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MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 811	Press
346-347	Misc.
Dated 18. 3	1870.

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*Proceedings of the Madras Government, Public Works Department,
18th March 1870.*

No. 346. Read the following letter from the Acting Superintending Engineer, 1st Division, to the Secretary to Government, Public Works Department, dated Dowlaishweram, 3rd March 1870, No. 4,155:—

I HAVE the honour to acknowledge receipt of G. O. of the 16th ultimo, No. 539, and regret to observe the Government should be under the impression any delay whatever had occurred in disposing of the Western and Eastern Delta Projects; I therefore solicit very respectfully to submit the following explanations.

2. The Western Delta Project was certainly returned in July with a Memorandum, received here on the 20th of that month, but the plans, etc., belonging to it were not received here till the end of that month, and the papers and plans connected with the Eastern Delta did not arrive here till some time in August.

3. I beg to enclose the original Memorandum on the Western Delta, by the Acting Chief Engineer for Irrigation, with its accompaniment, for the consideration of Government, and a perusal of this will, I trust, convince them that the revision required by him is a work of no little magnitude; and, in fact, absolutely necessitated the re-casting of the whole scheme; some of the leading points may here be noted, and it must be borne in mind these are made equally applicable to the Eastern Delta:—

1st.—Paragraph 2 requires an entire revision to be made of the general Map of the Delta, “so that every work, alluded to in the report, may be readily traced, and, in order that this may be the case, the names of all villages mentioned should be entered; as also those of all principal works.”

2nd.—Paragraph 3 requires “that a general statement of distribution of the water admitted at the head sluices; of the average corresponding to each principal portion of the water, or, in other words, each considerable canal and channel; of the principal dimensions of all the canals and channels; should be given. A form of statement, as a general guide to what is wanted, is enclosed.

3rd.—Paragraph 5 requires that “the actual cultivation in this Delta for a series of years should be given.” As the Irrigation Registers, kept up in this district, had never been verified by the Revenue authorities, the Collector has been applied to to afford this information; and also that required in paragraph 6 regarding the revenue for the last ten or fifteen years. Up to this time this information has not been received, and I have again applied for the same twice.

4th.—Paragraph 7 requires full explanations to be given as to the causes which have hitherto prevented the extension of cultivation, etc.

5th.—Paragraph 8 requires a separation to be made of the cost of the navigation and irrigation as regards outlay intended.

6th.—Paragraph 9 requires the total actual expenditure in the Western Delta works to be shown prior to the preparation of these (Captain Ryves's) estimates for navigation; also what the traffic during several years past has been.

7th.—Paragraph 10 complains of a need of the description of the locks; paragraph 11 disapproves of Captain Ryves's proposal for having kutchha locks, and advocates all masonry works being made pukka; subsequent orders directed this measure being carried out, so that every lock has had to be re-drawn and estimated for throughout Delta; and paragraph 12 declares it is necessary that the

designs for the locks should be re-considered with reference to the cost; this has been done, and it can be seen, from the designs submitted for the Nursapoor and Cocanada Canals, very considerable reductions in cost have been effected without any sacrifice of efficiency.

8th.—As regards paragraph 13 I beg to observe no progress whatever had been made with the scheme referred to by Colonel Anderson for the reservoir on the Yerra Calva; this has now been put in hand after a personal examination of the locality as soon as a Surveyor was available.

9th.—The suggestions contained in paragraph 14 required extensive surveys and levels to be made to test their feasibility; these or any other surveys and levels could not be carried on till the end of the irrigating season, viz., December; this remark applies to the whole delta, and it should be remembered we were then suffering fearfully from fever this cold weather; in fact, this has been a greater scourge to the district this year than the cholera in the worst seasons of its visitation.

10th.—Paragraph 15. A scheme for the disposal of the Ralla Mudgu floods has been submitted together with the design for the new Nundamoor Lock. After the waters of the Godavery have been once admitted into the small drainage channels of the Delta, it is a matter of very little importance how much more silt is added by small local drainages, and I have therefore deviated from the former proposal; and I have proposed also to do altogether without the shutters referred to in paragraph 16.

11th.—Paragraph 17 requires a Map to be prepared in such detail as would alone occupy the office for months without other work.

12th.—Paragraph 18. The instructions in this could only be attended to when works are very much alike; the cost of a lock or calingulah varies much more in proportion to the lift or drop than in any other way; hence, any considerable difference in these dimensions necessitates a corresponding increase or decrease in the body walls, and to prepare the estimates detailed drawings are required; and as all masonry works have been ordered to be made pukka, the whole of the designs for the delta nearly had to be done again.

