(1) Number of pages 20

(2) Date of repair 6/12/39

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Financial **DEPARTMENT.**

G.O. No. 586 Press / Mis.

321-322.

Dated 29-4- 1872.

19/20

Not to be folded or roughly handled

Proceedings of the Madras Government, Financial Department, 29th April 1872.

No. 321. Read the following letter from W. M. CADELL, Esq., Officiating President of the Municipal Commission, Mannargudi, to the Chief Secretary to Government, Fort St. George, dated Vallam, 30th January 1872, No. 17:—

With advertence to paragraph 5 of the Orders of Government of the 13th June last passing orders on the estimates of the Mannargudi Municipality, I have the honour, herewith, to submit a report* from Captain Oakes, the Superintending Engineer, regarding the project for the water-supply of that town. From this it will be seen that a further sum of Rupees 16,650 is still required to complete the works already begun. This sum, however, does not include anything for compensation for lands taken up by the channel, or for any bridges over it which may eventually be required.

* Plan and estimate sent separately.

2. Captain Oakes' report is so full and comprehensive that it seems unnecessary for me to say more. The Vadavar has its head in the Vennar near the Cachamangalam Anicut, and of late years its supply has been much improved; but the period between January and the middle of June is just that time of year in which the supply of water is low and the freshes uncertain; care will, therefore, have to be taken to take advantage of the freshes which occur before this period to store as much water as the tanks are capable of receiving.

From Captain R. F. OAKES, R. E., Superintending Engineer, 6th Division, to the Vice-President of the Mannargudi Municipality, dated Tanjore, 19th September 1871, No. 552.

With reference to your letter, No. 7, dated 30th May, I have the honour to inform you that, after a careful inspection of the channel from the Vadavar for the supply of the tanks in Mannargudi, I am of opinion that the tanks may be supplied by that channel if the alterations, &c., provided for in the enclosed revised estimate are carried out; but supplied as the Vadavar is, and dependent in a great degree, as it is, on local drainage and hence on local rainfall, the supply from the Vadavar must be more or less precarious and but little water will probably be obtainable from it between January and about the middle of June, and hence great care will have to be taken to fill the tanks during the north-east monsoon and to take advantage of any supply which may come down the Vadavar in December and January or at any subsequent period, before the freshes again set in in June, to supply those tanks which may most require a further supply, otherwise the tanks will probably run dry in April and May, when water is most required.

2. The great defects in execution of the channel already dug are—first, that the fall of the channel is not uniform, and second, that in some places the channel was to be carried between high embankments above the level of the country. The result would have been that the channel would have been breached the first time water was let into it, and no water would probably have found its way so far to the eastward as Mannargudi.

3. In the revised estimate the main and branch channels have for the most part been provided with a fall of one foot per mile, and a series of drops have been provided to overcome the fall of 34 feet 7½ inches in 11·6 miles. The bed of the new channel for the most part falls below the bed of the channel already excavated. Only for a distance of 6060 feet is the bed of the new channel above that of the channel originally proposed, and here the bed will become silted up to its proper level if the new channel is excavated, as shown by the green line on the section.

From 11,100 feet to $\frac{17,160.}{6060}$

4. As the excavation provided for in the original estimate amounted to Rupees 8,045, while the cost of work executed, according to Mr. Lawford's measurement, was Rupees 7,119-2-2, the work has evidently not been fully

Your letter No. 7, 30th May.

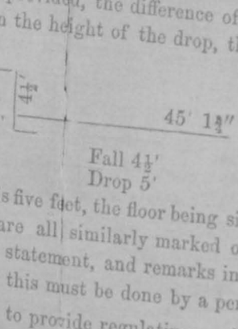
carried out, and hence, in preparing the revised estimate, it has been necessary to provide for the excavation of the channel *de novo* and to deduct from it the value of work done, which will form a part of the new channel. The deductions to be made are not 113,906⅓ cubic yards, or the quantity of work done according to Mr. Lawford's measurements; but from that amount the items noted in the margin must be deducted, as the work done is not required or does not form a part of the new channel, and hence Rupees 4,340 have been deducted at the foot of the revised estimate.

Rs.	A.	P.
7,119	2	2
2,779	2	2
4,340	0	0

For embankment.

