(1) Number of pages_____

(2) Date of repair_____

(3) Initials of the Referencer_____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 1153-1154 86-89-100		Press Mis.
Dated 15	18 92.	

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 6th May 1872.

Read the following letters :—

No. 86. From the Acting Superintending Engineer, 1st Division, to the Secretary to Government, Public Works Department, dated Dowlaishweram, 18th January 1872, No. 3,178.

ADVERTING to G. O. of the 8th instant, No. 28, I have the honour to observe it appears to me the point at issue is one between the Government of India and this Government as to the principles on which the audit of expenditure is to be conducted by the Controller, and hardly one which subordinate officers can interfere with; but having been called upon to do so, and having had considerable experience in the account branch, I venture to submit a few remarks.

2. When the late Accountant-General, Colonel Chesney, visited Madras, I had to explain to that officer that Sir W. Denison and his Council were totally averse to the Controller interfering in the matter of rates of work, as executed, or executing, on the principle that the local officers who prepared the designs and estimates supervised and executed the works, were far more competent for this duty, and should be held responsible for the expenditure they had recommended the Government to incur. To this Colonel Chesney appeared to assent, regretting merely, as far as I recollect, that uniformity of practice could not be adopted throughout India; but as there is no such thing in any other part of the country to correspond with our outlay on "Ryots Agricultural" and it would be next to impracticable to give the details of these, and useless if afforded for such simple works, it was decided not to interfere with the practice at all.

3. Having been connected with the account, the executive, and the directing branches of the department, and had some experience of the working of the system under the Government of India, I regret to say I must adhere to the principles formerly arranged for this Presidency. In Nagpore I found the greatest difficulty in obtaining information as regards rates for work, and the more so as there the works were chiefly in stations or lines of roads; whereas in our districts they are scattered all over the country, and when an irrigation project was taken up no one could tell what the rates were likely to be in any village; this knowledge can only be acquired by actual experience. I am unable therefore to see what good results are likely to be obtained by the Controller compiling long schedules of rates from the Progress Reports.

* * * * *

No. 87. From the Superintending Engineer, 2nd Division, to the Secretary to Government, Public Works Department, dated Camp at Kaligerry, 23rd February 1872, No. 157.

REFERRING to memorandum No. 20, 19th instant, I have the honour to observe that G. O., No. 177, 22nd January 1872, appeared to me to settle the whole subject referred to me for report in G. O., No. 28, 8th January 1872. Under its provisions officers in charge of large projects will furnish schedules of rates compared in detail with estimates, and in them, as I believe, all the information required by the Government of India.

2. As Superintending Engineers receive copies of these papers periodically, and can examine the registers themselves whenever occasion requires or opportu-

nity offers, they will have the best means of checking both works in progress and estimates for other works of similar nature.

No. 88. From the Superintending Engineer, 3rd Division, to the Secretary to Government, Public Works Department, dated Bellary, 3rd October 1871, No. 1,253.

I have the honour, with reference to G. O., No. 2,424, dated 22nd ultimo, to forward, for the information of Government, a printed blank form of data of prices of building and other materials, etc., which I require to be submitted half-yearly from every taluq in this division.

2. The entries under several of the main heads could doubtless be increased if adopted by other divisions; but considering the requirements for works in this division, I think the details of the schedule provide for everything.

No. 89. From the same Officer, dated Bellary, 9th April 1872, No. 72.

With reference to G. O., No. 28, dated 8th January last, I have the honour to make the following observations.

2. The Accountant-General very rightly remarks in paragraph 3 of his letter printed with above order, that Superintending Engineers have not the means of knowing the actual rates at which work is being executed. It is only when on tour through ranges can this information, if required, be obtained; for a difference between "estimate" and "actual working" rates must exist.

