GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper :—

From the Consulting Engineer for Railways, dated Madras, 19th September 1890, No. 626.

Report on inspection of the South Indian Railway, including the Nellore Branch, for the half-year ended 30th June 1890.

Submitted for the information of Government.

Order—dated 24th September 1890, No. 1451 R., Public Works.

The Agent's attention will be drawn to paras. 6, 7, 9, 15, 17, 21, 29, 33, 34, 39, 40, 45, 47, 51 and 54.

2. The latter portion of para. 48 will be referred to the Local and Municipal Department.

(True Extract.)

Major, R.E.,
Under-Secy. to Govt., P.W.D.,
Railway Branch.

To the Consulting Engineer for Railways.
" Local and Municipal Department.

Exd. J. Moses.
Spare Copies

RAILWAY.

Govt. of {1890} Madras.

PUBLIC WORKS.

Dated September, 24th.

Recd. *Encl.*

G.O., 24th Sept. 1890, No. 1451 R.

SEPTEMBER.

South Indian Railway including the Nellore Branch

Orders on inspection report of the — for the half-year ended 30th June 1890.

REPORT ON INSPECTION OF THE SOUTH INDIAN RAILWAY INCLUDING THE NELLORE BRANCH

FOR THE

HALF-YEAR ENDED 30TH JUNE 1890.

THE inspection was made between the 15th and 26th August in company with the Agent, Chief Engineer, Locomotive Superintendent, and the Resident Engineers of the several divisions.

2. **Earthwork.**—The banks and cuttings were in good order and appear to have been well maintained. Earth appears to be slowly accumulating on either side of the line at the Ponniár causeway; if this continues to any extent it should be levelled off in order that the flood waters may not be banked up. The banks in the Gúdúr valley on the Nellore branch were reported to be giving trouble through uneven settlement.

3. **Bridges.**—The bridges throughout the line are in good running order, but on the Nellore branch the gauge in some cases requires readjusting, and on the Erode and Negapatam branches, where the old 68lb. rails are in use, the joints on many of the bridges require opening out; on some of them a slight creep was noticed. On the Southern Extension it has been found that on many of the bridges the timber sleepers require renewing, and it has been thought advisable to relay them with the new 50lb. permanent-way.

4. It was decided that the 12-feet drain recently sanctioned to carry off the surface water at the Fort station, Madras, should be altered to four open drains of 4 one-foot openings at intervals, which would serve the purpose better.

5. 42/7—*One* 10-*feet bridge.*—The cracked north abutment has been securely strutted with rails.

6. 84/5—*Thondayar bridge*, *four* 100-*feet spans.*—The bank of earth in front of the third span from the north should be opened out in order to pass abnormal flood waters through the opening.

7. 85/13—*Gingee bridge*, *twenty-two* 30-*feet spans.*—A bund is required on the south side of this bridge to the west of the line and at right angles to it, to prevent water from spilling down alongside the line to the small bridges. A scheme for this should be got out at once.

8. 124/0—*Gadilam bridge*, *fifteen* 100-*feet spans.*—Cuts should be made in the bank opposite the new spans. Five diagonal tension links in the new spans have been cut and rivetted with plates, as they were too long by about $\frac{1}{8}$ inch. One stirrup carrying a cross girder is slightly cracked and should be strapped at once. These straps to which the cross girders are attached should be scraped and examined periodically as they are a very vital part of the bridge. It would be better if they were painted instead tarred.

9. 146/7—*One* 100-*feet span.*—A tension bar, which has a slight crack, should have plates rivetted to it.

10. 151/6—*One* 70-*feet girder completed.*—The slopes of the banks require pitching.

11. 176/4.—A small bridge is asked for across an irrigation channel, but this appears to be outside the Company's property.

12. 323/3—*One* 15-*feet girder bridge.*—It is proposed to build a small dam across this channel in order to divert a portion of the water through a double 20-feet bridge just below, which does not now take its share of the water.

13. 327/13.—A three 25-feet girder bridge is to be constructed here in connection with the Periyár Project. The diversion is nearly ready, but it was settled not to open it until after the north-east monsoon, when the bridge will be at once taken in hand.

14. 361/9—*Two* 15-*feet girder bridge.*—The south abutment is cracked; the bridge will be floored.

