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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. *381/82 (Ly)* Press
Mis.

Dated *3-2-* 18 *77.*

Not to be folded or roughly handled

No. 131. Read the following letter from Lieutenant-Colonel J. H. M. SHAW STEWART, R.E., Consulting Engineer for Railways, to Major-General G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Madras, 5th January 1877, No. 3:—

ADVERTING to the Proceedings of Government, under date the 16th August 1876, No. 2,123, I have the honor to forward, for the sanction of the Government of India, an estimate amounting to Rupees 35,354 of the cost of constructing four 30 feet openings spanned by wrought iron girders at 197-9 miles, North-west Line, Madras Railway, to carry the drainage from the ruined Chintagoonta tank across the railway.

The estimate is accompanied by three plans,* one of which is a sketch showing the course taken by the flood-water from the tank.

* Nos. 203, 479, and 481.

2. In sending forward the estimate the Chief Engineer observes, "I calculate the discharge from the tank at 2,916 cubic feet per minute, which with a depth of 4 feet 6 inches and a velocity of 5 feet at the bridge gives a waterway of 133 feet. I propose utilizing the present 15 feet arch, and supplementing it with four 30 feet girder openings."

3. It will be within the recollection of Government that the bund of the Chintagoonta tank gave way during the floods in October 1874. The damage inflicted upon the railway is stated in the papers printed with the Proceedings of Government, dated the 12th February 1875, No. 395. The restoration of the tank was taken into consideration, but I learnt from the District Engineer of Cuddapah that the proposal was abandoned on account of the cost, which was estimated at Rupees 50,000.

4. A letter† from the Agent of the Madras Railway, giving cover to a report from the Chief Engineer, is enclosed. It will be seen that, in consequence of the decision with regard to the restoration of the tank, it has become necessary to provide waterway to carry across the railway the three large streams which fed the tank. Mr. Robinson explains that the tank had no outlet; and that, as it was capable of holding more than one year's rainfall, no waste weir was formerly necessary, but that the gradual accumulation of silt reduced the capacity of the tank, until in 1874 the water for the first time topped the bund and carried it away.

5. After careful examination of the neighbouring country I am satisfied that the additional waterway now proposed is necessary, and as the maintenance of through communication is at present in danger I have authorized the immediate commencement of the work in anticipation of sanction.

6. Funds to the extent of Rupees 30,992, chargeable to Capital, are available from Schedule B, and Rupees 4,362 from Schedule G of the Budget estimate for 1876-77. The sanction will lapse at the end of the eighth quarter after its receipt. The work has not been entered in any of the half-yearly schedules.

7. I beg to draw attention to the question asked by the Agent, as to whether the Government are prepared to pay for the cost of providing the additional waterway rendered necessary by the decision not to repair the Chintagoonta tank. This was one

*Proceedings of the Madras Government, Public Works Department,
3rd February 1877. No. 331.*

of the case referred to in my letter, dated the 31st September 1876, No. 422, in reply to which His Grace the Governor in Council stated that "in consequence of the found necessary railway work to be executed, the Chintagutta tank must be dealt with at its merits." The Railway officials report that the tank formerly contained three years' supply, and had no outlet, owing to the high land there was no danger of its overflowing, and that the waterway on the railway was calculated only for the rainfall between the tank and the sea.

From R. B. HILWIN, Esq., Agent and Manager of the Madras Railway Company, to Mr. C. J. SMITH, R.E., Consulting Consulting Engineer for Railways, dated Madras, 25th September 1876, No. 314.

In continuation of my letter of the 5th ultimo, No. 308, I have the honor to acknowledge the information of the Government of the order of the 1st ultimo, and in reply to your letter of the 1st ultimo, I have received from the Acting Chief Engineer to the Madras Railway.

1. I shall be glad to learn from you whether the Government will be prepared to pay the cost of providing the extra waterway on the railway, considered necessary by the Government not to repair the head of the tank.

From W. B. ROBINSON, Esq., Acting Chief Engineer, to R. B. HILWIN, Esq., Agent and Manager of the Madras Railway Company, dated Madras, 28th August 1876, No. 648.

