

Public Works (1895) Department.

RAILWAY BRANCH.

G.O., No. 42R

DATED 5th July

[Despatch Abstract.]

Houses for native assistant Stationmasters. —

Estimate of Rs 5,916 for constructing six — on the North West and South West lines, Madras Railway, sanctioned and the allocation approved.

BACK PAPERS.

[illegible]

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

SOUTH INDIAN RAILWAY (INCLUDING THE (MAYAVARAM-
MUTTUPET AND VILLUPURAM-DHARMAVARAM
RAILWAYS).

(METRE GAUGE.)

Total mileage open for traffic	...	...	...	...	...	...	MYLES.
							1,096.

Inspection report by C. T. R. SCOVELL, Esq., Government Inspector of Railways,
Madras, for the half-year ended 30th June 1895.

The inspection was carried out between the 8th and 21st July 1895. The Acting Chief Engineer, Superintending Physician and Deputy Locomotive Superintendent were present throughout the inspection; the Resident Engineers and Assistant Traffic Managers accompanied the party over their respective divisions.

2. *General.*—The line is generally well kept up. The road was in good running order throughout. The restriction on speed on the Villupuram-Guntakal and Máyavaram-Muttupet Railways may be removed.

FEEDER ROADS.

3. *Serndanur station (South Arcot), mile 104.*—This new station, which will be ready for opening in about two months' time, requires a feeder road.

4. *Māyavaram-Muttupet Railway*.—The main road which runs more or less parallel with the railway at a distance varying up to $1\frac{1}{2}$ miles is metalled for 11 miles north and 16 miles south of Tiruválúr. All the stations on this railway are either situated on this main road or are accommodated by unmetalled cross-roads which, except in the rainy season, give good enough access; but the cross-road to Tirunattiyattangudi, which has only just been finished, is very rough.

The railway approach roads are metalled and though not in first-class order are better than the district roads.

5. *Chavadipalayam (E)*, (*Coimbatore district*).—Although in November 1894 the President, District Board, was asked to construct a feeder road to this station, nothing has yet been done.

6. *Tirukkóvilūr (South Arcot district).*—A causeway across the Ponnaiyār river is required to enable the feeder road, which has recently been finished, to be of much practical use.

7. *Chellankuppan tank, mile 133 G. (South Arcot district).*—This tank, which burst in 1891, has just been repaired, but the calingula has not been extended.

BRIDGES AND CULVERTS.

8. *Adyar bridge*.—A crack has recently been discovered in one of the vertical struts; it is probably an old one and will at present be carefully watched.

9. *Mile 63/0 A. (Chingleput district).*—An 18 inch culvert has recently been rebuilt, but the culvert which runs under the public road opposite to it requires to be cleaned out or an Irish bridge substituted.

10. *Mile 54 1/2 A.*—No further movement has occurred; the struts have been strengthened with rails.

11. *Pálár bridge*.—The overhead bracing has been completed.

12. *Mile 92/3.*—A tension link in the 2nd bay of this 120 feet girder is cracked along the fibre for some 2 feet. Although probably an old crack, the Chief Engineer will consider the best way of supporting it.

13. *Ponnaiyár bridge*.—Road over this bridge is very rough, but sound; it will however be cross-sleepered soon. Brackets to fit under the rail-bearers between them and the bottom flange of the cross-girder are under supply. These brackets will be fitted to all rail-bearers in bridges of this type (100 feet spans).

14. *Coleroon bridge*.—Road very rough over this bridge, but sound.

15. *Devanudee bridge*.—7 × 30 feet girders much corroded. One span has been sleeper-stacked. New girders are under order.

16. The causeway at mile 252 is making good progress. The work is of excellent quality.

17. *Mile 290/16 G*.—A new 15 feet girder bridge was inspected and passed. The girders have been strengthened up to the standard fixed by the Government of India.