15. 387/8—*Five* 50-*feet girder bridge.*—Several spikes were found to be loose and some nuts off the horizontal bolts. Clip bolts should be inserted, say 3 or 4 to each rail, as the spikes spring and often split the longitudinals.

16. *Arkónam Branch*—57/10-A.—At this mileage a two 20-feet bridge in lieu of one 15-feet opening, as the waterway was considered to be insufficient, was reported to be complete at the date of this inspection. It consists of girders of the ordinary plate type in use on the line with cross girders carrying longitudinal beams, on which the rails are laid in chairs. The pier and abutments are of brick pointed with cement. The ballast walls consist of double rails with the space filled in with cement, and are a very neat type. The bridge is floored with boulders set in chunam round the piers, the remainder being dry, and has drop walls 5 feet deep with aprons on the up and down stream sides. Height of rail level above floor is 18′ 4″. The brickwork appears to be excellent, the gauge is correct, and the approaches, excepting one gap to pass the water through temporarily and which has to be filled in, are consolidated. The slopes of the banks are pitched for a distance of 25 feet from the abutments. On testing with an engine the deflections varied from $\frac{3}{16}$ to $\frac{1}{8}$ inch; a running test could not be made on account of the gap. I am of opinion that the bridge may be opened for passenger-traffic without danger to the public using it. Sanction to open the bridge was given by the Consulting Engineer on 18th August 1890.

17. 63/10—*Four* 10-*feet bridge.*—The north abutment which has shifted forward has been strutted and the weight taken off. On rebuilding the abutment the question of whether a larger opening, say 15 feet, is advisable should be considered.

18. *Erode Branch*—267/9 E—*Wyacondin channel, five* 30-*feet girders.*—The rail joints want re-arranging and the gauge is rather tight.

19. *Tinnevelly Branch*—433/7 T—*Ten* 70-*feet girder bridge.*—The longitudinals on one side are being renewed, as it was found that the rail was too close to the edge of the longitudinals.

20. *Nellore Branch*—13/6 N.—The Irrigation Departments ask for a 3-feet culvert to be converted into a 20-feet bridge, as the drainage of a tank, which has been repaired, will pass through it. This seems to be necessary.

21. 14/7 N—*One* 40-*feet span.*—The groyne on the east side requires to be repaired and extended; extra flooring is also necessary.

22. 15/6 N—*Two* 10-*feet arches and six* 40-*feet girders.*—The arch at north end is badly cracked, the weight has been taken off by baulks. The arch at the south end is also slightly cracked. The piers should be re-pointed on the top as water lies there.

23. 72/8 N—*Ralayarroo bridge, seven* 100-*feet girders.*—The gauge is $\frac{1}{8}$″ tight. It was reported that there appeared to be more oscillation in the two northern girders than in the others; it was arranged to have these spans tested again and compared with the originals.

24. The refuges on many of the bridges are in very bad order and should be repaired.

25. All the bridges in the Gúdúr and Ramdass valleys appeared to be in good order, but some are tight as to gauge; any scour holes requiring to be filled in, or pitching found to be necessary, has been done.

26. **Permanent-way.**—The permanent-way has been well maintained throughout the line and is as a rule in good running order. Up to 30th June 1890, 275 miles of the new 50 lb. road had been laid, including 18 miles on the Arkónam branch, 10 miles on the Negapatam, and one over and on the approaches to the Gingee bridge on the Pondicherry branch.

27. The portion of the old 40 lb. road in the vicinity of Kumbakónam is wearing out fast, due mainly to the decay of the sleepers; the old 68 lb. road on the Negapatam branch is also deteriorating rapidly, the rails in many places showing signs of spreading. On this branch the old timber sleepers are being renewed with cast-iron pots taken out from the Negapatam end, which has been relaid for 10 miles with the 50 lb. road. The new 50 lb. road between Tanjore and Trichinopoly is in very good running order.

28. At 115/1-2 and 116/8 there are sharp curves in the line; where the trains jar badly, these might be eased.

29. A siding to form a run round should be put in at the end of the Cuddalore wharf siding so that the engine can always be in front of the train, as with a long train the driver cannot see what is going on at the other end. A man was recently knocked down by the brake-van and killed when crossing this siding, which is unfenced, though precautions are taken in restricting speed to 4 miles an hour and ringing a bell.

