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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

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No. 91. Read the following letter from Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, to Major-General G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Madras, 9th January 1877, No. 12 :—

In accordance with Proceedings of Government under date 10th August 1874, No. 2,200, I have the honor to submit, for the sanction of the Government of India, a schedule of the probable cost of completing the several works considered necessary to meet traffic requirements on the section of line from Trichinopoly to Madura.

2. This portion of the Southern Extension was opened for public traffic on 1st September 1875, and the original sanction therefore lapsed on 31st August 1876. During the month of July 1876 I went over the whole of the works with the heads of departments, and the schedule now submitted is drawn up in accordance with conclusions arrived at after careful inspection and full discussion. I am of opinion that the whole of the works entered are necessary to afford reasonable accommodation for working the traffic. It will be observed that the schedule is drawn up in two parts, one showing expenditure required to complete sanctioned works, and the other relating to works not yet sanctioned. Authority has been given for finishing off the sanctioned works at an estimated expenditure of Rupees 3,50,519, and I beg that early orders may be communicated regarding the additional works now considered necessary.

The following summary shows that, after providing for these additional works, there will still be a saving on the engineering portion of the sanctioned estimate :—

	Sanctioned Estimate.	Expenditure up to 31st August 1875.	Amount required to complete sanctioned Works.	Amount required for unsanctioned Works.	Total of Columns 2, 3 and 4.
	RS.	RS.	RS.	RS.	RS.
Construction of line ...	12,35,525	9,49,975	1,24,203	...	10,74,178
Ballast and permanent-way ...	21,59,239	18,61,771	4,885	62,023	19,23,679
Stations and buildings ...	4,85,530	3,94,122	83,711	1,79,047	5,94,880
Plant ...	1,47,201	69,666	29,040	...	98,706
Maintenance ...	1,24,080	78,739	63,600	...	1,42,339
Establishment ...	3,06,084	4,45,297	33,800	...	4,79,097
Contingencies ...	37,413	18,054	11,280	...	29,334
Total ...	44,75,972	37,57,624	3,50,519	2,41,070	43,49,213

A comparative statement in detail for the whole of the Southern Extension will be submitted, with the schedule for the remaining section opened on 1st January 1876, and a few general remarks only will be given here.

III.—*Construction of Line.*—The saving appears to be chiefly in small and large bridges and level crossings. The estimate for earthwork has been nearly worked up to; but, judging from the rates paid, it is thought that the quantity executed is probably in excess of that estimated for.

IV.—*Ballast and Permanent-way.*—The ballasting appears to have cost less than two-thirds of the estimated amount, and the expenditure on leading and laying permanent-way not much more than one-half. The amount entered under additional works is for sidings and third rail necessitated at Trichinopoly by the non-conversion of the Trichinopoly-Erode section.

V.—*Stations and Buildings*.—The original works have been executed well within the estimate, but further requirements cause an excess under this head. Two extra stations, Aiyaloor and Sawmynellore, are provided for, and additional cover at Trichinopoly junction.

VII.—*Plant*.—A considerable saving is shown.

X.—*Establishment*.—A large excess occurs here amounting to more than 50 per cent. on the estimate. A full explanation will be submitted hereafter, but it is doubtless due to the length of time occupied in construction.

SOUTH INDIAN RAILWAY.

STATEMENT SHOWING NECESSITY FOR WORKS ENTERED ON SCHEDULE.

Trichinopoly Junction.

1. For keeping carriages clean.
2. For through passengers stopping the night at Trichinopoly.
3. For protection of watermen from sun and rain while they are employed pumping.
4. At present there is no protection for passengers from sun and rain, with the exception of the small verandah covering only half the platform, and this affords very little shelter. This covering will also afford shelter for carriage stock.
- 5, 6, 7, and 8. The broad gauge line from the junction of the Southern Extension on the 81st mile with the original Negapatam-Trichinopoly Section was laid for construction purposes only, with light rails; after the line was opened for traffic it was decided to run broad gauge stock regularly up to the Trichinopoly Junction Station, and after this was commenced we soon saw that the heavy rolling stock was rapidly wearing out the light rails, hence our application for heavy, in place of the light, permanent way. The decision to run both broad and narrow gauge stock between the Fort and Junction Stations necessitated the addition of the third rail.

These works have been rendered necessary through the non-conversion to the narrow gauge of the Trichinopoly-Brode Section, in view of which all our plans and estimates were originally prepared.

9. Residence of the District Traffic Superintendent, to enable him to be near his work.

Trichinopoly Fort.

1. For keeping carriages clean.

Kolatur, Manaparay, Vayamputti, Vadamadura, and Sholavandan.

1. For shelter for passengers.
2. Keeping earth dry, for carrying out the dry-earth conservancy.
3. For convenience of storing salt, to liberate trucks, for general convenience, and to enable the through-siding to be kept clear for passing trains.

