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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	764	(W)	Press
B.P. No.			Mis.
Dated	18.3.		1874.

Not to be folded or roughly handled

1-1

*Proceedings of the Madras Government, Public Works Department,
18th March 1875.*

No 468. Read the following letter from Lieutenant-Colonel J F. FISCHER, R E, District Engineer, Madura, to Colonel G W WALKER, R E, Secretary to Government, Public Works Department, dated Pereacolum, 16th February 1875, No. 4,746 —

ADVERTING to G. O, of the 25th June 1874, No 1,712, I have the honor
1 Comparative Statement to report that I have now personally
1 Estimate for Travellers' Bungalow at examined the Goodaloor Ghaut, and
Cumbum
1 Plan of do. beg to submit the accompanying re-
marks and statements for the consideration and orders of the Government.

2. As regards the item for "Sundries and Superintendence" in the revised estimate of Rupees 51,900, I beg to remark that I am unable now to supply any details, as I find, on an examination of the accounts, that this sum has been actually expended, and in the comparative statement herewith sent I have entered the several items of the original sanctioned estimate and the actual outlay incurred, Lieutenant Greer's, R E, explanations regarding this matter are as follow — "The large excess in this item is owing partly to the amount put down in the estimate being much too small. In an out-of-the-way place like the Goodaloor jungles, where several camps had to be built each year for the coolies, elephant fires kept up every night, and several other extra things not required in a civilized place, 5 per cent. is not sufficient, when it includes superintendence as well. The excess is also partly due to the collection and stock of the stores, &c, required for the culverts, being included under the head of "Sundries." The actual excess on the original sanctioned estimate is only 32 per cent., and is very creditable to that officer's management, care and attention to his duties, and it is to be regretted this was shown in a revised estimate and not in a comparative statement.

3. I find it necessary now to submit a supplemental estimate to repair damages, restore the catch-drains in places, and to make sundry improvements to the work, the amount of this is Rupees 4,000 after deducting the sum of Rupees 1,870 already sanctioned in the Government Order under reply.

4. Much of the damage done to the ghaut is alleged to be from the rainfall, but I am inclined to think the revetment walls have been seriously injured by the wild elephants. The place is infested with these animals, and a herd of these passing over the road at any point where much new revetment work has been done are sure to injure it.

5. I propose to give up the masonry catch-drains, to open out the existing ones and convey their waters to the natural outfalls and across the road by the culverts on it or by road dams. The rainfall on rock should, I consider, be allowed to come down to a drain on the inner side of the road and passed across it at the salient angles as much as possible, and not be carried along to the re-entering ones where the natural drainages are crossed. The outlet of a drain in such a position will have far less drop than in a ravine.

6. I think it very advisable in many places to widen the road by blasting than attempting to keep up so much revetment which is liable to such extensive injuries.

*Proceedings of the Madras Government, Public Works Department,
18th March 1875.*

7. I regret to say two of the larger bridges have got bad cracks in their wing walls, and will probably require to be rebuilt; some of the culverts built are too small and must be replaced by longer ones, others have given way and require to be restored, but in such a locality it was very difficult to get any good chunam, and in ghaut works this is very common, and it would have been far better, in the first instance, to have used timber structures, and re-placed these, as soon as the road was opened, by more durable materials

8. I do not think the drainage across the road has been at all sufficiently provided for. Telford and other English Engineers, who had to provide for rapid wheel traffic, were very careful in this matter, and sectioned their ghaut roads so as to pass as much of the rainfall as possible, under and across their roads, always sloping them inwards to facilitate this, as well as to raise the outer wheels of their vehicles, and prevent material being washed off and lost. I trust I may be allowed to say I cannot approve of the sectioning of this road, and cannot but consider the omission to give the earthwork cuttings proper slopes a most lamentable error, certain to cause great inconvenience and expense in the future

9. I do not find anything to show why the line of road was taken through the pass on the west side of the Tavalum hill instead of that on the east, which is 500 or 600 feet lower, so far as I could see, this route appeared to be quite feasible, and if it could have been adopted would have avoided the necessity for the zigzags in the middle of the ghaut, where these are placed in the very worst possible position, and must entail great expense in maintaining, if the Government have no objections I would endeavour to rectify this part of the ghaut even now, but it would almost necessitate its reconstruction, but if successful would improve the gradient very much, making it probably 1 in 20, or less, instead of 1 in 16.

