

# MADRAS RECORD OFFICE.

Government of Madras.

*Revenue* DEPARTMENT.

|                                    |               |
|------------------------------------|---------------|
| G.O. No. 2353                      | Press<br>Mis. |
| <u>249-252</u>                     |               |
| Dated 17 <sup>th</sup> August 1918 |               |

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,  
17th August 1869.*

No. 249. Read the following Proceedings of the Board of Revenue, dated 29th July 1869, No 5,550 :—

Read the following letter from the Collector of Tanjore, to the Acting Secretary to the Board of Revenue, dated Puttucottah, 7th May 1869, No. 80.

I HAVE the honour to submit for the sanction of the Board and Government a scheme which Captain Oakes, the Superintending Engineer of the 6th Division, proposes for metalling the Local Fund roads in this district with granite brought from Trichinopoly.

2. I enclose his letter on the subject, with three memorandums A., B., and C., and a sketch.

3. It will be seen that the main grounds on which Captain Oakes proposes this measure are, first, that the gravel hitherto obtained from the neighbourhood of Tanjore is being rapidly exhausted; secondly, that the material now obtained is far inferior to what used to be got a few years ago; thirdly, that, in future, gravel will have to be brought from at a distance of two miles from the railway station at Tanjore, which will necessarily tend to increase considerably the cost of metalling the roads.

4. Captain Oakes thinks that granite will admirably supply the place of gravel, and suggests that stone might be brought from the Golden Rock at Trichinopoly, seven-eighths of which is the property of Government. This rock is only three-fourths of a mile from the railway.

5. In preference to manual labour, Captain Oakes proposes to employ Blake's Patent Stone Breaker, with a 12-horse engine, for breaking the stones. Statement A. shows the cost of sending for the machines from England and putting them up in working order at Trichinopoly. The charge is estimated at Rupees 11,500.

6. Statement B. contains the terms on which it is proposed to enter into a contract with the Agent of the Great Southern of India Railway Company, for making a branch railway to connect the Golden Rock with the main line, and for running special trains to convey the stone to the several railway stations in Tanjore. The branch railway referred to is to be made at the cost of the Local Funds, which is estimated at Rupees 13,432.

7. Statement C. is the estimate for metalling 10½ miles with stone every year at a cost of Rupees 1,11,300 or about 11,000 Rupees per mile.

8. The outlay thus required at first on account of the machinery and tools amounts to Rupees 26,500, with 10,000 Rupees in addition, to commence operations without delay. The former will be a general charge on the Road Fund, and the latter debited to that estimate, for which the stone first broken is made use of.

9. As the Board are aware the annual receipts on account of the District Road Fund may be set down at, at least, Rupees 2,00,000, and if we deduct Rupees 1,11,300, the estimate for graniting the roads, we shall have still a sum of Rupees 88,700 left, which will be sufficient for maintaining the other roads on which metalling was not commenced.

10. Under these circumstances I beg to recommend the project for the favourable consideration of the Board and Government.

*Proceedings of the Madras Government, Revenue Department,  
17th August 1869*

ENCLOSURE No. 1.

From Captain R. F. OAKES, Superintending Engineer, 6th Division, to the Collector of Tanjore,  
dated 29th April 1869, No. 145.

I HAVE the honour to inform you that I have been for some time in communication with the Agent of the Great Southern of India Railway, relative to the formation of a branch line to the Golden Rock at Trichinopoly, for the purpose of obtaining stone from that rock to metal the roads in the Tanjore District; this has become necessary because the gravel at Tanjore, from which material has been obtained for metalling the roads in near Tanjore itself, and for those roads which have been and are being metalled in the district, is being rapidly exhausted, and the material, even now being used, is far inferior to what we used to obtain a few years ago; the layer of gravel is not more than from a-quarter to three-quarter yards in depth, and the gravel is much mixed with red earth, from which it has to be separated. The gravel which is now being quarried for metalling the roads in progress is being brought from a distance of from 1 to 2 miles from the railway station, and the further we get from the railway station, of course the cost of the gravel increases and the thickness of the layer of gravel and its quality decreases, and the proprietors of the waste land from which gravel has hitherto been obtained, free of cost, are now demanding payment for the gravel excavated.

