

Public Works (1899) Department.

RAILWAY BRANCH.

943K

G.O., No. 1209 Rep

DATED 25th October

[Despatch Abstract.]

*Progress reports on railways under survey
and construction. — Communicating to the
agents, Madras and South Indian Railways,
a circular from the Govt of India laying down
the procedure in the submission of the —*

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
94	943	Ry	22-5-01				
	171	Ry	d 23-1-05				
	19824	Ry	d 4-11-05				
	189	AN	10/2/05				
	270	Ry	5. J. 103.				

The Agents & Managers of the Consolidation directing
a S. D. Ry. in supersession of all
a Carry Over Ry. previous orders on the subject,
that certain ^{specified} returns shall
Inches 45, + 6 here in future be submitted to
Not yet been received Connection with —
Recd + works to Jan. 1881

BACK PAPERS.

FURTHER PAPERS.

Enclosure No. 1 to Circular No. VIII Railway of 1899.

FORM A.

—RAILWAY—GAUGE.

Statement showing progress made in each division up to and during the half-year ending $\frac{31st\ March}{30th\ September}$ 19 .

Name of work.	Division.		Division.		Division.		Division.		REMARKS.
	From	To	From	To	From	To	From	To	
	Length—miles.		Length—miles.		Length—miles.		Length—miles.		
I. Preliminary Expenses and Survey.	Finished	...	Finished	...	Finished	...	Finished	...	
II. Land	All taken up	...	All taken up	...	All taken up	...	All taken up	...	
III. Earthwork	Finished	...	Finished	...	Finished	...	Finished	...	
Tunnels	...	...	...	...	...	...	...	...	
IV. Major Bridges	Extra waterways completed.	...	17 piers ready for girders.	...	...	...	...	...	
Minor Bridges	Completed, and arrangements for protective works in progress.	...	One hundred and two lineal feet of well sinking to be done, distributed over five wells.	...	One culvert incomplete. Will be done soon.	...	So far done as to ensure completion by next.	...	
V. Fencing	Arrangements made for stone posts.	...	Nothing done	...	Great progress made in hedge planting.	...	Nothing done.	...	
Road crossings	Complete	...	Half done	...	Nothing done	...	Nothing done	...	
Mile and gradient posts	Complete	...	Three quarters erected	...	Half erected	...	Half erected	...	
VI. Electric Telegraph	Complete	...	Complete	...	Complete	...	Complete	...	
VII. Ballast	Complete	...	Complete	...	Three quarters complete	...	Twenty six miles stacked along the line. Remainder in progress.	...	
Permanent-way-Sleeper supply.	Complete	...	Complete	...	22 miles delivered, remainder to arrive in next.	...	Delivering for whole division expected in next.	...	
Permanent-way-Rail supply.	Complete	...	Complete	...	Complete	...	Supply complete	...	
Permanent-way-Platelaying.	Line maintained in good running order.	...	26 miles complete, 5 miles still to be done.	...	Platelaying will commence immediately.	...	Platelaying should be commenced in next.	...	
VIII. Stations and offices	All complete except A which will be ready by	...	No station on this short length.	...	Commenced	...	Arrangements made for immediate construction.	...	
Workshops, Store-Buildings, etc.	Complete	...	...	...	...	...	...	...	
Staff quarters	Menials' lines, latrines, etc., completed.	...	Nothing done	...	So far advanced as to leave little to do next half-year.	...	Nothing done	...	Necessary temporary staff quarters erected.
Station Machinery	Station machinery completed and in good working order.	...	Nothing done	...	...	...	Signals being made up	...	
IX. Plant—Engineering	Complete	...	Complete	...	Complete	...	Ditto	...	
Construction	Ditto	...	Ditto	...	Ditto	...	Arranged for	...	
Locomotive	Ditto	...	Ditto	...	Ditto	...	Nothing done	...	
Carriage and Wagon.	Ditto	...	Ditto	...	Ditto	...	Ditto	...	
Station and office furniture.	Ditto	...	Ditto	...	Not commenced	...	Half made	...	
Steamers or boats	Ditto	...	Nil.	...	Nil.	...	Nil.	...	
X. Ferries	Nil.	...	Nil.	...	Nil.	...	Nil.	...	
XI. Rolling Stock supply	Complete	...	Complete	...	Nearly complete	...	Nearly complete	...	
" " erection	Ditto	...	Ditto	...	Ditto	...	Ditto	...	
XII. General charges—Construction Quarters.	Ditto	...	Ditto	...	Ditto	...	All ready and in use except at bridge.	...	

