

(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. 350-51	Press Min.
46-98	
Dated 5. 2	1892.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
5th February 1872.*

No. 96. Read the following letter from the Acting Superintending Engineer, 1st Division, to the Secretary to Government, Public Works Department, dated Dowlaishweram, 27th December 1871, No. 3,029 :—

ADVERTING to G. O. of the 16th instant, No. 3,170, I have the honour to forward a design and an estimate, amounting to Rupees 6,243, for constructing an iron punt 72 by 12 as directed in paragraph 3, together with a copy of a letter from the Executive Engineer in charge of the Workshops explaining in full the arrangements or alterations he has made. Captain Mead has somewhat increased the cost of the boat by using more iron than I consider is absolutely necessary; but as this adds to the strength of the boat, I have not considered it necessary to make any objections. In other respects the design is as I had originally proposed.

2. With reference to paragraph 2, I beg to observe that by paragraph 4 of G. O. of the 4th August last, No. 2,031, it appears the Government had been led to believe a punt could be made up at the Presidency Workshops of this tonnage for Rupees 3,000. When the Superintendent was called upon to send in his details, he declared it was his intention to use much thinner iron plates; not to make up the punt at all, but merely to cut up the iron at Madras and send it up here to be fitted, putting his rates for the work to be done here, which it will be observed from Captain Mead's letter were entirely erroneous; this is the proceeding I objected to as causing very unnecessary delay in such important works as these, for less thickness of plate cannot be used than that given by us, which is that adopted in England from common experience, the mere cutting up and selling so much iron to these works when arrangements had been made by Government for maintaining a workshop here was perfectly useless, particularly as no proper arrangements were made for conveying this up to Cocanada, and as the design made in Madras had other serious defects no useful purpose has been obtained by all this correspondence.

3. I beg to annex a statement showing the plant we can have from the Upper Godavery works in June or July next, communicated to me by the Officer now in charge on my requisition, the transfer of these I beg the Government will be pleased to sanction. As far as I have been able to ascertain, the steamer *Shamrock* is well adapted to the work of this river, Colonel Haig having had her fitted lately with powerful engines. Should this prove to be the case, some of the other steamers can be dismantled and disposed of, and the *Pioneer* transferred to the Kistna.

From Captain H. R. MEAD, R.E., Executive Engineer in charge, Government Workshop, Dowlaishweram, to the Superintending Engineer, 1st Division, dated Dowlaishweram, 19th December 1871, No. 254.

With reference to your memorandum, No. 2,622, forwarding G. O., No. 2,864, dated 13th November, I have the honour to report that I do not consider that the plan of the boat designed by the Superintendent of Stores at all adapted for use in the Godavery.

2. A boat 50 feet in length by 12 in width with a depth of 3½ feet would be difficult to manage, and certainly with a load of 30 tons, with the sides only 6 inches above water, could not

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5th February 1872.*

be towed across the Godavery with safety; and again the draught, namely, 3 feet, is too great for the dry season, except in the main canals.

3. I forward plan and estimate for a boat that I consider better adapted for the purpose required; it is 72 feet in length, 12 in breadth, with a depth of 3 feet at centre, with a draught of 2 feet; it will carry 24 tons, and this will be its ordinary load; however on special occasions with draught of 2½ feet (side 6 inches above water) it will carry 35 tons; the estimated cost being Rupees 6,243.

4. With regard to cost of boats, I would remark that it depends almost entirely on the thickness of the plates and sizes of angle iron used, and, therefore, it is useless to attempt comparisons; for example, the Superintendent of Stores has sent in two estimates for boats (it is below the same size), one 50 per cent. higher than the other, as, in the second estimate, he considered that the plates in his first design were not sufficiently thick.

5. In the boat, the design of which is now forwarded, the thickness of plates, ribs, etc., has been determined from examination of the boats now in use, and from the experience thus gained it has been thought perfectly safe to increase the distances of the ribs from 2½ feet to 2 feet 9 inches from centre to centre, and also to lengthen it from 60 feet (the length of some now in use) to 72 feet, and the width from 10 feet to 12 feet.

6. With regard to the remarks of the Chief Engineer for Irrigation and the Superintendent of Stores on rates of works, etc., I have to bring to notice that the rates of work at Dowlaishweram Workshop have not increased; it has been since 1867, 8 pies per lb. (4 being for tools, charcoal, and 4 for smiths,) and the difference of cost is almost entirely due to the cost of the materials, namely, iron, and this, should Government allow the shops to execute a large order, will be much reduced; the whole question is where the iron is obtained from—

	RS.	A.	P.
If from England the cost of iron not including workmanship is about at ...	0	1	0
Do. Calcutta do. do. at ...	0	1	10
Do. Cocanada or local market do. do. at ...	0	2	4

In the estimate now forwarded 0-2-4 per lb. is the rate allowed for the iron, wrought and complete, as we have part English and part Calcutta iron in stock.

