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MADRAS RECORD OFFICE

Government of Madras

Public Works' DEPARTMENT

G.O. No. / ~~B.P. No.~~	1466-67	Press / Mis.	1875
Dated	26-5-	—195—	

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
26th May 1875.

No. 505. Read the following letter from Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Madras, 10th May 1875, No. 265 :—

I HAVE the honor to forward, for the sanction of the Government of India, revised estimates of the cost of the narrow gauge rolling stock for the whole of the lines of the South Indian Railway.

2. From the following comparative summary it will be seen that these are greatly in excess of the sanctioned amounts :—

—	Amount sanctioned.	Revised estimate.
	RS.	RS.
Negapatam to Erode	13,03,360	14,36,205
Southern Extension	10,82,800	16,38,178
Madras to Cuddalore	7,68,000	9,61,260
Cuddalore to Tanjore	3,65,000	4,58,940
Total ...	35,19,160	44,94,583

3. The estimates now submitted are framed on the actual prices at which the contracts have been let, and the enclosed letters from the Agent explain generally the causes of the increased cost, which may be stated as follows :—

No. 504, 5th April 1875 (two enclosures).
„ 534, 17th „
„ 552, 28th „ (one enclosure).

Negapatam-Erode section.—The original estimate was Rupees 10,51,770, but this was afterwards raised to Rs. 13,03,360.* The increase now shown over the latter sum is due entirely to the high cost of engines, which are set down at Rs. 26,500 each.

* *Vide* Proceedings of Government, 23rd May 1874, No. 1,384.

Southern Extension.—For this line the Government of India sanctioned a sum of Rupees 10,82,800,† which they considered at the time sufficient to provide the numbers of engines and vehicles estimated for by the Locomotive Superintendent. The Agent, however, in submitting the indent, gave it as his opinion that the figures entered would not be found sufficient, and now the stock is estimated to cost Rupees 16,38,178, an increase of Rupees 5,55,378, or 51·2 per cent. Of this amount, Rupees 21,300 is due to the excess cost in obtaining the passenger vehicles from England complete. The details of the latter sum will be found in the Agent's letter, No. 534, of the 17th ultimo.

† Proceedings of Government, 21st March 1872, No. 803.

Madras to Cuddalore.—Amount sanctioned Rupees 7,68,000. The numbers sanctioned are given in the Proceedings of Government, dated 4th December 1872, No. 2,851, but the Agent in submitting the indent altered the numbers in some cases to what he considered could be provided within the sanction; and, under the circumstances, the extra vehicles were passed. The total cost is now expected to be

Rupees 9,61,260, an excess of Rupees 1,93,260, of which Rupees 99,000 is under the head of Engines; the balance under vehicles may be attributed to enhanced price of iron, and to the extra cost involved by obtaining the stock from England complete. The following are the vehicles ordered over and above the numbers sanctioned:—

4 Composites.
1 First Class.
30 Third Classes.
4 Passenger brakes.
2 Horse Boxes.

Cuddalore to Tanjore.—Amount sanctioned Rupees 3,65,000. Estimate now submitted Rupees 4,58,940. The provision was at the rate of Rupees 4,000 per mile approximately, and, owing to the high cost of engines, this has been found to be insufficient.

4. The total quantity of rolling stock ordered is 82 engines and 1,507 vehicles; and, as it may now be considered almost certain that the existing gauge will be retained between Trichinopoly and Erode, I suggested to the Agent the advisableness of countermanding some portion of it. Mr. Betts, however, explains that it is too late to do this without making a considerable sacrifice, and further states his opinion that the total quantity will not be found to be in excess of requirements. Supposing the break of gauge to take place at Trichinopoly instead of at Erode, the total length of the South Indian narrow gauge system, after the completion of the Chingleput-Conjeveram link and the Pondicherry branch, will be 578 miles, as follows:—

	MILES.
Negapatam to Trichinopoly	82
Southern Extension...	215
Madras to Cuddalore	128
Cuddalore to Tanjore	89
Arconum to Chingleput	40
Pondicherry Branch	24
Total...	578

and for this length the stock ordered will be equivalent to ·14 of an engine, and 2·60 vehicles per mile. This is somewhat in excess of the proportions laid down by the Government of India for the opening of new lines.

5. Adverting to paragraph 2 of this office letter, dated 1st April 1875, No. 182, it should be explained that the Agent has requested his Board to arrange for the supply of iron-work only in future contracts; but it would appear that contracts have already been entered into for a quantity of stock which will probably be found sufficient for working the traffic for some years to come. Considering the delay which is now occurring in the opening of the Southern Extension from the rolling stock not being ready, it is thought that the course which has been adopted of obtaining the greater part of the stock from England complete will be the cheaper in the end. Mr. Betts adds as an additional advantage the saving of expenditure in workshop accommodation and superintendence.

Proceedings of Government, 12th April 1875, No. 965.

Proceedings of the Madras Government, Public Works Department,
26th May 1875.

From W. S. BETTS, Esq., Agent of the South Indian Railway, to Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, dated Negapatam, 5th April 1875, No. 504.