Aiyaloor.

1. For carrying on goods traffic, no accommodation at present.
2. For convenience of passengers.
3. For watering of engines and clearing of ash pans.
4. For shelter for passengers.
5. To keep earth dry, for carrying out dry-earth conservancy.
6. For convenience of storing salt, general convenience, and to enable through-siding to be kept clear for passing trains.
7. For protection of watermen from sun and rain.

Ammanayakanore.

1. Standing room for trucks, present siding not being long enough.
2. For first-class passengers en route to the Pulney Hills.
3. For keeping earth dry, for carrying out the dry-earth conservancy.
4. For storing salt, so as to release trucks, general convenience, &c.

Sawmynellore.

1. For the Station-master to live in.
2. For protection of station.
3. For shunting purposes.
4. For storing salt and releasing trucks, general convenience, and shunting.
5. For Station office work.
6. For shelter for passengers.
7. For convenience of passengers.
8. For keeping earth dry, for carrying out dry-earth conservancy.
9. For passengers accommodation, entering and alighting.
10. For carrying on goods traffic.
11. For general convenience.

Madura.

1. For residence of District Traffic Superintendent, to enable him to be near his work.
2. Present accommodation not sufficient, and goods have to be exposed or trucks delayed.
3. Present position of bank too far from the station and inconvenient.
4. For use of Refreshment Room.
5. For guards to live in when ordered from their head quarters.
6. Necessitated by extra siding accommodation.
7. The present siding insufficient.
8. At present there is no office, and he has to use a station-room at inconvenience of station work.
9. For storing salt, releasing trucks, general convenience, and shunting.
10. Necessitated by the District Traffic Superintendent's bungalow.

NEGAPATAM.

4th January 1877.

(Signed) W. S. BETTS,

Agent.

ENGINEERING DEPARTMENT, TRICHINOPOLY—MADURA SECTION.

Statement of Unsanctioned Works necessary to complete the Line.

Description of Works.	Amount.		Total.	
	Cash.	Stores.		
<i>Trichinopoly Junction.</i>	rs.	rs.	rs.	
1. Pipes and plugs for carriage washing and station use.	100	1,014	1,114	Estimate sent to Agent with letter No. 12,576 of 3rd June 1876.
2. Sleeping accommodation above the present building.	6,428	...	6,428	Estimate sent to Agent with letter No. 8,249 of 2nd November 1876.
3. House over well (1) ...	260	...	260	Same as already sanctioned; no separate estimate sent.
4. Additional roof and run round	10,289	30,877	41,166	Estimate sent to Agent with letter No. 2,934 of 2nd September 1876.
5. Substituting heavy for light permanent-way. Material from Junction Station to junction with Trichinopoly, Brode Station.	6,995	55,028	62,023	Portion of estimate sent to Agent with letter No. 1,093 of 16th January 1876.
6. Additional sidings, Fort Station.				
7. Do. do. Junction do.				
8. Laying 3rd rail between Junction and Fort Station.				

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Statement of Unsanctioned Works necessary to complete the Line—(Continued).

Description of Works.	AMOUNT		Total.	
	Cash.	Stores.		
	RS.	RS.	RS.	
9. District Traffic Superintendent's Bungalow.	4,753	...	4,753	Estimate sent to Agent with letter No. 5,233 of 29th September 1876.
Out-houses for do. ...	1,742	...	1,742	Estimate sent to Agent with letter No. 8,789 of 8th November 1876.
Total ...	30,567	86,919	1,17,486	
<i>Trichinopoly Fort Station.</i>				
1. Pipes and plugs for carriage washing out and station use.	43	443	486	Estimate sent to Agent with letter No. 12,576 of 3rd June 1876.
<i>Kolatur.</i>				
1. Waiting shed, 3rd-class ...	872	...	872	Estimate sent to Agent with letter No. 3,551 of 9th September 1876.
2. Roof over dry earth bins for 3rd-class urinals.	28	...	28	Do. do.
3. Salt godown, loading bank approach and sidings.	6,058	2,649	8,707	Same as sanctioned for Dindigul; no separate estimate submitted.
Total ...	6,958	2,649	9,607	
<i>Manarparai.</i>				
1. Waiting shed, 3rd-class ...	872	...	872	Estimate sent to Agent with letter No. 3,551 of 9th September 1876.
2. Roof over dry-earth bins for 3rd-class urinals.	28	...	28	Do. do.
3. Salt godown, loading bank approach and sidings.	6,058	2,649	8,707	Same as sanctioned for Dindigul; no separate estimate submitted.
Total ...	6,958	2,649	9,607	
<i>Vaiyamputti.</i>				
1. Waiting shed, 3rd-class ...	872	...	872	Estimate sent to Agent with letter No. 3,551 of 9th September 1876.
2. Roof over dry earth bins for 3rd-class urinals.	28	...	28	Do. do.
3. Salt godown, loading bank approach and siding.	6,058	2,649	8,707	Same as sanctioned for Dindigul; no separate estimate submitted.
Total ...	6,958	2,649	9,607	
<i>Aiyalur.</i>				
1. Godown and loading bank ...	1,526	...	1,526	Same as Kolatur Station; no separate estimate submitted.
2. Urinals ...	487	...	487	Do. do.
3. Tank house and ash-pit ...	1,703	...	1,703	Estimate sent to Agent with letter No. 6,678 of 14th October 1876.
4. Waiting shed, 3rd-class ...	872	...	872	Estimate sent to Agent with letter No. 3,551 of 9th September 1876.