18. The loose bed stones noticed in the last inspection report have been re-emented.

19. The longitudinal timbers have been replaced by cross-sleepers on the bridge at 442 T; arrangements are being made for similar substitution on the bridge at 433 T, as well as for the additional rolled cross-beams recommended for girders on the Dharmavaram section in the last report.

GIRDER-STRENGTHENING.

20. All the bridges included in the list given in the last inspection report have now been completed.

A new estimate is about to be submitted for strengthening 23 spans of 10 feet and 9 spans of 12 feet girders; two of these latter have already been completed and one is in hand.

The cross-timber road to replace the weak cross-girders of 30, 50 and 70 feet spans has been arranged for. Three bridges have so far been completed.

21. *Karúr bridge* (Erode branch) might be made available for road traffic with pecuniary advantage to the company.

BALLAST AND PERMANENT WAY.

22. The new 50 lb. road has now been laid through to Tuticorin with the exception of 35 miles (390-425). Contracts have been let for the supply of the necessary material to complete the main line.

23. The section Cuddalore-Máyavaram requires attention.

24. The Májavaram-Muttupet line is now in very good order, particularly between Májavaram and Tiruválúr.

25. Between Tirumangalam and Virudupatti, the banks are low in places and road is a bit below standard.

Steel Sleepers, Villupuram-Guntakal Railway.

26. Three sleepers were taken out of the road at 110/10 G. and examined: two were much corroded on lugs and rail seat, one completely worn through. The keys had entirely lost their original shape. The sleepers on being weighed were found to have lost about 9 per cent. At mile 229/8-10 the road was opened and examined. The steel keys were found to have much corroded, and the corrosion of the keys and lugs had infected the adjacent rail web and flanges. Four sleepers were removed and weighed 260 lb. as against their original weight of 280 lb. Keys were found to be much corroded in Kurabalakóta yard though, between this station and Chinna Tippasamudram, they were found to be in good order.

27. Where practicable, all permanent-way gangs imprest stores have been removed either to stations or to level-crossings where gatemen are stationed.

28. Ballast short in places between Pákala and Tirupati.

29. Banks require making up in places between Tanjore and Ayyampéttai, mile 152, and on the Májavaram-Muttupet Railway generally.

30. An experiment was made at Chingleput to see whether the 20 feet locking bars were long enough to prevent a bogie vehicle, with 23' 3" between the two inside pair of wheels being split. It was found impossible to reverse the points until the whole train had passed clear. This experiment was repeated at Ayyalúr with the same result.

31. *Catch sidings*.—A safety siding off the main line has been recently put in at Ayyalúr. The points are weighted, interlocked with a disc signal and provided with a Stoney and Winter's locking bar. Two rail lengths might be removed at the end of the siding and the others sanded over.

32. Generally, I am of opinion that, at roadside stations, these safety sidings taking off the main line are a source of danger rather than a protection. The pointsman may lose his head at the last moment and turn the train into the siding, or a train out of control, unable to pull up at the station might be turned in and possibly destroyed, whereas it might have run on harmlessly and pulled up on the main line. When it is remembered that it is proposed to provide some 35 such sidings, I think some less dangerous design must be adopted. The primary object of safety sidings is to prevent run-away vehicles or those blown out of sidings from fouling the main line, and this will be adequately served without danger to passing trains by taking the siding off the loop, or merely by the insertion of a switch. By prohibiting hand-shunting over main line points and where the station itself is on a grade possibly ordering trains going in the up-hill direction, which require to do shunting work, to bring up on the loop, the safety siding will be equally efficient as if it were on the main line.

33. *Kurabalakóta*.—The catch siding here was found locked. The bolt and cottar were ordered to be removed. Three rail lengths should be taken up at the end of the siding and the remaining rails sanded.

This siding has been reduced to the level since last inspection.

LEVEL-CROSSINGS.

