[L. & M.
9,000-3-2-96.]

Local & Munl. (1895) Department.

MISCELLANEOUS.

G.O., No. 2348 L.

DATED 4" Decr 1895.

[Despatch Abstract.]

Feeder Roads.

Forwarding to certain local boards, with remark, extracts from the statement received with the endorsement of the Public Works Department regarding the want of ---- to certain stations on the Madras Railway.

BACK PAPERS.

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

FURTHER PAPERS.

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

L.M.
29/11

189 5.

Public Works Department.

Local & Municipal Dept.
CURRENT No. 3510 L

No. 3714 C

Dated 28-11-1895

Despatched

Received Enclo: 8+

4-7 Encls returned with Om 1826/11/12/95

CHIEF SECRETARY
29. NOV. 1895
GOVERNMENT OF MADRAS

SUBJECT.

Forwarding for necessary action papers regarding the want of feeder Roads to certain stations on the Madras Railway.

(With Order).

50—2,000—21-12-94.

C.S
Misc

Order No. 2348 L&M, 4.12.

Extracts from the statement received with the endorsement read above, will be forwarded to the Local Boards concerned with the request that they will show cause before the 15th January next, why they should not construct the feeder roads in question at once.

V.R.
3/12/95

WWP
4/12/95

To,
The Presidents of ~~the~~ District Boards
Anantapur, North Arcot, Chinglepu
Coimbatore, Cuddapah, Malaba
and Salem with a statement
- Public Works (Railway) Depart

Desp. 6/12/95

Recd 23/8/95

MADRAS RAILWAY.

STANDARD GAUGE 5′ 6″.

Total mileage including branches 850.

Inspection Report for the half-year ending 30th June 1895.

1. The inspection was made during the latter part of July in company with the Agent, Heads of departments, and District officers.

2. **Banks and cuttings** were maintained in good order and full section.

3. **Bridges and culverts.**—The question now needing consideration is how far the Railway administration should strengthen their bridges up to Government of India standard. Of spans up to 50′ nearly all have been strengthened up to Board of Trade standard, and a few of these have been strengthened up to Government of India rules.

4. There are many girder bridges which the Chief Engineer considers might, with advantage, be converted into arched bridges. I very strongly recommend this as the best and cheapest method where the foundations and headway admit of its being done.

5. The following bridges are to have an intermediate pier :—

2 × 50′ at Bowringpett station, 2 screw pile piers with cross girders.
$\frac{79}{14}$, 1 × 50 stone intermediate pier.
$\frac{70}{3}$, 1 × 50 do. do.

6. $\frac{387}{12}$ bridge is weak and in bad order; new girders are required.

7. 136. *Cheyáru bridge.*—The longitudinals require renewal; bearing plates would be an improvement on the new timbers.

8. 175. *Papaghni bridge*, 179. *Chitrávati bridge*, 232. *Pennéru bridge.*—The bolts which have been used in place of loose rivets in the joints of rail troughs and cross girders should be painted over; they are very rusty.

9. Some 6′ rail openings near Gooty require arching over, as the abutments are being pressed together by the expansion of the black soil behind.

10. $\frac{257}{15}$, 5 × 30′; the girders are much in need of scraping and painting.

11. The rattling of the hand-rails on many bridges is very marked. I suggest that condemned wire rope might be substituted as an experiment for the present tubing.

12. **Permanent-way.**—There was no marked difference in the sections except near miles 117–120, south-west line, where the new 30′ rails and pot-sleepers had been newly laid which was rough. At this place the old rails should be at once picked up and stored.

At Kátpádi station the curve to transhipping platform was 5′ 7⅛″ gauge; this should be seen to.

13. The Kolar Gold Fields branch road was in better order than when I last inspected it. The traffic complain of the small loads the engines can take, but with 6° curves and $\frac{1}{50}$ grades this is unavoidable, and assisting engines seem the best way of overcoming the difficulty.

14. Mr. Stoney exhibited a double cast iron pot-sleeper for joints to be used with fish plates. I have no objection, subject to Agent's approval, to a trial of these being made at some point on the main line where they can be under observation for the purpose of noting the deflection and wear of rails.

15. The timber stop blocks in use on this Railway are expensive and cumbersome. The Chief Engineer is requested to apply for a type of iron-hinged stop block from this office to make a trial of it.

16. The surface ballast used to keep down the dust entails extra work to the permanent-way gangs, and there is a continual loss going on every time the road is uncovered and repacked. This is unavoidable and should not be allowed to delay the extension of the covering to the north-west line.

