

(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.	1887	Press	<i>Original</i>
B.P. No.		Mis.	
Dated	25. 7.	1953	1876

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
25th July 1876. No. 1,337.

Read the following papers:—

No. 423. From Lieutenant-Colonel R. F. OAKES, R.E., Superintending Engineer, Tanjore, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, Public Works Department, dated Tanjore 2nd June 1876, No. 1,015.

WITH reference to G.O., No. 3,210, dated 13th November 1874, I have the honor to inform you that the file relative to the subject has been mislaid so that I cannot ascertain precisely what the Government required relative to the waterways in the Railway in relation to the drainage which may have to cross the line and to the tanks which by breaching might injure the line, but from my knowledge of the district, as I am of opinion that it would be a mere waste of money to have a survey made of the portion of the country the drainage of which crosses the Railway line between the Trichinopoly District or western limit of Tanjore and the town of Tanjore, I venture to offer a few observations on the subject.

2. Immediately west of Tanjore ten 20-feet openings with an area of 1,100 square

Miles 49. Chains 36.

Position.	Opening.	Area.
M. C.		
49-58	1- 3'	4' 6"
49-70	1-15	82 6
50-13	1- 3'	4 6
50-28	2-15'	170 6
50-35	1-15	52 6
50-52	1 omitted	
51-17	1- 3	4' 6"
51-28	3-15	427
51-37	1-12	90
51-49	1- 3	4 6"
51-60	1-15	142 6"
52-17	15-30	4050

feet span a stream which drains an area of about $1\frac{1}{4}$ square miles; west of this come the masonry works noted in the margin, which pass the water from a comparatively small but irregular gathering ground, perhaps 9 square miles in area, in a distance of 3 miles or up to 52-17 where 15-30s. with an area of 4,050 square feet provide for the drainage of about 50 square miles of a very thirsty country, *i.e.*, where the soil is light and absorbs much moisture and in which there are a few small tanks. It may be mentioned that the water which passes through the

bridge of 15 arches of 30' span finds its way into the Vadavaur which is spanned by 2-30s. and is aided by a surplus weir of about 60' on a high level; to the west of the 15-30s. for nearly 8 miles the line runs through high dry undulating ground and in it are twenty-two openings providing a lineal waterway of 322 feet and an area of 1,732 square feet from 60 miles 46 chains; the tank country may be said to be entered and continues for a distance of $6\frac{3}{4}$ miles nearly, through it twenty-three openings or vents are provided affording a lineal waterway of 1,038' and an area of 7,798 square feet, the area drained through these vents is about 45 square miles; the tanks are not in one valley but in five, and hence

Mileage.	Opening.	Area.
62-35	4-30	1200.
63- 9	4-30	1320.
64-17	4-30	1200.
65- 9	8-30	1680.
66-62	4-15	570.

there are five main openings in the positions indicated in the margin or about a mile apart, and hence the drainage of a comparatively small area of country has to find a vent through any particular opening.

3. The tanks, as a rule, are small and are not in good order; the valleys are broad and shallow, and if all the tanks were breached at once, I should not be in the least apprehensive of the Railway embankment being endangered, as the water would

*Proceedings of the Madras Government, Public Works Department,
25th July 1876. No. 1,837.*

rise to no considerable height, but would simply form a pool above the opening which retarded its passage.

4. It may be mentioned that the line has now been open for some fifteen years, and there has never been the smallest apprehension of danger on account of defective waterway from the town of Tanjore to the western limits of the district, a distance of 19 miles, and hence it appears to me to be unnecessary to have a survey of the country made and the area and contents of the tanks, in the valleys drained, calculated.

No. 105-W.

Note by the Chief Engineer for Irrigation.

No. 428-A.

THE instructions to District Engineers regarding measures to be taken for the security of tanks affecting lines of Railway are contained in this office Memorandum, No. 1,040, of the 14th December 1874.

2. A return of such tanks for the half-year ended 30th June 1875 was recorded in G.O., 21st September 1875, No. 2,740. That return included 46 tanks and was confessedly imperfect. The return for the half-year ended 31st December last is overdue.

3. The opinion of Lieutenant-Colonel Oakes that the tanks in Tanjore cannot be a source of danger to the Railway may be accepted, but though, from the importance of removing risk to Railways, tanks affecting them were required to receive special attention, it is nevertheless necessary that all tanks should be put into an efficient and safe state as soon as possible in the interests of the revenue and cultivation dependent upon them.

4. The return for the half-year ended 31st December last would now be useless, but that for the half-year ended 30th June 1876 should be prepared at once, and the tanks included in it should be put to rights as early as may be practicable, and all other tanks in the district should be similarly attended to, a considerable number being provided for out of the Repair grant in each year. The tanks of the Tanjore District have been generally much neglected, the time and attention of the Public Works Establishments having been for the most part devoted to the Delta; they should receive a fair share of attention and of the Repair and Minor New Works grants, and as in other districts where similar petty tanks abound, the provision of means of disposing of surplus should be made in an economical manner in some cases by the construction of weirs of the type of design No. 5, Circular 67, while in other cases a mere pavement of rough stone without any masonry will meet the requirements, and probably in some the levelling of the ground at one or both ends of the bund to F. T. L. and its protection with turf or nanel planting will suffice. If nanel be used, the waterway should be double that necessary if unobstructed.