2. It is high time therefore to find a substitute for the gravel and as  $\frac{3}{4}$ ths of the Golden Rock, which contains about  $1\frac{1}{2}$  millions of cubic yards of stone, is the property of Government, and as the rock is situated only about  $\frac{1}{2}$  mile from the railway line and is close to the Central Jail and advantage can therefore always be taken of any prisoners who are not otherwise occupied, and the Inspector-General of Jails, though not being able to state definitely what number of prisoners may be made available daily, has expressed his willingness to allow them to be employed in breaking stones when not otherwise required, provided the guards and tools, etc., are paid for. The Golden Rock appears to be the spot to look to for our future supply of material to metal the roads in Tanjore.

3. As the trains must run daily, and each train consists of 16 trucks, which will carry about 50 cubic yards of stone, occupation could be found for from 300 to 350 prisoners daily, and the cost of their guards would be about Rupees 14½ daily, while the cost of free labour would be from Rupees 65 to 70 daily; as far as I can ascertain it is not probable that more than from 150 to 200 prisoners will be available daily for stone breaking, etc., and about 100 or 120 would be required to load the trucks and blast the stone; some 150 or 200 daily labourers, costing from Rupees 30 to 40 daily, would therefore be required in addition to the convicts, but the Inspector-General of Jails objects to the convicts being brought in contact with free labourers, moreover the cost of breaking stone by means of Blake's Patent Stone Breaker would be only Rupees 21 per diem for 80 cubic yards. I would therefore

Blasting 3 per cubic yard.  
Breaking 4 do. do.  
Loading trucks 1 do.  
7 x 60 = 420.

Vide Memorandum A.

recommend that one of Blake's Patent Stone Breakers, 24 x 12 with a 12-horse engine to work it, should be procured at a cost of Rupees 11,500 when delivered and put up at Trichinopoly; this machine will break 8 cubic yards per hour, or say 80 cubic yards per day, and so all free labour could be dispensed with, for the 150 or 200 convicts would be sufficient to fill the trucks and blast the stone to feed the breaker.

4. The terms and conditions on which the railway company will undertake the work are given in Statement B. The work to be paid for by the Department Public Works is estimated at Rupees 13,432.

5. Statement C. exhibits the probable expenditure per annum at Rupees 1,11,300 for metalling about 10½ miles of road; this sum can well be spared from the Local Funds for metalling new roads annually for many years to come, in fact until all the main lines are metalled and the cost of maintenance becomes a heavy charge on the funds.

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6. If therefore you approve of my proposition, I would suggest that you should at once lay it before the Board, and obtain their sanction to the under-mentioned expenditure.

|                                                                                            | RS.    |
|--------------------------------------------------------------------------------------------|--------|
| For forming branch line.....                                                               | 13,432 |
| For land for do., 18 acres, at Rupees 15 .....                                             | 240    |
| For purchasing and putting up Blake's Patent Stone Breaker and 12-horse power engine ..... | 11,500 |
| For 400, 6 lbs hammers, at Rupees 2-5-0 .....                                              | 925    |
| Making 10 screens, at Rupees 19 .....                                                      | 190    |
| Sundries.....                                                                              | 213    |
| To commence stone-making .....                                                             | 10,000 |
| Total ...                                                                                  | 36,500 |

7. The last item provides merely for commencing operations at once, as convict labour may be available, and the expenditure incurred will be debited to any estimate for which the stone may be used.

8. As the Railway Department will have to obtain Locomotives from England for the stone traffic, and the Agent states that it will take twelve months to obtain them, it is not possible to determine now which line shall be first metalled, and it will depend much upon the determination of Government whether a railway is to be formed from Nilamangalam to Combaconum and the loop eventually completed along the Cauvery south bank via Mayaveram to Trivalore, which line shall be first metalled, and hence an advance of Rupees 10,000 to commence with is desirable. It is probable that when the gravel train from Tanjore ceases to run, the engine now used for that traffic may be made available for a time for the stone traffic from Trichinopoly; and if so, it would perhaps be well to metal the road from Kordacherry to Kodavasal with stone instead of with gravel, and if so, the Rupees 10,000 required to commence operations would not long stand as an advance.

9. The enclosed sketch shows the branch line to the Golden Rock, and it will be observed that the line will run for the most part through land which is already the property of Government and which is marked by dotted black lines, and the land to be taken up is only about 13 acres in area, and is shown by red dotted lines; the cost would probably be Rupees 15 per acre, as the adjacent land for the Jail and Lunatic Asylum was purchased at that rate.

ENCLOSURES Nos. 2 to 4—Memorandums.