34. The level-crossing gates between Saidapet and Beach should, in view of the number of trains that run or will shortly be run, be provided with a semaphore signal interlocked with the gate. Those crossings situated within distant signals should be provided with a simple arrangement whereby the distant signal could not be pulled off until the gates are closed.

35. The same arrangement should be adopted at the first level-crossing west of Trichinopoly junction.

36. Electric bells to warn gatemen of approaching trains should be fitted to the level-crossings between Egmore and Saidapet.

FENCING.

37. The aloe fencing is generally full of gaps and considering the large number of cattle accidents which occur on the so-called fenced line, I think wire fencing should be gradually substituted.

38. *Signals* require painting at Negapatam and at certain other stations, particularly on the Villupuram-Guntakal branch.

39. At some stations between Cuddalore and Májavaram, many of the distant signal wire connections were in a very neglected state.

STATIONS AND BUILDINGS.

40. *Madras*.—The Municipality of Madras having increased the water-rate, it is proposed to revive the scheme for obtaining water from the Cooum.

41. *Tindivanam*.—The sanitary condition of the compound leaves much to be desired.

42. *Villupuram*.—Many complaints have appeared in the Native Press concerning the 3rd-class accommodation at this station. With the exception that a species of tick infests the sand-flooring of the waiting sheds, I think these complaints are vexatious and unreasonable. I understand that it is the intention of the management to pave the waiting sheds at important stations by degrees. This is a work which should certainly be put in hand for the comfort of native passengers.

43. *Chidambaram*.—Two additional ticket windows are being provided. Temporary latrine accommodation in the compound is desirable during festival time.

44. *Tanjore*.—The scheme for the remodelling of this station is in hand.

45. *Pandi (M.M. Railway)*.—Goods platform still incomplete.

46. *Nannilam (M.M. Railway)*.—There is a good passenger traffic; the station requires extending.

47. *Kumbakonam*.—Sanitary condition of compound very bad. Permanent latrines with access from waiting shed required.

The refreshment room might be closed and re-opened at *Máyavaram*.

48. *Madura*.—An extra room for the accommodation of European travellers might be added.

49. *Egmore, Trichinopoly, Madura and Negapatam*.—Additional staff quarters necessary. Estimates are under consideration.

50. A new crossing station wanted between *Elamanur* and *Trichinopoly Fort*, mile 257, where there is a large village would be the best site.

51. *Kulittalai*.—A waiting room for 1st and 2nd class passengers has been built.

52. *Tiruvannámalai (Villupuram-Guntakal Railway)*.—Compound requires cleaning of prickly-pear.

53. *Vellore*.—Should a local service be again started between *Vellore* and *Kátpádi*, a trial station should be opened at mile 193/4 the nearest point to *Vellore town*.

54. *Pákala*.—The staff quarters at *Pákala* were generally in a very untidy state. The recently-sanctioned staff quarters are well in hand.

55. *Kálahasti*.—Additional goods-shed accommodation seems to be required.

WORKSHOPS AND ROLLING-STOCK.

56. *Egmore*.—Sheds are required for the protection of carriages from the weather. I think the four lines of rails parallel to the platform should be roofed over.

57. The locomotive shed extension at *Villupuram* is so far advanced that it had better be finished. This is one of the locomotive stations which would be more or less abandoned, if the Consulting Engineer's scheme for the revision of the locomotive districts were accepted. The proposal to discuss this scheme has, after considerable delay, been referred to the Company's Board for orders.

58. *Negapatam*.—The usual demand for workshop extension was made, but the attention of the Locomotive Superintendent is invited to the Senior Government Inspector's remarks in the last inspection report.

59. The locomotives are, as usual, in 1st class order.

60. Now that the vacuum brake is in use on some sections, it is hoped that the through timing of trains may be reduced by using the brake to draw up trains more quickly.

61. The brake is not used south of *Madura* because, it is stated, there are not sufficient engines fitted with it to work the trains, but this being so, the reason for working O-class engines on the *Erode* and *Negapatam* branches is not apparent.