3. With my letter No. 1,253, dated 3rd October 1871, I forwarded, for the information of Government, a form of "data of prices of building and other materials." This schedule is beginning to prove very useful, as I insist upon each Range Officer to fill in the rate column upon actually calculated data. This necessarily also requires an Overseer to have a knowledge of the details as well, as the return is for each taluq.

4. As far as practicable each of these returns is checked in my office, and Range Officers have been informed how very desirable it is to thoroughly scrutinize each item in the return for one half-year, as it would save them much time and trouble in filling in subsequent returns if they insisted upon their Overseers noting differences in rates on any particular kind of work during the preceding half-year.

5. So far as this office is concerned, the object for getting these data schedules is to facilitate the checking of rates given in estimates, but this does not answer the object the Accountant-General has in view that such schedules should serve to show the rates at which works of various description are being done.

6. I am quite of opinion with the Accountant-General in the matter that the Controller's Office having to deal with the details of accounts, can alone supply such schedules based upon *actual* working rates.

At present the accounts office is of no practical help to Superintending Engineers, as they are left to find out as best they can any tendency of an estimate being exceeded. This information, as remarked before, can only be obtained when a Superintending Engineer is on tour. Most Range Officers, under the false impression of getting into trouble, put off from day to day reporting such matters

or to send in supplemental or revised estimates until such a course becomes inevitable. Others, from not closely looking into these details themselves, allow estimates to be exceeded, and then submit revised or supplemental estimates. It must therefore be manifest that some strict and timely control to check any tendency for exceeding estimates is absolutely called for.

7. Unless I am very much mistaken, the schedules which the Accountant-General requires the Controller to compile would be practically useless, if they are to be prepared for each district. Of much less use would they be if prepared for a division which is comprised of two or three districts.

My reason for saying so is that the rates between some of the taluqs, even neighbouring taluqs, differ and at times so widely that they would form no basis for check-work, and the object of the compilation would thereby be wholly defeated. To be of use, therefore, I should say that these schedules should be for each taluq.

Then, again, the compilers of these returns must necessarily have some knowledge of the various kinds of work they should enter, or the result would be that the direction as well as the construction branches of the department will have a lot of useless information thrust on to them, while items of importance would probably be omitted.

8. Schedules compiled on *actual* rates would enable Superintending Engineers to check the rates in estimates with much greater accuracy than on the data referred to by me, and which is in use in this division. These schedules of actual working rates might be supplied annually to divisions and to ranges.

9. It is to be regretted that the Accountant-General has not sent, as far as I can gather from the papers before me, some copies of the schedules, as with these before one a better insight of the intrinsic value of such record might be obtained.

No. 90. From the Superintending Engineer, 4th Division, to the Secretary to Government, Public Works Department, dated Madras, 21st October 1871, No. 2,991.

With reference to paragraph 2 of the Government Order dated 22nd September 1871, No. 2,424, I have the honour to state that it will be much easier for the Controller to prepare the statement called for by the Government of India than it will be for the Superintending Engineer, if I understand rightly that a comparison is required between the present schedule rates and that at which the works have actually been carried out.

2. Price lists and schedules of rates are sent to the Controller of Public Works Accounts to enable him to check the expenditure on works of which he receives detailed accounts. Under the system in force the Superintending Engineer receives no detailed accounts of expenditure, such as those sent to the Controller, so it will not be possible for him to strike out the rates from the results obtained in actual work. It is the actual rates that it appears the Government of India require; they can, of course, be prepared by the Range Officer, but his Office is already overworked; they can also be prepared by the Superintending Engineer, but it will entail the submission of duplicate copies of the documents that only go to the Controller, whereas the whole papers are now always sent to the Controller's Office, and where the required return can be more easily made out.

3. As nearly all work in my division is done by contract, it is impossible to compare the schedule rates with the actuals.

No. 91. From the same Officer, dated Madras, 17th January 1872, No. 4,170.

