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MADRAS RECORD OFFICE.

Government of Madras.

Financial DEPARTMENT.

G.O. No. 668 Press Mis.

245-246.

Dated 27-3- 1875.

415

Not to be folded or roughly handled

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Proceedings of the Madras Government, Financial Department,
27th March 1875.

East Coast Canal.

No. 245. Read the following Proceedings of Government, in the Public Works Department, dated 23rd March 1875, No. 814 :—

ABSTRACT.—Passing orders on an estimate of Rupees 2,74,000 for extending the East Coast Canal from the Kundalairu River near Kistnapatam to the Pennair River below Nellore.

No. 246. ORDER THEREON, 27th March 1875, No. 668.

To be recorded.

(True Extract.)

W. HUDLESTON,
Chief Secretary.

Exd. J. Wright.

Govt. of 1875 March

FINANCIAL,

Dated March 27th.

Read.

G.O., 27th March 1875, No. 603.

MARCH,
Nos. 245-246.

East Coast Canal.—Proceedings, Public Works Department, passing orders on a letter from the District Engineer, Nellore, submitting an estimate for extending this Canal from the Kundalairu River near Kistnapatam to the Pennair River below Nellore, recorded.

Proceedings of the Madras Government, Public Works Department, 23rd March 1875.

No. 559. Read the following letter from R. SMITH, Esq., District Engineer, Nellore, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Nellore, 8th February 1875, No. 108 :—

I HAVE the honor to forward, by banghy,* the survey and sections of the reach of the East Coast Canal between the Kundalairu and the Pennair, a distance of miles 24·217, and to submit an estimate, amounting to Rupees 2,74,000, for the construction of that line of navigation. The rates proposed have been fixed with reference to those allowed for, and prevailing on, the portion of the canal now under execution, and I have to add that I believe them to be ample, but by no means excessive, as working on this line is occasionally very difficult and discouraging.

4 Estimates.
1 Specification.
* 27 Drawings.

2. The alignment of the canal, proposed in these papers, differs but little from that contemplated by Lieutenant (now Colonel) Chambers, R.E., 19 years ago. Two modifications only are really deserving of notice, and these I will now briefly refer to. The first is near the mouth of the Kundalairu ; the second is within the limits of the village of Koratoor. Colonel Chambers intended making the Kundalairu the line of navigation between the points marked A and B on the accompanying sketch map, but I am not disposed to recommend that arrangement, as I consider it would be difficult to preserve a good navigable passage in the vicinity of C, as that outlet is apparently silting up. Another objection to utilising that reach of the Kundalairu is its proximity to the bar, and the consequent risk that boats would be exposed to during high floods in that river. I therefore propose taking off the canal from the left bank of the Kundalairu at the point marked D. This alignment will be rather more expensive in the first instance than Colonel Chambers', and it will entail the maintenance of a ferry in the line of the Kistnapatam road ; but I am convinced the modification is very necessary if any approach to a first-class line of navigation is contemplated. At Koratoor I consider the canal should be taken more inland, than originally intended, to avoid the drift sand. In selecting the line, on the east of the bungalow on the Koratoor beach, Colonel Chambers had apparently two objects in view—the preservation of direct communication between the village and the bungalow and the conservation of the adjacent wet lands. The former I propose to provide for by a ferry boat on the canal, and with reference to the latter it was no doubt desirable, some years ago, to forego many advantages rather than interfere with wet cultivation ; but at the present time, with a supply of water available for the whole Pennair Delta, I think a few acres of rice land may be taken up for an important communication without much compunction or inconvenience.

3. In connection with the arrangements for navigation, in the vicinity of Kistnapatam, the reach of the Kundalairu, from D to E, will be most useful for the Nellore heavy traffic, as it is navigable at *all* seasons.

4. It will be observed that the proposed line joins the main or southern mouth of the Pennair not far from the bar ; this is objectionable, but it is the only suitable junction. In fact, I think it would be impossible to find another that could be kept open for navigation without a heavy expenditure annually.

5. In deciding on the alignment of the canal it was necessary, in parts, to avoid the cheapest line, and to select one less likely to be silted up by the local

drainage, or by the drift sand. The sand hills for some distance, north and south of the village of Kistnapatam, are reported to be advancing at the rate of two or three yards annually, and I thought it absolutely necessary to leave a considerable margin between them and the canal. North of Chennapillypalem the sand hills are comparatively low, and mostly covered with vegetation, and as I believe they will not give trouble or add to the working expenses of the canal, it has been set out rather close to them, where the adjoining ground is favorable.

6. As there are only a few hamlets on the east of the canal, and as the traffic on the three existing roads will, practically, begin or end at the canal, as the case may be, I do not consider bridges of any kind necessary over this section of the line. Ample provision has, however, been made in the estimate for ferry boats capable of carrying cattle and bandies across the canal at all seasons. The wheeled traffic is so very limited in those parts that, with one exception, it is scarcely deserving of notice; but, as before stated, arrangements have been made for maintaining speedy communication between the narrow strip of land on the east of the canal and the villages on the west of it. The exception alluded to is the Kistnapatam road, on which there is a moderate traffic, to the small port of Kistnapatam; but the trade to that port by *sea* going boats will be so very much reduced if it does not cease altogether, after the opening of the canal, that a ferry boat of the description proposed would more than suffice to meet the probable future requirements of the traffic intended for that particular route.

