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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No.	132	Press
		Mis.
Dated	18-11-1918	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
3rd May 1872.*

No. 39.

Read the following papers:—

From the Superintending Engineer, 2nd Division, to the Acting Chief Engineer for Irrigation, dated Camp at Salatur, 27th March 1872, No. 174.

I HAVE the honour to enclose papers detailed in the margin in supersession of part of work sanctioned for enlargement of Ryves' channel in G. O., No. 2,543, of 20th August 1867. This project allowed for a bridge at Murrevada below the junction of the Pullairu and Ryves' channel on a road which was through a rich portion of the delta.

- 1 Sketch.
- 2 Plans of Bridges.
- 2 Detailed Estimates.
- 2 Abstract of do. for Rupees 17,900.
- 2 Specification Reports.
- 1 Comparative Statement.

2. It is obvious that in this position the space enclosed between the two streams will be cut off from all direct communication with Murrevada and the country beyond it, and can only reach the country south and east by going round three miles to Weyoor, where there is a very old bridge.

3. The bridge provided in the estimate resembles one built at Pamarroo, which has failed of its purpose as suitable for navigation. I therefore requested the Range Officer to submit a design in lieu on the instructions given in your Circular No. 1 of 28th May 1869, and placing it *above* the junction with a second bridge.

4. The comparative statement shows that Rupees 14,190 are required in addition to the amount already sanctioned; but I would point out that this sum, Rupees 3,710, was wholly insufficient, and that a bridge even at the originally proposed site would cost probably Rupees 14,000, so that the extra convenience will be provided at a price of only Rupees 3,900.

5. I trust my proposal will meet with your support and the early sanction of Government.

No. 52.

Note by the Acting Chief Engineer for Irrigation.

With the above letter the Superintending Engineer of the 2nd Division submits plans and estimates for bridges

*Rupees 11,900.
† „ 6,000.

Rupees 3,710.

over the Pullairu* and Ryves'† canal above their junction in lieu of the bridge over the Pullairu channel below their junction, which was sanctioned in G. O., No. 2,543, dated 20th August 1867.

2. It appears from the specification that "the object of the work is to provide a passage over Ryves' canal in the probable line of a future road branching off at the Hyderabad road at Tadenky to Chidivada," while the Superintending Engineer states that if the bridge be placed below the junction the space enclosed between the two streams will be cut off from all direct communication with Murrevada.

3. The Masulipatam road taps the country between the two streams, and judging by the sketch it would appear that nearly two miles of road would have to be provided from the Masulipatam road to connect the latter with the line between the bridges, and for this no provision is made in the estimate; the advantage obtained, or supposed to be obtained, by providing more direct communication

between Murrevada and the Masulipatam road would only be attained to the disadvantage of the villagers desiring to proceed from the lands east of Pullairu below the junction to Murrevada.

4. Under the bridge across Ryves' channel a dam 2 feet 9 inches high is provided, and no explanation whatever is afforded relative to this dam, the construction of which would alter the arrangements relative to Ryves' canal, approved and sanctioned in G. O., No. 2,543, of 20th August 1867.

5. The original estimate of Rupees 3,710 is stated to be insufficient, but no explanation is afforded in what respects it is so; the rates appear to be sufficient; the estimate provided for a bridge of four spans of 20 feet and a draw bridge of 16 feet; a similar bridge is said to have failed at Pamarroo, but it is not stated in what manner the bridge failed; it can only be presumed that the arrangements for raising the draw-bridge failed, and if so this was probably due to defective arrangements relative to the standards supporting the counterpoise weights.

6. For the purposes of navigation it would be more convenient to provide two bays of 50 feet spanned by plate girders with a towing-path carried along the eastern abutment than to build a bridge as provided in the original estimate; a roadway of 14 feet over the bridge would be sufficient.

7. With regard to the estimates submitted it may be remarked that while in one Rupees 300 is provided in a lump sum for raising approaches and metalling, the other provides 13½ Annas per square yard for metalling with 9 inches of stone under 6 inches of kunkar. A thickness of 9 inches is sufficient for the metalling, and this at the rate given in the original estimate would cost Rupees 720 instead of Rupees 1,612-8-0 as provided in the estimate for the two-arched bridge over the Pullairu.

8. Under the circumstances represented above, I cannot support the recommendation of the Superintending Engineer that bridges should be provided for the Pullairu and Ryves' channel with a view to a road being carried above instead of below the junction, and even could I support his recommendation as regards the bridges, I could not, in the absence of all explanation or even mention of the dam under the bridge over Ryves' canal, recommend the construction of the dam.