In reply to Government Order No. 28, dated 8th January 1872, I have the honour to state that I have only to add to my letter No. 2,991, dated 21st October 1871, on the subject of the schedule of rates, that I would recommend that the Progress Report be sent in filled up with the information given in the last columns, as used to be done prior to Government Order No. 216, dated 22nd January 1867, which Government Order ought to be cancelled.

2. I consider that the Controller has very much over-estimated the extra work that would be entailed on his office, as out of 279 works in my division, mentioned in paragraph 6, only two would have to be examined for the preparation of a schedule of rates, all the others being under execution on contract. He could hardly, therefore, say that it would entail on his office extra work.

3. In conclusion I would only quote what the Secretary to Government of India says that, "It is one of the special objects of the Controller's Office to assist Superintending Engineers by preparing such information as may be useful to guide them in scrutiny of rates and estimates."

No. 92. From the Officiating Superintending Engineer, 5th Division, to the Secretary to Government, Public Works Department, dated Cuddalore, 18th January 1872, No. 229.

With reference to G. O., No. 28, of 8th instant, on the matter of the schedules of rates called for by the Government of India, I have the honour to state that it appears to me very immaterial by whom these schedules are prepared, but that I conceive it can be far more readily done in the Superintending Engineers' Offices, they having far readier access to the records, etc., of the Range Offices, and having also greater opportunities for personal communication with the Range Officers from whom, of course, the greater part of the information required must come.

2. The schedules, by whomsoever prepared, should be prepared for the use of Superintending Engineers, whose very proper duty should be to check and scrutinize rates, with which it seems to me the Controller should have nothing whatever to do.

3. If the Controller is to be vested with this power, as would seem to be contemplated by the Government of India, it would be far better to relieve Superintending Engineers of the trouble and responsibility attaching to it. It seems a sheer waste of time to put two men to do the same work, the one being, in my opinion, at least far less competent to perform it than the other. With however great care these schedules are prepared there must be occasional deviations from them; to account for these would entail, if the Controller is to sit in judgment on them, a great deal of correspondence, which is equivalent to delay of work, and if I understand aright, the Controller does not desire the duty, and is unprepared to undertake it without additional establishment, and I think he is quite right.

4. The system of check and counter-check is, I think, one of the curses of this department, operating fearfully to accumulate correspondence and retard work.

5. I think, then, that the preparation of these schedules can be best performed in the Superintending Engineer's Offices; that the check and scrutiny of rates should rest with the Superintending Engineers; and I would further suggest that the contemplated schedules be revised annually instead of half-yearly, as the changes likely to occur in six months are so very trivial that one document will be almost a literal transcript of that of the preceding half-year.

No. 93. From the Officiating Superintending Engineer, 6th Division, to the Secretary to Government, Public Works Department, dated Camp at Upper Anicut, 9th February 1872, No. 881.

With reference to G. O., No. 28, dated 8th January 1872, I have the honour to report that, under the present system of accounts, the preparation of a schedule of rates, as required by the Government of India, by the Controller, seems to be almost impracticable, and without considerable alterations in the system I do not see that the Controller could assist Superintending Engineers in the scrutiny of rates and estimates.

2. It is at present the duty of Superintending Engineers to check the rates entered in all estimates; the Range Officers are required to submit half-yearly price lists of labour and materials for each taluq in their ranges, and with this as a guide and the local knowledge that the Superintending Engineer must, after a short experience of the division, have acquired, he is able to exercise a very efficient check on all estimates submitted. This is surely sufficient; the Superintending Engineer checks the rates of all estimates, and is thus answerable for their correctness; he receives the information that enables him to check rates and data direct from the Range Officers, and can satisfy himself of the accuracy of that information, and I submit that he is in a position to inform the Controller on this point rather than the reverse.

3. I cannot see that anything more is necessary than the half-yearly statement of rates now submitted for a proper check on rates of all estimates, and I think it would be highly inexpedient to transfer the duty of checking rates, etc., from Superintending Engineers to the Controller, and would throw a vast amount of unnecessary labour in the office of the latter.