	Rs.	A.	P.
Vide original estimate ...	2,378	11	7
For No. 4 Channel ...	200	6	5
Approximate quantity in main channel from 11,160 to 17,160	200	0	2
Total ...	2,779	2	2

5. In the enclosed sections and in Statement A the levels of all the masonry works are given, and these must be most carefully fixed before the excavation of the channels is commenced. The level of the bed of the channel and the depth of excavation is shown in black figures on the original sections, and it will be observed that the floors of the masonry works are for the most part six inches lower than the bed of the channel at the sites of the masonry works; this is to allow for the tendency of masonry works to cause a lowering of the bed of channels immediately below their sites and to prevent the floors of the tunnels from affording an obstruction and acting the part of dams; hence, when a drop is provided, the difference of level of the channel-bed above and below the drop is six inches less than the height of the drop, thus in the



nel bed above and below the drop is 4½ feet while the drop or wall is five feet, the floor being six inches below the level of the bed of the channel. The drops and fall are all similarly marked on the sections, and, from the information afforded on the plan, sections, statement, and remarks in the estimate, there ought to be no difficulty in laying of the work; but this must be done by a person who can level correctly.

6. It has not been deemed necessary to provide regulating works at the points of separation of all the branches for the drops below the points of separation in a channel with so small a fall as one foot per mile can be made to answer the purpose of regulators: thus there is no masonry work at the head of branch No. 1, but at 400 yards below No. 1 is a drop of five feet three inches the main channel, and by closing the vent in this drop all the water may be diverted to No. 1 branch.

7. The sections provided for the channels vary in accordance with the quantities of water to be carried by them, due regard being had to the time in which it may be found desirable to fill any tank or series of tanks; thus the section of the main channel, viz., four at bottom with slopes of two

66,500 cubic yards.

to one is given to No. 1 branch, because more than half the

9,18,606

quantity of water to be supplied to Mannargudi is required for the Haridranadh Tank, the last of the series under No. 1, and by No. 1 and its branches nearly three-fourths of the supply received is to be distributed, and hence it may often be desirable to divert the full supply received down No. 1. The section to be given to each channel, or portion of channel, is shown at the head of the estimate for that channel or portion.

8. The only point at which the main channel bed is above the level of the country is near its

From 56,600 to 57,200.

tail near the Gopalayam Tank. The quantity of water to be there carried is, however, small, and, as the embankment already formed is very heavy, it is probable that there will be no danger of breaching; if, however, much percolation takes place, it may be necessary to form an artificial padugay to the channel. Near this portion of the channel the fall of the country is from south to north, and, if it is found that the new channel obstructs drainage, means will have to be provided for receiving or passing the drainage across

the channel. Near Carakotta, in the 3rd, 4th, and 5th miles, it may be necessary to provide for the receipt or passage of drainage from the north of the channel. The area drained in both cases, however, appears to be small and the soil such as will absorb a large quantity of water, and hence it must be ascertained from actual experience what, if any, provision should be made for the drainage adverted to.

9. At 47,748 feet a small channel crosses the main channel. It was stated by some to be a drainage and by others to be a supply-channel; it probably drains land to the north and supplies land to the south of the channel. The difference of level of the two channels is only one foot, and the fall south of the new channel is considerable, and hence a small head-sluice may be provided for this channel, or an open dam similar to No. 12, if it is found that the water brought down by the surplus channel is required for the supply of lands to the south of the channel.

10. Great care must be taken to place the levels of the floors of the sluices in the sides of the tanks correctly. These have been fixed so as to secure a supply for the lower tanks rapidly and before the water rises to its full height in the feeding tank; the lower tanks, therefore, are not dependent only on the surplus water of the tanks above. To make the most of the supply when received, considerable intelligence and care will be necessary in the distribution of the water, and no opportunity of obtaining water from other sources should be lost: thus the Haridranadhi Tank should obtain a supply from the Pamaneyar (as it now does) when that river is in flood, and from the Moovanalloor Tank when water can be spared from that tank.

11. In the revised estimate no provision is made for the supply of tanks noted in the margin. For the supply of Saccarakolum three drops and five road-tunnels are required in a distance of 1262 feet, and this for a tank which can hold only 13,612 cubic yards of water. The tank is in bad order, and would probably now not be able to retain the water received unless the adjacent ground were thoroughly saturated, and at such times the tank would receive a supply from the circumjacent lands without any aid from the new channel. The Strinivassenkolum Tank, it is believed, receives an ample supply from the drainage of the neighbouring streets, and that no extra supply is necessary; it appears to have no means of passing off surplus water except by flooding the neighbouring streets. If it be deemed advisable hereafter to supply this tank from No. 1, a small vent may be provided in the channel bank with the deep drop, as the bed of the channel is considerably below the level of the channel-bed adjacent to it.

