wet cultivation of our village and that recently another Channel was sanctioned to be dug up from the bar at Masulipatam to Mangiuapudi.

(2) The latter Course would involve two disadvantages viz 1 some 10 or 12 of our neighbouring villages will be altogether excluded from cultivation 2. only

3-8/3 8 hundred …

8/3/99

3-99

...ing Rs 3500 or 4000, thereby causing
the public revenue to stand at a low
figure. The poor people will not only
derive no benefit but will be subjected 19
to innumerable hardships.

(3). The former step would be of very great
...ry if tunnel were constructed at
Dothepalli instead of Gollagudem. The
advantages will not be too highly estimated
if it were taken into consideration the
irrigable area of the following villages
to the extent of acres 15,500 and water
cess to the amount of Rs 77500 contrasting
with the previous figure. The transport of
salt too will be no way be inconvenienced.
Thousands of poor people of our sort will
be provided with bread. The Government
will easily be compensated by the water
cess of a single year, if at all it thinks
a greater outlay has to be made in
carrying out this work, but if the
tunnel were constructed at Gollagudem
these villages cannot be irrigated and
serious harm will be caused to the
...ple living in these villages.

Moreover the soil of these villages is

---

to irrigate these
humble prayer is
Ramarazupallem to
tunnel at Dothepalli
boon to the population
For this act of kindness,
bound shall ever pray
List of villages adjoining

Name of villages	Total area of villages		Of cultivated				
			Cultivated land		Water tax		
2	3		4		5		
	Acres	S	Acres	S	Rs	a	p
Machavaram	1460	"	1100	"	5500	"	"
Dothepalli	2004	"	1500	"	7500	"	"
Doflapallem	1138	16	800	"	4000	"	"
Kothapudi	1030	40	800	"	4000	"	"
Kakerlamudi	1047	36	800	"	4000	"	"
Buddalapallem	1080	67	850	"	4250	"	"
Borrapotapallem	834	98	600	"	3000	"	"
Chilakalapudi	2384	27	1800	"	9000	"	"
Gopuvanipallem	970	30	650	"	3250	"	"
Kavisipudi	948	79	700	"	3500	"	"
Manginapudi	1408	38	1000	"	5000	"	"
Gollavaram	990	70	600	"	3000	"	"
Tallapallem	3364	"	2600	"	1300	"	"
Kara	1676	90	1200	"	6000	"	"
Byprejipallem	200	"	200	"	1000	"	"
Bissain pallem	438	82	300	"	1500.		
Total	20968	17	15500	"	77500	"	"

We beg to remain
Most hum...

Copy

28/3/99

8/3/99

the [illegible] causing
figure [illegible] laws
deriv [illegible] dep-
[illegible] ected
to
(3).

[illegible]

Parab [illegible]

8 [illegible]

9 [illegible]

10 [illegible]

11 P. Varadarajulu [illegible]

12 [illegible]

13 [illegible]

14 [illegible]

15 [illegible]

16 [illegible]

17 [illegible]

18 [illegible]

Pub [illegible] tment.

174 K.S

23 [illegible]

24 [illegible]

25 [illegible]

26 [illegible]

27 [illegible]

28 [illegible]

29 [illegible]

31 [illegible]

32 [illegible]

33 [illegible]

34 [illegible]

35 [illegible]

36 [illegible]

37 [illegible]

40 [illegible]

46 [illegible]

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48 [illegible]

49 [illegible]

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51 [illegible]

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62 [illegible]

63 [illegible]

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65 [illegible]

66 [illegible]

67 [illegible]

68 [illegible]

69 [illegible]

70 [illegible]

71 [illegible]

72 [illegible]

73 [illegible]

74 [illegible]

75 [illegible]

76 [illegible]

77 [illegible]

78 [illegible]

79 [illegible]

80 [illegible]

81 [illegible]

82 [illegible]

83 [illegible]

28/3/99

28/3/99

CHIEF ENGINEER
FOR IRRIGATION
16 MAR 1899
No.

140
141
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Public Works (1899) Department.

CURRENT No. 74 K.S

From The Superintending Engineer II Circle

Order E1

Forwarded. whether the Govt. sh^d be put up for sanction —
The question fresh water or tidal Canal is dealt with in paper flag G — a History of the case is given in note flagged A —
3/4/99.

No. 104 I

Dated 25th March 1899.

Received
Registered 27 — do —

Enclosures 29 (of which 9 sent separately)

Spare copies

SUBJECT.

Freshwater Canal from the Boat basin at Masulipatam to the Mangenapudi Saltpans — Submits plans & Estimates for a —

27/3

28/3/99

BACK PAPERS.

No.	Date.
I 200 KS.	30-11-98
R 170 KS.	3-8-98.
I 172 KS.	30-9-98.
I 54 KS.	20-3-99

FURTHER PAPERS.

No.	Date.

Superintending Engineer's Office, II Circle,
Bezwada, 25th March 1899.

No. 104 I.

From

J. Hannan Esquire,
Superintending Engineer,
II Circle,

To

The Chief Engineer,
For Irrigation.

CHIEF ENGINEER
FOR IRRIGATION.
27 MAR. 1899
No. 74 KS.

Sir,

Enclosures. 29

1 Classified abstract.
2 Detailed estimates } Lock at head.
2 Abstract estimates }
1 Data }
1 Abstract for land compensation.
1 Detailed Estimate } Bridge
1 Abstract Estimate }
1 Detailed Estimate } Road Culvert 2.
1 Abstract — " — }
1 Detailed Estimate } under tunnel at 2¼ furlong.
1 Abstract — " — }
1 Do - do - Do. at 1 m 2 fur.
1 Detailed estimate } Pipe sluices
1 Abstract estimate }
1 Data }
1 Detailed estimate } Earthwork
1 Abstract — " — }
1 Abstract estimate for ~~land compensation~~ demarcation stones.
20
2 Survey plans (tracings)
1 Tracing Longitudinal section
1 - do - cross sections
1 - do - bridge
1 - do - road culvert
1 - do - " tunnel
1 - do - Lock at head
9
9 Total

I have the honor to submit herewith plan and Estimates as per margin for a fresh water canal from the boat basin at Masulipatam to the Manginapudi Salt pans.

Mr. Martin's Estimate for this canal has been revised to give effect to the instructions given in your Memo No. $\frac{\text{II}}{172\text{ KS.}}$ of 30-9-98. The canal has been made available for irrigation by raising the bed and water level 1 foot - With full supply or 5' maintained on the upper sill of the tidal lock water can be maintained in this canal at a level that will command directly on either side of it some 2500 acres of land.

3. A saving of Rs. 9680/. has been effected on Mr. Martin's Estimate by raising the bed level and by reducing the slopes from

to 1 to 2 to 1. I think they will stand alright at the latter slope.

A pair of gates have been provided at a cost of Rs. 2820 as directed at the tidal basin end of the canal to keep water in it when the last reach of the Masulipatam Canal has to be unwatered during the closure.

How would an animal beyond do?

5. Provision amounting to Rs. 4160 has been made for pipe sluices for irrigation purposes, but this item is chargeable to irrigation funds.

6. The bunds of the last reach of the Masulipatam Canal will have to be raised about 1½ ft. for a couple of miles as they are now too low. This however can be done later on from silt clearances –

7. There are several objections to the construction of this canal which I think ought to be taken into consideration.

(a) The last reach of the Masulipatam Canal from which this canal will take off is a dead level reach at present only used for navigation – It does not now silt-up being still water – The length of the reach is 6 miles – If water is sent down for irrigation purposes heavy silting will result owing to the low velocity

(b) The same remark applies to the proposed canal. It will probably be necessary to close it for clearance once in 3 years –

(c) The irrigation under the proposed canal obtaining the water for the purpose will be available only being at the tail end of the system will, in times of scarcity, suffer from wan of water. There will be a conflict of interests – Water will be drawn off to the detriment of navigation

(d) Percolation of fresh water from the Cana into the factory may injuriously affect i the brine.

(e) The land which it is proposed to irrigate being very sandy soil a very low duty will be got from the water probably about half what would be obtainable from land available elsewhere –

8. None of the above objections apply to a tidal canal – which could be taken right through the centre of the factory whereas salt will now have to be carted from the factory to the canal –

I have the honor to be,
Sir,
Your most obedient Servant,

Hummel
Superintending Engineer,
II Circle.

OW G.O. / [illegible] 6/99

Public Works (1899) Department.

IRRIGATION BRANCH.

ISSUE No. 11/54 K.S.

To

The Supg Engineer, 2nd Circle

(Reply to letter No. 94-I, dated 15/3/99)

Dated 20-3-99

Despatched 22-3-99

Enclosures* 1 Petition

* Particulars of Enclosures.

SUBJECT.

Fresh water Canal to Connect Masulipatam with the Salt-pans. States that this office No 172 K.S. of 98 gives the general objects to be aimed at in preparing plans & estimates for the — and the S.E.'s reply does not give any information as to the validity of the objections raised by the petitioners to the Canal and the petition is returned in view to whatever provision may be necessary to meet them being made in the plans and Estes for a canal now expected from the S.E.

Indexed

Form No. 13—4,000—7-1-99

BACK PAPERS.

No.	Date.
R 69 KS d/	15-3-99.

Sent to Government with No. I., dated 189 .

Printed with G.O., No. I., dated 189 .

REMINDERS ISSUED.

No. 1, dated 189 .
„ 2 „
„ 3 „
„ 4 „
„ 5 „

KEEP-WITHS.

FURTHER PAPERS.

No.	Date.
R 74 KS	25-3-99

Papers
R 69 KS/99
I 45 KS/99 & papers

Draft

E1

No II/84 KS d/ 20-3-99

To S.E. R.

Encl.

With refce to the S.E.s No. 94 I the u/s has 13.3.99 the honour to remark that this office No. 172 K.S. d/30.9.98 only gives the general ~~[illegible]~~ objects to be aimed at in preparing plans & estes for the fresh water canal to connect Masulipatam with the Salt pans, but that it is nevertheless necessary to take into account any real objections that ~~[illegible]~~ may exist to any particular scheme and to make provision for meeting them if necessary — The petition forwarded detailed certain objections to a canal from the Masulipatam basin to the Salt pans ~~amongst which was a statement that same~~ but which cannot be clearly understood in this office The S.E.s reply does not give any information as to the validity of the objections and the petition is returned herewith so that whatever provision

79

may be considered necessary to meet them may be made in the plans & estimates ~~now~~ for a canal now ~~[illegible] [illegible]~~ expected from the S.E.

OJB
20/3/99

WH
20.3.99

Oc 9.21
24/6/99

Public Works (1899) Department.

CURRENT No. 69 K.S.

From The Superintending Engineer
II Circle

No. 94 d.

Dated 15th March 1899

Received } 17 —do—
Registered }

Enclosures Two.

Spare copies

S.E. II

Order ~~With refce to the S.E.'s No. 94 d the G/s has the~~
13.3.99
~~honour to remark that the decisions alluded to in this office No 172 K.S. only relate to~~

SUBJECT.