30. The gauge of the Nellore branch is in places from $\frac{1}{8}$ to $\frac{1}{4}$ inch tight, and the Denham Olphert sleepers continue to give trouble on account of the large breakages of the jaws.

31. **Ballasting and Fencing.**—The line is fully ballasted, but in many places the ballast is inferior in quality, and contains a good deal of earth.

32. The aloe fencing grows well as a rule, but in some places notably between the 51st and 53rd mile on the Arkónam branch it is poor and wants looking after.

33. Wire fencing is necessary at the level crossing gates near Nellore, and also at the west end of Rénigunta station between the cemetery and the gate lodge.

34. On some portions of the line large trees overhang in a way which would be very dangerous in the event of their being blown down; the most noticeable were at mileages 370 and 371 on the Main Line 63 and 68 to 70 on the Arkónam branch, and in the 255th, 264th and 283rd miles on the Erode branch.

35. **Stations.**—The buildings, platforms and yards were as usual well looked after and were neat and clean. Sanitation has everywhere been well attended to.

36. At Madras the question of a new station for the Beach terminus, which now only boasts of a ticket bunk, was discussed, and it was decided that plans should be got out at once and that the Harbour Trust Board and Municipality should be consulted as to the site. At Egmore the new carriage repairing shed was completed. The Locomotive Superintendent wants the smiths fires removed from their present position to a lean-to against the boundary wall to give more light and get rid of the smoke in the engine shed.

37. The new dock siding at Chingleput which has been a long-felt want has been commenced. This will allow of three trains being at the platform at the same time.

38. At Villupuram the junction arrangements are progressing slowly owing to the difficulty in getting labor, and it is estimated that it will take two-and-a-half months more to complete the work.

39. At Vikravandi, Venkatagiri and Kálahasti small goods sheds are necessary, and at Kuttalam a lean to against the present goods shed was asked for, as in rushes of traffic the goods are exposed to the weather. At Pallur more goods accommodation is required, a house should be built there for the station-master, who now lives in the station, and his room could then be converted into a goods godown. At Trichinopoly Fort the goods shed, salt godown, and old engine shed were all full of goods; if traffic increases it will be necessary to enlarge the yard and provide extra goods accommodation. The transhipping of goods at Erode having largely increased, the transhipping platform and cover will have to be extended. At Panruti Messrs. Parry and Co. ask for a siding into their works, and at Nellikuppam they also ask that the goods shed may be removed to the north side of their sidings in order to improve their shunting arrangements; this will also be more convenient for the public.

40. At Nídamangalam, Elamanur, and Venkatachellam the station buildings require to be re-floored, and the floor of the goods shed at Tuticorin requires re-pointing.

41. It was noticed that the pale fencing on the platforms of most of the stations on the Nellore branch was in bad repair and appeared to be deteriorating fast.

42. At Tanjore and Koilpati steam pumps are required, as a great deal of water is used at these stations, and at the former station the tank requires to be enlarged. At Tirupati and Nellore a roof is required over the pumps.

43. At Vaithisvarankoil the station building is badly cracked and also three of the staff quarters at Nellore; these are being strongly tied with old rails and will be carefully watched.

44. At Tanjore it was decided to pull down an old disused third-class waiting shed as it is getting in a dangerous condition. This station is one of the oldest on the line and is very unfitted for present requirements; it should, in my opinion, be entirely remodelled.

45. At Vendod and Yellacur the latrines, which are portable ones, should be removed to the other end of the platforms, as they are in the vicinity of the wells.

46. The Cuddalore Old Town station has been much improved of late, a great deal of the low swampy ground has been filled in and locomotive sidings laid down. The station sidings are also being lengthened and a new siding is to be put in.

47. Villiambakam, which is only a temporary station in a very dilapidated condition, shows a fair amount of traffic, and is, I think, worthy of a permanent structure. At Negapatam the Locomotive Superintendent asks for a weigh bridge and loading gauge in the works.

48. At Pasur there is no latrine, and Yellacur is the only station in the Nellore branch which has not got a feeder road; this should be provided.