In answer to my letter No. 509 of the 5th instant, I have since had an opportunity of inspecting the tank and of observing the effects of the flood of the 4th instant.

2. The Chintagutta tank was formed by throwing a dam some 50 feet high across a narrow valley between two mountains. It has no outlet, but at the time it was first constructed, and for many years after, no waste weir was necessary, as the tank was capable of holding more than one year's rainfall. Year by year however, silt accumulated till, as well as I could judge without measurement, it reached a depth of some twenty-five feet. The capacity of the tank being thus reduced, in 1874 the water for the first time over-topped the tank and reached the

3. Under the circumstances Government have determined not to repair the tank, and a waterway has to be provided for the three large streams which supplied the tank. On the 4th instant, after five hours rain, the flood from these streams, which naturally flows towards the 15 feet arch at 197th mile, 9th telegraph post, rose to 1 foot 6 inches above the crown. The surplus water following the fall of the country escaped through the 15 feet girdle opening at 196th mile, 8th telegraph post, and the trestle 30 feet at 197th mile, 1st telegraph post rising to rail level at the former, and to under side of girder at the latter.

4. The danger to the line appears to me to be so imminent that I have ordered the Resident Engineer to make arrangements for putting in a temporary double 30 feet bridge at 196th mile, 8th telegraph post. I should much have preferred putting in the opening at 197th mile, 9th telegraph post; but I feel sure that no temporary work could here withstand the rush of flood waters. At this point the line cannot be made safe till sufficient waterway is provided by means of a permanent bridge. I find the proper site for the new bridge is immediately to the east of the present 15 feet arch, the east abutment of which can be used as an abutment for the new work.

*Proceedings of the Madras Government, Public Works Department,
3rd February 1877. No. 331.*

No. 132. ORDER THEREON, 3rd February 1877, No. 381.

RAILWAY, No. 7.

THE estimate will be forwarded for the sanction of the Government of India.

2. As regards the question of the liability of Government to bear any portion of the cost of the work, His Grace the Governor in Council remarks that the Company were in the first instance bound to provide sufficient water-way for the ordinary drainage of the valley crossed by their line. The omission to do so while the line was under construction cannot be held to free them from the responsibility now.

3. The question of the repair of the tank would not have arisen but for the subsequent construction of the railway.

4. Under these circumstances the Government cannot be called on to contribute to the cost of the railway work. But in consideration of its execution affording relief to the distressed population, His Grace the Governor in Council has no objection to the excavation for widening the stream being done by Government under railway supervision, and the cost charged to Famine Relief Funds.

(Here enter No. 382, dated 3rd February 1877.)

(True Extract.)

Lieut.-Colonel, R.E.,
Joint Secretary to Government.

To the Consulting Engineer for Railways.

„ Examiner of Railway Accounts.

„ Financial Department.

Exd. E. C. Shunker.

Spare Copies

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, 3rd February 1877.

No. 133.

No. 382.

FROM

THE JOINT SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department, Railway Branch,

TO

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

RAILWAY, No. 8.

SIR,—I am directed to forward here-
with an estimate, amounting to Rs. 35,354,
for the construction of four 30 feet openings

spanned by wrought iron girders at 197th mile, 9th telegraph post, North-West Line of
the Madras Railway, to carry the drainage from a neighbouring tank at Chintagoonta.
The correspondence accompanying the estimate, with the Proceedings of Government
thereon, explain the circumstances under which the additional water-way is considered
necessary. I am to request the sanction of the Government of India to the proposed
outlay, a portion of which, on account of earthwork, will ultimately be borne by
Famine Relief Funds.

2. It will be seen that the work is in progress, the maintenance of through
communication having been threatened.

I have the honor to be,

Sir,

Your most obedient servant,

Lieut.-Colonel, R.E.,
Joint Secretary to Government.

Exd. E. C. Shunker.

Spare Copies

N^o 100

Madison Railway Company
Chief Engineer's Office
Madison, August 18th

The Agent and Manager

Dear Sir,

Referring to my letter of the 8th instant, I have since had an opportunity of inspecting the tank and of observing the effects of the flood of the 11th idem.

