M.R.O. 1—77,000—8-6-37.

(1) Number of pages_____

(2) Date of repair_____

(3) Initials of the Referencer_____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 911 & 912 Press / ~~Mis.~~

444-445

Dated 21—3. 1866.

Not to be folded or roughly handled

RR

Read the following :—

No. 444. No. 111.

Application from the Agent and Manager of the Madras Railway Company, requesting the sanction of Government to the following Estimate :—

North-West Line.

	Rs.
1 Single 50-feet opening, at 70 miles 4 chains, as per Plan No. 85	13,580
1 Double 20-feet opening, at 79 miles 67 chains, as per Plan No. 86...	14,843
1 Single 20-feet opening, at 79 miles 62 chains, as per Plan No. 87...	10,701
	39,124

Thirty-nine thousand one hundred and twenty-four.

---

1. It is proposed to construct these bridges on the portion of the North-West Line which sustained injury during the heavy rains that fell in December 1865. The reports on the subject were submitted to Government with Colonel Anderson's observations of the 7th and 11th December, Nos. 600 and 604.

2. Major Stewart inquired of the Agent whether the outlay of Rupees 39,124 was proposed to be charged to the Capital or Revenue account, or whether the amount was to be divided between the respective accounts, and he added as follows :—

"The proposed bridges allow for greater water-way than the bridges originally constructed, which were breached during the heavy rains that fell in December 1865, and as they may, therefore, be considered improvements on the original structures, it seems to me that the difference between the cost of the latter and that of the former, should alone be charged to Capital, in accordance with the views enunciated in paragraphs 11 and 12 of the Despatch from the Secretary of State for India, dated 9th March 1864, No. 17.

"It is desirable that Government should be informed on what data the water-way now proposed has been calculated, and I also request that the reasons which induced the Chief Engineer to adopt screw pile tressels for the piers and abutments of the proposed bridges, may be clearly stated for the information of Government. You will observe that the estimated cost of the tressels is no less than Rupees 21,938."

3. The Chief Engineer of the Railway Company has afforded the following explanation :—

"I beg leave to state that I did not specify to what account the estimates should be charged, because I conceived that we had a precedent in the case of the 395th mile bridge, and that consequently there could be no doubt about their being debited to Capital.

"It is perfectly true, as stated in paragraph 2, that the proposed bridges allow a greater water-way than those originally constructed, but this is not because we

considered the original designs defective, or unable to provide for the discharge waters from the calingulas, &c., but simply that we are desirous of being prepared for contingencies, such as the bursting of a series of Zemindary tanks, to which it appears to me that in the absence of Government supervision, we may at any moment be liable. Major Prendergast, in his recent report, gives ample testimony as to the sufficiency of the old bridges to provide for maximum discharges from calingulahs.

"The Secretary of State, in paragraph 11 of his Despatch No. 17, of the 9th March 1864, evidently assumed that exceptional cases might occur, necessitating a re-construction being charged entirely to Capital, and I submit that the reasons given in paragraph 2, and the precedent referred to in paragraph 1, are sufficient to justify it in the present instance.

"The actual cost of the old bridges was as follows:—

M.	C.		M.	C.	Rs.	
70	4	from Madras District 2,	5	76	3,566.	Proposed 50 feet girder.
79	62	do.	15	54	2,035	Do. 20 feet do.
79	67	do.	15	60	1,121	Do. double 20 feet do.

"At the first breach near Pootoor, the water-way has been but slightly increased. We propose to build an iron girder opening of 50 feet, in lieu of the 3-15 feet arches originally constructed. This provides for a water-way considerably in excess of the maximum discharge from the calingulah of the Pootoor tank.

"The breaches near the Sooramookey at 15 miles 64 chains* and 15 miles 60 chains (district mileage) do not occur near any discharge channel from the calingulah of the Koyampetta tank, but at a lower level some distance away from it. The old bridges (of 12 and 6 feet openings respectively) were built over irrigation channels, not directly connected with any tanks. The water from the Koyampetta and other breached tanks accumulated to a depth of about seven feet at this point, and ultimately carried them away, together with a portion of the embankment.

* 79-62 from Madras.
79-67 Do.

"In providing a double 20-feet and a single 20-feet girder opening, in lieu of the 6 feet and 12 feet arches which previously existed, I have simply endeavoured to secure the safety of the line, by carrying off any future accumulation of flood waters consequent upon the bursting of the series of Zemindary tanks lying west of the line. No accurate data can be arrived at upon which to calculate the water-way, but I am of opinion, after an inspection of the locality, that the openings above metioned will be sufficient, and in this opinion, I believe, Major Prendergast concurs.

"I have selected pile tressels for two reasons: First.—Because they are not likely to be carried away in the event of any future inundations. The piles will be driven to a depth of twenty feet or upwards below the bed of the stream, and no scour can affect them. Even if the embankment on either side be washed away, the bridges will still stand, and the replacement of the earth to restore communication

can only be the work of a few days. Second.—Because bridges upon the screw pile system can be constructed without reference to weather, and with much greater rapidity than bridges built with stone or brick abutments.