49. Many of the smaller stations have no raised platforms. I am of opinion that at those stations where there is a fair passenger traffic the platforms should be at least one foot above rail level. Several of the platforms and through sidings are also too short. A certain number might with advantage be lengthened every year so that they may all be gradually brought up to standard dimensions. A return has been submitted giving their present lengths.

50. **Station machinery.**—The points and crossings inspected were in good order. Ground disc signals have been fixed to the important ones at the larger stations, but at present there seems to be a difficulty in keeping them exactly square with the line.

51. The signals were as a rule in good working order, the only one noticed which did not work satisfactorily was the south distant signal at Unjalur. The north distant signal at this station should be moved to the other side of the line. At Kuttalam, the south distant signal is in a bad position as it cannot be seen from a distance. Both distant signals at Villenur, the north one at Narasingampet, and the west one at Negapatam, require stops to prevent the arm going below 45°.

52. The distant signals at nearly all the stations are too close to the facing points. The Agent has been requested to send in a return showing their exact positions with regard to the stations; a certain number of signals every year might then be removed to the necessary distances from the outermost points. All the minor stations on the South Indian Railway have distant signals only and no home signals.

53. **Watering arrangements.**—Water was reported to be short at Tindivanam, Vikravandi, Panruti, Manaparai, Vaiyampati and Erode. The Chief Engineer will take steps to increase the supply at these stations. At 286/2 an auxiliary watering place has been made. There is an old well here near the line, and an iron tank on a sleeper staging has been put up. An estimate has been sanctioned for laying pipes temporarily from an old well about half-a-mile off to the Kadambur station; if this is successful permanent arrangements will be made, which it is hoped will do away to a large extent with the water trucks which are now hauled between Koilpati and Tuticorin.

54. **Rolling stock.**—All carriage stock, except that running on the mail trains, requires to be varnished, and there have been several complaints of the leaky state of the first-class carriages. The engines and wagon stock of the Villupuram-Guntakal State Railway are being erected by the South Indian Railway, most of the former are completed and the latter are being turned out at the rate of one a day. Some of these engines and stock have been taken into use as a temporary measure by the South Indian Railway. Jones' patent couplings have been fitted to one Mail Train, and are favorably reported on, as they diminish considerably the jar at starting, and improve the steadiness of the train while running. The remainder of the stock is being fitted as opportunity offers.

55. **Traffic.**—The receipts for the half-year amounted to nearly 30 lakhs of rupees, the highest sum yet recorded, being an increase of nearly a lakh-and-a-half over the corresponding period of 1889; about one-third of the increase is due to additional 3rd-class passenger traffic and the remainder to merchandise, mainly on account of the carriage of grain owing to scanty crops and high prices in the Southern districts. It is probable that the result of the half-year's working will show that the line has earned the amount of interest paid by the State. The working of this department has been considerably handicapped by the death of two Traffic officers, but the Agent reports that the subordinates who have been temporarily promoted, have been doing very good work.

56. The distance between Búdalúr and Tiruverumbúr—14 miles—is too great. If traffic continues to increase, an extra station between these two, as a crossing place, will be necessary.

MADRAS,
11th September 1890.

(Signed) SIDNEY SMITH, Major, R.E.,
Deputy Consulting Engineer for Railways.

SOUTH INDIAN RAILWAY.

STATEMENT showing the Coaching and Goods stock received for renewals and repairs and turned out for the quarter ending 31st March 1890.

Particulars.	Passengers' vehicles.	Covered goods wagons.	High-sided wagons.	Other vehicles.	Total.	Remarks.
Total stock on hand on 1st January 1890.	44	32	32	12	120	
Total received from 1st January 1890 to 31st March 1890.	62	42	44	58	206	
	106	74	76	70	326	
Deduct— Stock turned out from 1st January 1890 to 31st March 1890.	61	46	49	50	206	
Total, stock on hand ..	45	28	27	20	120	Undergoing repairs .. 113 Awaiting repairs .. 7

TRICHINOPOLY,
15th April 1890.

(Signed) W. F. HOOPER,
for Agent.

SOUTH INDIAN RAILWAY.

LOCOMOTIVE DEPARTMENT.

STATEMENT showing the Coaching and Goods stock received for renewals and repairs and turned out for the quarter ending 30th June 1890.