The Locomotive Superintendent having received copies of all the contracts entered into in England for the supply to this Company of metre gauge rolling stock, he has been enabled to prepare a revised estimate of the cost at which he considers the stock can be delivered complete in this country.

2. I enclose a copy of the estimate, and shall feel obliged by you obtaining the sanction of Government to its adoption, all previously accorded sanction under the heading of Rolling Stock being thereby cancelled.

3. I also forward a statement showing the numbers of each description of stock entered on the several indents which have been sent to the Directors.

4. Upon indent No. 61 there were sanctioned 8 *composite* carriages, in place of those it is considered desirable to provide 8 *first-class* carriages.

—

South Indian Railway.

Estimate of the cost of erecting and constructing the Rolling Stock required for working on the metre gauge.

Details.	Amount of Estimate. Labor.	Stores.	Total.	Average Cost of each Vehicle.
	RS.	RS.	RS.	RS.
82 Locomotives	82,000	20,91,000	21,73,000	26,500
12 Composite carriages	600	48,570	49,170	4,097
18 First-class do.	6,960	68,500	75,460	4,192
10 Second-class do.	450	33,940	34,390	3,439
176 Third-class do.	6,160	4,56,010	4,62,170	2,626
37 Passenger brake vans	1,295	1,14,145	1,15,440	3,120
20 Horse boxes	700	43,788	44,488	2,224
4 Carriage trucks	80	4,100	4,180	1,045
16 Goods brake vans	1,485	23,255	24,740	1,546
580 Covered goods wagons	44,885	7,31,140	7,76,025	1,338
150 Ballast wagons	5,850	1,45,430	1,51,280	1,008
27 Timber trucks	940	23,930	24,870	921
3 Gun Powder vans	135	6,630	6,765	2,255
40 Salt trucks	1,400	49,200	50,600	1,265
229 High sided open goods wagons	13,150	2,31,530	2,44,680	1,068
100 Cotton trucks	3,500	1,49,000	1,52,500	1,525
80 Low sided open goods wagons	2,000	76,980	78,980	987
3 Post Office vans	105	9,620	9,725	3,242
2 Five-ton travelling cranes	120	16,000	16,120	8,060
Total...	1,71,815	43,22,768	44,94,583	.....

Negapatam,
5th April 1875.

(Signed) W. S. BETTS,
Agent.

Statement showing the Quantities of Rolling Stock indented for.

—	Carnatic No. 9.	Carnatic No. 10.	Carnatic No. 15.	G. S. No. 61.	G. S. No. 63.	G. S. No. 75.	Total.
Locomotives	2	2	14	30	26	8	82
Composite carriages ...	...	...	12	8	...	...	20
First class	...	...	2	...	6	2	10
Second class	...	...	2	...	6	2	10
Third class	...	...	60	50	50	16	176
Passenger brake vans ...	...	...	12	12	10	3	37
Horse boxes	...	...	6	6	6	2	20
Carriage trucks	...	...	2	2	...	...	4
Goods brake vans ...	1	1	2	6	4	2	16
Covered goods trucks ..	...	...	100	150	250	80	580
Ballast „ ...	15	15	...	50	50	20	150
Timber „ ...	10	...	...	9	8	...	27
Gun powder „ ...	...	...	1	1	1	...	3
Salt „ ...	...	...	...	40	...	...	40
High sided „ ...	...	...	24	100	80	25	229
Cotton „ ...	...	...	...	100	...	...	100
Low sided „ ...	...	...	...	...	60	20	80
Post Office Vans	...	...	3	...	...	...	3
Travelling cranes ...	...	...	...	1	1	...	2

NEGAPATAM,
5th April 1875.

(Signed) W. S. BETTS,
Agent.

From W. S. BETTS, Esq., Agent of the South Indian Railway, to Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, dated Negapatam, 17th April 1875, No. 534.

YOUR letter, No. 217, of the 13th instant. Although it may hereafter be decided to retain between Trichinopoly and Erode the gauge at present in use, still I consider it will be absolutely necessary, for the efficient working of the metre gauge system, that we should receive all the rolling stock which has been ordered. The length of that system would then be as you state, about 578 miles, and the number of engines and vehicles which have been ordered would give upon that distance a mileage rate of ·14 of an engine, and 2·60 vehicles. The mileage allowance upon the Madras Railway is ·15 of an engine and 4·31 vehicles. It must be borne in mind that we shall not be able to obtain so much work out of the metre gauge stock as we do out of the broad gauge stock. In the first place through the restriction of speed, and in the second place through the reduced carrying capacity of the stock. It is well known the present open line has been under stocked, and that we could not have worked the traffic without delay had we not used the goods vehicles of the Madras Railway Company. Over the metre gauge system there can be no use made of Madras Railway rolling stock.

2. Putting aside these reasons, however, it would not now be possible, even if desirable, the work being so far advanced, to cancel, without a considerable sacrifice of money, the contracts which have been entered into in England for the supply of metre gauge stock to this Company.

3. I have not, therefore, telegraphed to the Board of Directors, as you suggested, and I trust you will, after this explanation, agree with me that a telegram should not be forwarded.