10. I beg to send the estimate for the bungalow, called for in G O, of the 25th July 1874, No. 1,238, and would propose to construct it at Goodaloor Cumbum, the next village on our side, is five miles off, and for people using this ghaut a ten-mile march after coming down or preparing to go up the ghaut will probably be very inconvenient

11. The maintenance grant for this ghaut is Rupees 440 per mile. I would beg to solicit that this be increased to Rupees 480 per mile or Rupees 40 a month, this will enable us to pay for a sufficient establishment of mile coolies, hut them properly, and keep a Superintendent on the ghaut to watch it constantly, and keep it free from wild elephants by fires. Pereacolum is, I believe, the largest taluq in this Presidency. One Taluq Overseer cannot possibly manage it, and hitherto it has been much neglected. I sent an additional Local Fund Overseer to assist in the ghaut works, but he got fever at once, and is now dangerously ill and weak. There are some people at the place who were trained under Lieutenant Greer, and one of these I would select for this special duty if the additional maintenance grant is sanctioned

CHIEF ENGINEER'S MEMORANDUM

An analysis of these estimates shows that out of the original number of fifty-six culverts in the sanctioned estimate only fifty-one were built; out of which were

*Proceedings of the Madras Government, Public Works Department,
18th March 1875*

omitted entirely four first-class culverts, while three additional road tunnels were substituted for four third-class culverts. This quite bears out the apprehensions expressed in paragraph 4 of my memorandum recorded with G O, No 1,712, of 25th June 1874, that a sufficiency of under drainage had not been provided. In the supplemental estimate it is proposed to build three third-class culverts according to the original estimate, and to replace two first-class culverts that have been destroyed. But it would seem to me that at least two more first-class culverts were required to complete the original number; and I recommend the addition of Rupees 600 to the estimate on that account

2. I quite approve of the widening of the road proposed, and hope that detailed measurements of each portion of the road requiring to be widened are on record, to ensure this being effectually done. I must again reiterate the principles laid down as to cross section of ghaut roads in paragraph 3 of my memorandum above alluded to, under drains being substituted for the surface road dams, to which Lieutenant-Colonel Fischer proposes to trust more than I approve. There is no question of rapid wheel traffic in the Goodaloor Ghaut

3. I am utterly incredulous of the possible ghaut head 500 or 600 feet lower than the actual ghaut head, imagined by Lieutenant-Colonel Fischer. That he should have rested a day without satisfying his doubts on matter of such immense importance, not only as regards the Goodaloor Ghaut, but the supply of water from the Perryar river, is incredible in one holding the position that he does. He should not have hazarded a conjecture so derogatory to the reputation of every officer connected with either work. His examination of the ground will turn out to have been most superficial.

(Signed) G. W. WALKER, Colonel, R E,
Chief Engineer, D P W

20th February 1875

No 469.

ORDER THEREON, 18th March 1875, No. 764.

CIVIL WORKS, No 22

His Excellency the Governor in Council sanctions a total excess of Rupees 6,174 on the sanction of Rs 48,000 for the new Goodaloor Ghaut, accorded in G O, No 1,826, of 16th July 1873. The specific items of excess, aggregating Rupees 4,000, should be separated from those of the supplemental estimate now submitted that amount to Rupees 1,870, as the latter are for repairs and the amount is to be provided from the repair allotment, according to G. O, No 1,712, of 25th June 1874.