Pothapalli Ryots — Inform that the request of — in their petition Cannot be Complied with.

OJB
17/3

✓ Inly 18/3/99

18/3/99

17/3/99

BACK PAPERS.

No.	Date.
I 45 K.S.	7-3-99
I 172 K.S.	30-9-98

FURTHER PAPERS

No.	Date.
I II/54 K.S. d/	20-3-99
R 74 Ks	25-3-99

Superintending Engineer's Office, II Circle,
~~Bezwada~~, 13 March 1899.
Desp.d 15th March 1899
Camp: Masulipatam

No. 94 I.

From

J. Hannan Esq.,
Superintending Engineer,
II Circle,

To

The Chief Engineer,
for Irrigation.

Enclosures. 2.

Sir,

With reference to your Endt. No. II/45 K.S. dated 7th instant, herewith returned, I have the honor to inform you that the request of the petitioners cannot be complied with as you have decided in your memo No. II/172 K.S., dated 30-9-'98, that the canal to Salt pans must go from the Boat Basin.

I have the honor to be,
Sir,
Your most obdt. Servt.

J Hannan
Superintending Engineer,
II Circle

BACK PAPERS. FURTH ERS

CHIEF ENGINEER
FOR IRRIGATION.
16 MAR. 1899
No. R69 RS

Ow c. 25
[illegible] 16/98

Public Works (1898) Department.

IRRIGATION BRANCH.

ISSUE No. $\frac{\text{II}}{\text{172 RS}}$

To

The Supdg. Engineer
2d Circle

(Reply to letter No. 2338 K, dated 3-8-98)

Dated 30-9-98

Despatched 4-10-98

Enclosures *

* Particulars of Enclosures.

SUBJECT.

Navigable Canal to Manganapudy Salt factory. Supdg Engnr requested with remarks to resubmit the plans & Estimates returned with this Office No. 164 RS of 1894 for a fresh water — making such modifications & additions as are necessary to effect the object aimed at, so far as is possible.

Indexed

I. Form No. 13—2,000—4-6-93.

BACK PAPERS.

No.	Date.
R170 K.S.	5-8-98

Sent to Government with No.   I.,
dated   189 .
Printed with G.O., No.   I.,
dated   189 .

REMINDERS ISSUED.

No. 1, dated   189 .
" 2 "
" 3 "
" 4 "
" 5 "

KEEP-WITHS.

FURTHER PAPERS.

No.	Date.
P.W.C. 1105	25-11-98
R 130	5-1-99
P.W.C. 1107	26-1-99
R 50 Ks	9/14-2-99
R 69 Ks	15-3-99
R 74 Ks	25-3-99

Papers—
Remarks of the Salt Commr. on Note in the P.W.D. reg: the Constn. of a Canal from Manginapudi to Bunder.
Endorsement of the Rev: Dept thereon
D.E.'s note to E.I. reg:—do— d/27-8-98
I 273/98
G.O. 2145 W/98
R 170 Ks/98
I 53 Ks/95.
R 69 Ks/95
R 261 Ks/94
I 184 Ks/94
R 248 Ks/94
I 164 Ks/94
R 4 Ks/94
R 278 Ks/93
I 200 Ks/93
I 193 I/93
R 263 Ks/93
I 191 Ks/93 + vide papers noted thereon

B.S.I.

Please see E's pencil remarks on the margin of sheet 2.

4/10

No. II / 172 K.S.

To
S.E. II

With refce to the S.E.'s No. 2338 K d. 3.8.98 & the
U/S has the honour to observe that on a perusal of the papers in this office it would appear that there has been some misunderstanding of the intentions of Govt. on the part of the S.E. ~~[illegible]~~ originating with this office ~~E.~~ memo No. I 164 K.S. d. 12.11.94 to the S.E.—

2 The S.E. (Mr. Marten) submitted a scheme for a fresh water canal to cost Rs 61500 with his No. 1867 K.S. d. 6.10.93. This canal was to start from a short distance above the basin at Masulipatam and ~~this~~ was approved of generally but in view of the possibility of a railway being extended to Masulipatam it was desired that if possible

I. Form No 4-6-98.

An arrangement should be made which would obviate the necessity for running the canal dry in the hot weather so that there would be communication between Masulipatam & the Salt Factory at all times & even ~~though the main~~ during the ordinary closure of the Bundar Canal ~~Canal canal was closed~~.

One way of doing this would be to provide a single pair of lock gates at the Masulipatam end of the new canal facing towards the factory to hold water up during the closure.

The E.I. was of opinion that ~~this was not necessary~~ all that was necessary was that the new canal should have a terminal weir to run off surplus but in returning the estimates the object aimed at does not appear to have been clearly explained and it is believed that the approval given in this office No. II/53 R.S. d. 13.4.95 was misunderstood – ~~this~~ when it was taken ~~[illegible]~~ to mean an approval of an entirely new proposal

---

to make a canal taking off from above the Akumarru lock – However this may be it has now been ascertained from the Commissioner of Salt that the canal ~~is still~~ from Masulipatam to the Salt Factory is still wanted ~~and he [illegible]~~. The question whether the canal should be a tidal canal or a fresh water canal has already been decided by Govt. in favour of the latter –

~~The S.E. in [illegible] quoted to recommit the plans and estimates.~~

3. What Govt. desires is primarily that a navigable canal should be made connecting Masulipatam with the Salt Factory and that for the reasons before alluded to it should if possible be arranged that it can be kept open for navigation all the year round, secondarily the canal is to be used for irrigation so that the profits from this source may be taken ~~[illegible]~~ as a partial set off against the original cost of the work

I cannot see how this can be done when closure of the main canals cuts off supply
J.C.C.
5/4

Sir H. Bliss suggested a single pair of gates to retain water during closure irrigation being of course stopped it being hoped that leakage & evaporn. would not run the length dry till canals open again –

The S.E. is therefore requested to resubmit the plans & estimates for a fresh water Canal submitted with the Ex's No. 1867 R.S. d. 6.11.93 making such modifications or additions as are necessary to effect the objects aimed at so far as is possible –

As the matter has been pending for so long it is requested that this may be done at the earliest possible date –

JHB
28/9/98

JCL
30/9/98

Ow. 3. 26
[illegible]

Despd 4/10/98

1,000
18-7-98.

D.E.I
Estimate for the fresh water Canal from the Kistna to be got ready for sanction × (flag F) no estimates in the file

JCL
26/9/98

× They were recd. but returned to S.E. with E.I's memo No. 1646 d/ 1.11.94 (flag L) –

[illegible] 4/10/98 –

I don't see ~~that~~ the delay is ~~altogether~~ due to P.W.D. – there have been many references from one depart to another

?

Remarks of the Commissioner of Salt, Abkari and Separate Revenue on note in the P.W.D regarding the construction of a canal from Manginapudi to Bandur.

This paper is referred for opinion with reference to the Superintending Engineer's remark that "evidently the "Salt Department do not attach much importance to the construction of this "canal or it would have been carried "out long since and that it is not improbable that they do not want it at all". The only warrant for this remark that the Commissioner is aware of is the department's long suffering with P.W.D delay. There has been no change of opinion since the work was first sanctioned in 1892 and handed over to the P.W.D for execution. The licensees have petitioned in 1895, 1897 & 1898 for early execution of the work and the Board has been unable to give them any satisfaction as the matter was out of its hands.

2 SEP 98
SEPARATE DEPARTMENT

The Commissioner trusts that now the P.W.D will bestir itself.

19.9.98

Rev Dept

The above note by the Salt Commr. is forwarded to the D.P.W.

22/9/8

D.P.W. us.

Flag F.

Flag M.

CW 9.27
22/10/98

Note.

51.

The question of making a navigable canal from Masulipatam to the Manginapudi Salt factory has been under consideration for the last 25 to 30 years —

Flag M. In G.O. No. 225 dated 12.1.92 after ascertaining from the P.W.D. that a fresh water canal would cost Rs 78860 and a tidal canal only Rs 56600 Govt. called on the P.W.D. to submit estimates for the cheaper tidal canal. Some correspondence took place as to what funds should bear the cost and in 1893 the S.E. II (Mr. Martin) submitted a report in which he stated that a fresh water canal would be cheaper and not more expensive than a tidal canal. He

Flag F.

estimated that a tidal
canal would cost Rs 75300
and a fresh water
canal only Rs 61500 —

Flag N.

A note for orders went
up on this, which
resulted in a reference
being made to the ~~Rev.~~
~~Dept.~~ Board of Rev: on
the question of increase
of Rev: likely if a
fresh water canal were
made —

Flag S.

The Board of Rev: having
replied another note for
orders went up in the
Rev: Dept. which
resulted in the Hon
Mem: Sir A Bliss
expressing the opinion
that Govt. might safely
approve the scheme for
a fresh water canal
but as it was thought
probable that the railway
would be extended to
Bunder ~~[illegible]~~ the Hon
Mem: wished some
arrangement to be
made so that the
fresh water canal

from Bunder to the
Salt factory should
not be run dry for
clearance in the hot
weather; this so that
there should at all
times be communication
between the Salt factory
and Bunder —

The note having been
sent to the P.W.D. for
necessary action a
memo was sent to

Flag L

the S.E. [illegible] asking him
to draw out fresh
estimates with a
"terminal weir sufficiently
"low to allow the reach
"to be cleared if necessary"

The object of the instruction
does not appear to have
been sufficiently explained
to the S.E. or understood by
him —

Flag O.

With his endors. No
2945/28.3.95. the S.E. [illegible]
forwarded a letter
from the Ex Eng. Kistna
Eastern Divn in which

e describes what would be necessary for an entirely new kind of fresh water canal that is one taking off from the Bunder canal above the Akomanu lock – It is not known who originated this proposal the fresh water canal referred to in the note for orders submitted to Govt. being a canal from the Bunder basin —

After saying what would be necessary the S. Eng. says "I am of opinion "that it will be preferable" "to adhere to the original" "proposal of a navigable" "canal from the Basin" "at Bunder and provide" "for Eslenorum under the" "Ramarazupalem Chanl." independently —

E.I. reply to this is not very clear – It says the M/S approves of the Ex: Engr. proposals including

to the Salt factory which Govt. has considered of primary importance — It is not clear what E.I. approved of but I presume he approved of the canal from the Bunder basin to the factory which was the only proposal which had been before Govt.—

The current is a letter from the S.E. from which it would appear that he thought E.I. had approved of the other proposal This has it appears been estimated for but the S.E. says the estimate has not been properly prepared – before returning the estimates to the Ex Eng. for revision the S.E. wishes orders as to whether the work should be carried out and

Again goes back to
a proposal for a
tidal Canal –

The S.E. says also
that it is not
improbable that
the Salt Dept. does
not now want the
Canal and thinks
it would be well
to obtain the views
of the present Commnr.||
of Salt –

It might be ascertained
by means of a note
whether there is any
ground for supposing
that the Canal is not
now wanted and if
it is clear instructions
given to the S.E. which
scheme to estimate for.

