

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Police works DEPARTMENT.

G.O. No. 2184	Press ~~Mis.~~
110-11	
Dated 6-7-1869.	

Not to be folded or roughly handled

102

*Proceedings of the Madras Government, Public Works Department,
6th July 1869*

No. 110. Read the following letter from the Collector of Trichinopoly, to the Secretary to Government, Public Works Department, dated Trichinopoly, 17th June 1869, No. 32.—

As requested by Captain Oakes, I have the honour to forward direct the countersigned estimates for the Cariamankum and Tenapanore under-sluiques.

2. As regards the latter part of Captain Oakes' letter, I beg to state that the Perivelli channel has now been closed two months and three weeks, which would appear sufficient time for carrying out estimates of this nature, more especially as the materials seem to have been ready on the site.

From the Superintending Engineer, 6th Division, to the Secretary to Government, Public Works Department, dated Tanjore, 15th June 1869, No. 347.

I HAVE the honour to enclose plans and estimates for rebuilding the syphon sluices noted in the margin. These sluices pass under the Perivelli channel and drain respectively areas of one and a half and half a square mile, the greater part of which is under wet cultivation, the water eventually finds its way into the Pungoony, an irrigating channel.

2. From Captain Vertue's letter, No. 39, dated 15th May, it will be observed that he undertook these works on emergency, and I received the estimates only on the 18th, and it was then anticipated that the works would be completed on the 20th. I immediately wrote for information relative to the area drained, head of water, &c. &c., and made certain suggestions relative to alterations in the work; however, they arrived too late, and all that I have been able to do is to add the basins above and below the sluices. These, however, cannot be carried out this year, the works in other respects have been completed.

3. The vent of the old Tenapanore sluice was $1\frac{1}{2}$ feet by 1 foot, that given to the new sluice is 3 feet by $2\frac{1}{2}$ feet, this with a head of one foot will admit of the discharge of the rain-fall of nearly three inches over the drainage basin in twenty-four hours, instead of about half an inch as the old sluice allowed. The vents of the Cariamankum tunnel have not been changed, they will admit of the discharge of nearly two inches of rain-fall over the drainage basin in twenty-four hours.

4. The floors are placed sufficiently low to admit of the greatest head of water, or $7\frac{1}{2}$ feet, being counterbalanced by one foot of water in the Perivelli, so there is no prospect of the sluices bursting. The wing-walls I regard as far too slight, and the foundations as unnecessarily massive; however, as the works are completed, and there can be no doubt that much injury and, perhaps, breaches might have resulted had there been any delay in executing the works, I beg that Government will pass the estimates and provide funds for them from the Reserve. If the whole sum cannot be provided from the Reserve, I can only suggest that the works may be provided for later in the year, or from the allotments for Minor New Works under Agricultural, though I am unwilling to surrender any portion of these allotments as there will be a considerable

Tanjore	Rupees 7,500
Trichinopoly	5,500

*Proceedings of the Madras Government, Public Works Department,
6th July 1869.*

demand upon them for masonry works on new roads under G. O., No. 1,378, dated 27th April 1868.

5. Cultivation goes on almost all the year round under the channels which draw their supply from the Agunda Cauvery, west of the Upper Anicut, and hence it is most difficult to execute pairs in those channels, and works in them have for the most part to be carried out on emergency. Some regulation relative to the opening and closing of these channels for repairs is very much required.

From the Executive Engineer, Trichinopoly, to the Superintending Engineer, 5th Division, dated Trichinopoly, 15th May 1869, No. 39.

I HAVE the honour to forward estimates, as per margin, aggregating Rupees 5,440, for demolishing and reconstructing two under-tunnels in connection with the Perivelli channel.

Demolishing and rebuilding				Rs.
Cariamankum Tunnel	..	..	..	2,110
Tenapanore do	..	..	..	2,330
Total				5,440

2. The age of these works is unknown, but they are believed to have been built in the time of the Nawabs.

3. One vent of the Cariamankum tunnel had last year to be blocked up, as the greater part of the Perivelli water was passing through it by sundry gaps.