1. Saccarakolum, from No. 4.
2. Strinivassenkolum, ,, 1.
3. Sengullai, and
4. Jeyar from No 2.

6880 cubic yards.

The Singatta Pond may be supplied by a pot-sluice from No. 2, if necessary, from just above drop No. 18; but it is probable the tank now receives sufficient supply from the local drainage, and provisions may perhaps have to be made to pass off any surplus into the new channel. The bed of the Jeyar Tank is six-and-a-half feet below the bed of the channel below drop No. 18, and it may be supplied from the channel if necessary; but at present it would appear to receive the drainage of a large area.

32,400.

12. If it is found hereafter that the tanks mentioned above can receive a supply from January to June from the new channel from the Vadavar, it will be easy to provide means for their supply; but, as far as can be judged at present, that channel will be able to supply them just at the time when no supply is required, when it is desirable to get rid of surplus water, and will not be able to afford any supply in the dry month, when, even if a supply were received, it would probably soon be exhausted by percolation or absorption and by evaporation.

2, 3, and 4.

13. Branch No. 5 has not been excavated altogether, as shown in the plan. The deviations are somewhat as shown in pencil, and instead of passing through Annacharry Tank the line has been cut as at X, Y, Z. The channel may be taken along the margin of Annacharry Tank on its west side or through the garden above it. The latter course will involve heavy cutting.

14. While passing along the line of channel, several applications for the value of land taken up by the channel were made by the villagers. No provision has, however, been made in the estimate for compensation for land.

15. On the plan, the position of ra… ps for crossing the channel where necessary is shown. These as well as the raising of the approa… hes to the tunnels have not been provided for separately, but may be covered by the items allowed … r sundries.

—

NCLOSURES.

1 Survey.
2 Sections.
16 Plans of masc…
3 Estimates. …ry works.
1 General Abst…
1 Statement. …ct of do.

—

No. 322. ORDER THEREO…

…, 29th April 1872, No. 586.

With this letter Mr. Cadell s… omits for orders Captain Oakes' report on the scheme for supplying water to the … own of Mannargudi.

2. Captain Oakes estimates th… cost of the project at Rupees 21,000. Of the sum already expended by the Com… issioners, Rupees 7,119, work for only Rupees 4,310 is capable of being utilized, … caving a balance of Rupees 16,660, besides the cost of compensation for land take… up. He considers the project feasible, but is of opinion that the supply will be … ecarious, and that it will be difficult to keep the tanks supplied in the hot months, … hen water is especially wanted.

3. The Government understa… d that the Vadavar Channel is a high-level one which receives supply from the … er only during high freshes. It is mainly dependent on the drainage of an ar… of about 100 square miles, which it receives just above the town of Tanjore. … t only, therefore, is the supply very precarious, but the water, not being river-w… r, is not of the most desirable kind. The gathering grounds, however, have … terite soil, and the water is probably good. The difficulty will be to get a full s… pply in the end of October, from which time till June no water will pass down … e channel. If this supply s obtained, it will be ample. The tanks can hold 21… 530,000 gallons. Allowing one-third for loss by evaporation, and taking the pop… ation at 20,000, there would be 33·74 gallons per head per diem for seven months … Fifteen gallons per head is usually considered sufficient.

4. The compensation for lar… will probably not exceed Rupees 1,000, so that roughly Rupees 18,000 will be … uired to complete the channel. When completed, Rupees 700 per annum, re… esenting at five per cent. a capital of Rupees 14,000, will be wanted for mainten… ce. Thus the liability involved in the prosecution of the scheme will be about … pees 32,000. The income of the Municipality is only Rupees 24,000, and all the … st important taxes are already levied.

5. The opinion of the Commissioners as to the advisability of prosecuting the work does not seem to have been recorded. The Government direct that Captain Oakes' report be communicated to th… m with this Order, and that they be desired to weigh carefully the merits of the … heme, and whether it is possible and advisable

to attempt the completion of it from Municipal funds. It is obviously necessary that the work if prosecuted should be carried out by the Public Works Department.

(True Extract.)

