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MADRAS RECORD OFFICE

Government of Madras

Public works.

DEPARTMENT

G.O. No.	1396	Press
B.P. No.		Mis.
30.5.306		
Dated	19. 5.	1873.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
19th May 1873.*

No 305. Read the following endorsement of the Chief Engineer for Irrigation, dated Fort St. George, 25th April 1873, No. 258 :—

From Major R. F. OAKES, R. E., District Engineer, Tanjore, to Lieutenant-Colonel J. MULLINS, R. E., Chief Engineer for Irrigation, dated Tanjore, 19th April 1873, No. 57.

As directed in your memorandum No. 173, dated 18th ultimo, I have the honour to forward a statement showing Rupees 6,000. the expenditure required in 1873-74 for

Survey Establishment chargeable to Loan Funds for the survey, etc., of the Coleroon, called for in No. 811, of 7th March 1871, by the Government of India.

2. The establishment provides for the services of an Assistant Engineer for five months, for the purpose of taking the levels and cross-sections of the Coleroon, as I am perfectly satisfied that this work cannot be entrusted to a Surveyor or Upper Subordinate.

3. For the survey of the river two Surveyors are provided for the whole year, but if other competent Surveyors can be obtained they will be employed so as to get the work completed as early as possible.

4. The two Surveyors are not employed on different sections but work together, and as the one carries on the traversing, the other takes the offsets, etc., and puts in the river margins.

5. The whole length to be surveyed is about 115 miles; of this only 22 miles have been completed and plotted up to date, and the expenditure has been Rupees 1,577-6-0; of this amount Rupees 490-7-7 is the pay of a Mr. Howard and his establishment for 2½ months, and for an Assistant Surveyor for one month, whose work, it is feared, is useless; the services of these men have been dispensed with. The 22 miles completed is the work of two Surveyors from 15th November and 1st December 1872 up to the end of March. The survey is plotted on a large scale, and occupies a long time, but still the work turned out appears to be very small, and it is hoped that more rapid progress will be made in 1873-74. I am satisfied that the only way to do the work economically is to employ an officer upon it.

6. Of the Rupees 1,000 sanctioned in G. O., No. 2,841, dated 4th December 1872, for fixing bench-marks on the Coleroon bank, Rupees 525-0-4 have been expended up to 31st March, and I beg that the balance, Rupees 475, may be provided for the completion of the work in 1873-74.

*Proceedings of the Madras Government, Public Works Department,
19th May 1873.*

TANJORE DISTRICT.

Statement showing details of Survey Establishments proposed to be employed during 1873-74 for maturing Irrigation schemes which are likely to be classed as Extraordinary.

Details of Establishments.	Period for which required.	Total amount.	Particular Survey on which engaged.	Grounds on which it is expected that the project will be undertaken from Loan Funds.	Remarks.
1 Assistant Engineer... 450 6 Lascars, at 6 Rs. each 36 486	5 months ...	2,430	For Surveying and taking longitudinal and cross-sections of the Coleroon in connection with the Project for the Cauvery and Veennaur regulator in the Tanjore District.	The regulation of the minor streams has already been provided for from Loan Funds.	Vide letter No. 57, dated 19th April 1873.
1 Surveyor ... 100 1 Do. ... 50 12 Lascars, at 6 Rs. each 72 1 Draughtsman ... 25 247	12 months ...	2,964			
Contingencies... ..		5,394 006			
Total...		6,000			

TANJORE,
19th April 1873.

(Signed) R. F. OAKES, Major, R.E.,
District Engineer, Tanjore.

1 Letter with enclosure.

SUBMITTED for the consideration of
Government.

2. It is of considerable importance that the surveys called for by the Government of India in the letter of the 7th March 1871, No. 81 I, should be completed. The points which they are intended to settle have to be decided before the estimates for the regulation of the Cauvery at the Grand Anicut can be sanctioned, and that work again is intimately connected with the regulation of the rivers in the Tanjore Delta, towards which much has been done, while several considerable works of regulation are now in progress.

3. I agree with Major Oakes that it would be highly desirable to employ an officer upon this work, but, in the present state of the Public Works Establishments, it appears to me impracticable to find an officer for this duty, which must therefore, so far as the actual surveying and levelling operations are concerned, be performed by Surveyors, whose work must be so laid out as to ensure the detection of errors of importance. The Surveyors cannot, however, make the calculations necessary to determine the flood levels of maximum freshes under existing and proposed arrangements, and it must be left to the District Engineer to prepare these by other means.

4. In G. O. of the 4th July 1872, No. 1,618, Rupees 3,360 were sanctioned for these surveys, of which the District Engineer reports Rupees 1,577-6-0 were expended up to the 31st March last. Major Oakes applies for sanction for this year for Rupees 6,000, but deducting the Assistant Engineer and his lascars, Rs. 3,600 may be taken as the probable outlay. Major Oakes also asks that the

*Proceedings of the Madras Government, Public Works Department,
19th May 1873.*

unexpended balance, Rupees 475, of the sum of Rupees 1,000, sanctioned in G. O., 4th December 1872, No. 2,841, for bench-mark stones may be placed at his disposal. Both these sums will be debitable to Loan Funds, and can be met from the provision for establishments in the Budget of 1873-74.