4. Gaps in the other (Tenapanore) tunnel had been choked up with brushwood by the villagers.

5. On examination a large quantity of brushwood was found in the tunnel.

6. I have myself no doubt that the very defective state of these tunnels is in a great measure owing to a number of breaches which occurred at two separate times last year in the Perivelli.

7. The two-vent tunnel consisted of two vents, respectively four and two feet wide by two and a half feet high.

8. The foundation or flooring varied from $1\frac{1}{2}$ to $1\frac{3}{4}$; in some places, as I personally ascertained, there was no foundation at all, one of the wing-walls had fallen in, and all were very much cracked and damaged.

9. The state of the one-vent tunnel was quite as bad.

10. The foundation throughout was only $1\frac{1}{2}$ feet, composed principally of small water-worn stones, with one, and, in some places, two bricks above.

11. The vent was only $1\frac{1}{2}$ and 1. As the whole required reconstruction, and as it is almost impossible to keep such a small vent from becoming choked, or to clear it where it is so, I judged it prudent to increase the size of the vent to 3 feet by $2\frac{1}{2}$ feet.

12. The state of both tunnels was altogether so bad, and their foundations so insufficient, that I considered it in every way advisable to rebuild them *de novo*, as the failure of such works may be productive of great damage, and the mere examination of them is by no means either a trifling or inexpensive matter.

13. Owing to the Collector keeping the water in the Perivelli till the end of the first week in April, nothing could be done till after that time.

14. Material, however, had been provided beforehand, so that no delay was made in commencing the work after the tunnels had been uncovered and examined.

15. The Overseer promised to have the work completed by 20th instant, but that I consider rather short time; however I feel assured all will be completed by the end of this month, and as a first rate Maistry has the superintendence of this work alone, I am convinced that every thing will be well done.

*Proceedings of the Madras Government, Public Works Department,
6th July 1869.*

No. 111.

ORDER THEREON, 6th July 1869, No. 2,184.

IRRIGATION, No. 7.

Cariamankum	...	...	...	Rs. 3,620
Tenapanore	...	...	...	2,000

THE Government sanction the estimates for reconstructing the under-tunnels for passing the Cariamankum and Tenapanore drainage channels under the Perivelli channel in the Trichinopoly District.

2. These works have for the most part been carried out on emergency, and from the correspondence it appears that they were commenced in April, but that the plans and estimates were not sent to the Superintending Engineer until the 15th May, by which time the reconstruction had been nearly completed. It appears to have been necessary to start the under-tunnels immediately after the closure of the Perivelli, but the Executive Engineer should have furnished Captain Oakes immediately after the examination of the injured tunnels with full particulars of the circumstances of the works and of his proposal with regard to them, and the plans should have followed the preliminary report a few days afterwards.

3. To meet the cost of these works Rupees 6,220 will be allotted from the Reserve under "Agricultural."

(True Extract.)

(Signed) J. MULLINS, Major, R. E.,
Acting Joint Secretary to Government.

To the Collector of Trichinopoly.

- .. Superintending Engineer, 6th Division.
- .. Controller of Public Works Accounts.
- .. Accountant-General
- .. Chief Engineer for Irrigation.
- .. Revenue Department.

Exd. S T. Augustin.

Gort. of 1869 Madras.

PUBLIC WORKS.

To

THE COLLECTOR OF TRICHINOPOLY.

&c., &c., &c.

Dated July 6th

Recd

Enl

G O, 6th July 1869, No. 2,184.

JULY.

Nos. 110-111

Under-tunnels — Estimates amounting to Rupees 6,220 for reconstructing the under-tunnels for passing the Carianikum and Tenapanore drainage channels under the Perivelli channel, in the Trichinopoly District, sanctioned with remarks.

N^o 39

Trichinopoly Co. Eng. Office
15th May 1869

Captain R. P. Baker, R. E.