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Statement of Unsanctioned Works necessary to complete the Line—(Continued).

Description of Works.	AMOUNT		Total.	
	Cash.	Stores.		
	RS.	RS.	RS.	
5. Roof over dry earth bins for 3rd-class urinals.	28	...	28	Estimate sent to Agent with letter No. 3,551 of 9th September 1876.
6. Salt godown, loading bank approach and sidings.	6,058	2,649	8,707	Same as sanctioned for Dindigul; no separate estimate submitted.
7. House over well ...	231	...	231	No estimate prepared.
Total ...	10,905	2,649	13,554	
<i>Vadamaulura.</i>				
1. Waiting shed, 3rd-class ...	872	...	872	Estimate sent to Agent with letter No. 3,551 of 9th September 1876.
2. Roof over dry earth bins for 3rd-class urinals.	28	...	28	Do. do.
3. Salt godown, loading bank approach and sidings.	6,058	2,649	8,707	Same as sanctioned for Dindigul; no separate estimate submitted.
Total ...	6,958	2,649	9,607	
<i>Amayamankur.</i>				
1. Additional sidings (4 chains) and approaches.	150	616	766	Estimate not sent to Agent.
2. Waiting shed, 1st-class ...	1,846	...	1,846	Estimate sent to Agent with letter No. 3,551 of 9th September 1876.
3. Roof over dry earth bins for 3rd-class urinals.	28	...	28	Do. do.
4. Salt godown, loading bank approach and sidings.	6,058	2,649	8,707	Same as sanctioned for Dindigul; no separate estimate submitted.
Total ...	8,082	3,265	11,347	
<i>Sholavandan.</i>				
1. Waiting shed, 1st-class ...	1,846	...	1,846	Estimate sent to Agent with letter No. 3,551 of 9th September 1876.
2. Roof over dry earth bins for 3rd-class urinals.	28	...	28	Do. do.
3. Salt godown, loading bank approach and sidings.	6,058	2,649	8,707	Same as sanctioned for Dindigul; no separate estimate submitted.
Total ...	7,932	2,649	10,581	
<i>Sewmynellore.</i>				
1. Station-master's bungalow ...	1,000	...	1,000	Same as sanctioned for Kolatur; no separate estimate sent.
2. Semaphore signals ...	269	399	668	Do. do.
3. Switches and crossings ...	98	712	810	Do. do.
4. Salt godown, loading bank approach and sidings.	6,058	2,649	8,707	Same as sanctioned for Dindigul; no separate estimate submitted.
5. Ticket Office ...	1,073	...	1,073	Same as sanctioned for Kolatur; no separate estimate sent.

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Statement of Unsanctioned Works necessary to complete the Line—(Continued).

Description of Works.	AMOUNT.		Total.	
	Cash.	Stores.		
	RS.	RS.	RS.	
6. Waiting shed, 3rd-class ...	872	...	872	Same as provided for Amayanaikanur; no separate estimate submitted.
7. Latrine ...	487	...	487	Same as sanctioned for Kolatur; no separate estimate sent.
8. Roof over dry earth bins for 3rd-class urinals.	28	...	28	Same as sanctioned for Amayanaikanur; no separate estimate submitted.
9. Platform ...	925	...	925	Same as sanctioned for Kolatur; no separate estimate sent.
10. Loading bank and godown ...	1,527	...	1,527	Do. do.
11. Approaches ...	1,424	...	1,424	Do. do.
Total ...	13,761	3,760	17,521	
<i>Madura.</i>				
1. District Traffic Superintendent's bungalow.	4,753	...	4,753	Estimate sent to Agent with letter No. 5,233 of 29th September 1876.
2. Lengthening goods shed ...	7,958	...	7,958	Estimate sent to Agent with letter No. 3,223 of 6th September 1876.
3. Loading bank, removing and rebuilding existing one.	1,257	...	1,257	Do. do.
4. Pantry ...	219	...	219	Estimate sent to Agent with letter No. 9,154 of 14th November 1876.
5. Guards' bungalow ...	3,049	...	3,049	Same as sanctioned for Trinopoly; no separate estimate submitted.
6. Switches and crossings ...	155	646	801	Estimate sent to Agent with letter No. 3,223 of 6th September 1876.
7. Additional siding ...	820	485	1,305	Do. do.
8. District Traffic Superintendent's Office.	1,876	...	1,876	Do. do.
9. Salt godown, loading bank approach and sidings.	6,058	2,649	8,707	Same as sanctioned for Dinigul; no separate estimate submitted.
10. Out-houses for District Traffic Superintendent's bungalow.	1,742	...	1,742	Estimate sent to Agent with letter No. 8,789 of 8th November 1876.
Total ...	27,887	3,780	31,667	
Grand Total ...	1,27,009	1,14,061	2,41,070	

