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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.

959

(W)

Press

-B.P.-No.

-Mis.-

Dated

11-4-

1876

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
7th April 1876.*

No. 114. 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, 31st March 1876, No. 163 :—

I HAVE the honor to forward, for the information of Government, certain information* which has been compiled by the Agents of the Madras and South Indian Railways in compliance with a request from this office for circulation on other Guaranteed Railways.

2. I request that twenty printed copies may be forwarded to this office.

MADRAS RAILWAY.
List of Ruling Gradients on each Locomotive District.

Locomotive District.	RULING GRADIENT.			APPROACH TO RULING GRADIENT.			
	DOWN LINE.		Curve or Straight.	Rise.	Fall.	Length, Miles.	Curve or Straight.
	Rise.	Length, Miles.					
<i>Madras Division.</i> Madras to Arcotum and Vellore (inclusive of Arcotum and Vellore.)	1 in 189 57 Fall.	1 mile 40 chains.	Curve ...	...	1 in 890	1 mile ...	Partly curve and straight.
<i>Tirupetty Division.</i> Arcotum to Codoor (inclusive of Codoor.)	1 in 60 Fall.	64 chains.	Partly curve and straight.	...	1 in 179 78	31 chains.	Straight.
<i>Cuddapah Division.</i> Codoor to Kondipuram (inclusive of Kondipuram)	1 in 90 Fall.	53-20 chs.	Do. ...	1 in 90	...	1 mile 13-25 chains.	Partly curve and straight.
<i>Gooty Division.</i> Kondipuram to Goondacul and Goondacul to Bellary (inclusive of Bellary and Goondacul.)	1 in 122 Fall.	1 mile 15 chains.	Do. ...	Level.	...	20 chains.	Curve.
<i>Raichore Division.</i> Goondacul to Raichore	1 in 110 Rise.	45 chains.	Straight...	1 in 483-16	...	50 do. ...	Straight.
<i>Jolarpet Division.</i> Vellore to Samalputty and Jolarpet to Bangalore (inclusive of Samalputty.)	1 in 63 81 Fall.	1 m. 65-10 chains.	Partly curve and straight.	Level.	...	30 do. ...	Curve.
<i>Salon Division.</i> Samalputty to Porundoray (exclusive of both stations)	1 in 75 Rise.	1 mile 30 chains.	Do. ...	Level.	...	7 do. ...	Do.
<i>Pothanna Division.</i> Porundoray to Beypore and Pothanna to Mettapolliem (inclusive of Porundoray and Mettapolliem.)	1 in 62-11 Rise.	1 mile 84 chains.	Do. ...	Level.	...	59 do. ...	Partly curve and straight.
<i>Beypore Division.</i> Beypore to Palghat (inclusive of Palghat.)	1 in 100 Rise.	29 chains.	Curve ...	...	1 in 100	17 do. ...	Do.
<i>Bangalore Division.</i> Bangalore to Coopum (exclusive of Coopum.)	1 in 57-32 Fall.	54 chains.	Partly curve and straight.	Level.	...	4 do. ...	Do.

(Signed) R. B. LLWIN,
Agent and Manager.

(Signed) W. R. ROBINSON,
Acting Chief Engineer.

Proceedings of the Madras Government, Public Works Department,
7th April 1876.

Madras Railway Engines and their principal Dimensions.

No.	Makers.	CYLINDERS.		WHEELS COUPLED.	
		Diameter.	Stroke.	Diameter.	Number.
1	Stothert and Slaughter	15	23	6	6
1	Do.	16	23	6	6
10	Kitson, Thompson and Hewitson	12	20	6	0
2	Stothert and Slaughter	16	23	5	0
10	Do.	14	20	5	0
12	Beyer and Peacock	16	23	5	0
20	Do.	16	22	5	9
20	Sharp and Stewart	16	22	5	0
10	Neilson and Co.	17	24	5	0
10	Sharp and Stewart	17	24	5	0
10	Beyer and Peacock	17	24	5	0
20	Sharp and Stewart	16	23	5	0
2	Stephenson and Co.	15	23	5	0
...	Ghat	...	...	...	...