17. **Stations.**—The sanitation of stations appears good. I object however to the immaculate condition of most of the latrines which leads me to suppose that they are closed against the public before inspection, and request the Inspecting Medical officer will take this up and see that no restrictions are placed on their use at any time.

The insanitary state of the ditch alongside of line at Siruvallur requires attention.

18. At many stations the fare table is inconveniently placed in the 3rd-class waiting sheds, and many of the tables are dirty and torn; the use of sheet iron in a frame will obviate the latter defect; two or three are required at large stations placed at a convenient height on the walls, but not near the ticket window where there is generally a crush. A lamp should also be so fixed as to throw a good light on the passenger side of the ticket window board. At some stations—Gooty, Adóni and others—I noticed this was in darkness during the time of issuing tickets.

19. The Locomotive Superintendent is about to substitute a spring rubber tired luggage trolly for the present ones in use which are dreadfully noisy over ordinary undressed flagging; the roped tires have been tried and are not successful.

20. *Madras Goods Yard* called *Salt Cotaurs Station.*—The inwards shed will shortly need enlarging, and I suggest the duplication of this shed alongside the existing one with space for carts between. I did not gather whether the Traffic Manager considered the outwards sheds also requiring enlargement. A plan showing future extension should be prepared to work to a preconceived idea.

21. *Arkonam.*—It is not yet settled where the new engineering shops, which have been transferred from Ráyapuram, should be placed. At present the work is being done in temporary sheds and at site of the original telegraph works. It seems to be admitted generally that it will be economical to place all heavy work with the Locomotive Department. The improvement of the yard at the north end to admit of better shunting and siding lines is desirable.

22. *Jalarpet.*—All necessary land has now been handed over. As it is intended to keep the village at a distance from the staff quarters, that to the north of the line is to be kept clear of houses and might be laid out as a recreation ground.

23. *Urigam.*—The catch siding will be shifted outside the new Nundidrug siding; this should be done now; it has been already unduly delayed.

24. *Bowringpett.*—In building the new station on to the old, the doors of the latter should have been raised; this should now be done. The 3rd-class waiting shed requires some seats. The signal arrangements are fitted with a detector bolt, whereby, on the branch line points being correctly laid, the stationmaster can lower the corresponding signal. The Chief Engineer promised to alter the width of the slots in the sliding plate which at present corresponds to the throw of the points.

25. *Bangalore City Station.*—The works for which the estimate of Rs. 1,75,663 was sanctioned in 1894 are nearly completed.

26. The safety siding on the metre gauge line—it is now decided—is to be at the place recommended by me in 1893; it is already laid and used as a shunting siding. It will be fitted by the Madras Railway Company (who work the yard) with a weighted lever and treadle bar to stand laid for the siding and worked when necessary by a pointsman at the points. The Madras Railway Company will issue such rules as they find necessary to allow its being used as a shunting siding, but not as a lay-bye, and the present short catch siding will be removed.

27. The flower gardens near Bangalore were very pretty barring the mottoes worked out in coloured stones.

28. *Ferók.*—The goods-shed roof should have some glass tiles. It is very dark.

Calicut.—The proposed branch line to the Sea Customs house is not required, as the Cannanore extension will serve this.

29. **Watering stations.**—The Bangalore branch particularly and main line generally is suffering from inadequate water-supply.

30. The installation of steam pumps and stand pipes along the line at rivers, &c., is the remedy. Many of the original water stations have been closed and dismantled, and the evil of this is now being felt. The old-fashioned water columns are still in use. I think much time might be saved by adapting 8″ piping and swan-necked columns placed between tracks, which would have to be pulled out to standard distance of 16′ 7″.

31. *Salem*, *Nandalúru*, *Pódanúr* and *Whitefield* (for Bangalore) are stations in great need of more water.

32. **Staff quarters.**—The servants of this company are well housed and provided with schools and institutes; all of which were in good order and neat. The church at Perambúr is slowly progressing.

Signals.—The south-west line from Salem to Pódanúr is fitted with Stoney's point indicators. I do not myself think they should show any light to the in-coming train, but they may be useful for the station staff; the drivers should not, in my opinion, be bound by them. I noticed at night two signals for a train which had to be stopped outside the points—the signal lamp of the point indicator on one side and the signal lamp of the pointsman on the other; the driver was entirely guided by the light shown by the pointsman's lamp.