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

(Signed) W. S. BETTS,
Agent.

TRINOPOLY,
20th November 1876.

Proceedings of the Madras Government, Public Works Department,
2nd February 1877. No. 361.

ENGINEERING DEPARTMENT, SOUTHERN EXTENSION.

General Summary of Estimate of the Sanctioned Works remaining to be completed on the 1st of September 1876.

Particulars.	Sanctioned.		Amount expended up to 31st August 1876.		Balance.	
	To be expended Departmentally.	To be drawn from Stores.	To be expended Departmentally.	To be drawn from Stores.	To be expended Departmentally.	To be drawn from Stores.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
<i>III. Construction of Line—</i>						
1—Earthwork ...	4,12,588 12 7	...	3,64,487 14 2	1,150 12 1	24,393 0 0	...
2—Bridge work ...	3,19,912 10 2	47,123 2 9	2,22,814 8 10	42,947 1 10	43,480 15 7	...
1. Minor Bridges and Culverts.	1,78,407 8 9	1,31,370 3 3	1,00,733 0 0	1,34,650 5 1	22,638 0 0	1,301 0 0
2. Large Bridges ...	75,122 10 4	...	25,072 4 4	16,739 4 1	3,895 0 0	...
4—Level Crossings...	71,000 0 0	...	38,053 15 10	3,355 10 1	29,610 6 1	...
5—Fencing ...	10,57,031 9 10	1,78,493 6 0	7,51,131 11 2	1,98,843 1 2	1,24,073 5 8	1,301 0 0
<i>IV. Ballast and Permanent Way—</i>						
1—Ballasting ...	1,29,892 12 9	...	82,684 4 3	19 1 0	...	...
2—Permanent way ...	2,98,580 8 6	17,10,765 4 4	1,61,369 6 8	16,17,698 12 9	358 0 0	4,527 0 0
	4,28,473 5 3	17,10,765 4 4	2,44,053 10 11	16,17,717 14 3	358 0 0	4,527 0 0
<i>V. Stations and Buildings—</i>						
1—Stations and Offices	1,70,931 6 4	3,094 12 4	98,416 15 5	18,405 3 1	30,938 4 8	...
2—Workshops and Store Buildings	79,804 9 0	45,318 0 11	39,771 14 5	33,852 6 3	25,114 15 9	5,929 15 5
3—Staff Quarters ...	97,961 7 7	...	68,424 14 10	3,782 6 2	17,576 8 10	...
4—Station Machinery	36,556 9 10	51,752 15 4	20,539 2 2	51,133 7 9	3,355 4 8	1,376 1 2
	3,85,364 1 6	1,00,105 12 7	2,27,442 14 10	1,06,678 7 3	77,005 1 11	6,706 0 7
<i>VII. Plant—</i>						
1—Engineering ...	54,442 0 0	42,126 0 0	6,717 9 7	48,498 9 1	120 0 0	14,400 0 0
4—Station and Office Furniture	33,710 0 0	16,923 0 0	1,135 6 6	13,514 9 5	120 0 0	14,400 0 0
	88,152 0 0	59,049 0 0	7,852 15 7	61,513 2 6	240 0 0	28,800 0 0

General Summary of Estimate of the Sanctioned Works remaining to be completed, &c.— (Continued).

Particulars.	SANCIONED.			AMOUNT EXPENDED UP TO 31st AUGUST 1876.			REMAINED.		
	To be expended Departmentally.	To be drawn from Stores.	RS. A. P.	To be expended Departmentally.	To be drawn from Stores.	RS. A. P.	To be expended Departmentally.	To be drawn from Stores.	RS. A. P.
IX. Maintenance ...	RS. 1,24,980 0 0	...	...	RS. 77,920 0 3	RS. 819 5 8	...	RS. 63,600 0 0	...	...
X. Establishment— 2—Engineering ...	3,06,084 0 0	...	...	4,45,297 1 10	...	...	33,800 0 0	...	...
XI. Contingencies— 2—Engineering ...	28,483 0 0	8,930 0 0	...	4,938 2 10	13,115 11 0	...	1,800 0 0	9,480 0 0	...
Total ...	24,18,568 0 7	20,57,403 6 11	...	17,58,636 9 5	19,98,987 9 10	...	3,90,876 7 7	49,643 0 7	...