4. With respect to the difference between the revised estimate and the amounts entered in the indents (save that for the section between Negapatam and Erode, No. 68), I can but give the general reply that the latter figures were* not at the time considered by the officers of this Company to be sufficient to cover the cost of the stock indented for. Take as an instance indent No. 61 for stock required on the Southern Extension. The Government of India sanctioned the *numbers* of engines and vehicles enumerated by the Locomotive Superintendent, but decreased his estimate of their cost by Rupees 3,28,280. In making out our indent we had to insert the reduced figures although we had reason to believe the stock could not be supplied for the rates inserted. This was explained in my letters, Nos. 4,702 and 4,736, dated, respectively, the 25th September and 11th October 1872. As I cannot give any further explanation than this, I presume you will not require the detailed figures mentioned in your letter.

* *Vide* Agent's letter, No. 560, dated 30th April 1875.

5. It has been arranged to supply the stock required on the Northern Extension complete from England. On the 24th December 1873 (letter No. 384-C), I asked permission to do this; and in your reply, No. 359, of the 30th idem, you informed me you saw no objection to the proposal which I had made.

The estimated excess of cost of about Rupees 21,300 in getting the Southern Extension carriage stock complete from England is shown in detail below as requested :—

	Indian cost.	RS.		*English cost.*	RS.
First class ...	... 1 × 4,246 ...	4,246	× 4,060	... ...	4,060
Third „ ...	... 50 × 2,827 ...	1,41,350	× 3,050	... ...	1,52,500
Brake vans ...	... 12 × 2,475 ...	29,700	× 3,462	... ...	41,545
Horse boxes ...	... 6 × 2,530 ...	15,180	× 2,428	... ...	14,568
Carriage trucks	... 2 × 1,485 ...	2,970	× 1,080	... ...	2,160
	Total...	1,93,446		Total...	2,14,833

From the same officer, dated Negapatam, 28th April 1875, No. 552.

YOUR letter, No. 238, of the 23rd instant. The stock required for the equipment of the line between Cuddalore and Tanjore will be supplied complete from England as it had previously been arranged should be the stock required for the other portion of the Northern Extension. It must be remembered that when the indent for this stock was sent to the Board, it was expected the section from Cuddalore to Porto-Novo and the section from Tanjore to Combaconum would be ready for traffic in October 1875. I presume we shall be called upon to work public traffic over other portions of the Northern Extension long before the larger bridges are finished, I mean by the use of tramways laid across the beds of the rivers; and I doubt whether we could have erected (by the time referred to) sufficient stock in our workshops here if it had been determined not to get the vehicles complete from England.

2. The price of the stock entered on indent No. 15 differs from the revised estimate by Rupees 1,93,260, and about one lakh of that sum is due to the locomotive engines having been under-estimated. The building of the stock in England has also added to the revised estimate; no provision for this was made in the figures entered on the indent.

3. I have drawn up a statement (sent herewith) which shows in detail the differences between the sanctioned allotment for rolling stock and the amount which it is now considered the stock will be constructed for.

Comparative Statement of the estimated and sanctioned cost of the metre gauge Rolling Stock.