33. In order to comply with the new rules for working State lines, which the management have accepted with certain modifications, I request all distant signal arms be weighted in addition to the weighted levers at foot of post; the Chief Engineer estimates the cost about Rs. 10,000.

34. The station at Tiruttani fitted by Saxby and Farmer's interlocking of points and signals is now open to fast through running, there being no conflicting signals mentioned in the last report, and Púdi station has Anderson's system of interlocking by means of a selecting lever; this is also open to fast through running.

The working of the points and signals was in good order, except that the Tiruttani northern points required a slight adjustment.

35. *Mámandúru* station mentioned in paragraph 49 of the last report is not open for through running.

Puttúr station is to be fitted with Dutton's wire interlocking, but it is not ready.

36. In my opinion although these two stations are perfectly interlocked, they do not serve the purpose for which they were originally intended, which was, *inter alia*, to allow a fast train to run through the main line while another train is standing on the siding, but there is nothing to prevent the signalman lowering the signal for the in-coming train on the main or loop while there is a train standing there, assuming he forgets on which line the train is standing. Train protection bars are therefore required to prevent this, and I consider they should be put in.

In this connection I would draw attention to my remarks under the head of "General."

37. **Fencing.**—As a whole, especially on the north-west line, the aloe fencing is not good. I suggest that the gradual substitution of wire would be economical.

38. **Locomotive and Engineering shops**—*Pódanúr.*—These were to be abandoned on 21st July and machines sent to Perambúr.

The old radial engine shed latterly used as a fitting shop is to be converted into an institute.

The engineering shops have been closed and transferred to Arkonam.

39. *Central Station, Madras.*—The Pintsch's oil gas plant is under erection; the Agent hopes to light this station as well as the carriages.

40. *Perambúr.*—The Locomotive Superintendent showed a plan embodying the extensions he considers necessary when the Madras Railway take over the southern portion of the East Coast line. I concur in the necessity of this, but noticed that some work on the new timber yard line was commenced in anticipation of sanction, which is irregular. The extension of the shops will also entail more land for a Second Assistant Locomotive Superintendent's house. The shops were in good order and working full time.

41. **Rolling stock.**—Many of the 3rd-class carriages running want repainting, and the substitution of cane for stuffed cushions in the second class to prevent vermin is desirable.

The covered goods wagons load plates for increased loads from 10¾ to 12 tons are being fixed.

42. A new muster of horse box for six horses was shown me; it was very well arranged.

43. One of the six new 4-wheel-coupled bogie locomotives was completed. It had 6 feet driving and trailing wheels with front bogie-weight, loaded complete with tender, 74 tons, having axle loads of 14½ tons; tank capacity 2,020 gallons with 6 tons of fuel, and is designed to take 20 coaches on the mail. The working pressure of 140 lb. appears low in comparison with recent practice.

44. **Stores.**—The general stores at Ráyapuram were in good order and condition, but I request more care in storing cotton waste which should have separate divided bins.

Renewed efforts might be made to dispose of the large quantities of iron of sizes which have been lying here since the line was opened and not used by the Locomotive Department in any quantity.

45. The small stores at the various engine changing stations were also in good order.

46. The stores of teak seemed large, about three years' supply being on hand. It is a question which is the cheapest to purchase—selected logs at Rs. 100 a ton or unselected at Rs. 80. In view of the great waste in off-cuttings, I agree with the Locomotive Superintendent that selected logs will in future be most economical.

47. **General.**—The Madras Railway has been supplied with a copy of the recent orders to ensure the comfort and convenience of native passengers.

48. At several stations very complete arrangements have already been made for the provision of wholesome refreshments. The provision made for the resting and eating accommodation for native passengers at Rénigunta, Raichur, &c., does not seem to be much made use of; possibly the prices charged are too high. An attendance book might be kept at these places.

49. The supply of drinking water to trains standing at the station is not in many cases sufficient.

50. There are often delays in opening the ticket offices. At Cuddapah, on my inspection, the ticket office was not opened for the issue of tickets until the train had drawn up at the platform, although there were 30 or 40 passengers waiting to take tickets.

51. The remark in paragraph 58 of the last report is again brought to the notice of the authorities.

52. I noticed also that some time elapsed when a train entered a station before the doors were unlocked to enable passengers to get to the latrine, and at Gooty a native youth without any badge was collecting tickets.

53. No steps appear to be contemplated to carry out the suggestion in paragraph 56 of the last report, viz., the running through trains between Bombay and Madras. I hope the Agent will see his way to taking this matter up.