TIRUCHINAPOLY,
19th November 1876.

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

(Signed) W. S. BETTS,
Agent.

20th November 1876.

ENGINEERING DEPARTMENT, SOUTHERN EXTENSION.

Statement showing the Sanctioned Works remaining to be completed on the 1st September 1876.

Description of Works.	SANCIONED.			AMOUNT EXPENDED UP TO 1st AUGUST 1876.			REMAINED.		
	Cash.	RS. A. P.	Stores.	Cash.	RS. A. P.	Stores.	Cash.	RS. A. P.	Stores.
District No. 1.—Southern Extension.									
III.—Construction of Line—									
1. Earthwork ...	71,173 15 0	...	...	69,217 1 6	493 9 6	...	200 0 0	...	...
2. Bridge-work ...	41,841 12 9	4,136 14 3	...	34,272 6 9	4,000 15 1	...	10,365 15 7	...	...
1. Minor Bridges and Culverts ...	32,203 12 8	13,041 3 10	...	28,937 10 5	16,290 6 7	...	4,010 0 0	...	...
2. Large Bridges ...	11,765 10 4	...	...	6,523 2 4	2,555 10 11	...	215 0 0	...	...
4. Level Crossings ...	12,000 0 0	...	...	8,760 4 6	2,734 15 7	...	564 11 11	...	...
5. Fencing ...	23,798 0 5	...	...	11,896 13 10	...	...	...	...	...
IV.—Ballast and Permanent-way—	24,968 13 6	3,16,923 15 9	...	13,430 1 0	2,80,600 9 9	...	...	...	...
1. Ballasting ...	...	...	...	...	...	...	...	...	...
2. Permanent-way ...	...	...	...	...	...	...	...	...	...
V.—Stations and Buildings—	48,075 5 10	2,514 12 5	...	23,507 13 3	6,324 14 9	...	5,092 12 4	...	...
1. Stations and Offices, Trichinopoly	5,436 8 11	...	...	...	...	...	500 0 0	...	...
Do., Kolatur ...	39,532 2 9	23,869 5 4	...	20,257 8 6	17,233 10 1	...	4,347 3 8	...	...
2. Workshops and Store Buildings, Trichinopoly	...	...	...	...	...	...	...	...	...
Do., Kolatur ...	40,726 14 0	...	...	25,407 7 7	2,293 2 2	...	...	...	...
3. Staff Quarters, Trichinopoly	2,815 13 1	...	...	...	...	...	347 3 8	...	...
Do., Kolatur ...	7,038 12 0	17,941 13 5	...	5,294 2 4	18,604 8 5	...	260 0 0	...	...
4. Station Machinery, Trichinopoly	2,301 10 2	2,003 10 7	...	10,258 6 11	74 5 11	...	240 0 0	...	...
Do., Kolatur ...	18,855 0 0	...	...	...	...	...	9,000 0 0	...	...
IX.—Maintenance ...	...	...	...	...	...	...	...	...	...
Total ...	3,52,563 11 5	3,50,431 11 7	...	2,52,771 9 11	3,52,206 12 9	...	49,637 0 0	...	...

Statement showing the Sanctioned Works remaining to be completed, &c.—(Continued).

Description of Works.	AMOUNT EXPENDED UP TO 31st August 1876.						REQUIRE.					
	SANCATIONED.			Stores.			Cash.			Stores.		
	Cash.	RS.	A. P.	RS.	A. P.	RS.	A. P.	RS.	A. P.	RS.	A. P.	Stores.
District No. 2.—Southern Extension.												
III.—Construction of Line—												
1. Earthwork ...	51,136	10	9	...	...	53,955	11	5	400	4	9	...
2. Bridge-work ...	37,871	5	0	3,064	0	28,904	4	6	2,146	0	0	...
3. Minor Bridges and Culverts ...	11,271	6	9	6,736	4	10,155	1	5	6,967	2	0	...
4. Large Bridges ...	9,845	7	4	...	...	1,756	3	8	3,000	14	9	...
5. Level Crossings ...	9,000	0	0	...	...	6,220	2	4	...	...	...	...
6. Fencing ...	17,107	15	2	...	...	11,317	6	2	2,317	56	15	...
IV.—Ballast and Permanent-way—	27,282	13	7	2,522	0	15,810	5	5	...	...	...	...
1. Ballasting ...	...	...	...	...	...	...	...	...	...	...	...	...
2. Permanent-way ...	...	...	...	...	...	4,792	3	5	699	4	4	...
V.—Stations and Buildings—												
1. Stations and Offices, Manjuralai ...	5,808	14	7	...	...	...	...	...	...	...	...	...
2. Workshops and Store Buildings, Manjuralai ...	3,950	0	0	2,478	4	2,495	4	9	5	9	7	...
3. Staff Quarters, Manjuralai ...	2,404	15	8	...	...	1,808	9	1	2,983	13	3	...
4. Station Machinery, do. ...	18,315	0	0	...	...	7,179	10	0	105	1	4	...
IX.—Maintenance ...	1,93,144	8	10	2,44,889	4	1,44,484	14	11	3,47,885	1	1	...
Total ...	...	...	...	...	...	...	...	...	...	...	...	...