13th.—The designs required in paragraph 20 are ready; the Uttili Canal had to be levelled and cross sectioned throughout again, as those returned were so old they were not reliable to frame any estimate from; and this has been the case with several of the canals; and in others errors have been detected as reported by Mr. Sage in the accompanying letter, and the work had to be done again as soon as the season permitted.

14th.—As regards the requisition contained in paragraph 23 I am quite at a loss to supply a part to this; that is, to explain what portion of the discharge by drainage is considered to belong to rain-fall, and what to surplus irrigation water. Considering how seasons are known to vary, it would require an extensive series of observations to be carefully registered for many years, before even an approximate idea of this could be obtained.

15th.—Paragraph 27 requires cross-sections to be drawn to a natural scale; this of course necessitated the preparation of entire new ones for the whole Delta, and

has been a most laborious and tedious work, but is more than half complete, and should be finished, as I believe when done it will be the most useful record of all the canals we have in the Delta. As these are accompanied by tables showing all the necessary dimensions, surface and bed-levels, surface and bed-falls, velocity, capacity of discharge, and indicating the points where branches are taken off, a reference to any of these tables supplies at once, I think, all the information which can be required.

16th.—I have been unable to carry out the suggestions contained in paragraph 30 without up-setting the whole system of levels as maintained in the Delta for years, and it would be a pity to disturb this arrangement now for so trifling a difference.

17th.—Paragraph 31. The suggestions contained in this will, of course, be attended to.

4. I beg to submit copy of a letter* from the Executive Engineer of No. 1

* No. 592, dated 26th February 1870.

Range, giving his explanation regarding his portion of the work. Mr. Sage has been directed to exclude the Samulcottah canal

from the Delta Completion Project, as funds have been granted for this work, and the surveys and levels he now requires can be completed at leisure. The total expenditure, however, will be brought forward. I beg to add Mr. Sage and many of his subordinates suffered from the prevailing fever.

5. Mr. Rundall's explanations will be forwarded when replying to G. O. of the 12th ultimo, No. 506. In justice to the Executive Officers I must say they were unable to give me any information as to Captain Ryves's designs having had only to furnish him with the necessary surveys and levels, and it could have been seen from his papers he was endeavouring to prepare all the designs and estimates himself, when his health unfortunately gave way, and he had to leave his work so incomplete as noted by the Acting Chief Engineer in paragraph 1. Under these circumstances then I respectfully submit, I had no alternative but to do the work over again as well as I could, particularly after such minute instructions had been conveyed to me.

6. Owing to the very serious illness of Mr. Simon, and the continued indisposition in health of Mr. Turner and the Surveyor, the Central Delta scheme is not in so forward a state as I could have wished it to be, but I hope, now the fever is diminishing, we shall be able to get on much better.

7. In conclusion, I beg to add, besides the preparation of these Delta schemes, the whole of trunk road No. 6 to the Bengal frontier has been re-surveyed and levelled and estimates prepared in the manner required by the Government of India; the dry talooks have been inspected and their irrigation-works attended to and reported upon, and most of the estimates, I found wanting for the Local Fund roads, have been prepared and sent in, and good deal of office records in arrears has now been worked up: it is therefore a matter of deep regret to me to find the Government should consider I had been remiss in attending to any of the duties of this office.

Proceedings of the Madras Government, Public Works Department,
18th March 1870.

ORDER THEREON, 18th March 1870, No. 814.

IRRIGATION, No. 23

The Government are glad to find from Major Fischer's letter that the estimates for the completion of the Godavari Delta are receiving every attention, and, though it was expected that they would have been ready for submission before this, it is better that some delay should have occurred than that they should have been prepared with less care than is being bestowed upon them.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

Superintending Engineer, Division
Chief Engineer for Irrigation.

No 4155

Sd/- Engineers Office, 1st Division
Dowryyooram 3rd March 1870

From,

Major J. T. Fischer R.E.

Acting Sd/- Engineer
1st Division

Colonel C. A. R. R.E.

Secretary to Government

R.M.D.

Madras

Sir,

I have the honor to acknowledge receipt of G.O. of the 16th ultimo No 539 and regret to observe, the Government should be under the impression any delay whatever had occurred in disposing of the Western and Eastern Delta projects. I therefore solicit very respectfully to submit the following explanations.

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2 The Western Delta project was certainly returned in July, with a Memo received here on the 20th of that month, but the plans &c. belonging to it were not received here till the end of that month and the papers and plans connected with the Eastern Delta did not arrive here till some time in August.

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accompaniment for the consideration of Government, and a perusal of this will I trust, convince them that, the revision required by him is a work of no little magnitude, and in fact absolutely necessitated by the conducting of the whole scheme: some of the leading points may here be noted and it must be borne in mind these are made equally applicable to the Eastern Delta:

1st Para 2. requires an entire revision to be made of the general map of the Delta so that every work alluded to in the report may be readily traced and in order that this may be the case, the names of all villages mentioned should be entered as also those of all principal works."