Details.	Revised Estimates.			Sanctioned Estimates.			Remarks
	Cash outlay in India.	Value of English Stores.	Total.	Indian Expenditure.	English Expenditure.	Total.	
Negapatam to Erode.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
26 Locomotives	26,000	6,63,000	6,89,000	...	...	5,47,500	
6 First-class carriages ...	360	25,730	26,090	...	...	49,050	
6 Second do. do. ...	270	20,140	20,410	...	...		
50 Third do. do. ...	1,750	1,20,170	1,21,920	...	...	1,49,500	
10 Passenger brake vans ...	350	29,320	29,670	...	...	31,700	
6 Horse boxes	210	12,760	12,970	...	...	10,710	
4 Goods brake vans... ...	140	5,960	6,100	...	...	6,120	
250 Covered goods wagons ...	8,750	3,15,670	3,24,420	...	...	3,20,000	
50 Ballast wagons	1,250	47,030	48,280	...	...	46,500	
60 Low sided open goods wagons	1,500	57,480	58,980	...	...	55,800	
8 Timber trucks	160	6,920	7,080	...	...	7,120	
80 High sided open goods wagons	2,000	78,930	80,930	...	...	76,000	
1 Gun powder van	45	2,250	2,295	...	...	2,040	
1 Five-ton travelling crane ...	60	8,000	8,060	...	...	1,200	
			14,36,205			13,03,360	
Southern Extension.							
30 Locomotives	30,000	7,65,000	7,95,000	30,000	6,00,000	6,30,000	
8 First-class carriages ...	6,360	24,630	30,990	10,700	6,004	16,704	
50 Third-class do. ...	1,750	1,47,500	1,49,250	27,200	8,650	35,850	
12 Passenger brake vans ...	420	40,585	41,005	11,700	7,908	19,608	
6 Horse boxes	210	13,968	14,178	4,100	3,106	7,206	
2 Carriage trucks	40	2,100	2,140	480	486	966	
6 Goods brake vans ...	1,135	8,475	9,610	2,180	1,768	3,948	
150 Covered goods wagons ...	29,835	1,77,490	2,07,325	1,02,220	47,480	1,49,700	
100 High sided open do. ...	9,925	1,03,060	1,12,985	42,350	32,150	74,500	
50 Ballast wagons	3,350	50,400	53,750	9,000	9,100	18,100	
9 Timber trucks	580	8,010	8,590	2,520	2,547	5,067	
1 Gun powder van	45	2,350	2,395	400	1,151	1,551	
1 Five-ton travelling crane ...	60	8,000	8,060	300	1,020	1,320	
40 Salt trucks	1,400	49,200	50,600	26,150	9,330	35,480	
100 Cotton do.	3,500	1,49,000	1,52,500	47,050	35,750	82,800	
			16,38,178			10,82,800	
Madras to Cuddalore.							
18 Locomotives	18,000	4,59,000	4,77,000	18,000	3 60,000	3,78,000	
2 First-class carriages ...	120	9,070	9,190	2,800	2,000	4,800	
2 Second-class do. ...	90	6,900	6,990	1,090	2,000	3,090	
60 Third do. do. ...	2,100	1,48,690	1,50,790	32,640	60,000	92,640	
12 Composite do. ...	600	48,570	49,170	16,050	12,000	28,050	
3 Post office vans	105	9,620	9,725	1,800	3,000	4,800	
12 Passenger brake vans ...	420	35,390	35,810	11,280	12,000	23,280	
4 Goods do. ...	140	5,880	6,020	1,440	3,040	4,480	
100 Covered goods wagons ...	3,500	1,32,340	1,35,840	68,000	90,000	1,58,000	
24 High sided open do. ...	600	24,260	24,860	10,200	19,200	29,400	
6 Horse boxes	210	12,790	13,000	4,100	5,400	9,500	
2 Carriage trucks	40	2,000	2,040	480	1,600	2,080	
1 Gun Powder van	45	2,030	2,075	400	1,000	1,400	
30 Ballast wagons	750	28,800	29,550	9,000	12,340	21,340	
10 Timber trucks	200	9,000	9,200	2,970	4,170	7,140	
			9,61,260			7,68,000	
Cuddalore to Tanjore.							
8 Locomotives	8,000	2,04,000	2,12,000	...	...	...	No detailed estimate appears to have been rendered for these.
2 First-class carriages ...	120	9,070	9,190	...	...	...	
2 Second-class do. ...	90	6,900	6,990	...	...	...	
16 Third-class do. ...	560	39,650	40,210	...	...	...	
8 Passenger brake vans ...	105	8,850	8,955	...	...	...	
60 Covered goods wagons ...	2,800	1,05,840	1,08,640	...	...	...	
20 Ballast wagons	500	19,200	19,700	...	...	...	
20 Low sided open goods wagons.	500	19,500	20,000	...	...	...	
25 High sided do. do. ...	625	25,280	25,905	...	...	...	
2 Horse boxes	70	4,270	4,340	...	...	...	
2 Goods brake vans ...	70	2,940	3,010	...	...	...	
			4,58,940			3,65,000	

Proceedings of the Madras Government, Public Works Department,
26th May 1875.

ABSTRACT.

	Total.	Total.
	Rs.	Rs.
Negapatam to Erode	14,36,205	13,03,360
Southern Extension	16,38,178	10,82,800
Madras to Cuddalore	9,61,260	7,68,000
Cuddalore to Tanjore	4,58,940	3,65,000
	44,94,583	35,19,160

(Signed) W. S. BETTS,
Agent.

No. 506. ORDER THEREON, 26th May 1875, No. 1,466.

RAILWAY, No. 56.

WITH this letter the Consulting Engineer submits revised estimates amounting to Rupees 44,94,583 for the narrow gauge rolling stock required for the equipment of the entire system of the South Indian Railway lines. As compared with the sums already sanctioned, there is an excess of Rupees 9,75,423. The causes of this excess are explained in the papers submitted. Eighty-two engines and 1,507 vehicles have been ordered, and as the length of line to be worked is 578 miles the provision made is ·14 of an engine and 2·60 vehicles per mile, a proportion exceeding that prescribed for new lines. The Agent, however, considers that the quantities provided for will not be in excess of actual requirements. Contracts have, it is observed, been let at home for the supply of a quantity of rolling stock, including wood work, calculated to be sufficient for working the line for some years to come.

2. The papers will be forwarded for the orders of the Government of India.

(True Extract.)

(Signed) J. O. HASTED, Major, R.E.,
Officiating Joint Secretary to Government.

No. 507. (DOCKET No. 1,467, dated 26th May 1875.)

COPY of the above forwarded to the Government of India.

(True Extract.)

(Signed) J. O. HASTED, Major, R.E.,
Officiating Joint Secretary to Government.

Exd. E. C. Shunker.