(Signed) R. B. ELWIN,
Agent and Manager.

(Signed) F. H. TREVITHICK,
Locomotive Supt.

Speeds run with Trains on the Madras Railway.

Direction.	MILES RUN PER HOUR.					
	MAIL.		Mixed.		Goods.	
	Speed in- clusive of Stoppages.	Speed ex- clusive of Stoppages.	Speed in- clusive of Stoppages.	Speed ex- clusive of Stoppages.	Speed in- clusive of Stoppages.	Speed ex- clusive of Stoppages.
6.0 P.M., Madras to Beypore	20.83	23.44	...	...	...	...
10.15 A.M., Beypore to Madras	20.50	23.78	...	...	...	...
7.0 A.M., Madras to Erode	...	...	17.57	19.31	...	...
6.40 A.M., Erode to Madras	...	...	19.31	20.97	...	...
8.30 A.M., Madras to Jollapett	...	...	11.87	16.29	...	...
5.40 A.M., Jollapett to Madras	...	...	13.31	18.08	...	...
1.45 P.M., Madras to Vellore	...	...	14.41	18.15	...	...
6.50 A.M., Vellore to Madras	...	...	15.83	20.37	...	...
4 P.M., Madras to Arcconum	...	...	...	17	17	...
7.30 P.M., Madras to Jollapett	...	...	...	15.33	16.85	...
8.5 A.M., Jollapett to Madras	...	...	...	14.64	17.07	...
7.30 P.M., Jollapett to Pothanoor	...	...	...	...	...	...
8.5 A.M., Pothanoor to Jollapett	...	...	12.89	17.58	...	...
7.50 P.M., Vellore to Beypore	...	...	15.25	18.45	...	...
8.30 A.M., Beypore to Vellore	...	...	...	14.69	16.50	...
9.45 A.M., Pothanoor to Beypore	...	...	...	14.21	16.68	...
7.15 A.M., Beypore to Pothanoor	...	...	14.75	18.14	...	...
...	...	...	14.41	17.33	...	...
7.15 A.M., Pothanoor to Coimbatore	...	...	14	14	...	...
7.45 A.M., Coimbatore to Pothanoor	...	...	14	14	...	...
8.25 A.M., Pothanoor to Mettapolliem	19.17	19.17	...	...	...	...
2.0 P.M., Mettapolliem to Pothanoor	17	17	...	...	...	...
8.45 P.M., Pothanoor to Coimbatore	...	...	14	14	...	...
4.15 P.M., Coimbatore to Pothanoor	...	...	14	14	...	...
6.25 P.M., Pothanoor to Coimbatore	...	...	14	14	...	...
6.55 P.M., Coimbatore to Pothanoor	...	...	14	14	...	...
12.50 A.M., Jollapett to Bangalore	15.61	15.61	...	...	...	...
7.45 A.M., Bangalore to Jollapett	19.16	19.16	...	...	...	...
7 A.M., Jollapett to Bangalore	...	...	14.08	16.09	...	...
11.15 A.M., Bangalore to Jollapett	...	...	13.18	14.67	...	...
2.10 P.M., Jollapett to Bangalore	...	...	18.44	18.44	...	...
8.30 A.M., Bangalore to Jollapett	...	...	20.81	20.81	...	...

Proceedings of the Madras Government, Public Works Department,
7th April 1876.

Speeds run with Trains on the Madras Railway.—(Concluded.)