OOTACAMUND,
20th July 1876.

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

To the Secretary to Government, Public Works Department.

No. 429.

ORDER THEREON, 25th July 1876, No. 1,837.

IRRIGATION, No. 47.

RECORDED. The District Engineer will attend to the remarks of the Chief Engineer for Irrigation and he will furnish

*Proceedings of the Madras Government, Public Works Department,
25th July 1876. No. 1,837.*

the statements of tanks affecting the Railway at the end of each half-year. The return for the half-year ended 30th June 1876 should be submitted at once.

(True Extract.)

Colonel,

Offg. Under Secy. to Govt., P.W.D.

To the District Engineer, Tanjore.

„ Chief Engineer for Irrigation.

„ Consulting Engineer for Railways.

Exd. W. H. French.

Spare Copies

OFFICE OF CHIEF ENGINEER FOR IRRIGATION,

Botasamund
Fort St. George, 20th July 1876.

No 105-W.

Note by the Chief Engineer for Irrigation.

Encls 1

The instructions to District Engineers regarding measures to be taken for the security of tanks affecting lines of Railway are contained in this office Memo. No 1040 of the 14th December 1874.

2. A return of such tanks for the half year ended 30th June 1875 was recorded in G.O. 21st September 1875, No 2740. That return included 46 tanks and was confessedly imperfect. The return for the half year ended 31st December last is over due.

3. The opinion of Lt. Colonel Dakes that the tanks in Tanjore cannot be a source of danger to the Railway may be accepted, but though, from the importance of removing risk to Railways, tanks affecting them were required to receive special attention, it is nevertheless necessary that all tanks should be put into an efficient and safe state as soon as

possible in the interests of the revenue and cultivation dependent upon them.

4. The return for the half year ended 31st December last would now be useless, but that for the half year ended 30th June 1896 should be prepared at once, and the tanks included in it should be put to rights as early as may be practicable, and all other tanks in the District should be similarly attended to, a considerable sum being provided for out of the repair grant in each year. The tanks of the Tanjore District have been generally much neglected, the time and attention of the P.W. Establishments having been for the most part devoted to the Delta; they should receive a fair share of attention and of the Repair and Minor Works grants, and as in other districts where similar petty tanks abound, the provision of means of disposing of surplus should be made in an economical manner in some cases by the construction

of weirs of the type of design No. 5 Circular by, while in other cases a new pavement of rough stone without any masonry will meet the requirements, and probably in some the leveling of the ground at one or both ends of the bund to F.T.I. and its protection with turf or navel planting will suffice. If navel be used the waterway should be double that necessary if unobstructed.

Colonel Sir St. Colville
Chief Engineer for Irrigation

To

The Secretary to Govt. P.W.

20 Jan 73. No 184
 24 Apr 73 - 1183
 27 Nov 72 - 2783
 28 Feb 72 - 575
 2 Sept 75 - 2505
 28 March 73 - 963
 13 Nov 74 - 3210
 Cir Mem. of Chy. for Eng.
 14 Dec 74 No 1040
 Gov. 21 Sept 75 - 2740

P. W. 1876 Department

Form No. 18.

80-5346

From
The Chief Engineer for Irrigation,

To
The Secretary to Government,
Public Works Department.

Dated 20 July
 Despatched
 Received 27 July 1876

ENCLOSURE /

No. 10510

Subject.

Note on letter from the Public
 Engs. Janore about Tanks
 affecting Railway Lines in
 the East.

K-4280.

Cir - 22.9.76
 on 25-7-76
 on 25-7-76

E. I. Form No. 21.

No 1087

Public Works Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

UNDER date the 25 July 76.

READ the following:—

Note by the Chief Engineer for Irrigation
 No. 105 W, dated 20th July 1876.

Recorded. The District
 Engineer will attend to
 the remarks of the
 Chief Engineer for Irrigation
 and he will furnish
 the statements of Tanks
 affecting the Railway
 at the end of each half
 year. The returns for the
 half year ended 30th June
 1876 should be submitted
 at once.

S. G. Panjore
 C. E. for I. V.
 C. E. for R. V.

July 21/7

G.M.V.

5346

Govt. of 1870 Madras.

PUBLIC WORKS.

To
The District Engineer
Tanjore.

V.L. - R.

Dated

For

Per

Encl. 1

G. O. 25th July 1870 No.

1607

Not. 25th July

W. H. P. S.

Sanction affecting Railway
lines in the Tanjore Dist.

Note by the Chief Engr.
for District or letter from
the District Engr. Tanjore
ment ——— recorded
with remarks.