27/8/98

|| Concur. This note be sent
it seems highly probable
that the canal is not
required – if it really is
the fresh water one from
the basin is the best

DL
3/9/98

Desp. 28
Lec 16/1/99

E. I. Form No. 22—2,000—8-8-96.

GOVT. OF MADRAS. 1898. P. W. DEPT.

CHIEF ENGINEER FOR IRRIGATION.

Ootacamund ~~Madras~~, 5 September 1898.

OFFICE NOTE No. 273

Dt 9/9/98

Circulation Register.

To	From	Despatch Date.	Receipt Date.
Revenue Secretary	I	5-9-98	

KEEP-WITH.

No. , dated 189 .

See G.O. No. 878 dated 9th July 1898, regarding unofficial references to heads of Departments.

The accompanying note on a proposal to excavate a navigable canal from the Masulipatam tidal basin to the salt factory at Manganapudi, is forwarded with a suggestion that the views of the present commissioner of salt be ascertained with reference to the remarks on the last page of the note. d/27.8.98

J. C. L[illegible]

Ag. Joint Secretary to Govt: P.W.D

Irrigation Branch.

5/9/98

To the Commr. of Salt Revenue U.O.

9/9/8

Indexed

Lola Cas
pwc 1010387612 9

Ows 22
Recd 6/8/98

Public Works (189 8) Department.

CURRENT No. 170 Rs.

From The Superintending Engineer
II Circle

Order

No. 2338 K

Dated 3.8-98

Received 5 – 8 – 98

Registered

Enclosures

Spare copies

SUBJECT.

Navigable Canal to Mangenapudy Salt factory — Submits for orders a full report on the —

D.E.I.

Note On this orders on paper flagged G fresh estimates were called for from the S.E. who now advocates for reasons given the adoption of the original estimate for the tidal canal.

LCCS
8/8/98

6/8

13-8-98

BACK PAPERS.		FURTHER PAPERS.	
No.	Date.	No	Date.
I 200 Ks	30-11-93	PWC 10103	25-11-95
I 53 Ks	13-11-95	R 13 I	5-1-77
R 69 Ks	28-3-95	R 74 Ks	25-3-99
R 261 Ks	6-12-94		
I 84 Ks	22-11-94		
R 248 Ks	17-11-94		
I 164 Ks	1-11-94		

No. 2338 K / 3.8.98. Superintending Engr's Office
2nd Circle dated 28-7-9

From
J. Hannan Esquire,
Superintending Engineer
II Circle

To
The Chief Engineer
for Irrigation

Sir,

flag E

In your memo No. II/200 Ks, dated 30th November, 1893, you stated that the estimate for a navigable canal to the Manganapudi Salt factory at Masulipatam forwarded with this

flag F

office No. 1867 Ks. dated 6th November 93, had been recommended for the Sanction of Government. Some twel months afterwards with your memo

flag I

No. II/164 Ks. of 1st November '94, you returned all the plans & estimates unsanctioned to provide a termina weir to allow of the reach being a

r

In reply you were invited in this office memo No. 1923 K.S.,+ dated 17-11-94, to consider the circumstances of the canal which showed that no terminal weir was not* necessary.

flag H

In your memo II/184 K.S.,+ dated 22-1-94, you made further observations about the terminal weir which were not quite clear and enquired whether a lock at the Head was really necessary. This memo was replied to in this office No. 2086 K.S., dated 6-12-94 and with it was sent a letter from the Divisional officer, Kistna Eastern Division, making fresh proposals. These proposals were approved of in your memo No. II/53 K.S.+ of 13-4-95.

flag R

flag S

I think this is a misunderstanding the proposal of the E.E. was approved was to adhere to the original proposal for a navigable canal

These proposals shortly were:

Instead of taking off a salt water canal from below the Tidal lock at Bandar to take out a navigable one, from above the Akkanavarru lock 6 miles higher up the Bandar canal which canal a also to be utilized to bring some 60 acres of land under cultivation. I received some months back an estimate amounting to Rs 52,000 for giving effect to this proposal. The estimate has not been properly prepared and cannot be submitted in its present shape. I consider that the cost of the work has been considerably underestimated. I have not, however, returned it to the Divisional officer for revision as I am of opinion that the work should not be undertaken for the following reasons.

And to provide for extensions of cultivation independently

what would this be if not navigable?

The 6000 acres of new land, it is proposed to irrigate, is very sandy soil close to the sea impregnated with salt and a good deal of it actually salt swamp.

There is not in my opinion water

water available for any further extension of irrigation. If water is found to be available, there is any quantity of suitable land available under existing channels for extending irrigation.

The canal might of course be taken out purely for navigable purposes. The objections to this are: that the soil being very sandy it would be costly and difficult to maintain the banks and that there would be much loss of valuable water by percolation. Again the water being held above the level of the country, sooner or later it would be taken for irrigation purposes to the detriment of more suitable lands.

Yes but the point is that a canal being wanted in any case for navigation it would be of more use if a fresh water canal. It was stated in note for orders before that the fresh water canal would cost less

If a canal is really wanted the Tidal canal already estimated for is, in my opinion, the one which should be constructed. There i no real necessity for a head lock and this item can be struck out. The question of the construction of th piece of canal has been on the "tapis" for the last 25 years. So far back as x 1874 an estimate was submitted for it. Evidently the Salt Department do not attach much importance to its construction or it would have been carried out long since. It is not improbable that they do not want it at all. It would, I think, be well before issuing any further orders to ascertain the views of the present Commissioner of Salt. It is not unlikely that a railway will be made to this port one of these days and if so it will doub less tap these salt pans.

Copy of G.O. No 1598 of 19 Dec 74 applied for -
8/5/98

I have the honor to
Sir
Your most obt Se
J Hanney
Supg: Eng: Ch

CHIEF ENGINEER
FOR IRRIGATION.
6 AUG. 1898
170 Ks

56.5.30
44.6/58

E. Form No. 1

FORMER dated 28/3/55
R No „ 6-12-94
R, „ 17.11-95
Res

ISS
- 1895.
Da 1895.

Ks dated 3-8 1898.
Ks „ 25-3-1897.
„ 189 .

vernment with No. I. of
189 .
with G.O., No. dated
189 .

REMINDERS ISSUED.

1, dated 189 .
„ 2, „ „
„ 3, „ „
„ 4, „ „
„ 5, „ „

KEEP-WITHS.

R 69. KS/95.
R 211. KS/94
I 184-KS/94.
R 248 KS/94 + papers about
New work.

16/2

ISSUE CASE.

19/4

1895.

Chief Engineer for Irrigation.

To

THE Supg Engineer 2nd Circle
II

No 53 KS dated 13-4-1895.
(Reply to ~~letter~~ End. No. 2945-KS dated 28.3.
1895.)

Subject:—Mangimapudi Canal approves of the Exe Engineer's proposals in connection with the — including making the Canal navigable to the Salt factory and states with remark that the estimate should be prepared and submitted at an early date.

ENCLOSURES.

Note
Still on the S.E.'s URh-S.E. was asked to expedite the submission of the estimate

W.b 27/7/98

o Go

ed

No

Nayinapudi Canal

Memo.
II
No 53KS d/13 4-95

The undersigned approves of the Exec Engrs proposals including making ~~the~~ the navigable canal to the salt factory.
~~The~~ which Govt has considered of primary importance.

2- The deposit of silt should not be such as to greatly impede navigation but if it is considered that serious impediment will occur in the latter months of the year the difficulty m be overcome by raisin the banks & tail lock sufficiently to hold up still water provide the cost is not prohibitive

3- The estᵉ should therefore be prepared and submitted at an early date

FWS
9/4/95.

Rheds
13/4

No

FORMER CASES.

Brg No 8220 d 26-10-94.
R No. 261 Ks dated 8-12-1894
I " 184 Ks " 22-11-1894.
R " 218 Ks " 17-11-1894.

Receipt No. 69 Ks

Dated 1-4-1895.

LATER CASES.

I No. 53 Ks dated 13-4. 1895.
R " 170 Ks " 3-8-1895
P.W.E. 10103 d 25-11-[illegible]
R 74 Ks d 25-3-97

Sent to Government with No. . I of

189 .

Printed with G.O., No. dated

189 .

REMINDERS RECEIVED.

No. 1, dated 189 .
" 2 " "
" 3 " "
" 4 " "
" 5 " "

KEEP-WITHS.

E. I. Form No. 5—2,000—1-2-95.

Receipt No. 69 Ks

From

The Supg. Engr
2nd Circle

No. 2945 Ks

Dated 28-3-1895.

(Reply to ~~E.I.'s Memo~~ S.E.'s II Mo. No. 2086 Ks dated 6-12 1894.)

Subject—Manginapudi Canal – Forwards with remarks Sub Engr's letter subg a line of levels & a rough estimate for the proposed —

BR
1-4-95

papers
[illegible]
D. E. I

ENCLOSURES.

From BR 2-4-95 to
" "
" "
" "

Orders and Proceedings in File.

No.	Date.	No.	Date.

Letter from the Executive Engineer Kistna Eastern Dn. to the Supg Engineer II Circle, d/ 9th March 1895, No. 5541.

In continuation of this Office No. 4079 d/ 3·12·1894, I have the honour to forward a line of levels and a rough estimate amounting to Rs 55,00 for making a branch Canal to Manginapudi which will be navigable and will also supply about 6,500 acres of new Cultivation.

2. It is proposed to take off the Canal immediately above the Akumarru lock.

3. It will follow the existing Ramarazapalem Channel for five miles, after which it will branch off to the right across the Gokanaram Swamp at or near the water parting and then run straight to the South East Corner of the Salt Factory, at which point it will join the line of the Canal from Kasim Channel for which an estimate has already been sent in.

4. The bed level at Akumarru Lock will be 1 ft. above the upper Sill of lock and the bed fall will be 3 inches per mile with a depth of 5 ft.

5. During the irrigation season the surface fall will be the same as the bed fall and afterwards it is proposed decrease the surface fall to 1½ inches per mile by holding up the water at the tail end.

6. The masonry works required will be a head sluice to supply Ramarasupalem Channel at the point where the new branch leaves it, and a surplus weir and channel direct to the sea on the North side of the Salt Factory.

7. Provision has also been made for five distributary channels of varying lengths, amounting altogether to 10 miles each, being provided with a masonry sluice.

8. It will be necessary to carry out widening in the 2nd, and 3rd Reaches of the Bundar Canal, at a cost of Rs 8,000 in addition to the amount already provided in the proposals sent with this Office No. 4106 of 5-12-94

9. The 4th reach with a surface fall of 3 inches per mile and depth of 6 feet throughout will pass the required discharge without widening

10. If you approve of the proposals, I have the honour to suggest that it

may

may be forwarded to the Chief Engineer for Irrigation for orders as to whether it may be properly investigated.

11. It has already been proposed to improve and extend the Rama-rasapalem Channel and the cost of doing so and irrigating 4,500 acres of new cultivation was estimated to cost about Rs 18,000 which with Rs 40,000 for the Navigable Canal from Basin Channel amounts to a total of Rs 58,000.