No. 94. From the Superintending Engineer, 7th Division, to the Secretary to Government, Public Works Department, dated Camp at Cochin, 10th February 1872, No. 236.

In reply to G. O., No. 28, of the 8th January 1872, I have the honour to express my opinion that as pointed out by the Secretary to the Government of India in his letter printed with the G. O. under reply, the schedule of rates can be more accurately prepared by the Controller than by Superintending Engineers. The range Progress Reports supplied to the Controller give the quantity, rate, and cost of each sub-head of estimate, whereas such can only be seen by the Superintending Engineers on inspection of ranges and the several registers of works in progress, as the Progress Reports submitted to Superintending Engineers give only such information as is necessary under G. O., No. 2,986, dated 9th October 1865. Under G. O., No. 1,524, dated 5th June 1865, abstracts of all sanctioned estimates

are now invariably supplied to the Controller, who alone from the Range Officer's Progress Reports is able to check the rates and supply satisfactory schedules. I consider it unnecessary and undesirable that the Controller should examine and report upon estimates prior to their submission for the sanction of Government. This duty clearly belongs to Superintending Engineers, who before submitting the estimates to Government satisfy themselves that the rates are reasonable, and in accordance with the schedules to be hereafter furnished them by the Controller annually.

No. 95. From the Superintending Engineer, 8th Division, to the Secretary to Government, Public Works Department, dated on Circuit at Vagaicolum, 21st March 1872, No. 4,914.

In reply to G. O., 8th January 1872, No. 28, and your reminder No. 20, dated 19th ultimo, calling for a report on the preparation of schedules of rates of work of different kinds actually current in this division, I have the honour to state as follows.

2. Whatever may be the custom of the Government of India in regard to rates being fixed by their Controller, the system here practised of rates being fixed by the Superintending Engineer has no alternative, inasmuch as the Controller, though so-called, is *de facto* merely Accountant and Paymaster, and were the name of Controller dropped, it appears to me that much confusion of ideas would be avoided.

3. Under existing circumstances it must be manifest that it would be simply ridiculous to impose upon the Controller, at Madras, the fixing of rates in the different divisions of this Presidency; and the amount of additional correspondence that such a system would entail is something too awful to contemplate.

4. Moreover, the circumstances of one work differ so much from another that, except within certain limits, it is not possible to fix rates without local knowledge. Rates often vary in different localities of an executive charge more than they vary in different executive charges. And not only this, but in the same localities rates differ under our present system with the object of the work; that is to say, villagers interested in the speedy repair of an irrigation work will undertake it at rates for which they would not work on the roads.

5. These and similar circumstances can be known only to the Superintending Engineer with local knowledge, and not to the Controller, and it requires the most constant watching on the part of the Superintending Engineer to regulate these rates.

6. I may mention, as an instance in point, that since I have had charge of this division I have reduced the rates all round on an average about 25 per cent. How could the Controller at Madras venture upon such a sweeping reduction? It was only, however, by most careful inquiry on the spot as to the cost of materials, and by ascertaining the actual cost of work executed, that I arrived at a conclusion that authorized my acting as I did. This reduction, moreover, has resulted in superior work; for it would appear that natives are not slow to understand that those who are unable to check properly the cost of work will show equal inability in gauging its quality.

Proceedings of the Madras Government, Public Works Department, 6th May 1872.

7. I hope to be able to submit shortly a form of schedule showing data and rates for this division, but in consequence of the extreme confusion in which the department has unfortunately been allowed to fall in this division it has been rather an up-hill task.

8. I have only, in conclusion, to remark that I cannot understand the necessity of these frequent submissions of "complete and exhaustive" schedules, as directed by the Government of India. In the War Department, in England, the schedules for each station stand good for three years, and as the people of this country are far more conservative than is the case with us at home, I cannot myself see any justifiable or legitimate cause or excuse for throwing every six months on this department the laborious duties of preparing complete and exhaustive schedules for submission to the Government of India. With the form of schedule that will be submitted by me an attempt will be made, however, to reduce this labour to a minimum.