Table No. 3.—Southern Extension.

III.—Construction of Line—												
1. Earthwork ...	60,318	10	8	...	...	57,377	15	0	159	12	11	...
2. Bridge-work ...	43,102	13	5	7,832	4	30,131	14	1	6,444	8	8	...
3. Minor Bridges and Culverts ...	25,071	3	10	15,051	12	10,027	13	0	15,537	13	1	...
4. Large Bridges ...	6,376	6	4	...	...	385	9	4	1,016	13	7	...
5. Level Crossings ...	9,000	0	0	...	...	5,064	3	2	...	...	...	...
6. Fencing ...	...	...	...	...	...	...	...	...	...	...	...	...

District No. 3.—Southern Extension.												
III.—Construction of Line—												
1. Earthwork ...	18,010	2	0	...	...	14,480	5	2	...	...	...	...
2. Bridge-work ...	30,165	6	5	239,844	2	21,122	6	2	2,49,559	11	10	...
3. Minor Bridges and Culverts ...	5,439	9	6	...	...	1,791	10	7	37	15	11	...
4. Large Bridges ...	3,823	0	0	...	...	...	...	...	...	...	...	...
5. Level Crossings ...	...	...	...	...	...	...	...	...	...	...	...	...
6. Fencing ...	...	...	...	...	...	...	...	...	...	...	...	...
IX.—Maintenance ...	18,885	0	0	...	...	13,861	0	10	77	12	7	...
Total ...	2,46,138	8	6	2,66,131	14	168,389	12	5	2,75,102	11	10	...
District No. 4.—Southern Extension.												
III.—Construction of Line—												
1. Earthwork ...	70,615	8	4	...	...	61,535	1	7	39	4	4	...
2. Bridge-work ...	45,646	5	5	1,585	3	31,855	9	0	1,436	15	11	...
3. Minor Bridges and Culverts ...	31,599	1	10	12,337	8	16,655	0	1	12,869	15	8	...
4. Large Bridges ...	8,030	0	1	...	...	1,267	14	0	1,886	0	11	...
5. Level Crossings ...	11,000	0	0	...	...	4,216	8	8	152	3	0	...
6. Fencing ...	...	...	...	...	...	...	...	...	...	...	...	...
IV.—Ballast and Permanent-way—	17,768	4	0	237,696	2	10,139	1	0	2,28,187	3	11	...
1. Ballasting ...	42,879	11	1	...	...	26,142	0	10	...	...	...	...
2. Permanent-way ...	...	...	...	...	...	...	...	...	...	...	...	...
V.—Stations and Buildings—												
1. Stations and Offices, Vadamadura ...	6,846	10	6	...	...	24,804	1	10	6,725	3	0	...
2. Workshops and Store Buildings, Vadamadura ...	31,568	9	11	260	6	...	...	...	...	...	...	...
3. Staff Quarters, Vadamadura ...	1,000	0	0	...	...	...	...	...	...	...	...	...
4. Station Machinery, Vadamadura ...	3,250	0	0	...	...	2,715	1	3	...	...	...	...

Statement showing the Sanctioned Works remaining to be completed, &c.—(Continued).

Statement showing the Sanctioned Works remaining to be completed.

Description of Works.	SANCTIONED.			AMOUNT EXPENDED UP TO 31st AUGUST 1876.			RECEIVED.			
	Cash.		Stores.	Cash.		Stores.	Cash.		Stores.	
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	
<i>District No. 4.—Southern Extension—(Continued).</i>										
4. Station Machinery, Vadamadura.	2,421	14	2	2,003	10	7	{	240	0	0
Do.,	3,737	2	2	4,424	2	7		240	0	0
IX.—Maintenance	18,195	0	0	...	...	...		9,600	0	0
Total ...	2,94,858	3	6	2,58,307	0	11		53,053	6	9
<i>District No. 5.—Southern Extension.</i>										
III.—Construction of Line—										
1. Earthwork	55,588	1	8	...	...	...		...	...	
2. Bridgework	63,684	4	5	17,266	15	3		...	...	
1. Minor Bridges and Culverts...	6,267	3	0	...	...	...		25	0	0
2. Large Bridges	10,488	13	6	...	...	...		240	0	0
4. Level Crossings	9,000	0	0	...	...	...		750	0	0
5. Fencing	...	...	...	...	...	...		2,977	5	9
IV.—Ballast and Permanent-way—										
1. Ballasting	17,211	9	7	...	...	...		...	...	
2. Permanent-way	51,051	14	5	2,30,332	13	11		...	...	
V.—Stations and Buildings—										
1. Stations and Offices, Annayanakanur.	5,089	4	0	...	...	...		1,029	0	0
2. Workshops and Store Buildings, Annayanakanur.	...	...	...	...	...	...		...	...	
3. Staff Quarters	3,250	0	0	...	...	...		443	0	7
4. Station Machinery	2,666	13	5	2,003	10	7		240	0	0
IX. Maintenance	18,330	0	0	...	...	...		9,600	0	0
Total ...	2,45,928	0	0	2,40,663	7	9		15,904	6	4