W. HUDLESTON,
Officiating Chief Secretary.

To the President of the Municipal Commission, Mannargudi,
,, Public Works Department. with four enclosures and one plan returned.
,, Board … venue.

Exd. A. S. Rodgers.

Govt. of Madras.

FINANCIAL.

To

THE PRESIDENT OF THE MUNICIPAL COMMISSION, Mannargudi, &c., &c., &c.

Dated April, 29th.

Read.

Ditto.

G. O., 29th April 1872, No. 586.

APRIL.
Nos. 321-322.

Passing orders on Captain Oakes' report on the scheme for supplying water to the town of Mannargudi.

No. 17

321

President's Office
Vellam, 30th January 1872

From

W. M. Cadell Esqr.
Offg. President, Municipal
Commission
Mannargudi

To

The Honble R. S. Ellis C. B.
Chief Secretary to Government
Public Department
Fort Saint George

Sir,

With adverteence to para 5 of the Orders of Government of the 13th June last, passing orders on the Estimates of the Mannargudi Municipality, I have the honor herewith to submit a report from Captain Oakes, the Superintending Engineer, regarding the project for the water supply of that town; from this it will be seen, that a further sum of Rupees 16,650 is still required to Complete the works already begun. This sum, however does not include any thing for Compensation

× Plan & Estimate sent Separately.

for

the

for lands taken up by the Channel
or for any bridges over it which
may eventually be required -

2 Captain Oakes' report is so
full and comprehensive that it seems
unnecessary for me to say more; the
Vadavar has its head in the Vemár
near the Cachamangalam Anicut and
of late years its supply has been
much improved, but the period between
January and the middle of June is
just that time of year in which the
supply of water is low and the freshes
uncertain; Care will therefore have to be
taken to take advantage of the freshes
which occur before this period to store as
much water as the tanks are capable of receiving -

I have the honor to be
Sir
Your most obedient servant

W. M. Ballantine

Offg President

9 3

the

Superintending Engineer's Office
No 552. Sayani 19th September 1871

To.

The Vice President
Mamargudi Municipality

Sir,

With reference to your letter No 7 dated 30th May. I have the honor to inform you that after a careful inspection of the Channel from the Vadavar for the supply of the Tanks in Mamargudi, I am of opinion that the Tanks may be supplied by that Channel if the alterations &c provided for in the enclosed Revised Estimate are carried out; but supplied as the Vadavar is and dependent in a great degree as it is on local drainage and hence on local rainfall, the supply from the Vadavar must be more or less precarious and but little water will probably be obtainable from it between January and about the middle of June; and hence great care will have to be taken to fill the Tanks during the

Public Works Dept. No. 2503-60
26.7.32

Public Works Department
Simla

The Offg. Superintending Engineer
Municipal Commissioner
Mamarguda

The Chief Secretary
to Government
Fort St. George

No. 586 dated 30th January 1872

Received 2nd February 1872

Forwarding Estimate
Sending Engineer's letter
regarding the proposed
for the water supply of
the Mamarguda Municipality

No 223

Enclosures returned
1 Plan.

c. 9/3/72
Recd 5/2/72
521.

the north east monsoon and to take
advantage of any supply which
may come down the Vadavar in
December and January or at any
subsequent period before the freshes
again set in in June, to supply those
tanks which may most require a
further supply, otherwise the tanks
will probably run dry in April
and may when water is most required.

2. The great defects in Execution of
the channel already dug are, 1st
that the fall of the channel is not
uniform and 2nd that in some places
the channel was to be carried between
high Embankments above the level
of the Country. The result would
have been that the channel would
have been breached the first time
water was let into it and no
water would probably have found
its way so far to the eastward
as Mamargudi

3. In the revised Estimate, the
main and branch channels have,
for the most part, been provided
with a fall of 1 foot per mile
and a series of drops have been
provided to overcome the fall of
34' 7½" in 11.6 miles. The bed of
the new channel, for the most part,
falls below the bed of the channel
already Excavated, only for a dis-
tance of 6,060 feet is the bed of the
new channel above that of the
channel originally proposed, and
here the bed will become silted
up to its proper level if the new
channel is Excavated as shewn by
the green line on the section.