7. The bars between the Kundalairu and the Pennair, in the immediate vicinity of the proposed canal, are so small, and so very seldom open, that they will not interfere with the navigation to any appreciable extent.

8. To prevent silting as much as possible, provision has been made in the estimate for keeping the bulk of the local drainage out of the cuts forming the canal between the several backwaters. The drainage will in all cases, except where the configuration of the country is favorable for admitting it into the artificial reaches of the canal, be carried parallel to them and discharged into the nearest, or most convenient, backwater.

9. Compensation has been allowed in the estimate for the wet cultivation on the east of the canal, as the area is too small to justify the expenditure that would be necessary to construct the required irrigation syphons.

10. In conclusion, I have to state that I very much regret the delay that has occurred in submitting the accompanying papers; endeavours were made to despatch them sooner, but press of work, ordinary and extraordinary, materially interfered with their preparation.

No. 560. ORDER THEREON, 23rd March 1875, No. 814.

CIVIL WORKS, No. 29.

WITH the above letter the District Engineer of Nellore submits an estimate of Rupees 2,74,000 for extending the East Coast Canal from the Kundalairu river, near Kistnapatam, to the Pennair river below Nellore, a distance of 24¼ miles. The section of canal extension already in hand from Doogarazapatam to Kistnapatam on an estimate of Rs. 2,87,000, sanctioned in G. O., No. 274, of 28th January 1873, is 20¾ miles in length. The

Proceedings of the Madras Government, Public Works Department,
23rd March 1875.

rates for earthwork in the latter estimate ranged from 1½ to 6 Annas per cubic yard, while those of the present estimate range from 1¾ to 5½ Annas; an extra allowance of 3 Pies per cubic yard for sectioning the banks being made in both estimates.

The charges for providing intercepting drainage channels, for compensation, and for superintendence and sundries, are higher than before; so that it would appear on the whole that the working rates do not exceed those estimated, and that actual experience gives reason to believe that a mileage rate of Rs. 12,500 will not be exceeded, which for the entire length of 126 miles, between Doogarazapatam and the Kistna District, gives a total of 15¾ lakhs.

2. The deviations from the line of canal originally proposed appear to be justified by the reasons given by Mr. R. Smith. He proposes to dispense with bridges over the canal and to provide ferry boats only at Kistnapatam, Kottapalem, Nalatoor, Iduru, Kantopilly, Koduru, Venkanapalem, Koratoor, Mypaud and Pallipalem; also to dispense with irrigation syphons for maintaining such cultivation as exists between the canal and the sea, on the ground of their expense being disproportionate to the amount of cultivation concerned. It may be found necessary hereafter to modify those views in part as the work proceeds; and the Collector will be instructed, in the Revenue Department, to investigate each case in time, and to report if he considers that its requirements have not been fully met.

3. As remarked in paragraph 3, there is reason to suppose that the entire cost of extending the East Coast Canal to the Kistna District will be about 15¾ lakhs. Of which, assuming 2¾ lakhs as spent up to the end of 1874-75 and ¾ lakhs as the rate of annual outlay (both sums being overstated), it will take upwards of 17 years to complete so much of the project; after which there may still remain few miles to connect Madras with the navigable canals of the Kistna and Godavery. No adequate return, either direct or indirect, can be expected till such connection shall have been made. It is therefore expedient, on financial considerations alone, to proceed with the work, at least at double the rate of progress above mentioned. And the District Engineer will report in what manner such rate of progress may be attained without interfering with the other important works of the district; whether by concentration of more labor on the sections already surveyed and estimated, or by taking in hand, as fast as they are laid out, other sections with labor drawn from fresh sources The District Engineer of the Kistna is likewise called on to report the extent of work that has to be planned and estimated for in his district.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the District Engineer, Nellore.
,, ,, Kistna.
,, Controller of Public Works Accounts.
,, Revenue Department.
,, Financial ,,
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Hydraulic Department

Govt. of {1875} Madras.

PUBLIC WORKS.

To

THE DISTRICT ENGINEER, NELLORE,

&c., &c., &c.

No 733

Dated March 23rd.

Recd. 25. March/75 Encl.

MARCH.

Nos. 559-560

East Coast Canal.—Passing orders on an estimate of Rupees 2,74,000 for extending the —, from the Kundalairu river near Kistnapatam to the Pennair river below Nellore. to Mel ps. No 668.
27
Recorded

Govt. of Madras.

East Coast Canal

Final

to

G. O., 27 Feb., 1875, No. 668

Nos. 245-246.

East Coast Canal

Proc. P. W. D. passing orders on a letter from the Dy. Engr., Nellore, submitting an estimate for extending the canal from the Kundaleiru river near Kistnapatam to the Pennair river below Nellore, recorded.