5. An effort should be made to complete all the work, required to furnish the information required by the Government of India, by the end of 1873-74. When the Coleroon is in fresh sections of its bed cannot be taken, but at such times surveys of the margin may be made, and observations of the water levels corresponding to the several readings of the Cauvery dam gauge recorded, and the velocities also may be noted so that no time need be lost.

(Signed) JOHN MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

No. 306.

ORDER THEREON, 19th May 1873, No. 1,396.

IRRIGATION, No. 16.

RUPEES 3,360 for Survey Establishments and Rupees 475 for bench-mark stones are placed at the disposal of the

District Engineer, Tanjore, for the survey of the Coleroon and Cauvery, called for by the Government of India, and, as upwards of two years have elapsed since the additional information required by the Government of India in connection with the estimates for regulating the Cauvery at the Grand Anicut was asked for, Major Oakes should endeavour to get the surveys and levels, and the calculations of flood discharges, completed as early as practicable.

2. The Government regret that they are unable at present to place another Assistant Engineer at the District Engineer's disposal for employment on these surveys; but, as it is at present not practicable to do so, the field work should be carried out by Surveyors, and Major Oakes will be at liberty to employ as many efficient men of this class as he can obtain and find full occupation for, so that the completion of the work may be expedited as much as possible.

(True Extract.)

Lieut.-Colonel, R.E.,

Joint Secretary to Government.

To the Chief Engineer for Irrigation.
" District Engineer, Tanjore.
" Controller of Public Works Accounts.

Exd. S. T. Austin.

9/18/57.

District Engineer's Office
Tucson 14th April 1892

To

Major P. F. Carter M.E.
District Engineer

S.

Lieutenant Colonel J. Mullins M.E.
Chief Engineer for Irrigation

Sir,

As directed in your letter
of 17th dated 18th March, I have the
honor to forward a statement showing
the expenditure required in '92 for
Survey Establishment chargeable
to your funds for the Survey of
the Colorado called for in S.I. of 7th
March 1891 by the Government of
India.

The Establishment provide
for the services of an assistant
Engineer, for 6 months, for the purpose
of taking the levels and cross sections
of the Colorado, as I am perfectly satis-
fied that this work cannot be entrusted

to a Surveyor or Upper Subordinate.

In the Survey of the River, 2 Surveyors are provided for the whole year but if other competent Surveyors can be obtained, they will be employed so as to get the work completed as early as possible.

Two Surveyors are now employed on different sections but work together, and in the rainy season on the traversing the other takes the office by and back in the River Mangrove.

The whole length of the Survey is about 12 miles. The Survey has been completed and plotted up to date and the expenditure has been Rs. 10,000-0-0, of this amount Rs. 400-0-0 is the pay of a Mr. Howard and his establishment for 24 months and for an assistant Surveyor for 1 month whose work is required to be done. The services of these men have been dispensed with.

The 12 miles completed is the work of 2 Surveyors from 15th November and 15th December 1892 up to the end of March.

The Survey is plotted on a large scale even land occupies a long time, but still the work turned out appears to be very small and it is hoped that more rapid progress will be made in 93-94. I am satisfied that the only way to do the work economically is to employ an Officer upon it.

By the Public Works sanctioned in G.O. No. 28, dated 4th December 1892 for giving work to the Coleridge Works, Rs. 100-0-0 has been expended up to 25th March and I hope that the balance Rs. 75 may be provided for the completion of the work in 93-94.

I have the honor to be
Sir

Your most obedient servant
W. H. P. Major M.E.

District Engineer, Madras

18258.

Letter No 57 dated 19th April 1873 from
District Engineer Tanjore.

One Course
with
Sixth.

Submitted for the consideration of Government.

2. It is of considerable importance that the surveys called for by the Government of India in the letter of the 7th March 1871, No. 811, should be completed. The points which they are intended to settle have to be decided before the estimates for the regulation of the Canvey at the Grand Anicut can be sanctioned, and that work again is intimately connected with the regulation of the rivers in the Tanjore Delta, towards which much has been done, while several considerable works of regulation are now in progress.

G. C. 28th March
1871. 9.09/6.

1994

100

100

Die Bedeutung
der Erziehung

1875

Oct 27 1870

[illegible]

towards Mount St.
 Helens and arrived
 at the Chocoma Camp
 in 1833-4, and spent
 on the horses and
 in the country in 1835

3 I agree with Major Oakes that it would be highly desirable to employ an officer upon this work but, in the present state of the Public Works Establishments, it appears to me impracticable to find an officer for this duty, which must therefore, so far as the actual surveying and levelling operations are concerned, be performed by Surveyors, whose work must be so laid out as to ensure the detection of errors of importance. The Surveyors cannot, however, make the calculations necessary to determine the flood levels of maximum freshes under existing, and proposed, arrangements, and it must be left to the District Engineer to prepare these by other means.