From 11,100 feet to 17,160 / 6060

4. As the Excavation provided for
in the original Estimate amounted
to Rupees 8,046 while the cost of work
Executed according to Mr Lawford's
measurment was Rupees 7119-2-2
the work has evidently not been fully
carried out and hence in preparing
the revised Estimate it has been
necessary to provide for the excavation of

your letter
no 7, 30th May

of the channel dr. nova and to deduct
from it the value of work done
which will form a part of the new
channel. The deductions to be made Rupees 2779. 2-2
are not 11,390⅔ Cubic yards or the quan- 2779 2-2
=tity of work done according to Mr. 4,240-0-0
Lawford's measurements, but from
that amount the items noted in
For Embankment
Vide original Estimate Rs 2373-11-7 the margin
For new Channel 200-6-5 must be deduct
Approximate quan- } =ed as the work
=tity in main chan- } done is not
=nel from 11,00 to 17,160 } 200-2-2 required or
2779. 2-2 does not form
a part of the new channel and hence
Rupees 4,240 have been deducted at
the foot of the revised estimate.
5 In the enclosed sections and in
statement A the levels of all the ma-
=sonry works are given and these
must be most carefully fixed before
the excavation of the channels is
commenced the level of the bed
of the channel and the depth of
excavation is shown in black figures

on the original sections and it will be
observed that the floors of the ma-
=sonry works are for the most part
6" lower than the bed of the channel
at the sites of the masonry works, this
is to allow for the tendency of ma-
sonry works to cause a lowering of
the bed of channels immediately
below their sites and to prevent the
floors of the tunnels from affording
an obstruction and acting the part
of dams when a drop is
provided the difference of level
of the channel bed above and
below the drop is 6" less than the
height of the Drop there in the 1st
drop at 9,680, 45' 7¾"
is 1'-0" the fall or difference 1'-0" 45' 1¾"
of level between the chan- 7¼
=nel bed above and below drop 5 Fall 4½
the drop is 4½' while the drop or wall
is 5' the floor being 6" below the level
of the bed of the channel. The drops
and falls are all similarly marked
on the sections and from the infor-
=mation afforded on the Plan, sections,
statement

statement and remarks in the Estimate there ought to be no difficulty in laying of the work; but this must be done by a person who can level correctly.

6— It has not been deemed necessary to provide regulating works at the points of separation in a channel with so small a fall as 1 per mile can be made to answer the purpose of regulators— thus there is no masonry work at the head of branch No 1 but at 400 yards below not is a drop of 0' 3" the main channel, and by closing the vent in this drop all the water may be diverted to No 1 branch.

7. The sections provided for the channels vary in accordance with the quantities of water to be carried by them, due regard being had to the time in which it may be found desirable to fill any tank or series of tanks, thus the section of the main channel viz 4 at bottom with slopes of 2 to 1

66,500 Cubic Yards.

is given to No 1 branch, because more than ½ the quantity of water to be supplied to Mannargudi is required for the Nandrawadi tank, the last of the series under No 1 and by No 1 and its branches nearly ¾ of the supply received is to be distributed and hence, it may often be desirable to divert the full supply received down No 1. The section to be given to each channel or portion of channel is shewn at the head of the Estimate for that channel or portion.

9,8,606

8. The only point at which the main channel bed is above the level of the country is near its tail near the Gopalayam tank— the quantity of water to be there carried is, however, small and as the embankment already formed is very heavy it is probable that there will be no danger of breaching— if, however, much percolation takes place it may be necessary

From 56,000 to 57,200

to

to form an artificial Paduguay to the channel: near this portion of the channel the fall of the country is from South to north and if it is found that the new channel obstructs drainage, means will have to be provided for receiving or passing the drainage across the channel-near Cajatolla in the 3d. 4th and 5th. miles it may be necessary to provide for the receipt or passage of drainage from the north of the channel, the area drained in both cases, however appears to be small and the soil such as will absorb a large quantity of water and hence it must be ascertained from actual experience what, if any, provision should be made for the drainage adverted to.

9. At 47,748 feet a small channel crosses the main channel. It was stated by some to be a drainage

and

and by others to be a supply channel, it probably drains land to the north and supplies land to the south of the channel, the difference of level of the 2 channels is only 1 foot and the fall south of the new channel is considerable and hence a small head sluice may be provided for this channel or an open Dam similar to no 12, if it is found that the water brought down by the surplus channel is required for the supply of lands to the south of the channel.