Superintending Engineer.

Under-tunnels & Rebuilding
Carianikum & Tenapanore
Tunnels Nos 3110
Nos 2330
Nos 5440

I have the honor to forward
Estimates as per margin aggregating Rs 5140
for Demolishing and Reconstructing 2 Under-
Tunnels in connection with the Perivelli
channel. The age of these works is unknown,
but they are believed to have been built in
the time of the Nawabs.

One end of the Carianikum
Tunnel had last year to be blocked up,
as the greater part of the Perivelli water
was passing through it by sundry gaps.

Gaps in the other (Tenapanore
Tunnel) had been choked up with
brushwood by the Villagers.

On examination a large quantity
of brushwood was found in the Tunnel.
I have very much to do that
to the very defective state of these Tunnels.

is a great measure owing to a number
of Breaches which occurred at 2 separate
times last year in the Peowulley.

The 2 Vent Tunnel consisted
of 2 vents, respectively 4 & 2 feet wide by
2 1/2 ft high.

The Foundation or Flooring
varied from 1 1/2 to 2 ft in some places, as
I personally ascertained, there was no foundation
at all; one of the Wing Walls had fallen in
and all were very much cracked & damaged.

The state of the one Vent
Tunnel was quite as bad.

The foundation throughout
was only 1 1/2 ft. composed principally of small
water-worn stones, with one, and in some
places 2 Bricks above.

The Vent was only 1 ft x 1.

As the whole required reconstruction,
and as it is almost impossible to keep
such a small Vent from becoming choked,
or to clear it when it is so, I judged
it prudent to increase the size of the

Vent to 3' x 2 1/2'

The state of both Tunnels was
altogether so bad, and their foundations
so insufficient that I considered it in
every way advisable to rebuild them
de novo, as the failure of such works
may be productive of great damage,
and the more examination of them is
by no means either a trifling or inconse-
-derable matter.

Owing to the Collectors keeping
the water in the Peowulley till the end
of the first week in April, nothing could
be done till after that time.

Material however had been
provided before hand, so that no delay was
made in commencing the work after the
Tunnels had been uncovered and examined.

The Overseer promised to have
the work completed by 20th instant but
that I considered rather short time; —
however I feel assured all will be com-
-pleted by the end of this month, and as a

just rate Ministry has the Superintendence
of this work alone, I am convinced that
every thing will be well done.
I have &c

James Vertue Esq

Executive Engineer Lucknow

Supy. Engrs Office 6 D
No 347. Dnyor 15 June 1869

From
Captain O. F. Oakes Esq.
Superintending Engineer
6th Division

Colonel C. A. Orr Esq.
Secretary to Government
Public Works Department

Sir,
I have the honor to enclose Plans
and Estimates for rebuilding the Siphon
Sluices noted in the margin.
These Sluices pass under the
Perivelli Channel and drain
respectively areas of $1\frac{1}{2}$ and
 $\frac{1}{2}$ a square mile, the greater part of which
is under wet cultivation; the water eventually
finds its way into the Pungom an irrigating
Channel.

From Captain Vertue's letter No 39 dated
18 May it will be observed that he undertook
these works on emergency and received the
Estimates only on the 18th and it was then
anticipated that the works would be
completed on the 20th. I immediately wrote
for information relative to the area drained
head of water &c &c and made certain
suggestions

suggestions relative to alterations in the work, however they arrived too late and all that I have been able to do is to add the basins above and below the Sluices. These however cannot be carried out this year the works in other respects have been completed.

The vent of the old Shanpanoor Sluice was $1\frac{1}{2}' \times 1'$ that given to the new Sluice is $3' \times 2\frac{1}{2}'$ this with a head of $1'$ will admit of the discharge of the rain fall of nearly $3'$ over the drainage basin in 24 hours instead of about $\frac{1}{2}'$ as the old Sluice allowed. The Vents of the Caria Manikium tunnel have not been changed they will admit of the discharge of nearly $2'$ of rain fall over the drainage basin in 24 hours.