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South Indian Railway

The cost of erecting and constructing the
rolling stock for working on the metre gauge

No		Amount of Estimate Labor	Mater	Total	Average cost of each vehicle
32.	Locomotive Engines	32,000	20,91,000	21,23,000	26,500
18.	Composite Carriages	600	48,570	49,170	4,097
18.	1st Class do	6960	68,600	75,560	4,192
10.	2nd Class do	450	33,940	34,390	3,439
176.	3rd Class do	6,160	466,010	4,62,170	2,626
35.	Passenger Break Vans	1295	114,125	1,15,420	3,120
20.	Horse boxes	700	40,788	40,488	2,224
4	Carriage trucks	80	4,100	4,180	1,045
16.	Goods Break Vans	1145	22,645	23,790	1,518
580	Covered goods	14,835	731,140	7,76,1	1338
152.	Ballast	5,350	145,450	151,2	1008
27.	Timber Trucks	940	23,930	24,87	921
3.	Gun Powder Vans	135	6,630	6,76	2,255
40	Cattle trucks	1,400	49,200	50,60	1265
229	High sided open goods wagons	13,160	231,530	244,68	1068
100	Cattle trucks	3,600	149,000	152,50	1525
80	Low sided open goods wagons	2,000	76,980	78,98	987
1	Post Office Vans	100	4,620	4,720	3242
2	Steam Travelling cranes	120	16,000	16,12	8060.
	Rs	171,815	4,22,768.	4,94,583	

Negapatam
5th April 1875

William Betts
Agent

South Indian Railway

Statement showing the quantities of Rolling Stock indented for

	Quantities Nos 9	Quantities Nos 10	Quantities Nos 15	C. S. No 61	C. S. No 68	C. S. No 70	Do.
Locomotives	2	2	14	20	26	8	52
Composite Carriages			15	9			24
First Class "			2		6	2	10
Second Class "			2		6	2	10
Third Class "			60	60	60	16	176
Passenger Break Vans			15	15	10	3	37
Horse boxes			6	6	1	2	20
Carriage trucks			2	2			4
Goods Break Vans	1	1	2	6	4	2	14
Covered goods Trucks	5		100	150	150	80	580
Ballast "	15	16		50	60	20	160
Timber "	10			9	8		27
Gunpowder "			1	1	1		3
Cattle "				40			40
High sided "			24	100	80	25	229
Low sided "				100			100
Ballast "					60	20	80
Low sided "			3				3
Post Office Vans				1	1		2
Travelling Cranes							

Negapatam
5th April 1875

William Betts
Agent

South Indian Railway.

Comparative Statement of the estimated and actual cost of the metre gauge Rolling stock

Details	Revised estimates			Sanctioned estimates		
	Cash outlay in India	Value of English stores	Total	Indian expenditure	English expenditure	
	Negapatam to Erode					
26 Locomotives	26,000	663,000	689,000			
6, 1st Class carriages	360	25,730	26,090			
6, 2nd Class do	270	20,140	20,410			
50, 3rd Class do	1750	120,170	121,920			
10 Passenger Brake Vans	350	29,320	29,670			
6 Horse Boxes	210	12,760	12,970			
4 Goods Brake Vans	140	5,960	6,100			
250 Covered Goods wagons	8750	315,670	324,420			3
51 Ballast wagons	1250	47,030	48,280			
60 Low sided open goods do	1500	57,480	58,930			
8 Timber trucks	160	6,920	7,080			
80 High sided open goods wagons	2000	78,930	80,930			
1 Gun Powder Van	45	2250	2295			
1, 6 ton Travelling Crane	60	8000	8,060			
			1496,205			13
	Southern Extension					
30 Locomotives	30,000	765,000	795000	30,000	600,000	6
8 1st Class carriages	6,360	24,630	30,990	10,700	6,004	
50 3rd Class do	1,750	147,500	149,250	27,200	3650	
12 Passenger Brake Vans	420	40,585	41,005	11,700	7908	
6 Horse Boxes	210	13,968	14,178	4,100	3106	
2 Carriage Trucks	40	2,100	2,140	480	486	
6 Goods Brake Vans	1135	8476	9610	2130	1768	
150 Covered Goods wagons	29,835	177490	207,325	102,220	47,430	

	1400	49,200	50,600	26,150	9330	35480
	3500	149,000	152,500	47,050	35,750	82,800
			16,33,178			10,82,800
Madras to Cuddalore						
	18000	459,000	477000	18,000	360,000	378,000
verages	120	9070	9190	2800	2000	4800
do	90	6900	6990	1090	2000	3090
do	2100	148,690	150790	32640	60,000	92640
Vans	600	48,570	49,170	16050	12000	28050
Brake Vans	105	9620	9725	1800	3000	4800
do.	420	35390	35,810	11280	12000	23280
Goods wagons	140	5880	6020	1440	3040	4480
Open do	3500	132340	135840	68,000	90,000	158,000
Coaches	600	24260	24,860	10,200	19,200	29,400
Trucks	210	12790	13,000	4,100	5400	9500
Ser Van	40	2000	2040	480	1600	2080
wagons	45	2030	2075	400	1000	1400
Trucks	750	28,800	29550	9000	12340	21340
	200	9000	9200	2970	4170	7140
			961260			768,000
Cuddalore to Tanjore						
	8000	204000	212000			
verages	120	9070	9190			
do	90	6900	6990			
Brake Vans	560	39650	40210			
Goods wagons	105	8850	8955			
wagons	2800	105,840	108,640			
Open goods do	500	19,200	19700			
do do	500	19500	20,000			
Vans	625	25280	25905			
Brake Vans	70	4270	4340			
	70	2940	3010			
			458940			365000
Abstract	Total	Total				
to Erode	14,36,205	13,03,360				
Extension.	16,38,178	10,82,800				
to Cuddalore	961,260	768,000				
to Tanjore	458940	365000				

No detailed estimate appears to have been rendered for these

5

No. GREAT SOUTHERN OF INDIA RAILWAY.