No. 96. From the Special Executive Engineer, Wynaad, to the Secretary to Government, Public Works Department, dated Vythery, 13th January 1872, No. 9.

Reference.—G. O., No. 28, dated 8th January 1872.

With reference to above I am of opinion that there can be little difficulty experienced by divisional officers in drawing up schedules of rates from the reports of their Range Officers and the result of their own observation; but to assist them in this it would probably be better for Range Officers to furnish each half-year a copy of the entries in their Registers of Work during that period, as the monthly Progress Reports do not give sufficient details from which to compile a schedule of rates.

2. A short and easy form would be the present heading of the Work Register, with three lines added, showing,

1*st.*—Quantity of work under each sub-head and cost as per previous half-year's report.

2*nd.*—Quantity and cost during the half-year to which report refers.

3*rd.*—Total to be carried forward to next report.

3. I certainly think that the duty is one far more within the province of officers who have to countersign and submit estimates to Government, than of the Controller, independent of the question of cost for extra establishment.

No. 97. Memorandum from the Deputy Secretary to the Government of India, Public Works Department (Account—General), to the Secretary to the Government of Madras, Public Works Department, dated 9th February 1872, No. 877/1-A. G.

The undersigned is directed to invite attention to the reference from this department marginally noted, and to request the favour of an early reply thereto.

No. 877-A. G., dated 10th November 1871.

(Signed) J. J. McLEOD INNES, Lieut.-Col., R.E.,
Dy. Secy. to the Govt. of India.

No. 98. Memorandum from the Deputy Secretary to the Government of India, Public Works Department (Account), to the Secretary to the Government of Madras, Public Works Department, dated 22nd March 1872, No. 877/2-A. G.

THE undersigned is directed to invite attention to the reference from this department marginally noted, and to request the favour of an early reply thereto.

No. 877-A. G., dated 10th November 1871.

(Signed) J. HOPKINS,
For *Dy. Secy. to the Govt. of India.*

No. 99. ORDER THEREON, 6th May 1872, No. 1,153.

ACCOUNT, No. 9.

AFTER a full consideration of the reports of the Superintending Engineers and the Controller of Public Works Accounts, the Government are confirmed in their opinion that the duty of checking and reporting on estimates and rates should devolve upon Superintending Engineers, and that they are best able to prepare the schedules of rates referred to by the Government of India in their Circular No. 381 of the 12th July 1871.

2. The schedules should be carefully revised from time to time with reference to the cost of work actually executed, as shown in the range accounts and particularly in the Register of Works, and the Government concur in the opinion expressed by the Special Executive Engineer, Wynaad, that it would facilitate the task of Superintending Engineers if they were furnished periodically with copies of the Register of Works in each range, modified in form to exhibit clearly the information required. That is to say, in addition to the quantity and cost of work under each sub-head, the resulting rate should be shown. The number of the item in the range schedule of rates, corresponding to the character or class of work under the sub-head, should be attached, and work executed at contract rates should be distinguished from that carried on by departmental agency. Until the rates in the schedules can be considered well established, the range lists and the copy of the Register of Works should be sent to Superintending Engineers half-yearly. Subsequently it will be sufficient to prepare the statements once in the year.

3. The divisional schedules will be forwarded to the Chief Engineer, who will compile the abstracts required by the Government of India.

(Here enter No. 1,145, dated 6th May 1872.)

(True Extract.)

Colonel, R.E.,
Officiating Secretary to Government.

To Superintending Engineers.
,, Major R. B. Kennedy.
To the Controller of Public Works Accounts.
Exd. S. T. Augustin.

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, *6th May* 1872.