"As the bridges now constructed are of a very temporary nature, and would be liable to be swept away in the event of a continuation of wet weather, it is desirable to commence the construction of the new permanent bridges as speedily as possible."

4. The charge for the cost of the bridge at the 395th mile of the South-West Line, which is alluded to in the first clause of the Chief Engineer's explanation, was in accordance with the instructions conveyed in the Despatch from the Secretary of State for India, dated the 16th January 1865, No. 1, debited to the Capital account.

5. The rule in force is, that all repairs, &c., on a portion of line opened for traffic for upwards of two years shall be borne by "Revenue." The bridges above referred to are on a portion of line thus opened. As shown by the Chief Engineer, in clause 2 of his explanation, the bridges were sufficient to carry off ordinary floods, but not such extraordinary floods as occurred in December 1865. Clause 4 of the Railway Contract provides that the works of the Railway shall be designed so as to be protected from "injury or destruction by inundations, tempests, or other causes whatsoever."

6. Under Clause 11 of the Despatch of the Secretary of State, dated 9th March 1864, No. 17, it is optional with Government to allow the entire cost of the bridges to be charged against Capital or Revenue, or be divided between them. As however the sanction of the Government of India is necessary for the estimates now submitted, I think that the question raised as to the account to which the outlay should be debited may be referred for their decision.

7. Pending the receipt of the sanction of the Government of India, I would, for the reasons urged in the last clause of the Chief Engineer's explanation, recommend that permission be given to the Railway authorities to proceed with the construction of the bridges.

(Signed) H. N. D. PRENDERGAST, Major, V.C.,R.E.,
Dy. Consg. Engr. for Railways, in charge.

Madras,
7th March 1866.

No. 445. Order thereon, 21st March 1866, No. 911.

RAILWAY, No. 51.

1. The sanction of the Government of India will be requested to the works which are proposed for execution on the North-West Line of the Madras Railway, at an estimated cost of Rupees 39,124.

2. On the recommendation of the Deputy Consulting Engineer, His Excellency the Governor in Council grants authority for the construction of the works being at once proceeded with.

3. The question as to the account (Capital or Revenue) to which the outlay on these works should be charged will be referred for the decision of the Government of India.

Ordered that the following letter be sent:—

(Here enter No. 912, dated 21st March 1866.)

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Consulting Engineer for Railways, with eight Enclosures.

Exd. S. T. Augustin.

PUBLIC WORKS DEPARTMENT.
FORT SAINT GEORGE,
21*st March* 1866.

No. 912.

No. 446.
To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

SIR,

RAILWAY, No. 52.

1. I am directed by His Excellency the Governor in Council to request the sanction of the Government of India to the undermentioned works proposed for execution on a portion of the North-West Line of the Madras Railway which has been opened for traffic for more than two years:—

	RS.
1 Single 50-feet opening, at 70 miles 4 chains	13,580
1 Double 20-feet opening, at 79 miles 67 chains ...	14,843
1 Single 20-feet opening, at 79 miles 62 chains... ...	10,701
Total...	39,124

2. The circumstances which have rendered the construction of these bridges necessary are explained at length in the Deputy Consulting Engineer's letter, a copy of which is enclosed, and, in reporting that authority has been granted for their commencement, in anticipation of the approval of the Government of India, I am to request the decision of the Right Honorable the Governor General in Council on the question which is raised by the Deputy Consulting Engineer as to the account (Capital or Revenue) to which the outlay should be charged.

3. The case which is quoted by the Chief Engineer of the Madras Railway in support of his opinion, that the cost of the bridges under notice should be charged against "Capital," is that of the large iron bridge, of 210 feet span, which was constructed by the Railway authorities in 1864 to replace a small, one arched, masonry bridge of 20 feet, which carried the rail at the 395th mile of the South-West Line, over the bed of the abandoned Pooraparumba canal, and was destroyed by the bursting of the embankment of the Venjally lake in the Malabar District. The Agent of the Madras Railway submitted a claim upon the Public Works Department for Rupees 35,269-0-5 (the cost of the iron structure) on the ground that the destruction of the masonry bridge was caused by the neglect of that Department to maintain the embankment in question in an efficient state of repair. This being demurred to, the matter was referred to the Right Honorable the Secretary of State for India, and it was decided by him, in concert with the Railway Company, that the entire cost of the new bridge should be charged against the Railway Company's "*Capital*" account.

Procs. of Govt. 25th August 1863, No. 518, 519.
Do. do. 26th Sept. ,, ,, 577, 578.
Do. do. 18th Dec. ,, ,, 466, 467.
Do. do. 9th Feb. 1864, ,, 201, 202.
Do. do. 29th April ,, ,, 692, 693.
Do. do. 27th May ,, ,, 607, 608.
To Secretary of State, No. 34, 30th May 1864.
From do. ,, 1, 16th Jan. 1865.

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

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

Exd. S. T. Augustin.