FORM B.

RAILWAY

GAUGE.

Progress table showing work done up to and during the quarter ending

18 .

Main heads.	Name of works.	Section, From To miles.	Section, From To miles.	Whole line, miles.	REMARKS.
I	Preliminary Expenses and Survey.	1.00	.20	.50	
II	Land ...	.50	.00	.20	
III	Earthwork ...	.30	.00	.10	
	Tunnels ...	*	*	*	
IV	Major Bridges ...	.03	.00	.01	
	Minor Bridges ...	.03	.00	.01	
V	Fencing ...	.00	.00	.00	
	Road crossings ...	.03	.00	.01	
	Mile and gradient posts ...	.00	.00	.00	
VI	Electric Telegraph ...	.00	.00	.00	
VII	Ballast ...	.00	.00	.00	
	Permanent-way-sleeper supply	.00	.00	.00	
	Do. rail supply ...	.00	.00	.00	
	Do. platelaying ...	.00	.00	.00	
VIII	Stations and offices ...	.00	.00	.00	
	Workshops, Store Buildings, etc.	*	*	*	
	Staff quarters ...	.30	.00	.10	
	Station machinery ...	.00	.00	.80	
IX	Plant-Engineering ...	.00	.00	.00	
	Construction ...	.00	.00	.00	
	Locomotive ...	.00	.00	.00	
	Carriage and Wagon ...	.00	.00	.00	
	Station and office furniture.	.00	.00	.00	
	Steamers or boats ...	*	*	*	
X	Ferries ...	*	*	*	
	Floating bridges ...	*	*	*	
XI	Rolling Stock supply ...	.00	.00	.00	
	„ „ erection ...	.00	.00	.00	
XII	General charges—				
	Construction Quarters...	.03	.00	.01	
	Total average ...	.10	.08	.04	
	Date of probable opening for goods traffic.	...	...	...	
	Date of probable opening for all kinds of traffic.	...	...	...	
	Date of probable completion of line.	...	...	...	

NOTE.—1.00 signifies completion of work.

.30 „ that 3-10ths of the work has been done.

.00 „ that work is not commenced.

* „ that no work is to be done under this head.

N.B.—This return should be submitted as soon as possible after the close of the quarter to which it refers.

GENERAL INSTRUCTIONS AS TO PREPARATION OF FORM B.

These returns are intended to show the work done during the quarters ending 31st March, 30th June, 30th September and 31st December, and should be submitted *as soon as possible* after the close of the quarter to which they refer.

They are not intended to shew ordinary alterations and additions to existing railways, but are only required when important extensions or branch lines are under construction.

In filling up Form B the work done up to date is represented by a decimal of the whole. Hence 1.00 represents full completion of work, and any entry greater than 1.00 must obviously be incorrect. Two places of decimals should be given.

The proportion which the work done bears to the whole can only be estimated by the Engineer in charge, and will in most cases bear no relation to the amount of money expended on it to date. The decimal must not, therefore, be calculated on the money expenditure on the work.

The total for the whole line should be estimated by the Engineer-in-Chief to the best of his ability, and must not be taken as a mean of the work done in different divisions, for even if the divisions were all of equal length, the relative amount of work in each would generally differ.

Similarly the total average must be estimated and cannot be taken as a mean of the amounts under the various heads, as these heads are of different relative importance. Thus, suppose an Engineer had charge of an important bridge and had also ten miles of mile and gradient posts to make up in his shops, if the latter work were completed and the former not commenced, the Engineer would not be justified in stating that he had done a total average of half the work entrusted to him.

Electric Telegraph should be entered for information, although it forms no part of the work of the Engineer.

The dates for opening for traffic, goods and passenger, and completion of line are invariably to be entered. If either date is not fixed, the *probable* date must be given.

Enclosure No. 7 to Circular No. VIII Railway of 1899.

SAMPLE FORM C.