AGENT'S OFFICE,

NEGAPATAM, 5th April 1865.

From

THE AGENT,

~~Great~~ South~~ern~~ of India Railway,

To

The Consulting Engineer for Railways.

SIR,

The Locomotive Superintendent having received copies of all the contracts entered into, in England, for the supply to this Company of metre Gauge Rolling Stock, he has been enabled to prepare a revised estimate of the cost at which he considers the stock can be delivered complete in this country.

I enclose a copy of the Estimate, and shall feel obliged by your obtaining the Sanction of Government to its addition to all previously accepted sanctions under the heading of Rolling Stock, which head thereby cancelled.

I also forward a Statement

15

enclosed.

ales	
Total	
47560	
49,090	
49,500	
31,700	
10,740	
6,120	
20,000	
46,500	
32,800	
7120	
16,000	
2040	
1200	
83,360	
4200	
8,100	
8067	
1551	
1320	

the numbers of each description of stock entered on the several Indents which have been sent to the Directors.

Upon Indent. No: 61, there were sanctioned 2 Composite Carriages, in place of these it is considered desirable to provide 2 First Class carriages I have the honour to be Sir Your obt. Servt.

William Platt.
Agent.

Dated 5th May 1875
G 6-26 Rupees 75
To undersigned a Copy of Estimate, & Indents. Memo: of the Rolling Stock. Line & Stores.
MWP 9/8/75

To
The Secretary to Govt.
Public Works Dept.
Fort St. George.

No. 534

South Indian
GREAT SOUTHERN OF INDIA RAILWAY.

AGENT'S OFFICE,

NEGAPATAM, 17th April 1875

From

THE AGENT,
South Indian
Great Southern of India Railway,

To

The Consulting Engineer
for Railways
Madras

SIR,

Your letter No 217 of the 15th instant. Although it may hereafter be decided to retain between Trichinopoly & Erode the gauge at present in use, still I consider it will be absolutely necessary for the efficient working of the Metre gauge system, that we should receive all the Rolling stock which has been ordered. The length of that system would then be as you state, about 578 miles, and the number of engines and vehicles which have been ordered would give upon that distance a mileage rate of .18 of an engine, and 2.60 vehicles. The mileage allowance upon the Madras Railway is .15 of an engine and 4.31 vehicles. It must be borne in mind that we shall not be

be able to obtain as much work out of the metre gauge stock as we do out of the broad gauge stock. In the first place through the restriction of speed, and in the second place through the reduced carrying capacity of the stock. It is well known the present open line has been under stocked, and that we could not have worked the traffic without delay had we not used the goods vehicles of the Madras Railway Company. Does the metre gauge system there can be no use made of Madras Railway rolling stock

Putting aside these reasons however, it would not now be possible even if desirable, the work being so far advanced, to cancel, without a considerable sacrifice of money, the contracts which have been entered into in England for the supply of metre gauge stock to this Company

I have not therefore telegraphed to the Board of Directors, as you suggested, and I trust you will, after this explanation agree with me that a telegram should not be forwarded

With respect to the difference between

between the revised Estimate and the amounts entered in the Indents / have that for the section between Negapatam and Erode (663) Less; but give the general reply that the latter figures were at the time considered by the Officers of this Company to be sufficient to cover the cost of the stock indented for. Take as an instance, Indent No 61, for stock required on the Southern Extension. The Government of India sanctioned the numbers of engines and vehicles enumerated by the Locomotive Superintendent, but decreased his estimate of their cost by Rs 328.280. In making out our Indent we had to invent the reduced figures although we had reason to believe the stock could not be supplied for the rates invented. This was explained in my letters Nos 4710a and 4736, dated respectively the 5th September and 11th October 1872.. As I cannot give any further explanation than this, I presume you will not require the detailed figures mentioned in your letter

It has been arranged to supply the stock required on the Southern Extension complete from England

on

On the 21st December 1873 / letter No 3844 C / I asked
permission to do this; and in your reply
No 359 of the 30 idem you informed me
you saw no objection to the proposal
which I had made

The estimated excess of cost
of about Rs 21.300 in getting the Southern
Extension carriage stock complete from
England is shewn in detail below as
required

	Indian cost	English cost
1st class ----	1 x 4246 ---	Rs 4246
3rd ----	50 x 2827 ---	141.350
Break Vans --	12 x 2475 --	29.700
Horse boxes --	6 x 2530 --	15.180
Carriage trucks --	2 x 1485 --	2970
		Rs 193.446.