ENCLOSURE No. 5.—Sketch.

IN this letter the Collector of Tanjore supports a scheme proposed by the Superintending Engineer, which is to the effect that as gravel is becoming scarce and the quarries from which it is obtained are likely soon to be exhausted, arrangements should be made to get granite from the Golden Rock near Trichinopoly for metalling district roads.

2. He estimates that the sum sunk at first would be Rupees 26,500. The annual expenditure would be Rupees 1,11,300, and for this sum, 10½ miles of road would be macadamized at a cost of Rupees 11,000 a-mile.

3. The income of the Road Fund for this year, according to the Budget-Estimate, is Rupees 2,31,900. The balance at its credit will soon be exhausted, and the Board see no reason to anticipate much increase in the receipts. Making due allowance for cost of supervision, contingencies, etc., the Board believe that half the income of the fund would, under the proposed scheme, be swallowed up in macadamizing ten miles of road.

4. Repairs or maintenance allowances are estimated to cost this year Rupees 67,370, and as the granite will be laid so very slowly, little if any reduction can be expected in the expenditure on unmacadamized roads, at all events for many years.

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The cost of establishment, tools, and plant, contingencies, and supervision, is now Rupees 37,120, and the Board do not see how this is likely to be materially diminished.

5. Thus under the present proposals, future expenditure on works at present in existence, for a long time to come, would be distributed in something like the following way:—

|                                       | RA.      |
|---------------------------------------|----------|
| Macadamizing ten miles of road .....  | 1,15,950 |
| Maintaining unmacadamized roads ..... | 57,370   |
| Establishment and other charges ..... | 37,120   |
|                                       | <hr/>    |
|                                       | 2,00,540 |

6. Deducting this amount from the income, Rupees 2,31,900, Rupees 22,360 is all that would be left for original works, or not more than enough to make, say five miles of road per annum.

7. New roads and other original works are still imperatively demanded in Tanjore. The Budget for this year estimates the cost of such works in progress or projected at no less than Rupees 2,44,000. Increased maintenance allowances must be provided for extending lines, and the net work of practicable communications is far from complete. The proposed scheme would almost put an end to these improvements, whilst on a favourable hypothesis, twenty years must elapse before the macadamizing made any impression on the district, and whilst portions of the main roads were slowly placed in a state of repair which would be altogether beyond their requirements, the less fortunate parts of the district would be left neglected, and in villages to which roads have not already penetrated, generations might pass away without seeing any return for their subscription to the Road Fund.

8. The evil which the Collector and Superintending Engineer fear—the exhaustion of the supplies of gravel—is no doubt serious, but these proposals do not provide a remedy for it, and the Board cannot support them.

9. The Board hope that there is still sufficient gravel to last many years, but if this turns out to be not the case, efforts must be made either to bring gravel from a distance by rail, or if this is too expensive, to provide a substitute for it. The Board believe that broken brick burnt to an extreme hardness has been used in Tanjore for repairing roads, and that it is still used for the same purpose in parts of the Northern Presidencies.

No. 250. ORDER THEREON, 17th August 1869, No. 2,353.

|                   |
|-------------------|
| Local Funds No 5. |
| Civil Works.      |

ORDERED to be recorded.

(True Extract.)

(Signed) H. WELLESLEY,  
Acting Under-Secretary to Government.

To the Board of Revenue.

Exd. F. R. Eantleman.

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Perma 1869. *Office*  
Board of Revenue,  
MADRAS.  
No. 2628.

PROCEEDINGS, 20TH JULY 1869, No. 5,550.

*C. D. S. Aug 1/69*  
Received *by* Encl

JULY.  
No. 5,550.

*Metalling Local Fund roads—in Tanjore District with granite brought from Golden Rock near Trichinopoly,—Scheme proposed by Superintending Engineer, 6th Division, and approved by Collector, for, declined to be supported.*

No. 2353  
*Proceedings*

*Letter to Mr. G. A. Turton*

Mr. G. A. Turton.

Contd of 1869) *Continued*

REVENUE.

To

THE BOARD OF REVENUE.

Dated August, 17th.

Recd.

Encl

G. O., 17th August 1869, No. 2,353.

AUGUST.

Nos. 249-250.

*Metalling Local Fund roads in Tanjore District.—Proceedings Board of Revenue relating to support the Superintending Engineer's scheme in regard to it, recorded.*