9. If the arrangements in connection with the raising and lowering of the draw-bridge at Pamarroo have failed, and it can be distinctly shown that the cause of failure cannot be remedied, I would suggest that a plate-girder bridge of two spans of 50 feet should be provided below the junction of Ryves' canal and the Pullairu, in lieu of the bridge provided in the estimate for the extension of irrigation in the Eastern Delta of the Kistna.

FORT ST. GEORGE, (Signed) R. F. OAKES, Captain, R.E.,
11th April 1872. Acting Chief Engineer for Irrigation.

No. 40. ORDER THEREON, 3rd May 1872, No. 1,129.

IRRIGATION, No. 4.

The Superintending Engineer of the 2nd Division recommends the construction of two bridges over Ryves' Canal and the Pullairu in lieu of a single bridge over the latter. His proposition entails an expenditure of Rupees 14,100 in excess of the cost of the single bridge.

The object of the two bridges is explained to be to form a more direct communication from the lands lying between the two streams to the village of Marrevada than now exists; the saving in the distance is said to be three miles, but from the sketch the distance would appear to be only one mile, and by adopting the Superintending Engineer's proposition the advantages gained by the villages lying between the streams would be obtained at a corresponding disadvantage to the villages lying to the south of the Pullairu. The formation of the line proposed by the Superintending Engineer would entail the construction of two miles of road of which no notice is taken, and with one of the bridges he proposes to provide a dam across Ryves' canal, thus altering the arrangements sanctioned in connection with the Eastern Delta Project; he is altogether silent relative to the necessity for this dam. He states that the estimate for the bridge provided for the Pullairu channel is insufficient, but does not explain in what manner it is insufficient, or how the arrangements connected with the draw-bridge have interfered with or impeded navigation in a bridge similarly constructed elsewhere.

2. With the information now before them the Government are not prepared to accord sanction to the Superintending Engineer's proposal, and regret to observe the unsatisfactory manner in which the papers have been laid before them by the Superintending Engineer.

3. If the arrangements in connection with the draw-bridge cannot be modified so as to prevent all impediments to navigation, the Superintending Engineer will submit an estimate for a plate-girder bridge of two spans of 50 feet and will explain fully in what manner the bridge at Pamarroo interferes with navigation.

(True Extract.)

Captain, R.E.,

Acting Joint-Secretary to Government.

To the Superintending Engineer, 2nd Division.
,, Chief Engineer for Irrigation.

Ed. E. C. Shukor.

N^o 32.

Letter N^o 174 dated 27th March from the
Superintending Engineer 2nd Division

Encl^d 11.

° Rs 11900
* Rs 6000

Rs 3710

With the above Letter the Superintending Engineer
of the 2nd Division submits Plans and Estimates
for Bridges over the Pullaim & Ryves Canal
above their junction in lieu of the Bridge over the
Pullaim Channel below their junction which was
sanctioned in G.O. N^o 2543 dated 20 August 1867.

2. It appears from the specification that
the object of the work is to provide a passage over
Ryves Canal in the probable line of a future
Road branching off at the Hyderabad Road at
Tadenthy to Gudimada while the Superintending
Engineer states that if the Bridges be placed below
the junction the space enclosed between the two
Streams will be cut off from all direct com-
munication with Gudimada.

3. The Manipatam Road taps the country
between the two Streams and judging by the sketch
it would appear that nearly 2 miles of Road would
have

have to be provided from the Maculipatam Road
to connect the latter with the line between the Bridges
and for this no provision is made in the Estimate.
the advantage obtained, or supposed to be obtained
by providing more direct communication between
Munirabad and the Maculipatam Road would
only be attained to the disadvantage of the Villagers
desiring to proceed from the lands East of Pullaru
below the junction to Munirabad.

4. Under the Bridge across Ayres Chan-
nel a Dam 2' 9" high is provided & no explana-
tion whatever is afforded relative to this Dam the
instruction of which would alter the arrangements
relative to Ayres Canal approved & sanctioned
in Q. No. 25413 of 20th August 1864.

The original Estimate of Rs 3710 is stated
to be insufficient, but no explanation is afforded
in what respects it is so, the rates appear to be
sufficient - the estimate provided for a Bridge of
Spans of 20 feet & a Draw Bridge of 16'; a
similar Bridge is said to have failed at Ponnamm,
it is not stated in what manner the
Bridge

Bridge failed, it can only be presumed that the
arrangements for raising the Draw Bridge failed,
& if so this was probably due to defective arrangements
relative to the standards supporting the counterpoise
weights.