54. The policy of the Madras Railway in interlocking small roadside stations, using point indicators, &c., is, in my opinion, a mistake.

I consider that the vacuum brake should have first place in the improvements they make for the public safety, and that the above devices should succeed not precede the adoption of the brake, and I invite the special attention of the Railway administration to this opinion.

55. The want of feeder roads is still in many places very evident. I request the Agent to forward a list of those most needed in their order of importance for submission to the Local and Municipal Department.

(Signed) F. R. UPCOTT,
Senior Government Inspector of Railways.

OOTACAMUND,
8th August 1895.

STATEMENT showing result of tests of bridges on Madras Railway inspected on 29th July 1895.

Name or number of bridge.	Mileage.	Particulars of water-way.		Description of girder.	Particulars showing position in which test was applied.				First test.		Second test.	Third test.
									Deflection		Deflection	
		Number of spans.	Length of span in feet.		Number of span counting from Madras.	Right or left girder.	Top or bottom boom.	Point at which deflection and oscillation were taken.	In inches.	In terms of span.	In terms of span.	Oscillation in inches.
North-west line, mile 140/12.	140/12	4	24"	10" flanged continuous over 2 spans 58' long each girder.	1	R	All in bottom boom.	Centre of bottom boom.	1/4	1/1152	1st span.	Nil.
					1	R			1/4	1/1152	2nd ,,	
					1	L			1/4	1/1152	1st ,,	
					1	L			3/16	1/1536	2nd ,,	
					2	R			3/16	1/1536	1st ,,	
					2	R			1/4	1/1152	2nd ,,	
					2	L			3/16	1/1536	1st ,,	
					2	L			3/16	1/1536	2nd ,,	

REMARKS.—These girders were strengthened by the addition of plates to top and bottom booms; speed of engine about 30 miles per hour.

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

OOTACAMUND,
8th August 1895.

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8/3570 Ry/95

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7

Inspection Report of the Madras Railway for the half year ending 30th June 1895.

ce of the most important points
ioned is that of feeder roads.
sidering the number of years
ich the Madras Ry. has been
, I think this defect is one
h reflects seriously on the administration.
e never concealed my opinion that it is
lutely the duty of the Govt in the first
ance× to construct necessary
important lines of communica-
, leaving it to local bodies to
intain them. The Govt of India
repeatedly called the attention of the
torities to the meagre allotments to
mmunications compared with buildings.
I: think we should readjust these
nts, and if this means deferring the
struction of taluk cutcherries, I
not think the public will be any
ing but gainers.

Initialled/. W
27 aug.

Forwarded to His Excellency the Governor in Council for perusal.

Sd/. F. R. Upcott.

Joint Secry: to Govt. P.W.D. Ry Branch

×always supposing that the Local Boards cannot give material assistance (which is usua
the case)

Let me see the list which has been called for

Initialled/. HB
28-8-95

Initialled/ J. G.
30/8

Await list mentioned in para 55, the agent Madras Ry may be asked to expedite submission with small plan.

Initialled/ F.H.W.
30/8/95.

Ootacamund 30th Augt. 1895.

To

Agent and Manager M.R.

No. $\frac{116}{0}$ Reply No. 1017 dated 14-11-95.

Reminders.

No. $\frac{116}{0}$ d/10-10-95
issued 10/10

No. $\frac{116/0}{2}$ d/. 5-11-95
issued $\frac{6}{11}$ 95.

Despatched from Ooty
30/8/95.

Sir,

With reference to para. 55 of the Inspection Report of the Madras Ry for the half year ending 30th June 1895, I have the honour to request that you will be good enough to expedite the submission of the list, with a small plan, of the feeder roads called for therein in their order of urgency.

Initialled/ F.R.H.
30/8/95.

No. $\frac{8489}{781}$ 9

Madras Railway
Agent and Manager's Office,
Madras 2d September 1895.

From

The Agent and Manager
M.R.C.

To

The Consulting Engineers for Railways.
Ootacamund.

Sir

With reference to your letter No. $\frac{116}{0}$ of the 30th August 1895, I have the honour to inform you that the Inspection Report for the half year ending 30th June 1895 to which you refer has not yet reached me.

I have the honour &c
&c

Sd/. Louis E. Moss,
Agent and Manager

No. 8662/1017
Madras Railway
Agent and Managers Office,
Madras, 14th November 1895.