	English cost
	Rs 4060
x 4060 ---	152.500
x 3050 ---	41.545
x 3462 ---	14.568
x 2428 ---	2160
x 1080 ---	
	Rs 214.833

I have the honor to be
Sir
Your most obedient Servant
Williams & Betts
Agent

No. 552 ~~GREAT SOUTHERN OF INDIA~~ South Indian RAILWAY.

AGENT'S OFFICE.

NEGAPATAM, 28 April 1875

From

THE AGENT,
~~Great Southern of India~~ South Indian Railw

To

The Consulting Engineer for Railways
Madras

SIR,

Your letter No. 238 of the 23rd Inst. The stock required for the equipment of line between Cuddalore & Tanjore will be supplied complete from England as it had previously been arranged should the stock required for the other portion of the Northern Extension. It must be remembered that when the Indent for this stock was sent to the Board, it was expected the section from Cuddalore to Porto Novo and the section from Tanjore to Combaconum would be ready for traffic in Oct. 1875. I presume we shall be called upon to work public traffic over other portions of the Northern Extension long before the large bridges are finished, I mean by the use of tramways laid across the beds of the rivers, and I doubt whether we could have erected (by the time referred to) sufficient stock in our Workshops here if it had been determined not to get the vehicles complete from England.

The price of the stock entered in Indent No. 15 differs from the revised estimate by Rs 193,260. and about one lac of that sum is due to the Locomotive engines

enquiries having been made estimated. The building of the stock in England has also added to the revised estimate, no provision for this was made in the figures entered on the Indent.

I have drawn up a statement (sent herewith) which shows in detail the difference between the sanctioned allotment for Rolling Stock and the amount which it is now considered the Stock will be constructed for.

I have the honor to be,

Sir

Your Most Obdt Servt

Agent

No. GREAT SOUTHERN OF INDIA RAILWAY.

AGENT'S OFFICE,

NEGAPATAM, 186

From

THE AGENT,

Great Southern of India Railway,

SIR,

Madras 10 May 1875

CONSULTING ENGINEER'S OFFICE.

Railway Department.

No. 265

From

LIEUT.-COLONEL J. H. M. SHAW STEWART, R.E.,

Consulting Engineer for Railways,

To

COLONEL G. W. WALKER, R.E.,

Secretary to Government,

Public Works Department,

Fort Saint George.

SIR,

I have the honour to forward, for the sanction of the Government of India, revised estimates of the cost of the narrow gauge rolling-stock for the whole of the South Indian Railways.

2. From the following comparative summary it will be seen that these are greatly in excess of the sanctioned amounts:-

G.O. 26 May/75
No. B. 505

From
The Secretary to Govt.
To
The Consulting Engineer for Railways

Dated 25th May 1875.
Rec'd 31st May 1875.
No. 552

Ans. The Chief Engr. &c.
Transmit for consideration
of the Govt. the accompanying
Calculations & Estimate
forwarded as requested.

25/5/75

	Amount sanctioned	Revised estimate
Negapatam to Erode	13,03,360	14,66,205
Southern Extension	10,82,800	16,38,178
Madras to Cuddalore	7,68,000	9,61,260
Cuddalore to Tanjore	3,65,000	4,58,940
	₹ 35,19,160	₹ 44,94,583

3. The estimates now submitted are framed on the actual prices at which the contracts have been let, and the enclosed letters from the Agent explain generally the causes of the increased cost, which may be stated as follows:-

Negapatam-Erode section. The original estimate was ~~Rs~~ 10,51,770, but this was afterwards raised to Rs 13,03,360.[x] The increase now shown over the latter sum is due entirely to the high cost of engines, which

[x] Vide Rly. Dept. 23 May 1874 No 1384

Rly. Dept. 5 April 75 (two enclosures) No 534-17-4 552-28-" — (One enclosure)

17

which are set down at Rs 26,500 — each.

Southern Extension. For this line the Government of India sanctioned a sum of Rs 10,82,800, which they considered at the time sufficient to provide the numbers of engines and vehicles estimated for by the Locomotive Superintendent. The Agent, however, in submitting the indent gave it as his opinion that the figures entered would not be found sufficient, and now the stock is estimated to cost Rs 16,38,178, an increase of Rs 5,55,378, or 51.2 per cent. Of this amount, Rs 21,300 is due to the excess cost in obtaining the passenger vehicles from England complete. The details of the latter sum

[x] Rly. Dept. 21 March 1872 No 803

...ann will be found in the Agent's
...letter No 534 of the 17th ultimo.

Madras to Cuddalore. Amount
...sanctioned Rs 768000. The numbers
...sanctioned are given in the Pro-
...ceedings of Government dated 4th
...December 1872 No 2851, but the
...Agent in submitting the indent
...altered the numbers in some cases
...to what he considered could be
...provided within the sanction; and
...under the circumstances the extra
...vehicles were passed. The total
...cost is now expected to be Rs 961260
...an excess of Rs 193260, of which Rs
...99000 is under the head of engines;
...the balance under vehicles may be
...attributed to enhanced price of iron,
...and to the extra cost involved by
...obtaining

obtaining the stock from England
complete. The following are the
vehicles ordered over and above the numbers
sanctioned:-

4 Composites
1 First class
30 Third class
4 Passenger brakes
2 Horse boxes.

Cuddalore to Tanjore. Amount
sanctioned Rs 365000. Estimate now
submitted Rs 458940. The provision
was at the rate of Rs 4000 per mile
approximately, and owing to the
high cost of engines, this has been
found to be insufficient.