The Whintagoontah tank was formed by throwing a dam some 30 feet high across a narrow valley between two mountains. It has no outlet, but at the time it was first constructed and for many years afterwards no waste weir was necessary, as the tank was capable of holding more than one year's rainfall. Year by year however silt accumulated till (as well as I could judge without measurement) it reached a depth of some twenty feet. The capacity of the tank being thus reduced, in 1874 the water for the first time over topped the bund and breached it.

Under the circumstances Government have determined not to repair the bund, and waterway has to be provided for the three large streams which supplied the tank. On the 11th instant after 5 hours rain the flood from these streams, which naturally flows towards the 15 feet Arch

No. 914

MADRAS RAILWAY.

AGENT AND MANAGERS OFFICE.

Madras, 7th September 1876

From

Robert B. Elwin Esq.
Agent and Manager. M. R. Co.

To

Major C. J. Smith R. E.
Offg Consulting Engineer for Railways.

Sir,

In continuation of my letter of the 5th ultimo, No 805, I have the honour to enclose for the information of Government Copy of another letter I have received from the Acting Chief Engineer as to the Chintagoontah tank.

2. I shall be glad to learn from you whether the Government will be prepared to pay for the cost of providing the extra waterway on the Railway, rendered necessary by the determination not to repair the bund of the tank.

I have the honour to be
Sir,

Your most Obedient Servant
R. B. Elwin
Agent and Manager.

Received
28th Aug 1876.

RAILWAY DEPARTMENT.

CONSULTING ENGINEER'S OFFICE,

Madras, 5 January 1878.

No.

From

LIEUT.-COLONEL J. H. M. SHAW-STEWART, R.E.,

Consulting Engineer for Railways,

To

MAJOR-GENERAL G. W. WALKER, R.E.,

Secretary to Government,

Public Works Department,

Fort Saint George.

SIR,

Adverting to the Proceedings of Government under date the 16 August 1876, No 9123, I have the honour to forward for the sanction of the Government of India an estimate, amounting to Rs 35,354, of the cost of constructing four 30 feet openings spanned by wrought iron girders at 14 1/2 miles North of Madras Railway West line, to carry the drainage from the ruined Chindagaonta tank across the railway. The estimate is accompanied by three plans.

plans, one of which is a sketch showing the course taken by the flood water from the tank.

2. In sending forward the estimate, the Chief Engineer observes, "I calculate the discharge from the tank at 2456 cubic feet per minute, which with a depth of 1 1/2 ft and a velocity of 5 feet at the bridge, gives a waterway of 133 feet. I propose utilising the present 15 feet arch, and in supplementing it with four 30 feet girder openings."

3. It will be within the recollection of Government that the bund of the Chintagomta tank gave way during the floods in October 1874. The damage

inflicted

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inflicted upon the railway is stated in the papers printed with the Proceedings of Government dated the 12th February 1875, N^o 395. The restoration of the tank was taken into consideration; but I learnt from the District Engineer of Cuddapah that the proposal was abandoned on account of the cost, which was estimated at Rs 50,000.

4. A letter from the Agent of the Madras Railway giving cover to a report from the Chief Engineer, is enclosed. It will be seen that, in consequence of the decision with regard to the restoration of the

tank

914 dated
Sept 1876.

tank, it has become necessary to provide waterway to carry across the railway the three large streams which fed the tank. Mr. Robinson explains that the tank had no outlet; and that, as it was capable of holding more than one year's rainfall, no waste weir was formerly necessary; but that the gradual accumulation of silt reduced the capacity of the tank, until in 1874 the water for the first time topped the bund and carried it away.

5. After careful examination of the neighbouring country, I am satisfied that the additional waterway

3.
waterway now proposed is necessary; and as the maintenance of through communication is at present in danger, I have authorised the immediate commencement of the works in anticipation of sanction.

6. Funds to the extent of Rs 30,992 chargeable to Capital are available from Schedule B and Rs 4362 from Schedule G of the Budget estimate for 1876-77. The sanction will lapse at the end of the eighth quarter after its receipt. The work has not been entered in any of the half-yearly schedules.