From,

The Agent and Manager,
Madras Railway

To

The Consulting Engineer for Railways,
Madras.

Sir,

In compliance with the request contained in your letter No. 116/0 of the 30th August last, I have the honour to forward herewith the list of feeder roads required, entered in the order of importance.

The Chief Engineer has been requested to prepare the plans asked for by you but it will probably be sometime before they will be ready.

I have the honour &c

&c

Sd/ A Edwards,

Madras Railway

Statement of feeder Roads.

Stations.	Feeder Road required From or To.	Distance	Remarks.
Thalangai N. Arcot	To Karadakuppam	1/2 mile	
Kulipalaiyam Coimbatore	To Viseyapuram	4 1/2 miles	
	From Perumallur to Kulipalaiyam through Karakampalaiyam	4 1/2 miles.	
Kallavi Salem ✓	To Kaminellur	9 miles.	Repairs only needed.
Penneru Anantapur	To Ankireddipalli and Baga Samudram	2 1/2 miles	
Vinnamangalam N. Arcot	From Trunk Road	3 Furlongs.	
Vanganur Anantapur	To Cuddapah Bellary Road	1 mile	
Cauvery Salem ✓	From 240/18	1 1/2 miles	
Chinnamapet N. Arcot	To Thokolam	6 miles	
Kadalundi Malabar	To connect public road about 200 yards at Beypore	2 1/2 miles	
Mumal N. Arcot	To Panapakam	4 miles	
Kadambattur Chingleput ✓	To Tripasore	3 miles.	Repairs only needed.
Kalamalla Cuddapah	To connect with Cuddapah Bellary Road near Chilunku	2 miles.	
	To connect with Jamalamadugu and Bettaballi Road	4 1/2 miles.	
Viziamangalam Coimbatore	To Chennimalai Road	3 1/2 miles	
Periyanaikenpalayam Coimbatore	To Agrahara Shamacolum	1 mile.	
Ealur Coimbatore	To Kaliapuram Village	3 1/2 miles.	
Siddavattam Cuddapah	To Sidhout	2 miles	
Gudiyattam N. Arcot	To connect public road at Vettyr Sn.	3 miles.	
	To connect public road at Tippasamud		

Traffic Managers Office
Madras 12th November 1895

Copy)

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Sd/ A Edwards.
for Agent & Manager

Sd/ F. W. Read
Traffic Manager

No.
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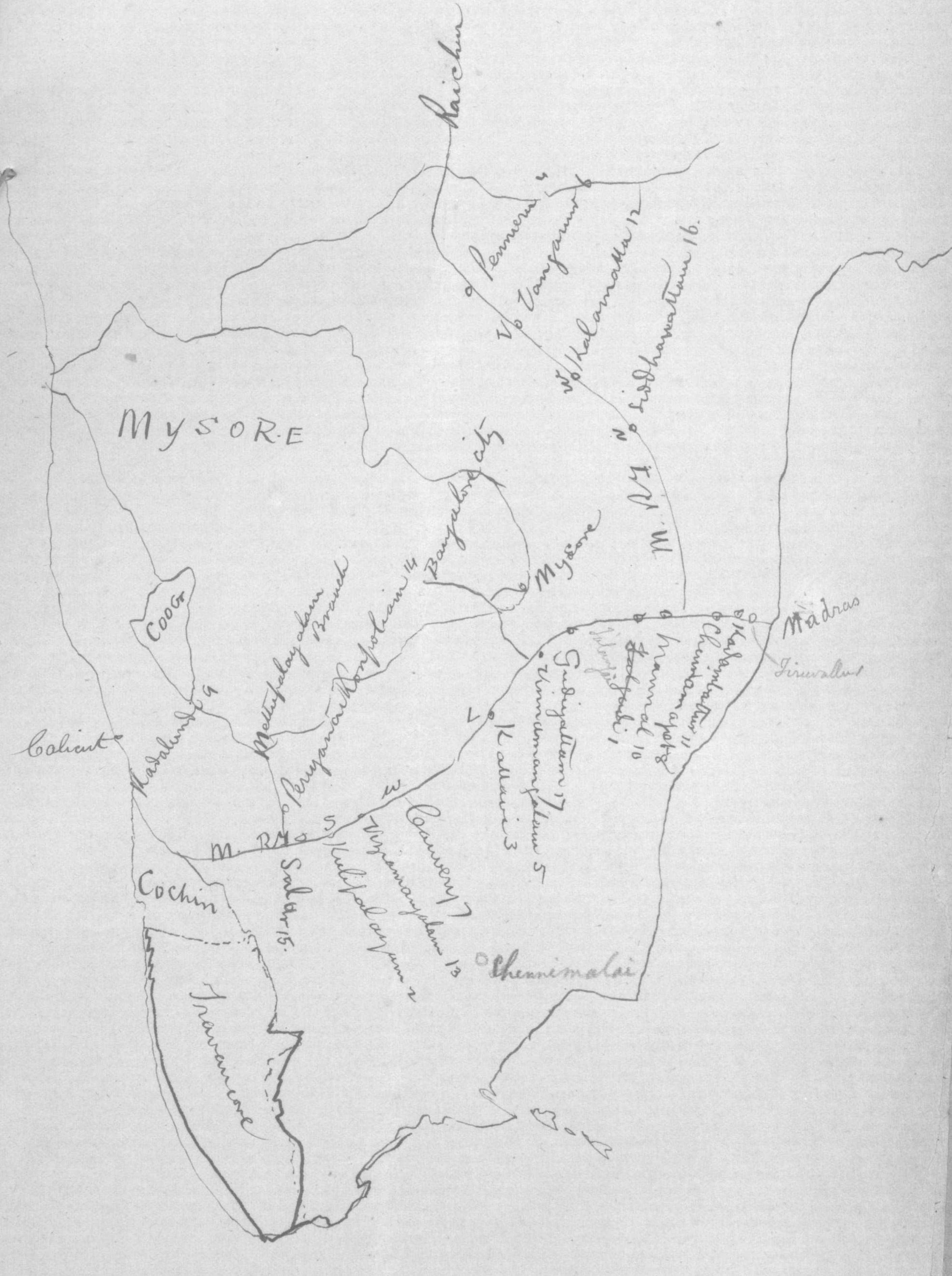
15