7. Should the workshops be ordered to build six punts, they could, if iron be bought in England for them, be done still cheaper.

8. With regard to whether it is anticipated that the cost of the boats will be covered by savings effected on the construction of masonry works in the delta, I beg to point out that the estimates have been made in the supposition that Government boats are used, Rupee 1 a cubic yard sanctioned in G. O., No. 28, dated 19th May 1869, as the cost of stone at the quarries being supposed to cover the cost of quarrying, etc., and also that of the Boat office, (I would remark that this rate will have seen to be again raised,) and that, therefore, there will be no saving on paper effected. On the other hand, should we not be provided soon with new boats our works will come to a stand-still for want of carriage, as local boats cannot be obtained in sufficient numbers to carry even building stones, and they will not carry Cyclopean stones except at enormous rates.

No. 97. ORDER THEREON, 5th February 1872, No. 350.

IRRIGATION, No. 9.

WITH his letter above quoted the Superintendent Engineer of the 1st Division furnished a plan and estimate for an iron punt 72 by 12 amounting to Rupees 6,243, in accordance with the directions given in G. O., No. 3,170, of the 16th December 1871.

2. It also appears from the enclosure submitted with Lieutenant-Colonel Fischer's letter that five steel barges 90 feet by 14 feet by 4½ will be available in

*Proceedings of the Madras Government, Public Works Department,
5th February 1872.*

June or July next from the Upper Godavery works, and as the Superintending Engineer does not take exception to the dimensions of these, it is presumed that they are suitable for conveying material from the quarries and for general use on the lower works. In his letter of the 13th July last, No. 1,229, the Superintending Engineer estimates that five lighters will be required and the cost of the whole at the present estimated rate would be, therefore, Rupees 31,215. In view of the supply of boats which will be received from the Upper Godavery, it does not seem desirable that the construction of punts should be embarked in to the extent originally proposed by Lieutenant-Colonel Fischer; but Government are of opinion that if that officer were to proceed with the construction of three, these would probably be as many as could be completed and brought fairly into use before those from the upper works are received. They will, however, be prepared to consider any further representations which the Superintending Engineer may make on the subject.

3. The plan and estimate forwarded with the letter already alluded to are approved and will be returned, and the sanction of the Government of India will

* Item No. 26. be requested to the transfer of the* sum of Rupees 20,000 from the grant for

Extraordinary Agricultural Works of the Godavery District to Tools and Plant. Pending the receipt of the reply no expenditure should be incurred.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the Acting Superintending Engineer, 1st Division.

" " Chief Engineer for Irrigation.

" " Controller of Public Works Accounts.

Exd. S. T. Augustin.

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PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, 5th February 1872.

No. 98.

No. 351.

To

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

IRRIGATION, No. 10.

SIR,—The Superintending Engineer of the Godavery District having reported that additional lighters are urgently required for use on the Lower Godavery works, in the conveyance of stone from the quarries and that native boats cannot be hired except at exorbitant rates, I am directed to request that the sanction of the Government of India may be given to the transfer of Rs. 20,000

* Item No. 26 in current year's Budget. from the grant* for Extraordinary Agricultural Works to "Tools and Plant" to cover the cost of their construction.

2. I am to add that this Government have given consideration to the fact that a certain number of barges now in the Upper Godavery works will be available for the purpose above alluded to, in consequence of the stoppage of the barrier works and that the original demand of the Superintending Engineer has been reduced in consequence.

I have the honour to be,

Sir,

Your most obedient servant,

Colonel, R.E.,

Secretary to Government.

Exd. S. T. Augustin.

No. 3029
FromMajor J. J. Fischer R.E.
Acting Superintending Engineer
1st Division

To

Colonel J. Carpendale R.E.

Secretary to Government D. P. W.

SIR,

MADRAS

Referring to J.C. of the 16th Instant
No 3170. I have the honor to forward a design
and an Estimate amounting to Rs. 6243 for
constructing an Iron punt 72 x 12 as directed
in para 3 together with a Copy of letter from the
Executive Engineer in Charge of the Works shops
explaining in full the arrangements or
alterations he has made. Captain Mead
has somewhat increased the cost of the boat
by using more iron than I consider is
absolutely necessary, but as this adds to
the strength of the boat, I have not considered
it necessary to make any objections. In other
respects the design is as I had originally
proposed.

With

2. With reference to para 2, I beg to observe that, by para 4 of G.O. of the 4th August last No 2031 it appears the Government had been led to believe a punt could be made up at the Presidency workshops of this tonnage for Rs. 3,000; when the Superintendent was called upon to give in his details, he declared it was his intention to use much thinner iron plates, not to make up the punt at all, but merely to cut up the iron at Masras and send it up here to be fitted, putting his rates for the work to be done here, which it will be observed from Captain Mead's letter were entirely erroneous. This is the proceeding I object to as causing very unnecessary delay in such important works as these; for less thickness of plate cannot be used than that given by us which is that adopted in England from ^{common} experience, the mere cutting up and rolling so much iron to these works when arrangements had been made by Government for maintaining a workshop here was perfectly useless.

particularly as no proper arrangements were made for conveying this up to Cocanada ⁹⁸ and as the design made in Madras had other serious defects, no useful purpose has been obtained by all this correspondence.