P. W. D. Dept.
Proc. of Govt. dated 21st March 1866 No. 963

Press No. 3850, G. M.—27-3-66—100.

1866.

RAILWAY DEPARTMENT.

From

The Consg. Engineer for Railways, in charge

To

The Secretary to Government,
P. W. Dept.

Dated 7th March 1866.
Received 8th

No. 111

Enclosures, No.
Estimates 5.
Plans -3.

Application from the Agent & Manager of the S. I. Railway requesting the sanction of Govt. to the Estimates specified.

Encls 911-2912-21st March/66

No. 1464
dated 12th March 1866 Q. 1600

Public Works Department.
No. 911

Proceedings of the Madras Government
Under date the 21st March 1866.
Read the following

Letter dated Consg. Engineer for Railways in charge, Fort St. George, 7th March 1866 No. 111

The attention of the Government of India will be requested to the works which are proposed for execution on the West Coast Line of the Madras Railway at an estimated cost of Rs 39,124.

2. On the recommendation of the Deputy Consulting Engineer,

Agent stated that there works are repairs, though certain improvements might be made — & that the charge should be against Capital —

Agent observed that the Collectors generally had the Railroad papers, but particularly the Collr of N. Arcot, should

His Excellency the Governor in Council grants authority for the construction of the works being at once proceeded with.

The question as to the account (Capital or Revenue) to which the outlay on these works should be charged will be referred for the decision of the Government of India.

$\frac{14}{2}$ 3 To

Ordered that the following letter be sent

To The Secretary to the Govt of India P.W.D.

Sir I am directed by His Excellency the

Governor in Council to request the sanction of the Government of India to the undermentioned works proposed for execution on a portion of the North West Line of the Madras Railway which has been opened for traffic for more than two years

1	Single 50 feet opening, at 70 Miles 4 chains		13,580
1	Double 20 feet opening, at 79 Miles. 67 chains		14,843
1	Single 20 feet opening, at 79 Miles 62 chains		10,701
	Total Rupees		39,124

The engineer in which case rendered the construction of these bridges necessary are

requested to consult with the Zemindars on the line, as to the mode of their adopting measures of some kind to provide [illegible] where wanted, and thereby impose the condition of within the bounds of the tanks within the limits of their Zemindary Estates. I may, I believe, be right that it will be for the Railway people to recover the cost of damage from such Zemindars as are found to have been negligent & thus to have caused to the line, such damage as recently occurred near Poo[illegible]. Both the solution of the question of will be one of that kind will be quite apart from that of the serious inconvenience to the public & risk from accidents resulting from tanks and irrigation channels unprotected or carelessly looked after, & collector will the ordinary influence of his position & do a great deal towards

The Consulting Eng. for Railways [illegible] the formation of such defences as [illegible] part of their duty

16.3.66.

With eight Enclosures

Dated 22nd March

Encl. 3

1/4
2

explained at length in
the Deputy Consulting Engr's
letter a copy of which is
enclosed.

In reporting
that sanction has been
granted for the commence
ment ~~of the work~~ in
anticipation of the ap
proval of the Government
of India, I am requested by
the decision of the Right
Honorable the Governor
General in Council on
the question which is to
be raised by the Consulting
Engineer as to the Account
(Capital or Revenue) to
which the outlay should
be charged.

Proc Govt 25 Augt/62. Nos 518-519
Do — Do 26th Septr " " 577, 578.
Do — Do 18th Decr " " 466, 467.
Do — Do 9th Feby 1864 " 201, 202.
Do — Do 24th ditto " " 692, 693.
Do — Do 2nd May " " 607, 608.
To Secy of State ditto 34 - 30th May 1864.
From — Do ditto 1 - 16th Jany 1865.

quoted by the Chief Engineer of the Madras Railway in support of their opinion that the cost of the bridge over the Vellar should be charged against "Capital" is that of the large iron bridge, of 210 feet span, recently constructed by the Railway Authorities in 1864, to replace a small one arched masonry bridge of 20 feet which carried the rail at the 395th Mile of the South West Line, over the bed of the abandoned Poovarasanumba Canal, and was destroyed by the bursting of the embankment of

of the Venjally lake in the Malabar District. The Agents of the Madras Railway submitted a claim upon the Public Works Department for Rs. 33,299-5 (the cost of further restoration) on the ground that the destruction of the masonry bridge was occasioned by the neglect of that Department to maintain the embankment in question in an efficient state of repair. The claim was demurred to, the matter was referred to the Right Hon'ble the Secy of State for India and it was decided by him in concert with the Railway Company, that the entire cost of the new bridge should be charged against the

Railway Company's
Capital Account.

Fort St George
21st March/66

16/
2

Dest. 22nd Feb

P W 1866 Deptt.

Proc: of Court for March

No 911 1912

Proc: of the Madras Court

Dt 21st March 1866.

Works on the South West Line of the Madras Railway - Passing orders on the letter submitted by the Consulting Engineer forwarding an Estimate of Rupees 39124 for the execution of — and authorizing their commence = ment.

Cf 444 @ 446.

21st March 1866 D2. 165