12. The present scheme will provide for 6500 acres of extension and a navigable Canal at a cost of Rs 63,000.

S.E.'s Remark
This appears a fatal objection, as it means heavy silt-clearances every year.

13. I may point out, however that the proposals will involve a Reach 17 miles in length from Nidumole lock to Manginapudi and I am doubtful, if after allowing for a certain amount of silt which will inevitably be deposited in the early part of the season, it will be possible to maintain a sufficient depth of water for Navigation during the latter part of the year.

14. Before going into details, I expected that the present scheme would prove more economical, but as it has

not

5. During the

ot done so, I am of opinion that
will be preferable to adhere to
original proposal of a navigable
Canal from the Basin at Bundar
nd provide for the extension under
Ramaraxpalem Channel independently.

15. The area of new land to be
commanded will probably be about
1000 acres more in the case of the
navigable Canal+, as I think the area
proposed by the Sub D. Officer to
be brought under the improvement
and extension of Ramaraxpalem
Channel i.e. 6500 acres was over
estimated and should be taken
at 4500 acres.

+. S Eipremark
Taking off just
above Akumarru
lock.

16. The area affected is, however
so broken up by sand ridges, that
it is not possible without going into
details of the distribution, to exactly
fix the acreage and I have, therefore
taken 6,500 as the largest area that
can be safely counted on.

No. 2945 M.S / 28.3.95 Forwarded to the
Chief Engineer for Irrigation, in
continuation of this Office No. 2086 K.S.
dy 6.12.94. There does not seem
to be much to choose between the
two schemes, but I am of opinion
that it would be wiser to drop the
the proposal for a navigable
Canal to the Manginapudi Salt
Factory, until more is known about
the proposed extension of the
Railway to Bundar. With a
Railway to Bundar, a branch
line to the Salt Depôts would follow
as a matter of course.

2. The question of extending irrigation
under the Ramaraxpalem Channel
will in any case be thoroughly gone
into and proposals submitted
in due course.

McBaddeley
Major R.E.
Supg Engr: II Circle

R. 25-3-95

CHIEF ENGINEER
No. 19Ks
17 APR. 95

From

The Supg Engr.
II Circle.

To

The Chief Engineer,
For Irrigation,
Madras.

No. 2945 XS

Dated 28th March 1895.

Manginapudi Canal.
Forwards Ex. Engineer's letter submitting a line of levels and a rough estimate for the proposed —— with remarks.

OW 5.32 / 16/59

FORMER CASES.

I No. 184 Ks dated 22-11-1894.
R " 246 Ks " 17-11- 1894
I " 164 Ks " 1.11 1894

Receipt No. 261 Ks

Dated 8-12-1894

LATER CASES.

R No. 69 Ks dated 28-3-1895.
I " 53 Ks " 13.4- 1895.
R " 170 Ks 3-8-1898

R 74 Ks 25-3-99

Sent to Government with No. , I of
189 .

Printed with G.O., No. dated
189 .

REMINDERS RECEIVED.

No. 1, dated 189 .
" 2 " "
" 3 " "
" 4 " "
" 5 " "

KEEP-WITHS.

E. I. Form No. 5—2,000—17-3-94.

Receipt No. 261 Ks

From The Supg. Engr.
2nd Circle

No. 2086 Ks

Dated 6-12-1894.

(Reply to E.I.'s Memo. No. 184 Ks dated 22 Nov. 1894)

Subject— Mangina pudi Ch Kistna 2 Dn. Offers certain remarks about the —

BR
8-12-94

ENCLOSURES. 1

From to D.E.I.
" BR "
" 10-12-94 "

Orders and Proceedings in File.

No.	Date.	No.	Date.
El	May lie over until further report is received		
	W 10/12		14/12

Mlj 10/12/94. R 69 KS/95 recd & put up [illegible] 2/4

Letter from the Executive Engine
Kistna Eastern Dn., to the Supg Engin
Second Circle d/ Bezwada, 3rd Decr
1894. No. 4079.

With reference to your No. 1835 KS/9.11.94, I have the honour to state that I inspected the Manginapudi Canal on 28th Ultimo in order to select a suitable site for the tail escape for which Chief Engineer for Irrign. has called for an estimate.

2. I find that it is not possible to put in an escape any where near the factory as it would be necessary either to provide a surplus channel at least 1 mile in length and a cut through the Sand ridge to the sea, or to allow the water to escape into the salt pans.

3. The former would be very expensive and the latter of course cannot be permitted.

4. At about 5th Mile on the Canal the line is nearer to the Coast than any where else, and if an escape at bed level is considered absolutely necessary, this will be the

the Cheapest Site as the Sea is within half a mile.

5. As however the proposed Canal is directly connected by an open head with the 5th Reach of Bundar Canal, I can see no reason why it should not be emptied at the same time as the latter, i.e. through the tidal lock as it cannot be emptied in any case without first emptying the 5th Reach.

6. I have also to point out that in the event of a railway being made to Bundar, the proposed Canal will cease to be of any use as presumably all the salt which now goes to Bezwada by boat will then go by rail, and it will be easily taken to the railway by carts.

7. I believe the chief argument in favour of the proposed Canal is that it will provide through carriage by boat.

8. In this connection I have also recently received a suggestion from Mr Reid to take the Canal off above Ankumarru lock and as I also inspected the proposed line of this, I think that from what I saw it is quite worth further investigation.

9. The proposal is to follow the present Ramarazupalem Channel for about 5 miles and then carry it in very nearly a straight line to the Salt Factory. The latter part of the line will be nearly the same as that originally proposed for the Chilakalapudi branch of the Ramarazupalem Channel (Vide handkerchief map) and it will probably bring at least 6000 acres of new land under cultivation.

10. Most of this land can in any case be brought under cultivation by a channel for irrigation only, but if the Canal to Manginapudi is to be constructed at all it will probably be cheaper to combine the two. I am having levels taken for this purpose and will report further as soon as they are received.

11. The enclosures to your letter under reply are returned herewith.

(True Copy)
Wm Baddeley Major R.E.
H. 5/12 Subrahmanyam, [illegible]

CHIEF ENGINEER FOR IRRIGATION
No. R 2/1 KS
8 DEC 94

Encl to No. 2086 KS
6.12.94

Ous 33
2446/89

No. 2086 KS

Superintending Engineer's Office,
Bezwada
II CIRCLE,
Dated 6th December 1894.

From,

Major W. L. C. Baddeley ~~Esquire~~, R.E.,
Superintending Engineer,
II Circle.

To,

The Chief Engineer,
for Irrigation,
Madras.

Enclo: 1 Copy of letter from E.E.

Sir,

In reference to your No. II/184 KS. d/ 22nd November 1894, I have the honour to inform you that I do not understand the necessity for a weir as the Manginapudi Channel can be cleared at the same time as the 5th reach of the Bundar Canal.

2. It is true that the bed of the branch is to be taken out a few inches lower than that of the Main Canal, but one season will probably make up the difference by silting.

3. I do not follow the argument in your memo as the effect of a weir at the end of a ~~still water~~ with no bed fall channel

would

ould not be to increase the depth
t the end of the Channel as stated
you.

In connection with this Subject I send you a copy of letter No. 4,079 of 3rd Instant from the Ex: Engineer, Kistna Eastern Dn. and would, recommend that the construction of the branch Channel be postponed unless the Salt Department consider that it is urgently required.

5. If the Channel is to be made, I see no necessity for a lock at the head, or weir at the end, and I can see no advantage in taking out the bed below the level of that of the 5th reach, Bundar Canal.

I have the honour to be,
Sir,
Your most obt. Servt.,

Major R.E.,
Suptg. Engineer II Circle.

H.
5/12

From

The Supdg Engineer

2nd Circle,

CHIEF ENGINEER
8th DEC. 94
FOR IRRIGATION

To

The Chief Engineer,
For Irrigation
Madras.

Enclo: 1

No. 2086 KS

Dated 6th December 94.

Manguiapudi Chal.
Kistna Eastern Dn —
Offers certain remarks
about the —.

[illegible]

From,
The Superintending Engineer,
II Circle.

To,
The

Dated }
Received } 18 .

Enclosures.

NO. .

SUBJECT.

E. I. Form No. 13—2,000—28-8-94.

ISSUE CASE.

FORMER CASES.
R No. 248 KS dated 17. 11. 94
" "
" II "

ISSUE No. 184 KS

Dated 22 - 11 - 1894.
Despd. 26 do 1894

LATER CASES.
R No. 261 KS. dated 6.12. 1894
R " 69 KS " 20-3- 1895.
I " 53 KS " 13-4- 1895.
~~R 170 KS 8-3-98~~

Sent to Government with No. R 79 KS 9-25-3-99 L. of
189 .

Printed with G.O., No. dated
189 .

REMINDERS ISSUED.

No. 1, dated 189 .
" 2, " "
" 3, " "
" 4, " "
" 5, " "

KEEP-WITHS.

1894.

Chief Engineer for Irrigation.

To

The Supdg Engineer 2nd Circle
II

No. 184 KS dated 22 - 11. 1894.
(Reply to letter No. 1923 KS dated 17 Nov. 1894.)

Subject:— Manguiapudi Canal
S.E. is requested with remarks to report whether certain arrangements noted are not feasible; whether it is absolutely necessary to have an expensive lock with the new —.

ENCLOSURES.

No 184 K.S. dy. 22-11-94

Memo.

With reference to letter No. 1928-K.S dated 17 Novr. 1894 from the Superg. Engineer, Second Circle, the undersigned has the honor to remark that it is presumed that the 5th reach of the Bunder Canal is more or less a still water one, but even if it were not so, and the ground over which the Mangunapudi Canal would run were fairly level, the water in this Canal would be somewhat deeper at the end than at the head with a hydraulic declivity regulated by the height of crest of the terminal weir. The Superg. Engineer is requested to report whether these arrangements are not feasible, or whether it is absolutely necessary to have an expensive lock into the new Canal.

21/11

To
The Superg. Engineer,
Second Circle.

21/11

1327

R248KS/94

Memo.

With reference to letter No 1923 K
dated 17 Nov. 94 from the Supdg.
Engineer, Second Circle, the under-
signed has the honor to remark that
it is presumed that the 5th reach
of the Bunder Canal is more or less
a still water one but even if this
were not so and the ground over
which the Manguinapudi Canal
would run were fairly level
the water in this canal would be
somewhat deeper at the end
than at the head with a hydraulic
declivity regulated by the height
of crest of the terminal weir.
[illegible] requested to
report whether these arrangements
are not feasible, or whether it
is absolutely necessary to take
[illegible]
[illegible]

FORMER CASES.

I No. 164 KS dated 1-11-1894.
Proc. 7038/94 189 .
R " 263 KS " 22-11- 1894

Receipt No. 248 KS

Dated 19-11-1894

LATER CASES.

I No. 184 KS dated 22/11-1894
R " 261 KS " 6.12- 1894
R " 69 KS " 25-3-1895.
~~I. 55 KS " 13-4-95~~
R 170 KS d 3-8-98

Sent to Government with No. of
R 74 KS d 21-3-99
189

Printed with G.O., No. dated
189

Are all [illegible] whether it is absolutely necessary to have a separate canal. Remind 20/11

REMINDERS RECEIVED.