Direction.	MILES RUN PER HOUR.					
	MAIL.		Mixed.		Goods.	
	Speed in- clusive of Stoppages.	Speed ex- clusive of Stoppages.	Speed in- clusive of Stoppages.	Speed ex- clusive of Stoppages.	Speed in- clusive of Stoppages.	Speed ex- clusive of Stoppages.
8.5 P.M., Arcconum to Raichoor	20.43	22.37	...	...	...	...
1.35 P.M., Raichoor to Madras	20.73	22.89	...	...	15.35	17.36
10.35 A.M., Arcconum to Cuddoor	...	...	...	...	15.98	17.78
4.15 P.M., Cuddoor to Arcconum	...	...	16.41	19.04	...	...
12.15 P.M., Arcconum to Cuddapah	...	...	13.47	16.64	...	...
7.45 A.M., Cuddapah to Arcconum	...	...	15.00	18.68	...	...
5.15 P.M., Arcconum to Tirupetty	...	...	15.00	18.68	...	...
6.0 A.M., Tirupetty to Arcconum	...	...	14.40	16.55	...	...
9.0 A.M., Cuddapah to Bellary	...	...	14.04	17.93	...	...
5.45 A.M., Bellary to Cuddapah	...	...	16.5	18.85	...	...
3.15 P.M., Bellary to Adoni	...	...	15.52	19.87	...	...
5.30 A.M., Adoni to Bellary	...	...	...	...	15.09	16.94
10 A.M., Gooty to Raichoor	...	...	...	...	16.17	18.19
2 P.M., Raichoor to Gooty	...	...	21.87	21.87	...	...
6.40 A.M., Royapooram to Perambore	...	...	21.87	21.87	...	...
6.55 A.M., Perambore to Royapooram	...	...	12.12	12.12	...	...
8.20 A.M., Royapooram to Perambore	...	...	12.12	12.12	...	...
11.30 A.M., Perambore to Royapooram	...	...	12.12	12.12	...	...
1.40 P.M., Royapooram to Perambore	...	...	12.12	12.12	...	...
3.20 P.M., Perambore to Royapooram	...	...	21.87	21.87	...	...
5.50 P.M., Royapooram to Perambore	...	...	21.87	21.87	...	...
7.10 P.M., Perambore to Royapooram	...	...	...	...	...	...

MADRAS, (Signed) R. B. ELWIN,
Agent and Manager.
27th March 1876.

(Signed) H. E. CHURCH,
Traffic Manager.

SOUTH INDIAN RAILWAY.

List of the Ruling Gradients on each Locomotive District.

LOCOMOTIVE DISTRICT.		RULING GRADIENT.		APPROACH TO RULING GRADIENT.			
		Down Line.	Curve or Straight.	Rise.	Fall.	Length, Miles.	Curve or Straight.
From	To	Rise.	Length, Miles.				
Negapatam.	Trichinopoly.	1 in 210	1 35	Straight...	1 35	Level	0 13
Trichinopoly	Erode	1 100	1 0	Do. ...	1 0	1 in 197.86	0 14
Do.	Madura	1 160	2 43	On straight	2 21.75	...	1 2
Madura	Tuticorin	1 200	1 22	Curve ...	0 21.25	Level.	0 39
Maniachee.	Tinnevely	1 200	0 72	Straight...	0 53	1 in 330	1 45
				Do. ...	0 19		0 39
				Curve ...	0 53		1 39
				Straight...	0 19		0 6

TRICHINOPOLY,
March 1876.

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

Proceedings of the Madras Government, Public Works Department,
7th April 1876.

Statement of Engines and their principal Dimensions.

No.	Broad Gauge.	CYLINDERS.		WHEELS COUPLED.	
		Diameter.	Stroke.	Diameter.	Number.
9	Passengers ...	14	22	5 0	4
6	Goods ...	15	23	4 6	6
4	Do. ...	15	23	5 0	4
2	Tank ...	12	18	3 6	4
Metre Gauge.					
5	Passengers and Goods—Dubs ...	13	20	3 3	6
73	Do. do.—Neilson, Sharp, Stewart & Co.	13	20	3 0	6
4	Tank ...	13	20	3 0	6

NEGAPATAM, (Signed) W. S. BETTS, (Signed) E. G. SHEWARD,
21st February 1876. Agent. Loco. and Carriage Supt.

Speeds run with Trains.