No. 100

No. 1,154.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

ACCOUNT, No. 10.

10th November 1871, No. 877-A. G.

SIR,—In reply to the letter of the Government of India marginally noted, I am directed to inform you that after reference to the Controller of Public Works Accounts and Superintending Engineers, the Honourable the Governor in Council is confirmed in his opinion that the duty of controlling the rates paid for work as well as checking and reporting upon estimates should devolve upon the latter officers, who are the professional advisers of Government, and who with their intimate knowledge of local peculiarities affecting rates, and their close correspondence with the Range Officers actually carrying out works, are far better fitted for it than the Controller, who is not required to be an Engineer.

2. It follows I am to point out that the detailed schedules of rates for each division, directed to be prepared by the Government of India in their Circular No. 381 of the 12th July 1871, can be most readily and correctly furnished by the Superintending Engineers, but that it is at the same time obvious that the general abstract must be compiled in a Central Office with which all these officers are in correspondence, and further that it will also be necessary that the schedules should be carefully scrutinized in order that discrepancies may be rectified, and that uniformity in nomenclature, in the classification of the different descriptions of work, and in the units of measurement adopted, may be secured.

3. I am to add that apart from the fact explained by the Controller in his letter accompanying, that the progress returns furnished to him at present only exhibit rates for work executed during the current month, and not for work up to date, and that consequently they do not supply the necessary information, it is the conviction of this Government that the investigations indicated are entirely beyond the province of a Controller of Accounts, who is not necessarily an Engineer, and that centralization in reference to such matters should be effected in the Office of the Chief Engineer. The Government consider that the work of digesting the schedules furnished by the Superintending Engineers can hardly be entrusted to any other officer, and I am desired to add that to this view effect will be given in order to meet the requirements of the Supreme Government.

4. In reference to the question of the desirability of deriving the rates for estimates from the cost of similar work previously executed, adverted to by the Government of India in their circular, I am to observe that if the schedules are periodically revised from such data they should afford correct information as a basis for estimates, and that in order to enable Superintending Engineers to carry out this revision readily and comprehensively, they should be furnished periodically

with copies of the Register of Works of their Range Officers I am to state that orders to this effect will be issued, and to add, in conclusion, that the Government consider that, although it may be desirable at first to correct the schedules at half-yearly intervals, it will be sufficient, so soon as these rates are well established, to revise them once a year only.

I have the honour to be,

Sir,

Your most obedient servant,

Colonel, R.E.,

Officiating Secretary to Government.

Exd. S. T. Augustin.

SUPERINTENDING ENGINEER'S OFFICE, 1ST DIVISION,

DOWLAISHWARUM, 18th January, 1877

No. 3178

From

Lieut Colonel A Pearson R.E

Actg Superintending Engineer

1st Division

To

Colonel J. Carpendale R.E.

Secretary to Government D. P. W.

MADRAS

SIR,

Forwarding to Govt the Schedule of Rates for the Division

It appears to me that the Public Interests

would be best served by the Government of India

fixing the Rates for the Principal

Articles of Supply and leaving the Executive

Officers to adjust the Rates for the Subordinate

Articles, but having been called upon to do so, and having had

considerable experience in the manner of

Working Schedules to submit the following

Remarks.

2 When the late Lieut General

General Colonel Cheape visited

Madras

Madras, I had to explain to that Officer that Sir H. Simcox and his Council were totally averse to the Central interfering in the matter of rates of work, as executed, or executing, on the principle that the Local Officers, who prepared the designs and Estimates, supervised and executed the works, were far more competent for this duty and should be held responsible for the expenditure they had recommended the Government to incur. To this Colonel Cheney appears to assent, regretting merely as far as I recollect, that uniformity of practice could not be adopted throughout India; but as there is no such thing in any other part of the country, to correspond with our outlay on Repairs Agricultural, and it would be next to impracticable to guide the details of these, and useless if afforded for such simple works,

I

I was decided not to interfere with the practice at all.