62. More attention should be paid to the cleaning of carriages. At *Trichinopoly* junction I noticed a 3rd-class bogie carriage, which had been detached early in the morning and was then about to be attached to the night mail train to *Madras*, in a very filthy state.

63. The *Singarenni* coal required for the northern section of the South Indian Railway (some 20,000 tons annually) is delivered in Southern Mahratta wagons at *Dharmavaram* junction. Here the coal is unloaded, carried some distance and stacked; its cubic contents is then measured and it is reloaded this time into South Indian Railway trucks. It is then railed some 140 miles to *Pákala* where it is again stacked.

The reasons for these unnecessary operations at *Dharmavaram* which involve a waste of Rs. 1,700 alone for the reloading at *Dharmavaram*, to say nothing of the wastage of coal and cost of restacking at *Pákala*, are stated to be—

(1) that it affords the only means of measurement;

(2) even if other means of measurement were adopted, it would still be cheaper to tranship the coal out of Southern Mahratta Railway into South Indian Railway wagons to save the demurrage charges on foreign stock.

With regard to (1) it seems that the Locomotive Department were unaware that there is a weigh bridge at *Dharmavaram*; and with regard to (2) it would appear, if it is cheaper to tranship a commodity like coal which is easily pulverized and wasted, that no advantage is gained by having a continuity of gauge.

TRAIN SERVICE.

64. The time has now arrived for a complete revision of the time-tables. A deputation waited on me at *Panruti* station complaining of inadequate service, and similar complaints have been received from time to time from other stations. Passengers are frequently left behind for want of room in the trains, and at all times the trains are crowded.

65. No attempt has been made to improve the service so as to form a direct through connection with *Colombo*, suggested in the last report.

Faster mail trains and additional passenger trains appear necessary to deal with the public acquirements of all classes.

The *Madras* local service is inadequate; the present office train is too slow in consequence of its being too long.

TRAFFIC.

66. *Kivalúr (N)*.—Besides a few pointsmen, the stationmaster had no assistance. He was supposed to practically simultaneously issue tickets, obtain and give line-clears without even the assistance of a signaller, to personally inspect the facing points, to attend to the trains and to collect tickets. This station has an average traffic of 460 passengers in and out daily.

67. *Tiruverumbúr*.—The inspection special and No. 2 mixed, which crossed at this station, were both started on false line-clear tickets. At this station the books were seized, after the starting of both trains; and on examination were found to have no entries whatever.

68. *Tanjore*.—The only machine at this important station for weighing passenger luggage and parcels would not weigh to within $\frac{1}{4}$ a cwt.

69. In spite of the overwork which station masters have to contend with, they are obliged to rule numerous columns in many of their account and return books. Some of the books are not machine-numbered, thereby rendering fraud easier.

70. The milk supplied to me at *Villupuram* refreshment room consisted half of water. In the interest of European passengers, I think such an important article of diet should receive attention. The refreshment contractors should be obliged to keep cows and supply unadulterated milk.

71. The fare list placed in the 3rd-class waiting shed at *Manganallur (Máyavaram-Muttupet Railway)* was illegible, while those at stations on the *Villupuram-Pákala* section and at some stations in the *Nellore* branch did not give the fares to stations on the *Dharmavaram* branch.

72. The inspection train and 14-30 goods, which crossed at *Putalapattu (Villupuram-Guntakal Railway)*, were both started on false line-clear tickets. The books were seized before they had been filled up. The stationmasters generally are unable

to do all the duties expected of them at train times within the time allowed. Were the system advocated by me in paragraph 12 (b) of the South Indian Railway inspection report for the half-year ending 31st December 1893 adopted, much of the necessity for starting trains on false line-clears would be removed.