No. 1, dated 189 .
" 2 " "
" 3 " "
" 4 " "
" 5 " "

KEEP-WITHS.

over which the Manguina-
pudi Canal would run
were fairly level, the
water in this canal would
be somewhat deeper at the
end than at the head with
a hydraulic declivity regu-
lated by the height of crest
of the terminal weir. The
S.E. is requested to report
whether these arrangements

E. I. Form No. 5—2,000—17-3-94.

Receipt No. 248 KS

From The Supg. Engr.
2nd Circle

No. 1923 K
Dated 17-11-1894.

(Reply to E.I.'s Memo. No. 164 KS dated 1 Nov
1894)

Subject— Manguinapudi Chl. Draws attention to the fact that the — will be cut from the 5th reach of Bunder Canal, as the estimate is ordered to be submitted.

Papers
19/11

BR
19 11 94

ENCLOSURES.

From to
" " (D.E.I.
" "
" "

BR
20 11 94

SCB

Orders and Proceedings in File.

No.	Date.	No.	Date.

Dispose 20/11

It is presumed that the
5th reach of the Bunder Canal
is more or less a still water
one, but even if this were
not so, and the ground

19/11

Superintending Engineer's Office,
Bezwada
II CIRCLE,
Dated 17th November 1894.

No. 1923 M.S.

From, Major W. L. C. Baddeley R.E.
~~Esquire,~~
Superintending Engineer,
II Circle.

To,
The Chief Engineer,
for Irrigation,
Madras.

Sir,

In reference to your No. II/164 M.S. of 1st November 1894, I have honour to enquire whether when ordering ~~the~~ estimate for a terminal weir for the Manginapudi channel, you have considered the fact that the new channel will be connected by an open head with the 45th reach of the Bunder Canal.

I have the honour to be,
Sir,
Your most Obt Servant
W L C Baddeley
Major R
Supdg. Engineer, II C
16/11/94

From

The Supg Engineer,
2nd Circle

R2418Ks

To

The Chief Engineer
~~For Irrigation~~
Madras,

No. 1923 KS

Dated 17th November 1896.

Manginapudi Channel — Draws attention to the fact that the — will be cut from the 5th reach of Bundar Canal, as the Estimate is ordered to be submitted.

[illegible]

Form No. 13—2,000—28-8-94.

ISSUE CASE.

1894.

Chief Engineer for Irrigation.

FORMER CASES.
J. No. 1939 d 30-11-93
R. No. 263 KS d 24-11-94
R. No. 1046/93 dated
" " 7038/94 "
" II "

ISSUE No. 164 KS

Dated 1 — 11 — 1894.

Despd. 2 — do — 1894.

LATER CASES.
R. No. 2418 KS dated 17-11- 1894
J. 184 KS 27-11-94
R. " 261 KS " 6-12- 1894
R. " 69 KS " 28-3- 1895.
J. 53 KS 13-4-95
R 170 Ks d 3-8-98

Sent to Government with No. L. of
189 R 74 KS d 25-3-97

Printed with G.O., No. dated

189 .

REMINDERS ISSUED.

No. 1, dated 189 .
" 2, " "
" 3, " "
" 4, " "
" 5, " "

KEEP-WITHS.

To

The Supg Engineer 2nd Circle
II

No 164 KS dated 1 — 11 — 1894.

(Reply to letter No. 1867 KS dated 6-11-1893.)

Subject:—Navigable Canal from Masulipatam to the Manganapudi Salt factory. Returns plans and Estimates for a — with a request to draw out as soon as possible fresh Estimates with a terminal weir sufficiently low to allow the reach to be cleared if necessary

ENCLOSURES.

6 A Estes
1 Class: Abst
1 Data Sheet
3 Tracings
2 Surveys
1 Longl Section
2 Cross Sections

E/ No II/6448 d/1/11/93

Memo

In returning the plans and estimates for a navigable canal from Masulipatam to the Manganapudy salt factory received with letter No 1867 K S dated 6th Nov/93 from the Supg Engr II Circle the undersigned has the honor to request that he will be so good as to draw out as soon as possible fresh estimates with a terminal weir sufficiently low ~~so as to be able~~ to allow the reach to be cleared if necessary.

FWG
31/10

Recd
1/11

To The S. E. II Circle

31-10-94

In G.O. 515 Rev.
7-2-94

Read. Draft G.O. out W. C.No 10467.
" again G.O. d, 15-12-93 No 4686 Rev.
" Office Note to the P.W.D No 4 d, 7-2-94
" G.O. d, 7-2-94, No 515 Rev
" C.No 1543.
" C.No 6701.

For orders.

As will appear from the note for orders under G.O d, 7-2-94, No 515 and the Office Note to the P.W.D No 4 d, 7-2-94 stitched with that G.O the point for decision now is whether the contemplated Manginapudi-Masulipatam canal is to be a fresh-water one as now proposed by the P.W.D or a tidal one as previously decided in G.O d, 12-1-92, No 225.

2. The previous decision was arrived at after obtaining professional opinion as to the relative merits of (1) a tidal canal (2) a fresh-water canal and (3) a tramway; and the 1st was preferred in ~~difference~~ deference to the opinion then received.

3. The P.W.D now prefers the 2nd

It ~~is~~ would no doubt be an objection to a fresh water canal that it ~~may~~ might have to be closed for 2 or 3 months in the year, if it is decided to make a railway to Mm, as I have no doubt it will be, sooner or later. But I do not see that it follows that it must be so closed. The Supt Engr points out that it is not likely to have much silt deposited in it. I cannot see therefore, why water should not be kept up all the year round in this canal, to a suffct extent for navigation, by putting in a single ~~lock~~ pair of lockgates at the point where the canal will take off from the basin — This would cost very ~~[illegible]~~ little, compared with the advantages (i) of securing some irrigation revenue and (ii) of not having the expense of maintenance which would certainly (as pointed out by the S.E.) be involved by the construction of a tidal canal. I should like to know the opinion of the C.E. for Irrn as to the possibility of keeping a fresh water canal open in this way all the year round, so as to afford constant communn with the Railway, if made. Because, if there is not a railway

2nd (Fresh-water canal) chiefly for the following reasons:-

(a) that the cost of its construction[x] and maintenance will be less than that of a tidal canal.

(b) that the transport will take less time:

(c) that a fresh-water canal will bring in some irrigation revenue

4. As the Hon Member directed that the prospect of an extension of the Railway to Masulipatam should be ascertained as also the probable irrigation revenue, reference was made to the P.W.D and the Board & the replies received are contained in the two currents.

5. The irrigation revenue is estimated at Rs 5000 - being the water-rate on 1000 acres of land - expected to be brought under cultivation. But it is not known what (if any) portion of this area will in the event of the proposed canal not being constructed, be brought under cultivation under the general canal extension scheme of the Delta.

6. As regards railway extension the information contained in the Office note in C.No 1543 is that there is no prospect of such extension in the immediate future. But since the date of that Office note there has been correspondence on the subject between the Govt of India and this Govt (vide B.P. $\frac{28-8-94}{350}$ & $\frac{21-9-94}{5797}$) and it remains to be seen what orders the Supreme Govt will pass thereon ~~on that subject~~.

7. Reference is solicited in this connection to para 11 of the Kistna Collector's letter at page 5 of Bd Procs $\frac{28-8-94}{350}$ and to his subsequent letter in Board's Procs $\frac{21-9-94}{5797}$(x). ~~A~~ ~~Copies of~~ with the latter Procs ~~is put up~~ will be found a ~~with a rough~~ sketch showing the probable approximate alignment of the railway on the Masulipatam side. It will be seen from this sketch that the line as now aligned will run within about 4 miles of the Manginapudi factory. If the railway is likely to be constructed soon, it might be worthwhile to reconsider also the tramway scheme. - In the consulting Engineer's note under G.O of 12-1-92 No 225 it is stated that permanent-way materials for a 2 feet gauge will

[x] Rs 60000 against 79000 -

The closing of this canal for 2 or 3 months annually will not prejudice the salt traffic, which wd. in any case be stopped by the closing of the canal from [illegible] to Bezwada.
If Col. D.H. agrees with my suggestion, I think we may safely approve the scheme for a fresh water canal. I did at one time think of a tramway in contn of the Railway. But that wd. never yield the revenue which a fresh water canal wd. bring in, from irrigation I mean -

BS
1/10/94

With refce. to the H. M's remarks I would state that I do not think it will be found necessary in the future to close the canals of the Delta for annual clearances. This may however have to be done once in three years. The freshwater canal to the factory would require two pairs of gates. A lock cannot be worked with a single pair, but if the reach is made a still water one, or provided with a terminal weir to pass off surplus, no lock would be necessary. The freshwater canal may therefore I think be undertaken with advantage upon those lines.

Rueds
10/10

I know a lock can't be worked with a single pair of gates - What I meant was could a single pair of gates be put in at the Masulipatam end of the branch canal, so as to prevent the water therein from draining off when the main canal was closed & allowed to run empty in order to silt clearance? However it does not greatly matter what contrivance is used to effect the object of keeping the branch canal navigable, even though the main canal is closed - The Chief Engr. for Irrn. should be (x) asked to modify the scheme in whatever way he thinks best suited to this end; & it can then be approved.

BS
19/10/94

(x) In Endorst. No. 3769 of 26th Septr. 1894.

Cost Rs 5400 per mile to which should be added the cost of formation and bridges - The latter cost is likely to be light in the case of a tramway running from the factory to the Railway line.

8. The draft order of the P.W. Department sanctioning the estimate for a fresh-water canal which was returned to that Department with office note No. 4 d/ ~~7-12-93~~ 7.2.94 (with G.O. d/ ~~7-12-93~~ 7.2.94 No. 515) has been obtained and put up.

R.V.L.
27/9.

Until the question of constructing a Bezwada - Bunder line of Railway is definitely decided, it seems premature to come to a decision about the Canal - The Collr's sketch shows only the "probable approximate alignment" wh. seems to be too indefinite to admit of orders being passed regarding the Canal - The papers re. Tidal v. Fresh-water Canal furnish very little information regarding

---

C. Nos: 1543 of 6701 of 1894

—

Re. the proposed Mangiapudi-Masulipatam Canal

—

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read

the difficulty raised by the Chief Engineer, connected with the closing of a Fresh-water canal during some months in the year & those the very months when the Salt trade is most active. In saying this the Board reported that it had no objection to a fresh-water canal - but there is nothing to show that the prospect of its being periodically closed was contemplated —

L.G. 27/9.

P.T.O.

Endorsement – Mis. No. 4126 of 26 Octr/94

Manginapudi – Masulipatam – Canal –

Dep 26/10

Transferred to the P. W. Dept. with the Hon. Member's notes in original for the necessary action.

R. V. L. 26/10.

26/10.

The Hon. Mr. Bliss, C.I.E.

DISPOSED OF BY GOVT. ORDER
Mis. No. 4126
Dated 26-10-94

To.