Diaper No. 6.—Southern Extension.

District No. 6.—Southern Extension.														
III.—Construction of Line—														
1. Earthwork	...	...	43,277	4	11	...	40,640	1	10	...	...	...	...	...
2. Bridgework	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1. Minor Bridges and Culverts	...	...	33,778	4	4	8,005	6	2	28,054	14	10	6,354	9	11
2. Large Bridges	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4. Level Crossings	...	...	11,442	8	1	...	6,934	1	2	2,636	8	3	750	0
5. Fencing	...	...	19,000	0	0	...	4,535	15	10	...	...	...	5,454	0
IV.—Ballast and Permanent-way—														
1. Ballasting	...	...	16,911	13	2	...	11,444	0	1	...	...	...	...	...
2. Permanent-way	...	...	57,095	11	0	2,26,311	6	3	31,472	15	3	2,20,518	12	2
V.—Stations and Buildings—														
1. Stations and Offices, Sholavandan.	...	...	7,828	1	3	...	5,557	15	4	709	8	11	500	0
Do., Sawmynellore.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2. Workshops and Store Buildings, Sholavandan.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Do., Sawmynellore.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Staff Quarters, Sholavandan.	...	...	3,250	0	0	...	5,099	12	10	...	...	...	...	...
Do., Sawmynellore.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4. Station Machinery, Sholavandan.	...	...	2,798	8	10	2,003	10	7	3,514	7	1	1,282	11	10
Do., Sawmynellore.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
IX.—Maintenance...	...	...	15,000	0	0	...	13,267	9	0	26	1	7	3,000	0
Total...	...	...	2,09,952	3	7	2,36,380	7	0	1,48,321	13	0	2,32,093	0	9

District No. 7.—Southern Division.

[illegible]

Proceedings of the Madras Government, Public Works Department,
2nd February 1877. No. 361.

Statement showing the Sanctioned Works remaining to be completed, &c. — (Continued).

Description of Works.	SANCATIONED.		AMOUNT EXPENDED UP TO 31st AUGUST 1876.		REMAINED.	
	Cash.	Stores.	Cash.	Stores.	Cash.	Stores.
IV — Ballast and Permanent-way —						
1. Ballasting	Rs. 18,995 0 5	A. P. 5	Rs. 10,356 7 2	A. P. 19 1 6	Rs. ...	A. P. ...
2. Permanent-way	58,536 2 6	2,26,986 0 3	33,543 10 5	1,87,165 11 7	...	...
V — Stations and Buildings —						
1. Stations and Offices, Madura ...	47,705 10 10	319 9 6	35,158 8 11	8,330 5 8	9,536 5 9	5,329 0 0
2. Workshops and Store Buildings, Madura ...	40,282 7 0	21,448 11 7	19,514 10 11	16,118 12 2	20,767 12 1	...
3. Staff Quarters, Madura ...	35,606 4 6	15,490 6 3	29,136 13 3	431 11 10	500 0 0	...
4. Station Machinery, do. ...	9,653 1 1	...	1,845 0 8	20,110 13 4	7,200 0 0	...
IX — Maintenance	14,400 0 0	...	13,708 3 5	461 3 7	...	...
VII — Plant —						
1. Engineering	4,22,463 9 9	3,53,620 9 2	2,34,032 13 5	3,19,998 8 7	48,801 7 3	5,459 15 5
4. Station and Office Furniture ...	54,442 0 0	42,126 0 0	6,717 9 7	48,498 9 1	120 0 0	14,400 0 0
X — Establishment —						
2. Engineering	33,710 0 0	16,923 0 0	1,135 6 0	13,314 9 5	120 0 0	14,400 0 0
XI — Contingencies —						
2. Engineering	3,06,084 0 0	...	4,45,297 1 10	...	33,800 0 0	...
Total	28,483 0 0	8,930 0 0	4,938 2 10	13,115 11 0	1,800 0 0	9,480 0 0
Total	4,92,719 0 0	67,979 0 0	4,58,088 4 3	74,928 13 6	35,840 0 0	38,280 0 0
Grand Total	24,18,568 0 7	20,57,403 6 11	17,58,636 9 5	19,98,987 9 10	3,00,876 7 7	49,643 0 7

(Signed) F. F. SMITH,
for Acting Chief Engineer.
(Signed) W. S. BETTS,
Agent.