2nd Para 3. requires "that a general statement of distribution of the water admitted at the head sluices, of the average corresponding to each principal portion of the water, or in other words each considerable Canal and Channel, of the principal dimensions of all the Canals and Channels should be given - A form of statement as

a general guide to what is wanted is enclosed.
3rd Para 5. requires that "the actual cultivation in this Delta for a series of years should be given" as the Irrigation Registers kept up in this District had never been verified by the Revenue Authorities, the Collector has been applied to to afford this information and also that required in para 8 regarding the Revenue for the last 10 or 15 years: up to this time this information has not been received and I have again applied for the same twice.

4th Para 7. Requires full explanations to be given as to the causes which have hitherto prevented the extension of cultivation &c.

5th Para 8. Requires a separation to be made of the cost of the Irrigation and Irrigation as regards outlay intended.

6th Para 9. Requires the total actual expenditure in the Western Delta works to be shown prior to the preparation of this (Captain Agues) Estimates for Irrigation, also what the traffic during several years past has been.

7th Para 10. Complaints of a need of the description of the Locks, para 11 disapproves of

of Captain Rye's proposal for having
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masonry works being made *puerka*, sub-
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being carried out, so that every Lock has
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throughout Delta, and para 12 declares
it is necessary that the designs for the
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Cocanada Canals, very considerable
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8.th As regards para 13 I beg to observe
no progress whatever had been made
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for the Reservoir on the Yerra Calua. this
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we were then suffering fearfully from fever
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increase or decrease in the body walls and to prepare the Estimates, detailed drawings are required and as all masonry works have been ordered to be made *pucca*, the whole of the designs for the Delta nearly had to be done again.

13.th The designs required in para 20 are ready. The Attili Canal had to be levelled and cross sectioned throughout again as these returns were so old they were not reliable to frame any Estimate from: and this has been the case with several of the Canals and in others errors have been detected as reported by Mr. Sage in the accompanying letter and the work had to be done again as soon as the season permitted.

14.th As regards the requisition contained in para 23 I am quite at a loss to supply a part of this, that is, to explain what portion of the discharge by drainage is considered to belong to rain-fall, and what to surplus irrigation water. Considering how seasons are known to vary, it would require an extensive series of observations to be carefully registered for many years before even an approximate idea of this could be obtained.

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17.th Para 31. The suggestions contained in this, will of course, be attended to.

I beg to submit copy of a letter from the Executive Engineer to Mr. Range giving his explanation regarding his portion of the work,

to 392 of 26th Feb 77
1870

Mr. Sage has been directed to exclude the Samul
Cottah Canal from the Delta completion
project as funds have ^{been} granted for this work
and the surveys and levels he now requires can be
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suffered from the prevailing fever.

5 Mr. Randall's explanations will
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me any information as to Captain Ryces'
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and a good deal of Office records in arrears
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of deep regret to me to find the Government
should consider I had been remiss in attending
to any of the duties of this Office.

I have the honor to be

Sir,
Your most obed^t servant

Wm: F. Titcher Major R.E.
S. J. Sup^r Engineer, Division

P. B. No 934

Enclosure in letter
No 4155 dated 3^d March
from the Lieut Eng^r 1st Division
to Genl. Sir Eyre to Genl. D. O. M.
to be kindly returned

Wm Lloyd Garrison
in 4755

Wm Lloyd Garrison

at St. Charles
to Government
Chas.

Wm. D. P. March 1890

Agave
detrits with pebbles
E. 100 to 200 yards

to the Eastern and Western

Delta completion by 1950
to the Governor.

Ms. B. 1. 6

Rec'd 2/2/70

827.1.20

Swanwick P. Mad.
No 814 8/12

Proceedings of the Madras Govt. 9 10
Under date the 18th March 1890
Read the following:-

From the Ag. Supr. Engr of the
1st Divⁿ - { A. E. No 4155 of 3 March/90 }

The Government are
glad to find from Major Fischer's
letter that the estimates for the
completion of the Godavery Delta
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than is being bestowed upon them.

To the Supr. Engineer
Ch. Engineer for District

Sept 21/90

Wm. 10/3/90

Cue 934

Govt. of 1870: India

PUBLIC WORKS.

To The Superintending Engr.
1st, Division

Date:

Recd:

1870, No. 814

Nos 346-347

Godavery Delta Papering water on
the letter from the Supy Engr of the
1st Div explaining the cause of
delay in the preparation of the
estimates for the Godavery Delta.