The floors are placed sufficiently low to admit of the greatest head of water or $7\frac{1}{2}'$ being counterbalanced by $1'$ of water in the Orivelly so there is no prospect of the Sluices bursting. The wing walls I regard as far too slight and the foundations as unnecessarily massive, however, as the works are completed and there can be no doubt that much injury and perhaps breaches might have resulted had there been any delay in executing the works, I beg that Government will pass the Estimates and provide funds for them from the Reserve. If the whole sum cannot be provided from

from the Reserve I can only suggest that the works may be provided for later in the year or from the allotments for Minor New Works under Agricultural though I am unwilling to surrender any portion of these allotments as there will be a considerable demand upon them for masonry works on new Roads under G. N. 1378 dated 27 April 1868.

Cultivation goes on almost all the year round under the channels which draw their supply from the Agunda Cavery west of the Upper Anicut and hence it is most difficult to execute repairs in those channels and works in them have for the most part to be carried out on emergency. Some regulation relative to the opening and closing of these channels for repairs is very much required.

I have the honor to be
Sir

Your most obed^t. Servant

H. T. Baker
Captain R.E.
Supg. Engineer 6th Division

From
The Lady Dargis
6th Ave

To
The way to Fort.

1877-2552/19

2-2-18

24

[Handwritten signature]

2434

Towards Peace and
Antislavery for Redding
 the Christian Church
 and Massachusetts
 Baptismal Union in
 the sixteenth century
 British.

C. 220260810 of 19 June 1869
 100 247 - 15 15

Trichinopoly
 From the Co. Commr
 To the Supd Commr
 No 2552/69
 Date 15th May
 Recd 18 May
 G. No 96-Ex 10
 No 39
 Enclosure 6-
 Forward for San
 Estimates for Carian
 - Run and Excavation
 undertakings under
 Personally examine

Trichinopoly District
 Abstract Est No 1869/70
 Work Reconstructing an Under Tunnel of 2 feet across
 the Peruvaiy Channel in the limits of Calcamone Run
 Trichinopoly Taluk.

Quantity	Description of Charge	Rate	Amount	Total
12079 1/2	Cft of Brickwork Chumam	18	217422	
1027	Cft of Brickwork in Chumam	8	8216	
280 1/2	— New cut stone — do —	12	3366	
4408	— Plaster of Paris —	20	88160	
1788	— Portland —	10	17880	
7096 3/4	Cft of Graveling —	2	14193	
2302 1/2	Cyds of Earthwork —	6	13815	
	—		200	
	—		100	
	—		10	
	Sundries and Contingencies —		158	11

Total Est Prices. — 3620 ..

Geo Rankin & Co. / Signed / James Vertue Esq
 Executives Engineers
 Trichinopoly
 15th June 1869
 W. F. A. Esq Capt. R. C. Esq
 Supd Commr 6th Div

Trichinopoly District
 Abstract Est No 189/40
 Works Reconstructing an Under Tunnel across the
 the Peruvallay Channel in the limits of Hennappanur
 Trichinopoly Talug.

Quantity	Description of Charge	Rate	Amount	Total
147 1/2	Cyds of Rough stone in Chunam - at 28	28	4121	28
5526	Cft of Brick in Chunam - at 26	803	7	
382 1/2	- do - of Rebuilding old cut stone in Chunam - at 8	191	12	
471	- do - of New Cut stone - at 1	471		
972	suplft of Pointing - at 1	9	11	6
3116	- do - of Plastering - at 2	62	5	1
2735 1/2	Cft of Demolishing - at 4	98	10	5
1280	Cyds of Earthwork - at 16	120		
456	- do - Hard soil - at 3	85	8	
	Baling	100		
	Scaffolding	10		
	Filling foundations & restoring Banks	100		
	Surveys & contingencies	118	15	4
	Total Estimate Papers	2600		

(Signed) James Fortes Capt R.E.
 Executive Eng. Trichy.
 Secy. Cantt. Bangalore
 Sup. Engrs. Office
 Mysore 15 June 1889
 N. F. Fortes Capt R.E.
 Sup. Engrs. Bangalore

Estimated at 3650, for
 reconstructing an Under
 Tunnel of the Peruvallay
 the Peruvallay Channel
 in the limits of Hennappanur
 Talug. in the Trichinopoly
 District.