73. The work of Sattur station, which deals with some 20,000 rupees' worth of traffic monthly, is done by one stationmaster on Rs. 30 and one clerk on Rs. 15. Koilpatti station has a stationmaster on Rs. 20, although the station deals with some 14,000 rupees' worth of traffic per month, whereas some other unimportant stations earning only Rs. 600 or 700 have stationmasters on Rs. 25. Generally there appears to be a want of system and no encouragement for good men to remain.

74. Sufficient attention is not given to helping 3rd-class passengers to find room in crowded trains.

75. Nothing has yet been done towards providing attractive refreshment stalls for natives as suggested by the Senior Government Inspector in the last report.

76. There would seem to be no reason why No. 14 mail should be allowed 26 min. on a down grade between Ambaturai and Dindigul, while the corresponding train in the reverse direction is allowed 19.

77. The following are lines in which economies might be effected without detracting from the general efficiency of the service.

Trailing points need not be held for the passage of trains.

At many stations the points might be grouped and three or four points worked by one pointsman. This has been adopted with success on the Madras Railway.

Under-guards might be abolished on many of the mixed branch trains, and in vacuum brake mail trains a travelling parcels clerk could take the under-guard's place, thereby releasing the chief guard from duties which now prevent his attending to passengers. A superior class of man, time expired European Soldiers for preference, is required for mail train head guards.

The substitution of a tonnage for a vehicular load of trains. The Southern Mahratta Railway with the same class locomotives and on the same ruling gradient run their trains at practically the same speed with 26 loads or 210 tons as against 19 loads on the South Indian Railway.

78. There seems to be an impression that no train is allowed to exceed 25 miles an hour. That trains frequently reach 35 miles an hour is of course known to everybody connected with the railway. The limit of speed, as laid down by the Government of India, is 40 miles an hour. With the vacuum brake, new bogie rolling-stock and the 50 lb. permanent way, I certainly think the mail trains may be officially allowed to run at over 25 miles an hour. That this increase of speed is required is evident from the present inability of the night mails to and from Madras to make a connection with Colombo steamers at Tuticorin, and that natives appreciate fast travelling is evinced by the crowded state of these night trains.

79. The authorized speed over facing points for non-stopping trains is 4 miles an hour. The Government of India limit is 10 miles an hour, and this should be sanctioned at once so as to avoid the necessity for the Company's officials having to connive at the habitual breakage of their existing rule.

80. The ballast siding points referred to in the last report had not been removed, although it has been decided in subsequent correspondence that they should be removed until signallers and signal cabins had been provided. The following sidings were open on the date of inspection, but have since been closed:—Tiruválur, Rettaimai and S. Kollatur.

81. It would tend to keep the railway in touch with the trading public and their requirements, if the Traffic officials made periodical visits to important trade centres as is done on the Madras Railway.

82. The necessity for inter-communication between passengers and the staff in charge of the train having been admitted, it is hoped that a suitable system will shortly be adopted.

3rd August 1895,

(Signed) C. T. R. SCOVELL,
Government Inspector,

Notes by Senior Government Inspector.

Paragraph 26.—I advise a trial should be made of a cast iron sleeper for the F.F. rails to replace the steel sleepers which will shortly require renewal.

Paragraphs 31 to 33.—Safety siding should as a rule be laid off the loop and hand shunting over the main line prohibited—this matter is being taken up with the Agent.

Paragraphs 67 and 72.—False line-clear tickets.—This is most serious and I request the Agent will at once investigate and report on these cases and, if the stationmasters are unable to perform their duties, assistance must at once be given them.

Paragraph 60.—Vacuum brakes.—There are 20 engines and 66 bogie coaches fitted, and it is reasonable to expect that they should be used as suggested.

Paragraph 80.—An explanation is also required about the ballast sidings which had not yet been removed or protected.

The earnest attention of the Traffic and Locomotive Departments is invited to the report generally which is not satisfactory in regard to the working of their departments.

(Signed) F. R. UPCOTT,
Senior Inspector.

D.A.P.

Please attach
to case "Inspection
Reports."

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