Particulars.	Passengers' vehicles.	Covered goods wagons.	High-sided wagons.	Other vehicles.	Total.	Remarks.
Total stock on hand on 1st April 1890.	45	28	27	20	120	
Total received from 1st April 1890 to 30th June 1890.	31	31	76	10	148	
	76	59	103	30	268	
Deduct— Stock turned out from 1st April 1890 to 30th June 1890.	44	38	62	25	169	
Total, stock on hand ..	32	21	41	5	99	Undergoing repairs .. 83 Awaiting repairs .. 16

NEGAPATAM,
10th July 1890.

(Signed) W. S. BETTS,
Agent.

(Signed) C. E. CRIGHTON,
Locomotive and Carriage Superintendent.

SOUTH INDIAN RAILWAY.

Engineer Department.

Statement showing the renewals of rails for the half-year ending 30th June 1890.

—	Rails Displaced.																			
	Iron.								Steel.											
	68 lb.				40·3 lb.				50 lb.				41 lb.				56 lb.			
	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut left feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Main Line.																				
January 1890	..	30	..	..	47	24	3	38	..	..	..	..	..	..	..	..	..	..	..	..
February ,, ...	..	1,594	64	296	144	83	13	261	1	..	..	..	139	192	4	422	..	..	..	..
March ,, ...	..	3,087	93	285	56	30	7	..	1	..	..	..	1	..	..	..	..	..	..	..
April ,, ...	..	978	4	..	89	32	5	..	..	..	..	..	..	..	..	..	..	..	..	..
May ,, ...	..	505	8	19	80	79	1	..	..	..	..	..	..	..	..	..	..	..	..	..
June ,, ...	..	6	..	..	189	141	4	219	..	..	..	..	..	65	..	..	..	..	..	..
Total ..	..	6,200	169	600	605	389	33	518	2	..	..	..	140	257	4	422	..	..	..	..
Sidings.																				
January 1890	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
February ,, ...	..	..	..	..	25	10	1	..	..	..	..	..	..	..	..	..	..	..	..	..
March ,, ...	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
April ,, ...	..	..	..	..	3	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..
May ,, ...	..	..	..	..	13	15	..	16	..	..	..	..	..	..	..	..	..	..	..	..
June ,, ...	..	..	..	..	6	..	4	182	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	48	33	7	198	..	..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	..	6,200	169	600	653	422	40	716	2	..	..	..	140	257	4	422	..	..	..	..

Statement showing the renewals of rails for the half-year ending 30th June 1890—*cont.*

—	Rails Replaced.																			
	Iron.								Steel.											
	68 lb.				40·3 lb.				50 lb.				41 lb.				56 lb.			
	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut left feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.
	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Main Line.																				
January 1890	..	30	..	..	47	24	3	38	..	..	8	..	..	..	..	..	..	..	..	..
February ,, ...	..	4	..	..	59	42	5	22	1,910	8	..	..	8	..	..	..	..	..	..	..
March ,, ...	..	61	..	..	50	17	7	..	2,725	2	2	53	7	13	..	..	..	..	..	..
April ,, ...	..	40	4	..	85	25	3	..	820	..	..	..	4	7	2	..	..	..	..	..
May ,, ...	413	39	2	32	68	60	1	..	..	..	..	..	12	19	..	..	..	..	..	..
June ,, ...	..	6	..	..	177	65	4	..	113	12	..	..	7	16	..	..	..	..	..	..
Total ..	413	180	6	32	486	233	23	60	5,568	22	2	53	38	55	2	..	..	..	..	..
Sidings.																				
January 1890	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
February ,, ...	..	..	..	..	23	2	1	..	..	..	..	..	2	8	..	..	..	..	..	..
March ,, ...	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
April ,, ...	..	..	..	..	2	1	..	..	..	..	..	..	1	5	1	..	..	..	..	..
May ,, ...	..	..	..	..	11	7	..	16	..	..	..	..	2	8	..	..	..	..	..	..
June ,, ...	..	..	..	..	6	..	3	182	..	..	..	..	..	..	1	..	..	..	..	..
Total ..	..	..	..	..	43	12	5	198	..	..	..	..	5	21	2	..	..	..	..	..
Grand Total ..	413	180	6	32	529	245	28	258	5,568	22	2	53	43	76	4	..	..	..	..	..