2. The District Engineer will take an early opportunity of personally satisfying himself on the subject of the ghaut head, which the Chief Engineer considers to be a matter of such importance that it should not have been left in doubt by him for a moment. He will likewise cause the Chief Engineer's instructions in this and his former memorandum to be acted on. The bungalow plan and estimate of Rupees 4,800 are sanctioned. The Board of Revenue will be requested in the Revenue Department to settle whether it should be built at Cumbum or Goodaloor. The District Engineer is understood to be of opinion that the stage from Cumbum to the first bungalow within Travancore limits would be too far. But Goodaloor

Proceedings of the Madras Government, Public Works Department,
18th March 1875.

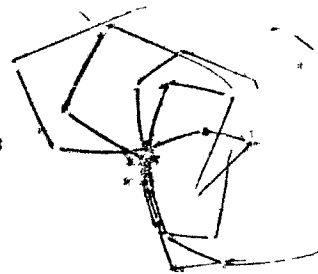
may be less eligible than Cumbum as a halting place on considerations of health and supplies of food and carriage

3 The necessity of increasing the mileage allowance of the ghaut from Rupees 440 to Rupees 480 is not apparent

(True Extract)

Colonel, R E,
Secretary to Government.

To the District Engineer, Madura
" Controller of Public Works Accounts
" Revenue Department



Chief Engineer's Memorandum

An analysis of these Estimates shows that out of the original number of 56 Culverts in the sanctioned Estimate only 51 were built; out of which, were omitted entirely 4 1st class Culverts, while 3 admt. Road Tunnels were substituted for 4 3rd class Culverts - This quite bears out the apprehensions expressed in para 4 of my Memo. recorded with G.O. No 1712 of 25th June 1874, that a sufficient number of smaller drainage has been provided - In supplemental Estimate proposed to build 3 3rd class Culverts according to the original Estimate, and to replace 2 1st class Culverts that have been destroyed - But it would seem from that at least 2 more 1st class Culverts were required to complete the original number, & I recommended the addition of Rs. 600 to the Estimate on that account -

Exd S T Austin,
Spare Copies

No 4746 District Engineers Office
Parsaland 16 February 1895

From Lieutenant Colonel J. G. Fisher R.E.
District Engineer Madras

To Colonel G. W. Walker R.E.
Secretary to Government, D.P.W.
Madras

Sir,

Enclosures 3
1 Comparative
statement.
1 Estimate for
Travellers Bungalows
at Pambur
" " of 20

According to G.O. of the 20th inst.
No 1712 I have the honor to report that I have
now personally examined the Goodaloo Ghans
and beg to submit the accompanying re-
marks and statements for the considera-
tion and orders of the Government

As regards the item for Sanitation
and Superintendence in the revised Estimate
of Rs 51,900 I beg to remark that I am unable
now to supply any details as I find
on an examination of the accounts that
this sum has been actually expended and
in the comparative statement herewith
sent I have entered the several items of
the

the Original Sanctioned Estimate and
the actual outlay incurred; Capt. Currie's
Explanations regarding this matter are as follows
"The large excess in this item is owing partly
to the amounts put down in the Estimate
being much too small. In an out-of-the-
way place like the Cordaloi jungle where
several camps had to be built each year
for the coolies, elephant fens—kept up every
night and several other extra things not
required in a civilized place, 5 per cent is
not sufficient, when it includes superin-
tendence as well. The excess is also partly
due to the collection and stock of the stores
required for the culverts being included
under the head of sundries. The actual Excess
on the original Sanctioned Estimate is only
3.2 per cent, and is very creditable to that
officer's management, care and attention
to his duties, and it is to be regretted this
was shown in a revised Estimate and not
in a comparative statement."

3 I find it necessary now to submit
a supplemental Estimate to repair damage,
restore the catch drains in places, and
to make sundry improvements to the
work; the amount of this is Rs 4000. after
deducting the sum of 1870 Rs already sanc-
tioned in the Est. under reply.