The P. W. Dept.

S. E. may be requested to draw out the estimate with a terminal wall so as to be able to allow the reach to be cleared if necessary.

P.W.D. 8220/94

Suffl. Lov.

[illegible] 30/10

P.W.D. 30
Dec 16/98

4

1543.

[illegible] Public Works Department

Transferred to the P. W. Dept. under the [illegible] [illegible]

22 February 1894
24 Feby 1894
Nil
519 C.

Stating that the Commissioner [illegible] has reported that there is [illegible] [illegible] to the Masulipatam [illegible]

0/13 —5,000—7-9-93.

(1894.)

REVENUE DEPARTMENT.

ABSTRACT.

Current Number 1543.

From

The Public Works Department

Dated 22nd February 1894

Received 26th Febr. 1894

Enclosures Nil.

No. 819 C.

SUBJECT.

Stating that the Consulting Engineer for Railways, Madras, has reported that there is no prospect of the railway being extended to Masulipatam in the immediate future.

3

Proceedings of the Board of Revenue

(Separate Revenue),

Dated 5th September 1894.

No. 3789 Mis.

Read again Board's Proceedings, dated 12th Febru 1894, No. 609 Mis, Communicating to the Collector of Kistna for very early report Government Order, Revenue Department, requesting the Board to ascertain the probable increase of revenue which may be expected from the construction of a fresh water canal from the Manginapudi Salt pans to Masulipatam.

Read again also Board's Proceedings, dated 12th June 1894, No. 2615 Mis., recording, pending receipt of further report, letter from the Collector of Kistna reporting on the probable increase of Revenue which may be expected from the excavation of a fresh water canal from the Manginapudi Salt pans to to Masulipatam.

Read also letter from the Collector of Kistna, dated 18th August 1894, No. 2861/Rev of 1894, reporting that according to the Executive Engineer 1000 acres can be cultivated under the Manginapudi – Masulipatam canal without material alterations to the Bandar Canal and that the annual increase of revenue from that point of view is Rs 5000.

Resolution

With reference to Government Order dated 7th February 1894, No. 515 Mis., not read read in the first proceedings quoted above, the Collector of Kistna reports that the Executive Engineer states that 1000 acres only will be brought under cultivation unless the design of the canal is altered materially and at considerably increased cost. The annual increase in Revenue without such alteration will be approximately Rs 5000/.

(True Extract)

Assistant Secretary

To
The Secretary to Government
Revenue Department
" Collector of Kistna

Exd 11/9

0/18—5,000—7-9-93.

P.W. CURRENT No. 8220

(1894.)

~~REVENUE DEPARTMENT.~~

~~Current Number.~~ 6701.

From

The Board of Revenue
Separate Revenue.

Enclo 1 & orig(Rev) papers.

Recd: 30.10.94

Dated 5th September 1894.

Received 13th September 1894.

Enclosures

No. 3789. Mis.

SUBJECT.

Reporting to Government what increase of revenue may be expected by the construction of a fresh water instead of a tidal canal from Manginapudi to Masulipatam.

ABSTRACT.

Read also C. No. 1543.

Endorsement No. 4126. Mis.

Transferred to the Public Works Department with the Hon. Member's notes in original for the necessary action.

Under Secretary to Govt.

Fort St George
26th Octr 1894.

To

The P.W. Department
with notes & the bundle of papers in original

D.E.I.

B.R. 30.10.94

Mr. 26/10

FORMER CASES.

R No. 278 K dated 7-12-1893
I " 200 KS " 30-11. 1893.
" " 189 .

Receipt No. 4 K
Dated 8-1-1894

LATER CASES.

R No. 170 K dated 3-8 1898.
R " 74 K " 25-3-1899
" " 189 .

Sent to Government with No. I. of
189 .
Printed with G.O., No. dated
189 .

REMINDERS RECEIVED.

No. 1, dated 189 .
" 2 " "
" 3 " "
" 4 " "
" 5 " "

KEEP-WITHS.

1,500—2-11-93.

E. I. Form No. 5.

Receipt No. 4 K

From

The Supg. Eng
2nd Circ

No. 2340 K

Dated 2-1-1894

In contn of his (~~Reply to E. I.'s Memo.~~ No. 2616 K dated 5 Decr. 1893.)

Subject—Canal from Masulipatam to Manginapudi Salt-factory. States that Rs300000 are reqd for during 1894-95

D.E.I.
F.E.I.

B.R.
8-1-94

ENCLOSURES.

From to
" "
" "
" "

Orders and Proceedings in File.

No.	Date.	No.	Date.

2893

With R No. 278 K.S./93 which was ordered [illegible] the [illegible] pending receipt of sanction to the [illegible].

Mh.
10/1/94

3

Superintending Engineer's Office,

No. 2340 KS

II CIRCLE, Camp-Madras

Dated 19th Decr 1893.

Despd 2-1-94

From,

J. W. Martin Esquire,

Superintending Engineer,

II Circle.

To,

The Chief Engineer,

for Irrigation,

Madras.

Sir,

In continuation of this Office No. 2161 K.S. d/ 5th Instant, I have the honor to inform that Rs 30,000 are required to be provided in the budget for 1894-95 on account of the Canal from Masulipatam to Manginapudi Salt Factory for which Estimate has already been sent for Sanction.

I have the honor to be,

Sir

Your most Obt Servt.

J W Martin

Supg: Engineer

2nd Circle

From

The Supt. Engineer,
II Circle.

To

The Chief Engineer,
For Irrign.

CHIEF ENGINEER
No. [illegible]
8-JAN.94
FOR IRRIGATION

dated 2 January/94
No. 2340 Ks

Canal from Masulipatam to Manginapudi Salt factory. States that Rs 30,000 are reqd for - [illegible] 94-95

[illegible] 16 [illegible]

E. I. Form No. 29.

FORMER CASES.

No. 200 K dated 30-11-1893
" " 189 .
" " 189 .

Receipt No. 278 Ks
Dated 9-12-1893.

LATER CASES.

Sa R No. 4 Ks dated 2.1. 1894
R " 170 Ks " 3-8 1895.
R " 74 Ks " 25-3 1897

Sent to Government with No. I. of 189 .

Printed with G.O., No dated 189 .

REMINDERS RECEIVED.

No. 1, dated 189 .
" 2 " "
" 3 " "
" 4 " "
" 5 " "

KEEP-WITHS.

Receipt No. 278 Ks

From

The Supg. Engr
2nd Circle

No. 2161 Ks

Dated 5-12-1893.

(Reply to E. I.'s Memo. No. II/200 Ks dated 30 Nov. 1893.)

Subject—Navigable Canal from Masulipatam to Manginapudi Salt-factory. Suggests that, if the estimate is sanctioned, it would be well to arrange for the collection of materials for masonry works.

BR
7.12.93

Papers
W/11

ENCLOSURES.

From to
"
"

To D.E.I.
This may lie over until the estimate has been sanctioned.
The Rev Dept is going to refer the Estimate to the Bd of Rev for remarks
BR
12-12-93

Orders and Proceedings in File.

No.	Date.	No.	Date.

[illegible] 13/12/93
[illegible] 8/12/93

Superintending Engineer's Office,

No. 2161 Kd.

II CIRCLE, Bezwada
Dated 5th Decr. 1893.

From,

J. W. Martin Esquire,
Superintending Engineer,
II Circle.

To,

The Chief Engineer,
For Irrigation
Madras.

Sir,

With reference to your memorandum No. $\frac{II}{200 Kg}$ d/ 30th Ultimo, in regard to the proposed navigable canal from Masulipatam to Manginapudi Salt Factory, I have the honor to state that I shall report later on the amount that should be provided for the work in the Budget for 1894-95. But I think it desirable at present to bring to your notice that in the event of the estimate being sanctioned, it would be well to give permission to collect materi materials as soon as possible for the masonry works in order that these works may be carried out during the next hot weather.

2. It is, I think, very desirable to complete the foundations for the masonry works during the hot weather, as the subsoil water is only a few feet below the surface during the irrigation season. There will, therefore, be a good deal of baling work unless the foundations are completed during the hot weather, but we cannot complete them unless permission is given, at once, to collect materials as the canals will be closed on 1st March next, ~~but~~ and we cannot convey materials to Masulipatam except by means of the Masulipatam Canal.

I have the honor to be
Sir,
Your most obed Servt
J. W. Martin
Supdtg Engineer

From

The Supdg. Engineer
2nd Circle

To

The Chief Engineer
for Irrigation
Madras

Dated 5th Decr/93
No. 2161 Ks.

Navigable canal from Masulipatam canal to Manginipudy Salt factory — Suggests that, if the estimate for — is sanctioned it would be well to arrange for the collection of materials reqd for masonry works.

CHIEF ENGINEER
27 E.I.G.
7 DEC 93

From,
The Superintending Engineer,
II Circle.

To,
The

Dated
Received } 18

Enclosures.

NO.

SUBJECT.

Ow 5-141
Dec 18 1893

FORMER CASES.

R No. 263 Ks/53 dated
" "
" II "

ISSUE No. 200 Ks

Dated 30-11- 1893.

Despd. 1-12- 1893.

LATER CASES.

R No. 278 Ks. dated 5-12- 189~~3~~4.

R " 4 Ks " 2-1. 1893.

R 170 Ks d 3-8-98

R 74 Ks d 25-3-99

Sent to Government with No. I. of
189 .

Printed with G.O., No. dated
189 .

REMINDERS ISSUED.

No. 1, dated	189 .
" 2, "	"
" 3, "	"
" 4, "	"
" 5, "	"

KEEP-WITHS.

√

E. I. Form No. 13.—2,000—14-4-93.

ISSUE CASE.

1893.

Chief Engineer for Irrigation.

To

The Supdg Engineer 2nd Circle

No. 200 Ks II dated 30-11- 1893.

(Reply to letter No. dated
189 .)

Subject:—Navigable Canal from Masulipatam to Manginipudi Salt Factory—States that the Estes for — have been recommended for sanction and requests to report what amount shd be provided for the work in the ensuing year's budget estes for "Minor works & Navign"

ENCLOSURE.

Send to P.W.D.
Branch for budget
file

D.

ICS
5/12/93

FORMER CASES.

R No. 254/2 dated 6 11 93
R " 9532/93 "
R " 263 RS - 24. 11 93
" "

ISSUE No. 193 I

Dated 30 11 — 1893.

Despd. 1 — 12 — 1893.

LATER CASES.

R No. 278 RS dated 5.12 — 1893.
R " 4 RS " 2.1. 1894.
R 170 RS d 3 - 6 - 98
R 74 RS d 25 - 5 - 97

Sent to Government with No. I. of
189 .

Printed with G.O., No. dated
189 .

REMINDERS ISSUED.

No. 1, dated 189 .
" 2, " "
" 3, " "
" 4, " "
" 5, " "

KEEP-WITHS.

E. I. Form No. 13.—2,000—14-4-93.

ISSUE CASE.

1893.

Chief Engineer for Irrigation.

To

THE Joint Secy to Govt P.W.D. I.B.

No. 193 I dated 30 11 — 1893.