10. Great care must be taken to place the levels of the floors of the sluices in the sides of the tanks correctly - these have been fixed so as to secure a supply for the lower tanks rapidly and before the water rises to its full height in the feeding tank - the lower tanks, therefore, are not dependent only on the surplus water of the tanks

above

above. To make the most of the supply when received, considerable intelligence and care will be necessary in the distribution of the water and no opportunity of obtaining water from other sources should be lost— thus the Haridranadhi tank should obtain a supply from the Pamanyar (as it now does) when that river is in flood and from the Moovanallur tank when water can be spared from that tank.

11. In the revised Estimate, no provision is made for the supply of tanks noted in the margin.

1. Saccarakolum from no 4.
2. Strinivassen Kolem no 1
3 Sengullai
4 and Jeyar from no 2.

for the supply of Sackiarkolum 3 drops and 5 Road Tunnels are required in a distance of 1262 feet and this for a tank which can hold only 13612 Cubic yards of water.

The

The tank is in bad order and would probably now not be able to retain the water received unless the adjacent ground were thoroughly saturated and at each time the tank would receive a supply from the circumjacent lands without any aid from the new channel. The Strinivassen Kolum Tank it is believed receives an ample supply from the drainage of the neighbouring streets and that no extra supply is necessary. It appears to have no means of passing off surplus water except by flooding the neighbouring streets if it be deemed advisable hereafter to supply this tank from no 1, a small Vent may be provided in the Channel bank with a deep drop as the bed of the channel is considerably below the level of the channel bed adjacent to it. The Sengatta pond

6880 Cubic yards.

may

may be supplied by a pot sluice from no 2 if necessary from just above drop no 18 but it is probable the tank now receives sufficient supply from the local drainage and provisions may perhaps have to be made to pass off any surplus into the new channel. The bed of the Jeyar tank is 6½ feet below the bed of the channel below drop no 18 and it may be supplied from the channel if necessary, but at present it would appear to receive the drainage of a large area. 32,400

12. If it is found hereafter that the tanks mentioned above can receive a supply from January to June from the new channel from the Vadavar it will be easy to provide means for their supply but as far as can be judged at present, that channel will be able to supply them just at the 2, 3 and 4

the time when no supply is required when it is desirable to get rid of surplus water, and will not be able to afford any supply in the dry months, when, even if a supply were received, it would probably soon be exhausted by percolation or absorption and by evaporation.

13. Branch No 5 has not been excavated altogether as shewn in the plan the deviations are somewhat as shewn in pencil and instead of passing through Annacherry tank the line has been cut as at X. Y. Z. the channel may be taken along the margin of annacherry tank on its west side or through the garden above it, the latter course will involve heavy cutting.

14. While passing along the line of channel several applications for the value of land taken up by the channel were made by the villagers, no provision has however been made in the

Estimate

Estimate for compensation for lands.

15. On the Plan, the position of Ramps for crossing the channel where necessary, is shewn, these as well as the raising of the approaches to the Tunnels have not been provided for separately but may be covered by the items allowed for embrics.

Enclosures

1 Survey
2 Sections
16 Plans of masonry works
3 Estimates
1 General Abstract of Do
1 Statement.

I have &c.
(signed) R. F. Oakes Captain R.E.
Superintending Engineer
6th Division

(True Copy).
(signed) Y. Alagasingam Mudliar
Vice President

(True Copy)

W. M. Fredericks
President

19 25 19

20

21 27 21

Financial Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

Read the following letter from the President of the Municipal Commission, Mannargudi, dated 30th January 1872 No. 17.

Order thereon No. 586 - 29th April 1872.

With this letter Mr. Cadell submits for orders Captain Oakes report on the scheme for supplying water to the town of Mannargudi.

2. Captain Oakes estimates the cost of the project at Rs. 21,000. Of the sum already expended by the Commissioners Rs. 7,119 - worth for only Rs. 4,340, is capable of being utilized leaving a balance of Rs. 16,660, besides the cost of compensation for land taken up. He considers the project feasible, but is of opinion that the supply

1872

From

The Offg. President
Municipal Commissioners
Mannargudi

To

The Chief Secretary
to Government
Fort St. George

Dated 30th January 1872
Received
Rs. 17

Offg Chairman states
necessities the supply
for the water supply
of the Municipality
Municipality
No 223/72

supply will be precarious, and that it will be difficult to keep the tanks supplied in the hot months when water is especially wanted.