4 Much of the damage done to the
Chaut is alleged to be from the rain-fall
but I am inclined to think the worst
inward wall had been seriously injured
by the wild elephants. The place is infested
with these animals and a herd of these
passing over the pond at any point where
much vice prevalent work has been
done are sure to injure it.
I propose to give up the in-
sisting catch drains to open out the
existing ones and convey their waters
to the natural outfall and across
the Road by the culverts on it, or by
road-drains. The rain-fall on rock should
J

It would be allowed to come down to a
drain on the inner side of the Road and
paved ^{perhaps} it at the culvert angle
so much as possible could not be carried
along to the re-entering ones where the
natural drainages are crossed. The out-
let of a drain in such a position will
have far less drop than in a ravine.

I think it very advisable in
narrow places to widen the Road by
blasting, then attempting to keep up
so much revetment which is liable
to such extreme injuries

I regret to say 2 of the larger
bridges have got bad cracks in their wing
walls and will probably require to be re-
built. Some of the culverts built are too
small and must be replaced by larger
ones; others have given way and require
to be repaired; but in such a locality
it was very difficult to get any good
Chinamen and in Ghaut Works, this

is very common and it would have
been far better in the first instance to
have used timber structures and replaced
these as soon as the Road was opened by
more durable materials.

I do not think the drainage
across the road has been at all sufficiently
provided for. I find and other English
Engineers who had to provide for ra-
pid wheel traffic were very careful
in this matter, and sectioned their
Ghaut Road so as to pass as much
of the rain-fall as possible under and
across their Road always sloping them
inward to facilitate this, as well as
to raise the outer wheels of their vehicles
and prevent material being washed off.
(I trust to say I cannot approve of the
sectioning of this Road and cannot
but consider the omission to give the
earth work cuttings proper slopes a
most lamentable error certain to
cause

cause great inconvenience and expense
in the future.

9. I do not find any thing to show
why the line of road was taken thro'
the pass on the west side of the Tavalum
Hill instead of that on the East which
is 500 or 600 feet lower so far as I could
see, this route appeared to be quite
feasible and if it could have been
adopted, would have avoided the necessity
for the zig-zag in the middle of the Chaut
where there are placed in the very worst possible
position and must entail great expense in
maintaining; if the Government have no ob-
jections I would endeavor to rectify this part
of the Chaut even now, but it would almost cer-
tainly necessitate its reconstruction, but if successful
would improve the gradient very much
making it probably 1 in 20 or less instead of
1 in 16.

10. I beg to send the Estimate for the bridge
now called for in R.O. of the 26th Sept 1898
and would propose to construct it at

Goodaloo Cannibum the next village on
our side is 5 miles off and for people vi-
siting the Chaut a 10 mile march after coming
down or preparing to go up the Chaut will
probably be very inconvenient.

11. The maintenance grant for this Chaut
is Rs 400 per mile. I would beg to solicit that
this be increased to Rs 1000 per mile or Rs 200
a month; this will enable us to pay for a
sufficient establishment of mile coolies, but
them properly and keep a Superintendent in
the Chaut to watch it constantly and keep
it free from wild elephants by fire. Coen-
colom is I believe the largest talug in the
Presidency and talug officers cannot properly
manage it and hitherto it has been much
neglected. I sent an additional Local Fund
officer to assist in the Chaut work but he
got fever at once and is now dangerously
ill and weak. There are some people at the
place who were trained under Gento Cress
and one of these I would select for this
Special

Special duty of the additional maintenance
granted sanctioned in

and I have the honor to be
Dear Sir

Your most obedt Servt

W. T. Tucker

District Engineer Madras.

S.H.B.