(Reply to letter No. dated
189 .)

Subject:— Navigable Canal from Masulipatam to Manginapudi Salt Factory — Estimate of Rs. 60,000 for excavating a — Submitted with a recommendation that it — be sanctioned.

To
F.E.I.
The estimate has been checked & the amount reduced to Rs 60000 owing to certain errors in calculation & the plans stamped.

ENCLOSURE.

6 A Este
1 Classified ~~Abstract~~
1 Data Sheet
3 Tracings
2 Surveys
1 Long Section
2 Cross Sections

S.E. 6-12-93. Please stamp plans and return file soon

R.
1/12/93 To C.E.I.
This estimate seems to have not been examined, without doing so it has been [illegible] away & [illegible] the [illegible]

The [illegible]

Orgl of Sdent St. 2

No 193 I d/ 20.11.93

Read the following:—

[illegible]

From Supg Eng. II Circle No. 1867 K.S. d/ 6. Nov/93.
To do. 191 K.S. d/ 17th do.
From do. 2042 K.S. d/ 24th do.

Submitted to Govt. with a recommendation that the estimate forwarded by the Supg. Eng. II Circle, + reduced in this office from Rs 6,150 to Rs 6 be sanctioned. In G.O. No. 2475. W., d/ 26th Sept/9 it was decided that the cost of the canal should be charged to "Provincial. 43. Minor Works & Rep." With reference to the concluding portion of para 181. D., Chapter XV, P.W.D. Code, the estimate may be classified

vide para 3 of letter No. $\frac{A}{3517}$ d/ 14th Augt/93 from Govt of India, Finance & Commerce Dept.

der "Minor Works for which neither Capital nor Rev. Accounts are kept, P.W.D."

Order thereon.

The Estimate amtg. to Rs 60000, for a navigable canal from Masulipatam to the Manginapudi Salt Factory, is sanctioned.

2. This sanction is registered as W. I of 1893-94 & classified as shown below:—

Provincial
Irrigation
43. Minor Works Navign.
Minor Works for which neither Capital nor Rev. Accounts are kept. P.W.D.
Kistna Eastern Divn.
Original work.
Excavating a navigable canal from Masulipatam to Manginapudi Salt Factory - Estimate Rs 600

3. The Supg Engr. II Circle, will report, at an early date, what amount is required for expenditure during the current year on the work now sanctioned.

4. Ordered that a copy of these Procs: be forwarded to the Govt of India for information.

Endorsement

Forward

P. W. CURRENT No. 10467

accordingly

Rueds
30/11
93

~~28/11~~

II

Encls 3 (Long'l at 3790 / 4/18.11.93 each)

with report

To Secretary to Govt, Rev. Dept., for favor of [illegible] initials

To
The Chief Engr for I.
Chief Engr. I. W.D
Supg Engr II
Ex P.W.D.
Rev Dept.

R.S. 8/12

1894
REVENUE DEP
Enclosure No.
To Current No.

29/11
BR

H.E. the Governor

Estimate for a navigable Canal from Masulipatam to Manginapudi Salt Factory

To Recorder.

BR
23.2.94

[illegible] 24/6/99

Rev Secy

Recd from [illegible] Office
7/12/93

FORMER CASES.

No. 191 Ks dated 17-11-1893.
R " 256 [illegible] " 15-11 1893 (B.P. No 953 / 99)
R " 2054 Ks " 6-11 93
R " 927 W " 21-10 1891.

Receipt No. 263 Ks

Dated 27-11-1893

LATER CASES.

No. 938 dated 30-11-1893.
R " 278 Ks " 5-12-1893
" R 170 Ks d/3-8-1898
R 74 Ks d/15-3-99

Sent to Government with No. 193 I. of 30-11-1893.

Printed with G.O., No. dated 189 .

REMINDERS RECEIVED.

No. 1, dated 189 .
" 2 " "
" 3 " "
" 4 " "
" 5 " "

KEEP-WITHS.

E. I. Form No. 29.

Receipt No. 263 Ks

From

The Supg. Engr
2nd Circle

No. 2042 Ks

Dated 24-11-1893

(Reply to E. I.'s Memo. No. 191 Ks, dated 17 Nov 1893.)

Subject— Manginapudi Salt Canal gives reasons for providing slopes 1:3 for the —

papers

BR
27-11-93

ENCLOSURES.

From to To D.E.I.
BR "
" EI
28-11-93 "

Orders and Proceedings in File.

No.	Date.	No.	Date.

The Est may go forward as it is — Rueds 29/11 93

B.G.
28/11/93

Superintending Engineer's Office,

No. 2042 Ks

II CIRCLE, Bezwada

Dated 24th Novr 1893.

From,

J. W. Martin Esquire,
Superintending Engineer,
II Circle.

To,

The Chief Engineer,
For Irrigation,
Madras.

Sir,

In reply to your Memorandum No. $\frac{\text{II}}{191\text{ K.S.}}$ d/ 17th Instant in the matter of a Canal from Masulipatam to Manginapudi, I have the honor to state that I provided for the slopes being made 1 : 3 as the soil is sandy except for the last mile where it is clay. The slopes for the last mile are 1 : 1½. The character of the soil and the reason for making the slopes 1 : 3, I have already explained in para 3 of letter No. 1867 K.S. d/ 6th Instant. The nature of the soil at different points along the line proposed for the Canal is also entered on the longitudinal section.

2. I do not think the soil would stand with a slope of 1:1½; it might stand with a slope of 1:2 but 1:3 would be safer. I should prefer to reduce the bottom width than reduce the side slopes, but at the same time, it is not desirable to reduce the width much as canal boats cannot sail in narrow water, and besides with a strong sea breeze, the boats will require some room as it is difficult to hold them up to the wind.

I have the honor to be,
Sir,
Your most obt servt.

J. W. Martin
Superintending Engineer,
2nd Circle.

H.
23.11.93

263Ks
27 NOV 93
FOR IRRIG

From
The Supy. Engineer
II Circle

To The Chief Engineer
For Irrigation
Madras

Dated 24th Novr. /93
No. 2042 Mo.

Pr E.3
10447/93

Mangnipudy Salt Canal — Providing slopes 1:3 for the — Gives reasons for —

From,
The Superintending Engineer,
II Circle.

To,
The

Dated
Received } 18

Enclosures.

NO.

SUBJECT.

6W546
22.11.93

1894
REVENUE DEPARTMENT
Enclosure No. 13
To Current No. 377

FORMER CASES.
Pr Ref. 252½ KS dd 6-11-93
Pr No. 9532/93 W dated
R „ 256½ Mi „ 15.11.93.
R „ 820 W II „ 26-9-93

ISSUE No. 191 KS

Dated 17-11-1893.

Despd. 18 do 1893.

LATER CASES.

R No. 263 KS dated 24.11. 1893.
R 278 KS „ 5.12. 1893.
~~R 170 Ks d 3-8-98~~ 99
R 74 Ks d 20-[illegible]

Sent to Government with No. 193 I. of 30-11-1893

Printed with G.O., No. dated 189 .

REMINDERS ISSUED.

No. 1, dated 189 .
„ 2, „ „
„ 3, „ „
„ 4, „ „
„ 5, „ „

KEEP-WITHS.

R 252½ KS/93 (w R 256½ Mi/93 w Pr 9532/93)
R 810 W/93
R 602 W/93
R 99 W/92
W.O. of Pro No. 2929 W d 14.11-93
W.O. of Pro No. 2457 W d 26.9-93
W.O. of No. 699 D d 15.8-93
W.O. of No. 545 D d 10-7-93
W.O. No. 540 D d 8-7-93 (CB)
W.O. of Pro 1973 W d 28.7-93. R
W.O. of Pro 412 W d 2.2-93
W.O. of Pro ~~[illegible]~~ 821 D d 24.10.91
[illegible] (93) —
see inside

E. I. Form No. 13.—2,000—14-4-93.

ISSUE CASE.

1893.

Chief Engineer for Irrigation.

To

THE Supg. Engineer 2nd Circle II

No. 191 KS dated 17-11 1893.

(Reply to letter No. 1867 KS dated 6.11. 1893.)

Subject:— Manginapudi Salt Canal — Requests to be informed as to the necessity of providing slopes 1:3 for the —

ENCLOSURE.

SCB

Please say what is to be done with the enclosures received with PWCn No. 9532/93

Pr 18/11/93

Should be kept with the file until S Engr replies to this reference

[illegible]
18/11/93

Ptd G.O. 769 d 17-4-79.
do 226 d 11-2-79
do 428 d 29.11.78
do 2081 d 6.8-77 (Bo G.O. 130 W d 15/8/77)
Rev G.O. 1423 d 14.4.77 (Bo G.O. 290 d 25/4/77)
W.O. of G.O. 21 d 3-8-76 (B)
Rev G.O. 36 d 11-1-76.
W.O. of G.O. 120 d 15-1-76 (B)
G.O. 3062 d 16.11.76
G.O. 3428 d 3-12-75.
Rev G.O. 43 d 11.1.75.
Ofl. ~~W.O.~~ G.O. 4403 W d 19.11.78
W.O. of G.O. 3769 W d 25.9.78
G.O. 3230 d 24.11.92
W.O. ~~of~~ No. 1360 C d 14-3-92 with file.

E. I. Form No. 29.

G.E. 4/12/93

FORMER CASES.

R. No. 810. W dated 26-9-1893.
R. " 652 W " 28-7-1893.
R. " 99. W " 26-1-1892.

Receipt No. 254½ Ks

Dated 16-11-1893.

LATER CASES.

I. No. 191 Ks dated 17-11-1893.
R. " 263 Ks " 24-11-1893.
I. " 193 I " 30-11-1893.

R. 278 Ks d 5.12.93
R 4 Ks d 2.1.94

Sent to Government with No. 94/93 I. of 30-11-1893.

Printed with G.O., No R 170 Ks d 3-1-94 dated 189

Receipt No. 254½ Ks

From The Supg. Engr 2nd Circle.

thro E.W. No. 3779 C d 15-11-93

No. 1867 Ks

Dated 6-11-1893.

(for ~~Reply to E. I.'s Memo~~ G.O. No. 71 I, dated 26.1.1892)

Subject— Manyamapundi salt-Canal - Subg plans & estes of Rs 61,500 for —.

REMINDERS RECEIVED.

No. 1, dated 189
" 2 " "
" 3 " "
" 4 " "
" 5 " "

KEEP-WITHS.

ENCLOSURES.

From to
" "
" "
" "

Orders and Proceedings in File.

No.	Date.	No.	Date.

Superintending Engineer's Office,

No. 1867 R.S.

II CIRCLE,

Dated 6th Novr. 1893.

From,

J. W. Martin Esquire,
Superintending Engineer,
II Circle.

To,

The Chief Engineer
for Irrigation
Madras,

Through The Chief Engineer
P.W. Department
Madras.