RAILWAY SURVEY GAUGE,

Progress Report of work done up to end of

(a) Reconnaissance ... Length, miles
(b) Preliminary Survey ... " "
(c) Detailed Survey (Final Location) ... " "

Division or Section.	Length, miles.	Superior staff employed.	PROGRESS OF WORK DONE UP TO END OF MONTH (IN MILES).								REMARKS.	
			Recon- noitred.	Trial lines run.	Traverse run.	Located line pegged out.	Levelled.	Check levelled.	Bench marks and lock- spitting.	Plans and sections plotted.		Plan and sections traced.
(a) No. 1 Party ...	150	Mr. A, In charge ...	110	...	...	...	...	...	...	...	...	...
(b) No. 2 Party ...	80	Mr. B, In charge ...	}	...	...	...	...	...	...	...	...	...
From to	...	Mr. C, Assistant Engineer		...	...	...	...	...	...	...	...	...
Mile to mile	...	Mr. D " "		...	...	60	...	58	55	...	40	...
	...	Mr. E, Surveyor ...		...	...	...	...	...	...	...	...	...
(c) No. 3 Party ...	150	Mr. F, In charge ...	}	...	...	...	...	...	...	...	...	...
From to	...	Mr. G, Assistant Engineer		...	...	...	...	...	...	...	...	...
Mile to mile	...	Mr. H " "		...	...	...	120	118	115	80	100	...
	...	Mr. I, Surveyor ...		...	...	...	...	...	...	...	...	...
* (d) Traffic enquiry	...	Etc. etc. ...	...	Completed	Completed	Completed	Completed	Completed	Completed	150	50	...
Parties in recess, preparing estimates and plans and sections.	...	Mr. K. ...	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	...
		Messrs. A, B, C, etc.	...	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	...

* Enter brief particulars in column for "Reconnoitred" or "Remarks."

SAMPLE FORM D.

RAILWAY SURVEY ——— GAUGE.

Narrative Progress Report, ——— 18 .

No. 1 Party (Reconnaissance from A to D). The country has been reconnoitred up to mile near B. Aneroid levels show no difficulty in obtaining a ruling gradient of 1 in . The bridging of the large rivers appears to present no difficulties except at C. The country traversed is of the same character as previously reported.

No. 2 Party has now completed miles of the preliminary survey from E to K as a branch line. A good river crossing has been obtained at F. Heavy patches of jungle have been met with between mile and near G, which have necessitated more than the usual deviation from what is considered the direction for the permanent alignment to take. Heavy bridging will be required on mile and near H, as the country shows signs of inundation, but suitable station sites have been selected all on high ground except at I. Two alternative lines have been examined between mile and near J and flying levels taken.

No. 3 Party engaged in pegging out the through line from L to P has now reached mile near M. It was thought advisable to run an alternative line between mile and mile , and the result has been an improvement in location with lighter work on the section. It has been found necessary to make use of the limiting curvature on two occasions to minimise work.

The work has been considerably interrupted by the weather, but the field work will probably be finished by the end of ——— or middle of ———.

Borings in the following rivers have been taken.

* * * *

Trial pits have been dug in some of the nullahs; the lockspitting is well advanced.

Alternative Sample.

No. 1 Party. During the month—miles of line were located, pegged out, levelled, over and "daghbelled." Cross sections being taken at—chains interval. Contoured map completed to miles—.

The Party left—on the—and reached—on the—.

No. 2 Party. The trace for a 1 in—line was carried down to the—, and the traverse along that route completed to opposite the village of—on the right bank of the—. Two miles of branch traverses were also run.

The rains having set in and the streams being in flood, preparations for return were being made towards the end of the month.

[For Heads of Departments.]

Circular No. VIII Railway of 1899.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY CONSTRUCTION.

Simla, the 25th September 1899.

Progress reports for Railways under Survey and under Construction.

READ—

Public Works Department Circular No. 7 Ry., dated 5th April 1878.

" " " " 40 Ry., dated 3rd December 1879.

" " " " 7 Ry., dated 10th July 1882.

" " " " 6 Ry., dated 9th June 1890.

" " " " 11 Ry., dated 3rd October 1890.

OBSERVATIONS.—In Government of India Circular No. 11 Ry., dated 3rd October 1890, the various orders for the submission of progress reports were reviewed, and the submission of the following returns was prescribed for all Railways under survey or construction :—

I.—Half-yearly narrative progress reports (in Form A) for railways under construction for the half-years ending 31st March and 30th September.

II.—Quarterly progress statements (in Form B) for railways under construction, with progress sections of works and progress diagrams of bridges and other important structures.