Trichinopoly Collector's Office
17th June 1869

To, ^{No 32.}
From, Geo. Baumburg Esq.
Collector of Trichinopoly.
Colonel J. H. Orr. R. E.
Secretary to Government
Public Works Department
Fort Saint George

Sir,
Pāia. As requested by Captain
Oakes I have the honor to forward
direct the countersigned Estimates
for the Kariamankum and Sena-
spanmar under Sluces.

2 As regards the latter
part of Captain Oakes' letter I beg
to state that the Perivally Channel
has now been closed 2 months
and 3 weeks, which would appear
sufficient time for carrying out
Estimates of this nature; more es-
pecially as the materials seem to
have been ready on the site.

I have the honor, Sir,
to be,
Your most Obedt Servant.

Geo Baumburg
Collector

from the Supply Engineer
6-8-70 No 34, dated
15th June 1869.

Ph 2532/69

Estimated, No 230, for
reconstructing on Western
bank of river the
Perivally Channel in
the same manner as
in the Trichinopoly Dis-
trict.

Enclosure, in a letter No 32, dated
17th June 1869, from the Collector's Department
of Trichinopoly.

1st 1869 Mr. W. B. P.
Trichinopoly
No. 2557.
The Collector of
Trichinopoly
To the Secretary
to Government
Public Works Dept.
Trichinopoly

Dated 19th June/69.
Recd 19.

Enclosure.
No. 2557.
Trichinopoly.

To the
Commander the
Bombay Army, the
Director for the
Madras Army, the
and Madras Army
and Madras Army
and Madras Army

1110

2077 June 1869 No. 32

No 2184-6 July 1869

Public Works Department
No 2184
Proceedings of the Madras Government
Under date the 6th July 1869
Read the following

From The Collector of Trichinopoly A.O. No 32 of 17th June 1869

Carriamankum — Rs. 3,620.
Senapanore — " 2,600.

W.H.

A.A.

The Government
Sanction the estimates for re-
constructing the under tun-
nels for passing the Carri-
amankum and Senapa-
nore drainage channels
under the Perivelli channel
in the Trichinopoly Dis-
trict.

2. These works have for
the most part been car-
ried out on emergency and
from the Govt. Repondence.

181203

It appears that they were commenced in April, but that the Plans and Estimates were not sent to the Super-Engineer until the 15 May, by which time the construction had been nearly completed. It appears to have been necessary to start the under-tunnels immediately after the closure of the Perivelli, but the Executive Engineer should have furnished Capt. Baker immediately after the examination of the injured tunnels with full particulars of the circumstances of the works and of his proposal with regard to them, and the Plans

Plans should have followed the preliminary report a few days afterwards.

3. To meet the cost of these works Rs. 6220 will be allotted from the Reserve, under Agricultural.

AB

To the Director of
Machinopoly.
" Super-Engr. 6th Div.
" Controller P.W. Works.
" Acct. Genl.
" Chief Engr. for the Government of the
Irrigation.
" Revenue Dept.

53

Luc 2532

Court. of 1869 Madras.

PUBLIC WORKS.

To The Collector of
Trichinopoly

Dated

Recd.

G O 6th July 1869 No 2184.

Nos. III-III

Charles Lumsden estimates amount
-ing to Rs 6220 for reconstructing
the under Lumsden for papering the
Paria manikun and Tenapa.
-and drainage channels under
the Perinelli Channel in the
Trichinopoly Co., sanctioned with
remarks.