The total quantity of
rolling-stock ordered is 82 engines,
and 150 vehicles; and, as it may
now be considered almost certain
that the existing gauge will be
retained

retained between Trichinopoly and Erode, I suggested to the Agent the advisableness of countermanding some portion of it. Mr. Betts, however, explains that it was too late to do this without making a considerable sacrifice, and further states his opinion that the total quantity will not be found to be in excess of requirements. Supposing the break of gauge to take place at Trichinopoly instead of at Erode, the total lengths of the South Indian narrow gauge system, after the completion of the Chingleput-Conjeveram link and the Pondicherry branch, will be 578 miles, as follows:-

Pro. of Govt. 12 April 1875 No 965.

Negapatam to Trichinopoly	83 miles
Southern Extension	213 "
Madras to Cuddalore	128 "
Cuddalore to Tanjore	89 "
Arconum to Chingleput	41 "
Pondicherry branch	24 "
	578 miles

and for this length the stock ordered will be equivalent to .14 of an engine, and 2.60 vehicles per mile. This is somewhat in excess of the proportions laid down by the Government of India for the opening of new lines.

Adverting to paragraph 5. 2 of this office letter dated 1st April 1875, No 182, it should be explained that the Agent has requested his Board to arrange for the supply of iron-work only in future contracts; but it would appear that contracts have

have already been entered into for
relay
a quantity of stock which will
Prod
probably be found sufficient for
the
working the traffic for some years
some
to come. Considering the delay
expl
which is now occurring in the
this
opening of the Southern Extension
vac
from the rolling-stock not being
spur
ready it is thought that the
no
course which has been adopted
reg
of obtaining the greater part of
of
the stock from England complete
by
will be the cheaper in the end.
le
Mr Betts adds as an additional
g
advantage the saving of expenditure
of
in workshop accommodation and
a
superintendence
l

I have the honour to be
Sir
Your most obedt Servant
Macalister Lt Col RE
Cons: Engineer for
Railways

for Secretary

P. W. D.

Proceedings of the Madras Government,

Under date the 1875.

Read the following :—

From The Consulting Engineer for Railways } (G.C. No. 265 of 10th May 1875)

G.O. No. 1466 of 26th May 1875

With this letter the Consulting Engineer submits revised estimate amounting to Rupees 44,94,583 for the narrow gauge Rolling-stock required for the equipment of the entire system of the South Indian Railway lines - As compared with

No. 1205

Civil Sec. Ord. 21-5-75.
Supdt. of Ry. 13-5-75.

S. No. 1875 Delhi.

RAILWAY DEPARTMENT.

No. 3168

From

The Consulting Engineer,
for Railways,

To

The Secretary to Government,
P. W. Department,
Fort Saint George.

Dated 10 May 1875
Recd. 12

No. 265.

Returned, for the consideration of the G. of I. revised estimate for the cost of the narrow gauge rolling-stock for the whole of the lines of the South Indian Railway which again to Rec.

S. No. 1466. 26-5-75.

No. 505

No. 12. Appl. 195 pp 227-229
" 2. Sanct. " 135-136
" 3. Mag. 76 " 489-490
" 4. Oct. " 17-18
" 5. Jan. 77 " 495-496
" 6. Sanct. " 82
" 7. Mag. " 79-81

with the sums already sanctioned there is an excess of Rs 975,423 - The causes of this excess are explained in the papers submitted. 82 Engines and 1507 vehicles have been ordered, and as the length of line to be worked is 578 miles the provision made is 14 of an Engine and 2·66 vehicles per mile - a proportion exceeding that prescribed for new lines - The Agent however considers that the quantities provided for will not be in excess of actual requirements - Contracts have, it is observed, been let at home for the supply of a quantity of Rolling Stock including wood work, calculated to be sufficient for working the line for some years to come -

The papers will be forwarded for the orders of the Govt. of India -

Consg. Engr for Railways
18 Sc Dispd - 14 - 6 - 75 (H.E. No 1167 dated 26th May

Copy of the above forwarded to the Govt of India -

30 Sc Dispd 14 - 6 - 75 - 16 Calcutta. Office -
60

3168

Govt. of [1875] Madras.

PUBLIC WORKS.

To

The Chairman Southern
Railway Company Limited
Madras

Dated

Rec'd

Encl.

Encl.

G. O. 25th May 1875, No. 1465

1467

Nos. 505–506

507

Forwarding papers on the subject of the revised estimate of the cost of the narrow gauge rolling-stock, South Indian Railway.

Narrow Gauge Rolling-Stock, South Indian Railway.—

Passing orders on the revised estimates of the cost of the _____, and the letters of the Agent.

Cw 1/10/70