Raichur
Pennern
Vangaum
Kalamalla 12
Siddhavattam 16.
MYSORE
M. RY
Bangalore city
Mysore
COOG
Madras
Tiruvallur
Kalambattur 11
Chintamapet 8
Nannal 10
Lealpadi 1
Gudiyattam 17
Vinnamangalam 5
Kallaviz 3
Cauvery 7
Vizamangalam 13
Kulipalayam 2
Chennimalai
Perunani Kunjolian 14
Mettupalayam Branch
Kadalundi 9
Calicut
M. RY
Salur 15.
Cochin
Travancore

Para 55 Inspection Note
21/11

The attention of the Local oards concerned should be awn to these roads. and they hould be called upon to show ause why they should not construct them at once. To all those ho have not the means to construct them, I would give grants. and see that the money was promptly and properly spent.

We ought to call for a similar return from the South Indian, and East Coast Railways. I am sure ~~that~~ a judicious outlay in this direction will pay hand over fist - if not directly - most certainly indirectly.

Sd/- W
22 Nov.

Sd/ J.G.
21/11/95.

With reference to remarks by His Excellency and Honourable Mr Bliss I submit the list of feeder roads and a small map.

The roads only aggregate 60 miles in length.

The Local Boards ? might be called upon to construct the roads mentioned in the list.

Sd/ F.R.M. 20/11 95

His Excellency the Governor
Hon: Mr Bliss.
Hon. Mr Grose

The question of means should be looked into when the Local Fund Budgets come up. For this purpose the L & M Deptt should see in what Districts the specified roads are situated. There does not seem to be as much to do as I imagined possibly would be required. Recent orders as to devoting more money to roads should effect an improvement

Sd/ ~~A.S.~~ H.W.B
25/11/95.

Call for list, with small plan of feeder roads required in order of urgency.

Sd/ F.R.M.

18

No. 3714 C d/28th November 1895

The L & M. Department

The papers are forwarded to the Local and Municipal Deptt. for favour of very early orders issuing as directed ~~of~~ by H. E. in Council.

(signed) F. R. Upcott
Jt. Secy: to Govt. P. W. D. Ry. Branch

27/11

When given for copying
When copied
When examined
When signed
189 .

AD AGAIN G.O., No. DATED
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LOSURES TO C. No.

RDER OF GOVERNMENT .. .. .. A A A A A A A

TTER OF GOVERNMENT.

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NOT FILED UP, BEING MEANT FOR DESPATCH IN ORIGINAL.

N.B.—
A = Copy in full.
B = Not to be copied.
P = Copy abstract only.
Q = Copy heading only.