Trichinopoly,
15th August 1890.

(Signed) W. F. HOOPER,
for Agent.

(Signed) F. F. SMITH,
for Chief Engineer.

SOUTH INDIAN RAILWAY.

Engineer Department.

Statement showing the renewals of sleepers for the half-year ending 30th June 1890.

	Sleepers Displaced.								Sleepers Replaced.							
	Creo. 6 feet.	Creo. 9 feet.	Pingadu.	Teak of sizes.	Pot 68 lb.	Pot 50 lb.	Pot 40 lb.	Transverse steel sleeper.	Creo. 6 feet.	Creo. 9 feet.	Pingadu.	Teak of sizes.	Pot 68 lb.	Pot 50 lb.	Pot 40 lb.	Transverse steel sleeper.
Main Line.																
January 1890	2,339	..	30	..	70	77	35	..	2,273	..	8	..	158	77	35	..
February ,, ...	2,425	..	93	95	5,550	1½	5	2,241	2,130	..	93	9	254	8,426½	5	..
March ,, ...	3,235	..	154	8	10,516	½	3	..	2,742	..	129	8	496	12,194½	3	..
April ,, ...	2,672	..	3	10	2,178½	..	3½	..	2,539	..	142	4	1½	3,523	3½	..
May ,, ...	908	..	3	..	1,552	1½	3	..	790	..	46	..	78	1,745½	3	..
June ,, ...	2,614	..	365	342	1	2	..	..	1,815	..	50	64	712½	479	134	..
Total ..	14,193	..	648	455	19,867½	82½	49½	2,241	12,289	..	468	85	1,700	26,445½	183½	..
Sidings.																
January 1890	65	..	..	..	..	..	..	..	64	..	1	..	..	..	..	..
February ,, ...	116	..	..	..	..	..	..	..	116	..	..	..	..	..	..	..
March ,, ...	347	..	27	..	..	..	..	..	347	..	27	..	..	..	..	..
April ,, ...	301	..	..	2	..	..	..	..	301	..	2	..	..	..	..	..
May ,, ...	219	..	8	..	..	..	..	..	219	..	8	..	..	..	..	..
June ,, ...	316	..	1	..	..	..	..	..	316	..	1	..	..	..	..	..
Total ..	1,364	..	36	2	..	..	..	..	1,363	..	39	..	..	..	..	..
Grand Total ..	15,557	..	684	457	19,867½	82½	49½	2,241	13,652	..	507	85	1,700	26,445½	183½	..

Trichinopoly,
15th August 1890.

(Signed) W. F. HOOPER,
for Agent.

(Signed) F. F. SMITH,
for Chief Engineer.

8

Form No. 2.

Public Works Department.

Office of Consulting Engineer for Railways,
Madras, 19th September 1890.

Report on Inspection of the South Indian Railway, including the Nellore Branch for the half-year ended 30th June 1890.

No. 626

Submitted for the information of Government:

Sidney Smith
Major R.E.
for Off. Cons. Engr. for Rys.

Form No. 3.

P. W. Cons: 9131

From

THE CONSULTING ENGINEER
FOR RAILWAYS,
MADRAS.

No. 626

Dated 19th
Received 26th } September 1890.

No. of Enclosures. 1

Subject.

Submitting the Inspection Reports, S. I. Ry. (including Nellore Branch) for the h. y. ended 30th June 1890.

A
No. 1451 R. dy. 24th Sept. 90.

A No. 1451 R dy 24th Sept/90.

Dft 23/9/90

The Agent's attention will be drawn to paras 6, 7, 9, 15, 17, 21, 29, 33, 34, 39, 40, 45, 47, 51 and 52.

2. The latter portion of Para 48 will be referred to the Local and Municipal Department.

Dft: R

27/9/90

To
The Comptg: Engr for Rys
— Local & Municipal Dept.

Dft. 20/9
Ath. 22/9. R 23/9

9131

Govt. of 18 Madras.

PUBLIC WORKS.

30-9-90

Dated

Recd. Encl.

G.O., 24 Sept. 1890, No. 1457 R

S. I. Ry - including the Nellore Branch

orders on inspection report of the —— for the half-year ended 30 June/90.

Qb 100/4.

E. I. C 24/9/90