TRICHINOPOLY,
19th November 1876.

Proceedings of the Madras Government, Public Works Department,
2nd February 1877. No. 361.

General Progress Report of Work in erecting and building Locomotive and Rolling Stock for
Quarter ending 31st December 1876.
METRE GAUGE.

	Number sanctioned.	Number erected up to 30th September 1876.	NUMBER ERECTED DURING CURRENT YEAR.		Building or under erection at end of quarter.	Arrived at Shops during quarter.	Arrived at Port during quarter.	Balance to arrive in Port.	Remarks.
			During quarter.	To end of quarter.					
Locomotive Engines and Tenders.	63	74	3	77	5	...	...	...	
Royal Saloon Carriages	3	3	...	3	...	...	...	...	
Composite Carriages	12	10	...	10	...	...	...	...	
1st Class " "	18	13	3	16	3	...	...	...	
2nd " " "	10	9	3	12	...	...	...	...	
3rd " " "	176	129	30	159	10	...	...	...	
Passengers' brake-vans	37	25	6	31	2	...	...	...	
Post-Office vans	3	3	...	3	...	...	...	...	
Horse-boxes	20	13	...	13	7	...	...	...	
Carriage Trucks	4	4	...	4	...	...	...	...	
Goods Brake-vans	16	15	...	15	1	...	...	...	
Covered Goods Wagons	580	484	29	512	68	...	...	...	
Ballast Wagons	150	140	10	150	...	...	...	...	
Open Goods wagons low-sided	80	79	...	79	1	...	...	...	
Timber Trucks	27	26	...	26	1	...	...	...	
Gunpowder Vans	3	3	...	3	...	...	...	...	
Salt Trucks	40	32	...	32	8	...	...	...	
High-sided open trucks	229	168	20	188	41	...	...	...	
Cotton do.	100	77	...	77	23	...	...	...	
Five tons travelling crane	2	1	...	1	...	...	...	...	
Sets of iron work (carriages).	280	270	...	...	...	...	...	...	
Do. wagons	1,227	1,222	...	...	...	...	...	...	
Springs	6,028	6,028	...	...	...	...	...	...	
Wheels and Axles	3,014	3,014	...	...	...	...	...	...	

NEGAPATAM,
9th January 1877.

(Signed) W. S. BETTS,
Agent.

No. 92.

ORDER THEREON, 2nd February 1877, No. 360.

RAILWAY, No. 5.

ORDERED to be forwarded to the
Government of India.

2. The works for salt traffic seem
costly and should be reconsidered.

(True Extract.)

(Signed) J. H. M. SHAW-STEWART, Lieut.-Colonel, R.E.,
Joint Secretary to Government.

No. 93.

(DOCKET, No. 361, dated 2nd February 1877.)

Copy of the above forwarded to the Government of India.

(True Extract.)

(Signed) J. H. M. SHAW-STEWART, Lieut.-Colonel, R.E.,
Joint Secretary to Government.

Exd. E. C. Shunker.
Spars Copies

READ the following :—

From the Consulting Engineer for Railways
No. 12 dated 9 January 1877.

FOR ORDERS.

Submitted for
any orders which may
be considered necessary
on the works included
in the Schedule.

Wm. R. B.
Secretary to Govt.

2200-7-10-8-74
 2510- " 3-9-75
 2665- " 4-9-75

P.W.D.

11 JAN 77

NR 252

No 360 d/2^d Feby 1877

Ordered to be forwarded
 to the Government of India
 1. The works for salt
 traffic seem costly, and
 should be reconsidered.

AL No 361 d/2^d Feby 77)

Copy of the above
 forwarded to the Govt
 of India.

ML

C. P. R. R. R.
 R. R. R. R.
 R. R. R. R.

Recd - 1-2-77
 Cir - 27-1-77

Received

Dated

No. 12

To

The Secretary to Government,

P. W. Department,

Fort Saint George.

From

The Consulting Engineer

for Railways,

RAILWAY DEPARTMENT.

9th January 1877

a schedule of the probable
 cost of completing the
 work would be most
 necessary to meet traffic
 requirements on the
 section from...

Ch 252

OFFICE OF THE
PUBLIC WORKS

No. 252

2nd Feb 1871

No. 252

Section of line from Lichin
to Madras, S. E. Ry.
Passing orders on letters from
Lichin submitting for the
action of the Govt of India, as
to the probable cost
of completing the several
works considered necessary
to meet the requirements in

Wm. R. R.

Office
Lichin

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