	MILES RUN PER HOUR.							
	BROAD GAUGE.				METRE GAUGE.			
	Mail Train.		Mixed Local Train.		Mail Train.		Mixed Local Train.	
	Average through Speed.	Average Speed between Stations.	Average through Speed.	Average Speed between Stations.	Average through Speed.	Average Speed between Stations.	Average through Speed.	Average Speed between Stations.
Negapatam and Trichinopoly ...	...	...	...	...	17	20	14	20
Trichinopoly and Erode. Do. and Tuticorin ...	19	24	16	21	...	...	13	15

NEGAPATAM, (Signed) W. S. BETTS, (Signed) E. G. SHEWARD,
21st February 1876. Agent. Loco. and Carriage Supt.

No. 115.

ORDER THEREON, 7th April 1876; No. 913.

RAILWAY, No. 15.

ORDERED to be printed and the required number of copies supplied to the Consulting Engineer.

(True Extract.)

(Signed) G. W. WALKER, Major-General, R.E.,
Secretary to Government.

To the Consulting Engineer for Railways.

Ed. T. O'Connor.
Spec. Copies

Railway Department.

CONSULTING ENGINEER'S OFFICE.

No. 163/Madras 31st March 1876.

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 information of Government certain information which has been compiled by the Agents of the Madras and South Indian Railways in compliance with a request from this office for circulation on other guaranteed Railways.

I request that 20 printed copies may be forwarded

forwarded to this office.

I have the honour to be

Sir,

Your most Obedient Servant.

Wm. Smith. Major R.E.

For Cons. Engr. for Pys

No 913 dated 7th April 66

Ordered to be

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number of copies sup-
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Engineer

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Dated 31st Dec

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24/11/76
G.O. of 118701 Madras.
PUBLIC WORKS.

To

The Chief Eng^r for Railways

Dated

Issued

Recd

Encl

G. O. of 118701, No. 913

Recd. 11/4/5

*Gradients, Engines and
Speed of trains - State -
Matters submitted by the
Chief Eng^r for Rlys relating
to - ordered to be permitted*

*2 P. in Reg.
27-4-76*

4
Proceedings of the Madras Government, Public Works Department,
11th April 1876.

Read the following papers :—

No. 207. Proceedings of the Board of Revenue, dated 21st March 1876, No. 892.
From W. H. GLENNY, Esq., President of the Local Fund Boards, Tinnevely,
to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated
5th February 1876, No. 6.

In supersession of my letter, No. 5, dated 31st January 1876, I have the honor
to request the early sanction of the Board of Revenue to the following allotments,
and to state that the works will begin in anticipation of sanction, as only two months
of the official year remain :—

NEW WORKS.

Public Works Department.

2.	1. Completion of Road No. XVI from Ambasamudram to Panagudi, Item No. 3, Part I., New Works	Rs. 3,000
	2. Reconstruction of a ruined culvert on Road No. IX from Tinne- velly to Pottalpur	220
	3. Reconstructing portion of the same road destroyed in floods of 1869	2,660
	4. Building a bridge over Vaval Odei near Pappagudi on the same road...	1,000
	Total ...	6,880

Other Agency.

5.	(i.) Completing road from Road No. IX to Kovilkulam (Estimate No. 1, Rupees 2,390) in addition to budget allotment. Item No. 10, Appendix Part I., New Works	250
6.	(ii.) Completing Pananjadi Road through Pallakal and Pudukudi (Estimate No. 3, Rupees 1,850), in addition to budget allotment. Item No. 12, Appendix Part I., New Works	300
7.	(iii.) Completing village road from Ambur to Karuttapillyur...	200
8.	(iv.) Three culverts on village road from Govindaperi to Ravanasamudram	500
9.	(v.) Culvert over Odei on village road from Alwarkurichi to Darnapuramadam...	200
10.	(vi.) Two culverts on Road No. VI.-F. from Kullakurichi to Singampatti	200
11.	(vii.) Bridge over Palien Channel at Gopalasamudram...	500
12.	(viii.) Bridge over Odei on village between Karukurichi and river Tambrapurni	300
13.	(ix.) Culverts on village road from Tirupudeimarudur to Arike- savanullur	300
	Total ...	2,750

REPAIRS.