6. For the purposes of Navigation it would
be more convenient to provide 2 bays of 50' spanned
by Plate Girders with a towing path carried
along the eastern abutment than to build a
Bridge as provided in the original Estimate.
a Roadway of 14 feet over the Bridge would
be sufficient.

7. With regard to the Estimates submitted
it may be remarked that while in one Rs 300
is provided in a lump sum for raising approach
& metalling, the other provides 13 1/2 annas per
square yard for metalling, with 9" of Stone
under 6" of Kunhar. A thickness of 9" is
sufficient for the metalling, and this at
the rate given in the original estimate would
cost Rs 720 instead of 1612-8 as provided in
the estimate for the 2 arched Bridge over the

The Pullains.

8 Under the circumstances represented
above I cannot support the recommendation of
the Superintending Engineer that Bridges should
be provided for the Millam & Ryres channel
with a view to a Road being carried above
instead of below the junction & even could
I support his recommendation as regards the
Bridges, I could not, in the absence of all ex-
planation or even mention of the Dam under
the Bridge over Ryres Canal recommend the
construction of the Dam.

9. If the arrangements in connection with the raising and lowering of the Draw bridge at Parramoo have failed and it can be distinctly shown that the cause of failure cannot be remedied I would suggest that a Plate girder Bridge of 2 Spans of 50 feet should be provided below the junction of Ryres Canal and the Pullarri in lieu of the Bridge provided

presented on the columns for the opinion of
Judication on the Eastern side of the Victoria
Island
11th Sept 1892
J. J. A. Chapman
of
The Secretary to the
M. A.

Public Works 1872 Department
 The Ag. Chy
 Engrs for Irrigation

The Secretary to
 Govt of India

N^o 52.

Dated 12th April 72
 Recd 12th April 72
 Encl^d 11

Note on the Plans
 & estimates for Bridges
 over the Pullaim & Byres
 Canal above their junction
 in lieu of the Bridge
 over the Pullaim Channel
 below their junction which
 was sanctioned m/c
 N^o 2543 of 29th Aug 67.
 N^o 1129-13th Dec 72

D/3 07
 Encl^d 11

MEMORANDUM

REQUESTED for reference the under-mentioned papers

Irrigation Series N^o III.
 Enclos to 28th Dec 176. 27th Dec 72
 Printed m/c. No. 1129. 5th Dec 72

OFFICE OF THE CHIEF
 ENGR. FOR IRRIGATION,
 P. W. Department,

To 12. 1872

Mr. Hamilton
 Head Clerk.

The Registrar of the P. W. Secy.

H. C. Bellamy

Public Works Department
No 1129
Proceedings of the Madras Government
Read the following

From The Asst Chief Engrs
for Irrigation } S.O. No 524/11th April 1921

A/A

105

The Super Engineer
of the 3rd Division re-
commends the construc-
tion of 2 Bridges over
Rynes Canal and the
Tullairu in lieu of a
single bridge over the
latter, his proposition
entails an expenditure
of Rs 14,170 in excess
of the cost of the single
Bridge. the object of the
2 Bridges is explained
to be to form a more

in what manner it is
insufficient or how the
arrangements connected
with the Draw bridge
have interfered with
or impeded navigation
in a bridge similarly
constructed elsewhere.

With the information
now before them the
Government are not
prepared to accord
sanction to the Supy.
Engineer's proposal
and regret to observe
the unsatisfactory
manner in which
the papers have been
laid before them by
the Supy Engineer.
If

If the arrangements
in connection with
the Draw bridge can-
not be modified so
as to prevent all
impediments to na-
vigation the Supy.
Engineer will submit
an estimate for a
plate girder Bridge
of 2 spans of 50 feet
and will explain
fully in what manner
the Bridge at Pan-
maroo interferes with
navigation.

25
Supy Engr & D^y
Chief Engr for Bengal
Desd 6/5/72

H. D.
11. 12th
April

Apr 1798

GOVT OF INDIA: BOMBAY.

PUBLIC WORKS.

The Superintending Eng^r
2^d Division

Date

Amount

Rs 11

3^d May

3 Pounds

1129.

No 29440

Bridges over Wynes Canal
& the Pullairu - Putting
orders in the note by the
Chief Eng^r for Eng^rs in the
Plans & Estimate for bridges
over Wynes Canal & the
Pullairu