Enclosures: 16

6. Abst. Estimates
1. Class. Abst.
1. Data Sheet
3. Tracings
2. Surveys
1. Longl. Section
2. Cross Sections

16

Sir,

Adverting to G. O. No. 71 I. d/ 26th January 1892 in the matter of submitting plans and estimates for a navigable Canal from the Masulipatam to the Manginapudi Salt Factory I have the honor to forward the plans noted on the margin together with an estimate amounting to Rs 61,500 for a fresh water Canal starting from a short distance above the basin of the Masulipatam Canal at Masulipatam. The line now proposed is almost similar to the line proposed in 1864 by the late Col. J. C. Anderson, R.E.

2. In G.O. 24th October 1891 No. 821 I the relative cost and merits of a fresh and salt water Canal are discussed, and the conclusion arrived at is, that a salt water Canal would be cheaper and more useful than a fresh water one. I find, however, that it will cost less to make a fresh water canal than a salt water one; and the Assistant Commissioner of Salt and Abkari Revenue informed me, when we inspected the line for the Canal, that he would prefer a fresh water canal instead of a salt water **one**.

3. The Canal I propose will start from a short distance above the basin at Masulipatam, cross the Hyderabad Road, for which a bridge is provided, and then will run straight to Manginapudi with the exception of three gentle bends, the total length being **8 miles 17 chs.** The bottom will be 17 feet wide, bed level throughout +0.07, and side slopes 3 to 1 the soil being sandy except for the last mile where the soil is clay and the slopes for this mile are reduced, therefore, to $1\frac{1}{2}$ to 1.

4.

4. The bridge over the Canal at the crossing of the Hyderabad Road will be 20 feet span and 15 feet roadway with approaches on each side having a slope of 1 in 20. The headway between the surface of water and bottom of girder will be 11 ft, the usual headway allowed for bridges over canals. Regarding cross drainage, some drainage crosses, at the Hyderabad Road, the line for Canal. For the disposal of this a tunnel is provided for taking some of the drainage across the road replacing an existing tunnel which is not large enough and an under-tunnel is provided for carrying the water under the Canal; and further on at 1 m. 2 fur. another undertunnel is provided but beyond 1 m. 2 fur. no masonry works for the disposal of cross drainage will be required, as only very little drainage crosses the line and it may be allowed to pass into and out of the Canal over the natural surface of the ground as the F. S. L. is practically the same as the existing level of the surface of the ground.

5.

2. In [illegible]

5. At 1m 6f the Canal will cross a village road. For the use of the traffic on this road a bullacut is provided in the estimate, and another bullacut is provided for use near the salt-factory to allow bandies &c to cross the Canal and enter the factory when required.

6. With regard to Compensation for land, the estimate provides for taking up 129 acres, and from information furnished by the Tahasildar, I do not think the average rate per acre will exceed Rs 50. So the amount required for compensation will not, I believe, be much over Rs 6,450 - the sum provided in the Estimate. However, I have already forwarded land plans to the Collector and asked him to let me know how much will be required for compensation.

7. Regarding the cost of a salt water canal, I have had an estimate of the quantity of earthwork required with bed level - 3.80 bottom width 17ft and side slopes 3 to 1. The quantity works out to 17,100 units against 10,471 units of earthwork required for a fresh water Canal.

Applying

Applying a rate of Rs 3/- per unit, the cost of Earthwork for the former is Rs 51,300 against Rs 31,413 for the latter. I am, however doubtful whether a rate of Rs 3/- per unit would be sufficient for the salt water canal as owing to bed level being - 3.80' it is certain the soil is wet, and the lift would be higher than in the case of a fresh water Canal. Moreover it is doubtful whether a lock would not be required at the entrance to the salt water canal to prevent daily erosion by the rise and fall of tide. A lock would cost, I think [illegible] Rs 24,000, this being about the cost of a lock on the Buckingham Canal, but in any case a bridge should be provided as the Canal would cross the road leading to rather a large fishing village; there would not be much saving in the matter of disposing of cross drainage, for it would be necessary to specially arrange for the disposal of the drainage between the canal and the Eastern dyke ~~Co~~ bank put up to keep out a tidal waves.

8. With regard to the relative Cost

cost of upkeep of a fresh water and salt water Canal, experience shows that silt is not deposited in the last reach which is practically a still water reach of the Masulipatam Canal so unless the sides of the fresh water canal slip down, it will cost very little to maintain this canal; on the other hand we know that in the case of the Buckingham Canal, it costs a good deal to remove silt. In these circumstances, it seems probable it would cost less to maintain a fresh water than a salt water Canal. I think, therefore, that so far as expense is concerned, a fresh water Canal is preferable to a salt water one.

9. As regards the merits of the usefulness of the two kinds of Canal, I understood from the Assistant Commissioner that he preferred a fresh water Canal as (1) it would bring a supply of fresh water to the Salt factory; (2) be a shorter line for boats travelling up the Masulipatam Canal; and (3) time would not be lost by passing through the tidal lock. With regard to its being necessary to close every year the fresh water Canal for 3 months, the Assistant Commissioner said he did not consider this an objection as all the Canals are closed during the hot weather, so in any case a canal would be of no use during the closure of the Canals except between Masulipatam and Manginapudi.

10. With regard to extension of irrigation this point has not been raised heretofore but I think it is highly probable that some land will be taken up if a fresh water Canal be made as a lot of land is available if it can be made suitable for irrigation and I have no doubt but that the ryots will do their best in this direction.

11. The question may be raised that it would be unwise to bring a fresh water Canal to the salt factory as the fresh water might interfere with the manufacture of salt, but I do not think this matter need be considered, as the level of the subsoil water along the line proposed for the fresh water canal is not more than about 3.50 below the surface of the ground as will be seen from the trial pits marked on the longitudinal section.

I have the honor to be,
Sir
Your most obedient Servant

No. 6111 Superintending Engr. II

P.W. [illegible] No. 9532

From

The Supdg Engineer
2d Circle

To

The Chief Engineer
for Irrigation
thro Chief Engineer
Public works

PW E3/1046/93

Dated 6-11-93
Rd 10-11-93
Recd 16/9

+ 8 Plans &c
Such separately

No 1867. R.S.

A Navigable Canal
from Masulipatam to
the Salt factory at
Manginapudi - forwards
the - Plans &
Estimates for Rs 61,500

for a 12
To Current No. 3/7

No. 3769W d/25-9-78
" 44030 " 19-11-78
" 151 " 20-1-75
" 3428 " 3-12-75
" 3062 " 16-11-76
" 182 " 10-1-76
" 126 " 15-1-76
" 21 " 3-8-76
" 290 " 25-4-77
" 130W " 15-8-77

From, " 2128 " 29-11-78 Fml
" 226 " 11-2-79 "
The Superintending Engineer,
" 719 " 17-4-79
II Circle.
" 3959 " 21-8-89

To, " 2339 " 16-4-90
" The 439 " 15-1-91
" 8219 " 24-10-91
" 3230-1W " 24-11 92
" 5380C " 1-12-91
" 1310C " 14-3-92
" 719 " 26-1-92
" 799 " 1-2-92

Dated
" 9469 " 12-11-92 } 18
Received " 242W " 2-2-93 }
" 1973W " 28-7-93
" 540D " 8-7-93
" 545D " 10-7-93
" 699D " 15-8-93
Enclosures.
" 2475W " 26-9-93
NO.
" 2929W " 14-11-93

R 15 6½

SUBJECT.

No. 3790C d/15th November 1893

To
E.I.

For favour of disposal with reference to G.O. No. 2475W d/26th September 1893, under which the work is to be classed under "43 - Minor works & Navigation."

OW 545/ ue 16/93

D
15/11 EW.

with complete file.

No. 3769 W d/25-9-78

II

No. 191 K.S.

Memo:

Letter no 1867 K.S. d/ 6. 11. 93 from the Supg Engineer. Second Circle.

—

The undersigned has the honor to request to be informed as to the necessity of providing slopes 1:3 for the Manginapudi Salt Canal. It is thought that slopes of 1:1½ which would provide sufficient water surface for two boats to pass would be preferable on the score of economy.

Rivett
17/11
93

Pl E x47
~~1867~~ KS
24/6/98

1894.
REVENUE DEPARTMENT.
Enclosure No. 14
377

No. $\frac{\text{II}}{191 \text{ KS}}$ d/ 17.11.93
Letter No. 1867 KS d/ 6-11-93

Forwd to S. E. II ~~[illegible]~~
for the information
& the needful

Requests to be informed as to the necessity of providing slopes of 1:3 for the Manginapudi Salt Canals. It is thought that slopes of 1:1½ which would provide sufficient water surface for two boats to pass would be preferable on the score of economy.

Rueds 16/4

II

No 2008 K.S. d/ 30-11-93

Memo:

The Estimates forwarded with letter, No. 1867 K.S., d/ 6 Nov/93, from the Supg Engr. II Circle, have been recommended for the sanction of Govt under "Provincial 43 Minor Works for which written Capital nor Revenue Accts are kept, P.W.D." The Supg Engr. is requested to be so good as to report, as soon as possible, what amount should be provided for the work in the ensuing year's budget Estimates for "Minor Works & Navign."

Rucci
30/11/93

To the S.E. II
[illegible] B.R.

377

CURRENT No. 1039

4

REVENUE SECRETARIAT.

OFFICE NOTE.

Station Fort St. George date 7th February 1894.

From

The Secretary Rev. Dept.

To

Recd: 10·2·94
Encls P.W. C.L. 10467/2 3d file.

The Secretary P. W. Dept.

With reference to the draft order sanctioning the construction of a navigable canal from the Manginapudi Salt factory forwarded for counter-initials and herewith returned, the undersigned has the honor to enquire whether there is any prospect of the Railway being extended to Masulipatam in the immediate future. The draft order cannot be counter-initiall

until

Ws 19/2

until the question of substituting a fresh water canal for a tidal canal is finally decided

Secretary to Government.

To R. No 33 d/12-2-94

Please furnish the information required regarding the Bezwada-Masulipatam Railway.

12/2

"9"

12/2 94

No 711 C d/17th February 1894

To I.

So far as is known in this Office, there is no prospect of the railway being extended to Masulipatam in the immediate future

A.C.G.S.

D.R.
16/2/94.

GOVT. OF MADRAS. } 1894. { P. W. DEPT

CHIEF ENGINEER FOR IRRIGATION.

Madras, ~~20~~ 22nd February 1894.

OFFICE NOTE No. 8190

Circulation Register.

To	From	Despatch Date.	Receipt Date.
Secretary to Govt. Revenue Dept.	Joint Secretary to Govt. P.W.D. Irrigation Branch.		

Your Office note No 4 dated 7th February 1894

The Consulting Engineer for Railways, Madras, states that so far as is known in his Office there is no prospect of the railway being extended to Masulipatam in the immediate future.

2. The disposal of the Estimate for a fresh water canal between Masulipatam and Manginapudi will be deferred until the question of substituting it for a tidal canal is decided

in your department.

Wh
20/2

Recd
"J"
20/2

B.R.
20-2-94.

[illegible]
24/6/99

E. I. Form No. 22—2,000—21-4-93.

KEEP-WITH.

No. , dated 189 .

No. 819 Cd/22nd Februa

189