14.	(x.) Repairs to road from Kovilkulam to Gatinanadi ...	250
	Grand Total ...	3,000

*Proceedings of the Madras Government, Public Works Department,
11th April 1876*

3. The allotment for the first of these works was applied for by the Local Fund Board on a previous occasion, but application for sanction was deferred, pending a further reference. The whole road can be completed during the official year, and the District Engineer is pressing on with it in anticipation of sanction.

4. Items 2, 3, 4, are for works required on Road No. IX an important main line from Tinnevely to Pottalpur. The damage caused by the great flood of 1869 has never been made good, and nearly a mile of made and metalled road was then swept completely away. A few miles further westward, traffic is impeded by a deep jungle stream which swells into a torrent with local rains. An estimate of Rupees 1,950 has been submitted, but will now be checked and reduced by the District Engineer and forwarded for the sanction of the Board as soon as possible. Meanwhile an allotment of Rupees 1,000 is requested, which is all the District Engineer can utilize during the current year.

5. Of the remaining allotments, which are all to be utilized by Other Agency, Nos. (i) to (v) are to complete works undertaken by the Additional Sub-Collector at settlement. Item No. (vi) provides for two much-needed culverts on road No. VI-F. Nos. (vii), (viii), (ix) are to supplement the efforts of the villagers for three useful roads in the southern portion of Ambasamudram now under settlement. Item No. (x) under repairs provides for putting in order a useful road running north from Ambasamudram.

6. The resolutions of the Local Fund Board at a special meeting are herewith enclosed.

ENCLOSURE No. 1.—Extract from Proceedings of the Local Fund Board.

From the same Officer, dated 5th February 1876, No. 7.

I HAVE the honor to forward, for the early sanction of the Board of Revenue, an estimate of Rupees 2,660 for reconstructing a portion of Road No. IX from Tinnevely to Pottalpur, nearly a mile in length, destroyed by the floods of 1869, and not yet restored. The road is a main line of communication. In my letter No. 6 of this date, an application is made for the allotment of the required sum.

ENCLOSURE No. 1.—Estimate.

In the first of the foregoing letters, the President applies for an aggregate allotment of Rupees 9,880 for the works therein detailed from the Special Provincial grant* of Rupees 12,000.

2. The estimate, amounting to Rupees 2,660 for the third work, received with the second letter read above, is sanctioned. The President is requested to expedite the submission of the estimate promised for the fourth work.

*Proceedings of the Madras Government, Public Works Department,
11th April 1876.*

3. The Board sanction the allotment of Rupees 9,880, and request the Accountant-General to place the amount at the disposal of the Public Works Department from the source above indicated.

(True Copies and Extract.)

(Signed) C. A. GALTON,
Acting Secretary.

No. 208.

ORDER THEREON, 11th April 1876, No. 959.

ACCOUNT, No. 12.

RECORDED.

2. The attention of the Financial Department is called to the late date at which the Special Provincial grant of Rupees 12,000 has been availed of.

(True Extract.)

Colonel,

Offg. Under Secy. to Govt., P.W.D.

To the Board of Revenue.
" Financial Department.

Exd. E. C. Shunker.

Spare Copies

No 959 Account-
Public Works Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the 11th April 1876.

Read the following:—

Pro: Board of Revenue (No. 802 of 21st March 1876)

Recorded.

2. The attention of the
Financial Department is
called to the late date at
which the Special Provision
grant of Rs 12,000 has been
availed of.

G.M.W.

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8th April }
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Gobt. of 1876 Madras.
PUBLIC WORKS.

To

The Board of Revenue

Dated

Issued

Recd.

Encl.

G.O. 11th April 1876, No. 959

No. 207-228

Encl. 2-5-76

Road from Timmavally to Pottal
puram in the Timmavally D.

Pro: of the B. P. P. Res, same:
tioning an Est for recon:
-structing portion of — and
an aggregate allotment of Rs.
9880 for this and certain other works,
and requesting President to con-
sider submission of the Estimate
for the bridge over the Vandal Odde
recorde of with remarks