3. The Government understand that the Vadavar Channel is a high level one which receives supply from the river only during high freshes. It is mainly dependent on the drainage of an area of about 500 square miles, which it receives just above the Town of Tanjore. Not only, therefore is the supply very precarious, but the water, not being river water, is not of the most desirable kind. The gathering grounds however have laterite soil, and the water is probably good. The difficulty will be to get a full supply in the rud[illegible] other, from which time water will pass [illegible] If this

supply is obtained it will be ample. The tanks can hold ~~2 1/2 millions of~~ 17,530,000 gallons allowing one-third for loss by evaporation and [illegible] at 20,000, there would be 33.74 gallons per head per diem for seven months. Fifteen gallons per head is usually considered sufficient.

The compensation for land will probably not exceed Rupees 1,000, so that roughly, Rupees 18,000 will be required to complete the channel. When completed, Rs 700 per annum, representing at 5 percent, a capital of Rs 14,000 will be wanted for maintenance. Thus the liability involved in the prosecution of the scheme will be about Rs 32,000. The income of the Municipality is only Rs 24,000, and all the more important

important cases are already levied.

5. The opinions of the Commissioners as to the advisability of prosecuting the work does not seem to have been recorded. The Government direct that Captain Oakes report be communicated to them, with this order, and that they be desired to weigh carefully the merits of the scheme, and whether it is possible and advisable to attempt the completion of it from Municipal funds. It is obviously necessary that the work if prosecuted should be carried out by the Public Works Department.

HG

To President of the Municipal Commissioners Mannargudi with 5 enclosures returned
" Public Works Department. 21
" Board of Revenue. 14

dated 6/5

65-1240

25 31 25

Memo for orders.

Letter from the President of the Municipal Commission Mannargudi, dated 2nd Jany 1872 No 17.

With this letter Mr Cadell submits for orders on Captain Oakes report on the scheme for supplying water to the town of Mannargudi.

2. Captain Oakes estimates the cost of the project at Rs. 21,000. Of the sum already expended by the Commissioners Rs 7119, work for only Rs. 4340, is capable of being utilized leaving a balance of Rs. 16660, besides the cost of compensation for land taken up. He considers the project feasible, but he says that the supply will be precarious, & that it will be difficult to keep the tanks supplied full in the hot months

where

Vide G.O. 13th June 71 Nos 405.

Captain Oakes' report and the papers connected therewith should be communicated to the Commissioners and they should be told that it would appear desirable to proceed with the work.

HG

where water is especially wanted.

3. The question for orders is whether the Commissioners should be allowed to go on with the project.

4. I have asked Captain Oakes opinions & have gathered from him the following additional information

5. The Vadavar Channel is a high level one receives supply from the river only during high freshes. It is mainly dependent on the drainage of an area of about 100 square miles which it receives just above the town of Sanjose. Not only therefore is the supply very precarious, but the water, not being river water, the supply is not of the most desirable kind. The gathering grounds however have laterite soil, and

and the water is probably good. The difficulty will be to get a full supply in the end of October, from which time till June no water will pass down the Channel. If this supply is obtained it will be ample. The tanks can hold 21½ millions of gallons. Allowing one third for loss by evaporation, and taking the population at 20,000, there would be 33.8 gallons per head for Seven months. Fifteen days 45 gallons per head is usually considered sufficient.

6. Captain Oakes estimates that the compensation for land will be about Rs 1000, so that, roughly, Rs 18000 will be required to complete the channel. When completed Rs. 700 per annum, representing at 5 per cent, a capital of

of Rs. 14000 will be wanted for maintenance. Thus the liability involved in the prosecution of the scheme will be about Rs. 32,000. The income of the municipality is only Rs. 24,000, and all the most important taxes are already levied.

7. The opinion of the Commissioners as to the advisability of prosecuting the work, does not seem to have been recorded. The project is so popular & no doubt the Commissioners favor it. It is submitted with reference to Captain Oakes remarks, as to the necessity of skilled agency, that the work if prosecuted should be carried out by the D. P. W.

I think the Commrs. should decide with the information before them.

19/3/72

526 - 18-4-1872

18/11/55 Re 14996 DI 57

Govt. of {1872} Madras.

Financial

To

The Revd. Brumel. Commr.
Nilgiris

Dated Apl. 29 }
Recd. }
1872, No. 536

Nos. 321. 322.

Passing orders on Captain Oakes' report on the Scheme for supplying water to the Town of Nilgiris.

26/7/32
27-2-34 Bill
30