7. I beg to draw attention to the question asked by the Agent

Agmt, as to whether the Govern-
ment are prepared to pay for
the cost of providing the additional
waterway rendered necessary by
the decision not to repair the
Chinagoonta tank. This was
one of the cases referred to in
my letter dated the 21st September
1876, No. 62, in reply to which
His Grace the Governor in Coun-
cil stated that "each case of
works found necessary subsequent
to railway construction must
be dealt with on its merits."
The Railway Officials represent
that the tank formerly contained
three years' supply, and had no
calingula, as owing to the high
land there was no danger of
its

173 4
its overflowing; and that the es-
timate for the waterway was
calculated only for the rain-
fall between the tank and
the line.

I have the honour to be,
Sir,
Your Most Obedt Servant,
Wm. Watson Esq. M.P.
Secy. for Railways

Pro. of Govt.
20th Dec. 1876
N. 3498.

From the Consulting Engineer
for Railways, No. 3, dated 5th January.

ORDERS.

Submitted for order
with reference to para-
graph 4 of the Law.
Consulting Engineer's letter.
The demand appears
unreasonable.

Comptroller, Municipal
Secretary to Government
P.W.D.

Understand that the
road is to be built
across the valley. They say they
will not be able to
build it by the effect of
the law. I am not
satisfied. I am not
satisfied. I am not
satisfied.

P.W.D.

8 JAN 77

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RAILWAY DEPARTMENT.

From

The Consulting Engineer

for Railways,

To

The Secretary to Government

P. W. Department.

Fort Saint George.

Dated

5th January

1877

Received

No. 3

Engineer's

Submitted for order

with reference to para-

graph 4 of the Law.

NR-131-

C-12-1-77

Consulting Engineer
for Railways, No. 3
dated 5th January

and must be
filled -
The report of the
of the tank in no way
affects the water supply
in any way. The
of the tank is
The report of the
of the tank is
The report of the
of the tank is

The estimate will be
forwarded for the sanction
of the Government of India.
As regards the question
of the liability of Government
to bear any portion of the cost
of the work His Grace the
Governor General remarks
that the Company were in
the first instance bound
to provide sufficient water-
way for the ordinary drainage
of the valley crossed by their
line. The omission to do so
while the line was under
construction cannot be held

to free them from the responsibility now. ~~The circumstances of the bank were apparently such that it was not possible to continue its operations without a substantial contribution from the Government.~~

The question of the repair of the bank would not have arisen but for the subsequent construction of the Railway.

Under these circumstances the Government cannot be called on to contribute to the cost of the Railway work. But in consideration of its position after doing relief to the distressed population, His Grace the Governor & Council has no objection to the excavation for widening the stream being done by Government under

Railway supervision, and the cost charged to famine Relief Funds.

(No 302 of 1877)
The Secretary to the Government of India
P. D. (Railway)

Sir,
I am directed to forward herewith an estimate amounting to Rs 25,386 for the construction of four 30 feet openings spanned by wrought iron girders at 2 1/2 miles north west line of the Madras Railway to carry the drainage from a neighbouring bank at Chataganda. The enclosure accompanying the estimate with the Proceedings of Government

M. R. S. S. No 23-2-77
By Secy to Govt. Dept.
Revenue Dept.

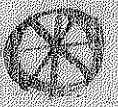
thereon explain the circum-
stances under which the
additional railway is con-
sidered necessary. I am
to request the sanction of the
Government of India to the
proposed outlay a portion of
which, on account of the
work, will ultimately be
borne by Saurashtra Relief
Funds.

It will be seen that
the work is in progress.
The maintenance of through
communication having
been threatened.

Amv.

3 Plans & one Est
+ 6 so of order &
Letter
Dated. 23.2.77

10/1/88



Est. of 1877, 30/10/88
PUBLIC WORKS.

The Cant. of 1877

Dated

1/1/88

1/1/88

1/1/88

1/1/88 387
382

1/31/88 133

1/31/88 133

Requesting sanction to estimate amounting to Rs 35,000 for the construction of four 30 feet openings at 12 1/2 miles, N. W. Line of the Andhra Railway.

Four 30 feet openings at 12 1/2 miles, N. W. Line of the Andhra Railway. — Passing orders as letter from the Cant. for Rs 30 submitting plans and estimate of the cost of constructing —

Est. no 100