III.—Monthly narrative progress reports for all railways under survey or reconnaissance, and for railways partly under survey and partly under construction.

2. It has been observed that the returns I and II have not in all instances followed the prescribed Forms A and B, and that the progress diagrams of bridges under construction to accompany Form B are submitted without reference to the size or importance of the bridge ; also that some of the items in the Forms prescribed are now obsolete and do not accord with the current Heads and Sub-heads of Accounts.

RESOLUTION.—In order to ensure uniformity of practice on all railways, the Government of India are pleased, in supersession of all previous orders on the subject, to direct that the following returns shall in future be submitted :—

I.—Half-yearly narrative progress reports for all railways under construction, in the accompanying Form A, as soon as possible after the close of the half-years ending 31st March and 30th September.

II.—Quarterly progress reports for all railways under construction, in the accompanying Form B, together with the progress sections of works, bridges and other important structures, in the same manner as heretofore, as soon as possible after the close of the quarters ending 31st March, 30th June, 30th September and 31st December.

III.—Monthly tabular and narrative progress reports for railways under survey or reconnaissance in the accompanying Forms C and D, as soon as possible after the close of each month.

2. It is particularly requested that all progress sections and diagrams be submitted on foolscap size, *vide* sample attached, and that they be folded in two and not rolled for transmission by post. Also that progress diagrams of bridges or other special works be of the same width as the progress sections, *viz.*, 13½ inches; their length may be greater if absolutely necessary, in which case they should be folded so as to enable them to be interleaved in the same book as the progress sections.

3. Progress diagrams of bridges need only be submitted for openings of 100 feet span and over, or those aggregating 200 feet or over between faces of abutments.

4. When the field work of a survey or reconnaissance is completed, the fact should be noted in the last monthly report of the same, and a special narrative report giving the history of the survey and the results obtained, for the purpose of compiling Chapter III, Part I, of the Annual Administration Report, should invariably be submitted in the form prescribed in Public Works Department No. 18 R. Stat., dated 9th January 1899, as soon as the survey is completed, and before the Engineer-in-Chief and his staff are dispersed. Enclosure No. 9 reproduces the sample form given in the above Resolution and is appended hereto for ready reference.

5. Consulting Engineers, Engineers-in-Chief and Managers are particularly desired to see that the above instructions are attended to before the submission of progress sections and diagrams to the Government of India for the lines under their control.

ORDER.—Ordered that this Resolution be communicated, for information

The Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh and Burma. and guidance, to the
The Chief Commissioner of Assam. Local Governments and
The Residents at Hyderabad and in Mysore. Administrations and the
The Agents to the Governor General for Rajputana and Central India. Officers marginally
The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow and Assam. noted.
The Managers, North-Western, Eastern Bengal, Oudh and Rohilkhand and East Coast Railways.
The Engineers-in-Chief, Hurdwar-Dehra and Ghaziabad-Moradabad Railways, Indus Bridge Works and Shadipalli-Balotra Railway (British Section), Godavari Bridge Works, and Ludhiana-Dhuri-Jakkhal Railway.
The Engineers-in-Chief, Kohat and Bunnau Railway Survey, Bara-Ajmere and Marwar Railway Survey and Ranaghat Gauges-Katihar Railway Survey.

Also, for information, to the Government of the Punjab, the Chief Commissioner of the Central Provinces, the Agent to the Governor General for Baluchistan and the Accountant General, Public Works Department.

By order,

C. C. S.

Under Secretary.

Documents accompanying.

Enclosure No. 1. Form A. for half-yearly narrative report.

Enclosures Nos. 2 and 3. Form B for Quarterly Tabular report and general instructions for its preparation.

Enclosure No. 4. Notation to be adopted in progress sections.

Enclosures Nos. 5 and 6. Sample forms for progress sections of line and progress diagrams of bridges.

Enclosures Nos. 7 and 8. Sample of Forms C and D for monthly report of surveys.

Enclosure No. 9. Sample Form of yearly Narrative Memoranda of complete surveys for Annual Administration Report, Chapter III, Part I.

N.B.—Applications for additional copies of this Circular and Enclosures should be made direct to the Superintendent, Government Printing, Calcutta.

G. C. Press, Simla. No. 1108 P. W. D.—5-10-99.—1,232.

To
The Secretary to the Govt. of Madras,
Public Works Department, Ry. Branch,