4 In G.O. of the 4th July 1872 No 1618 Rupees 3360 were sanctioned for these surveys, of which, the District Engineer reports, Rupees 1577-6-0 were expended up to the 31st March last.

Major —

Major Oakes applies for sanction for this year for Rupees 6000; but, deducting the Assistant Engineer and his lascars, Rupees 3600 may be taken as the probable outlay. Major Oakes also asks that the unexpended balance, Rupees 475, of the sum of Rupees 1000, sanctioned in G.O. 4th Dec-ember 1872 No 2841, for bench mark stones may be placed at his disposal. Both these sums will be debitable to Loan funds and can be met from the provision for establishments in the Budget of 1873-74.

5 An effort should be made to complete all the work, required to furnish the information required by the Government of India, by the end of 1873-74. When the Coleroon is in fresh sections of its bed cannot be taken, but at such times surveys of the margin may be made, and observations of the water levels corresponding to the several

several readings of the Cauvery
 dam gauge recorded, and the
 velocities also may be noted, so
 that no time need be lost.

Fort Saint George,
 25th April 1873

Colonel Sir L. C. R. S.
 Chief Engineer for Irrigation.

To the Secretary to Government
 Public Works Department

Tanjore District

Return showing details of current establishment to be employed during 1873/74
 for Irrigation & Navigation. Summed with a view to be placed in a tabular form.

Amount in which
 it is estimated
 that the Government
 will be required to contribute

Details of established

1 Assistant Engineer 450
 6 Peons at 8 each 480
 480 5 months 2400

1 Surveyor 100
 1 Peon 50
 12 Peons at 8 each 96
 1 Peon at 25 25
 247 12 months 2964

Contingencies

Total 6000

Amounting to
 the sum of Rs. 6000
 for the purpose of the
 collection in connection
 with the project for
 the Cauvery & Tamir
 Regulation in the
 Tanjore District.

1873 latter
 11th 57, 8th 1873
 19th April 1873

District Engineer's Office
 Tanjore 19 April 73

L. P. S. S. S.
 District Engineer Tanjore

Shelburne in a letter
of 27th of March 1793
April 18 1793. - from
the District of
Cambridge, to the Church
of St. Andrew for which
see the paper. -

1/13 4/3 3.

PM 27 11 3/73

the following the
letter of the same date
proposed to be supplied
during 1793-74 for the
term of one year of the
which are to be by the
of the same date

8028 mail of 11.6.73
 "4" July - 172.94-95
 "4" Decr - 160-61.

873 Dept
 No 2743

The Chief Engineer
 Bangalore

The Secretary to
 Government Pub.
 Bangalore

Dated 25th April
 Received 3rd May 1873

No 258 & 2.

Submits for the con-
 sideration of Govern-
 ment letter from the
 Dist. Engr. Bangalore for
 forwarding a statement
 of establishment re-
 quired for the Coleroon
 Survey in 1873-74.

No 1396-19th May 1873

For Bldg
 Sent to the Secy 3rd May 1873

No 1396 P.P.D.

Pro: of the Madras Govt.

Read the following:-

From the Secy Engr for Engrs (P.R. No 258 & 2) 25th April 73

Ruppes 3,360 for
 Survey Establishment,
 and Ruppes 475 for bench
 mark stones, are placed
 at the disposal of the Dis-
 trict Engineer Bangalore
 for the Survey of the
 Coleroon and Cauvery,
 called for by the Govern-
 ment of India and,
 as

as upwards of 2 years
have elapsed since the
additional information
required by the Government
of India in connection
with the estimates for
regulating the Canals
at the Grand Anicut
was asked for, Major
Bates should endeavour
to get the surveys and
levels, and the calculations
of flood discharges, com-
pleted as early as practi-
cable.

2 The Government
regret that they are unable at present
to place ^{anther} ~~an~~ Assistant
Engineer at the District
Engineers' disposal for
employment.

employment on River
Surveys; but, as it is
at present not practica-
ble to do so, the field
work should be carried
out by Surveyors, and
Major Bates will be
at liberty to employ as
many efficient men of
his class as he can
obtain and find full
occupation for, so that
the completion of the
work may be expedited
as much as possible.

To the Chief Eng^g & Irrigation
P. E. Bangalore
Controller of P. W. D.

W. 30/4/73
W. H. B.

Recd. 2 June/73.

N^o 274³

Genl. of 1873. ~~Public~~
PUBLIC WORKS.

The Chief Engr for
Irrigation

Date

March

1873

19th Aug 1876

No. 305 & 306

Survey of the Talson and
Cannery. Funds placed
at the disposal of the
Chief Engr for
the Survey of the Talson
Cannery ~~and~~ in
the ~~Talson~~ and
Major Baker desired
to expedite the work as
early as practicable.

N^o 305-6.

W. P. M. 1873