Proceedings of the Madras Government
Read the following:-

From
The District Engineer
Madras

(H.E. No. 4746. of 16th July 1873)
764

His Excellency the
Governor in Council
sanctions a total excess
of Rs ~~5074~~ ⁶¹⁷⁴ on the sanc-
tion of Rs 48,000 for the
New Goodaloor Wharf,
accorded in G.O. No. 1826
of 16th July 1873. The
specific items of excess
aggregating Rs 4000, in
should be separated from
those of the Estimate
now submitted ^{that}
amount to Rs 1840;
as the latter are for
repairs.

M
24/8

and the amount is to be
provided from the
Repair allotment accord-
ing to G. O. No. 1412 of
3rd June 1874.

The District Engineer
will take an early
opportunity of personally
satisfying himself on
the subject of the Shant
Head; which the Chief
Engineer considers to be
a matter of such im-
portance that it should
not have been left in
doubt by him for a
moment. He will
likewise cause the
Chief Engineer's instruc-
tions in this and his
former Memo to be acted on.

The

The Bungalow Plans
and Estimate of Rs 4,800
are sanctioned. The
Board of Revenue will
be requested in the Re-
venue Department to
settle whether it should
be built at Cumbum
or Goodaloor. The Dis-
trict Engineer is un-
derstood to be of opinion
that the stage from
Cumbum to the first
Bungalow within Tra-
vancore limits would
be too far. But Gooda-
loor may be less eli-
gible than Cumbum
as a halting place on
considerations of health
and supplies of food.

age

and carriage.

The necessity of in-
creasing the mileage
allowance of the Agent
from Rs 440 to Rs 480
is not apparent.

C.M.W.

To
The H. B. Chadwick
Controller of P. & A. Dept.
Revenue Dept.

Recd. 22-3-75

No 468-469

1108 /
G.O. of 1875, Madras.

PUBLIC WORKS.

To

Dated

Recd

Encl

G. O. 1875, No. 714

Nos. 458-469.

to increase the mileage at
Covance of the Ghant dis.
approved.

New Gordaloor Ghant.

A total receipt of Rs
374 on the sanction for the
—, sanctioned with Rs.
Also the Bungalow Plan &
estimate of Rs 4,800, sanctioned,
and the B: of Rs requested
to settle whether it should
be built at Cumbum or
Gordaloor. The proposal

1/15

*Proceedings of the Madras Government, Public Works Department,
18th March 1875.*

No. 470. Read the following letter from G S SAGE, Esq, District Engineer, South Arcot, to Colonel G W. WALKER, R E, Chief Engineer, Public Works Department, dated Camp Cuddalore, 1st March 1875, No 255.—

I AM sorry that almost the last act of my reign here should be to have to recommend a man for punishment

2. It is not many months since I recommended 2nd class Taluq Overseer Narrainsawmy Naidoo for promotion on the ground of his having at that time done some important work very rapidly (not on account of my general good opinion of him, although I have often said he is the best man I have, but bad is the best), and being in hopes it would have a beneficial effect not only on himself but on others, I am very sorry to say that my expectations have not been realized, but ever since his promotion he has been of very little use. I cannot trust him as he ought to be trusted, nor will he work, the district swarms with his relatives, who are, I have lately found out, more or less mixed up with the works, and in fact he has been so long in this district, and has so much private influence which he can and does use on the work, that I would recommend, if not his reduction and removal to another district, at least his removal should be carried out as early as possible

No 471

ORDER THEREON, 18th March 1875, No. 765

ESTABLISHMENT, No. 28.

THE District Engineer of South Arcot is permitted to dispense with the services of P. Narrainsawmy Naidoo as soon as he can replace them by an efficient man. The Chief Engineer will exercise his discretion as to his reduction in grade.

(True Extract.)

Colonel, R E.,
Secretary to Government.

To the District Engineer, South Arcot
" Controller of Public Works Accounts

" Chief Engineer P. W. D.
" for signature

Exd J W Lewis.
Spare Copies

1/15

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18th March 1875.*

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