3. I beg to annex a statement, showing the Plant we can have from the Copper Godamery works in June or July next, communicated to me by the Officer now in Charge on my requisition, the transfer of these I beg the Government will be pleased to sanction. As far as I have been able to ascertain, the Steamer "Shamrock" is well adapted to the work of this river, &c. Colonel Haig, having had her fitted lately with powerful Engines. Should this prove to be the case, some of the other Steamers can be dismantled and disposed of and the "Pioneer" transferred to the Kistna.

Have the honor to be

Dear,

Your most obed^t. servant

Neustädter Major 128

A. G. Supt Engineer 1st Division

J. W. Deft
N^o 350 118

Proceedings of the Madras Government
Under date the 1st January 1872
Read the following

From the Supt. Engr. 1st Div. / H. E. N^o 3039 of 22nd Decr 71.

With his letter
above quoted the Superin-
tending Engineer 1st
Division furnished a
plan and estimate for
an iron Pier 72 x 12
amounting to Rs 6243
in accordance with the
directions given in G.O.
N^o 3176 of the 16th December
1871. - Jh

Rev. Secy. to Govt. N^o 45-46
a 16 Decr 71 285-286

J. W. Deft
1872
Supt. Engr. 1st Div.
H. E. N^o 3039 of 22nd Decr 71.

Enclosed for the
Supt. Engr. 1st Div.
H. E. N^o 3039 of 22nd Decr 71.
is a copy of the
letter from the
Supt. Engr. 1st Div.
H. E. N^o 3039 of 22nd Decr 71.
to the Secy. to Govt.
N^o 45-46 of 16 Decr 71.
and a copy of the
letter from the
Supt. Engr. 1st Div.
H. E. N^o 3039 of 22nd Decr 71.
to the Secy. to Govt.
N^o 45-46 of 16 Decr 71.

Chapt
N^o 350 of 31-5-71
1871

2 It also appears from the enclosure submitted with Lieut. Colonel Fisher's letter that five steel barges $90' \times 14' \times 4\frac{1}{2}'$ will be available in June or July next from the Upper Godavery works and as the Superintending Engineer does not take exception to the dimensions of these it is presumed that they are suitable for conveying material from the quarries and for general use in the lower works.

In his letter of the 13th July last No 1229 the Sup^r Engineer estimates that five lighters will be

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required and the cost of the whole at the present estimated rate would be therefore Rupees 31,215. In view of the supply of boats which will be received from the Upper Godavery it does not seem desirable that the construction of Danks should be embarked in to the extent originally proposed by Lieut. Col. Fisher - but Government are of opinion that if that Officer were to proceed with the construction of three, these would probably be as many as could be completed and brought

brought fairly into use
before those from the
upper works are received.

They will however be
prepared to consider any
further representations
which the Superintending
Engineer may make
on the subject.

The Plan and
Estimate forwarded with
the letter already alluded
to are approved and will
be returned and the sanc-
tion of the Government
of India will be requested
to the transfer ^{the sum of} Rs. 20,000
from the grant for extra-
ordinary Agricultural Works
of the Godavery District
to

15 v
to Tools and Plant.
Pending the receipt of
the reply no expenditure
should be incurred.

Ans

H. J. L. S.

To the Insp. Engineer
Ch. Engineer for Engrs. S.
with fine back.

Recd 6/2/72

J. W. Dept. 178

N^o 351

To The Secretary to the
Government of India.

Sir,

The Superintending
Engineer of the Godavery
District having reported
that additional lighters
are urgently required for
use on the lower Godavery
works, in the conveyance
of Stone from the quarries
and that native boats
cannot be hired except
at exorbitant rates I am
directed to request that

Yours
W. D.

the sanction of the Govern-
ment of India may be
given to the transfer of
Rupees 20,000 from the grant
for extraordinary Agricul-
tural works to "tools and
plant" to cover the cost of
their construction.

2 I am to add
that this Government have
given consideration to
the fact that a certain
number of barges now
in the Upper Godavary
works will be available
for the purpose above-
alluded to in consequence
of the stoppage of the
barrier works and that
the.

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the original demand of
the Superintending En-
gineer has been reduced
in consequence.

And

Sept

Govt. of 1872 Madras.

PUBLIC WORKS.

To The Superintendent Engineer
1st Division

And
To The Secretary to the
Govt of India

Dated

Recd.

Encl.

G. O. 5th 1872, No. 50-257.

Nos. 96-97498

For the purpose of
referred in an order dated
1st Dec 1871 for the
Ketta, which will be made

Remind attention to
certain branches of funds
for the construction of
trial ligues for use on
the common property works.