3 Having been connected with the account, the executive and the drawing Branches of the Department, and had some experience of the working of the System under the Government of India, I regret to say I must adhere to the principles formerly arranged for this Presidency. In Bengal, I found the greatest difficulty in obtaining superintendence and agency as Estimates for work and the more so, as there, the works were chiefly in stations or lines of Roads, whereas in our Districts, they are scattered all over the Country and when an Irrigation project was taken up, no one could tell what the rates were likely to be in any Village, this knowledge can only be acquired by actual experience; I am unable therefore

therefore to see what good results are likely to be obtained by the Controller compiling long schedules of rates from the Progress reports.

4 I do not believe there would be any absolute difficulty in the matter, and the Controllers Establishment ought certainly to be able to cope with the work without any additions at all. Its present cost is 70 per cent above the cost in 1865/66, and more than 40 per cent increase in hands to what it was when the present incumbent declared no further increase was re:quired, and the work certainly has not increased since that time - as far as I can see on the contrary, several points formerly enquired into are now left out altogether.

5 In conclusion I beg very respectfully to submit for the consideration of Government, that if the Code of the Government of India is to be referred to at all in this Presidency in matters connected with this Department, it would be far better to adopt the whole Code at once; the present practice cannot be satisfactory to either Government; as in some instances the views or principles of one are approved of and authorized, and in others rejected for the same Empire, so that it is impossible without frequent references to know what principles are actually recognized.

I have the honor to be
Sir,
Your most obdt. Servant

[illegible] Lieut. Col. R.E.
A. Supdg. Engineer 1st Division

DISTRICT

Data of prices for building Materials &c. in the Talook, Range for the Half year ending 187

No.	Description of work.	Per	Half year ending		Half year ending		Remarks.
	Masonry.						
1	Sun-dried brick in clay.	Cft.					
2	Brick in clay.	,,					
3	Rough stone in clay.	,,					
4	Brick in chunam.	,,					
5	Rough stone in chunam.	,,					
6	Hammer dressed granite stone in chunam.	,,					
7	,, ,, laterite ,, ,,	,,					
8	Cut granite stone in chunam.	,,					
9	,, laterite ,, ,,	,,					
10	Facing with cut granite stone in chunam	,,					
11	,, ,, ,, laterite ,, ,,	,,					
12	Flat arch, brick in chunam	,,					
13	,, ,, rough stone ,,	,,					
14	,, ,, cut granite stone in chunam	,,					
15	,, ,, cut laterite stone ,,	,,					
16	Circular arch, brick in chunam,	,,					
17	,, ,, rough stone ,,	,,					
18	,, ,, cut stone ,,	,,					
19	,, ,, cut laterite ,,	,,					
20	Cornice, brick in chunam 12X9 inches	Rft.					
21	,, ,, ,, 18X12 ,,	,,					
22	Cordon, ,, ,, 12X12 ,,	,,					
23	Column, ,, ,, 15 inches diameter.	,,					
24	,, ,, ,, 18 ,, ,,	,,					
25	,, ,, ,, 21 ,, ,,	,,					
26	,, ,, ,, 24 ,, ,,	,,					
27	Honey-comb, tiles in chunam & plastered 2 coats.	Sqr.					
28	,, brick ,, ,,	,,					
28A							
28B							
28C							
28D							

No.	Description of work.	Per	Half year ending			Half year ending			Remarks.
	Flooring and Paving.								
29	Flooring tiles, 6 inches Sqr. in Chunam.	Sqr.							
30	„ „ 12 „ „	„							
31	Paving with laterite „	„							
32	„ „ granite „	„							
33	„ „ 18 inches sqr. „	„							
34	„ „ asphalte ¼ inch thick	„							
35	„ „ „ 1 „ „	„							
36	Flooring with brick Jelly and clay 3 inches thick and well rammed	„							
	Roofing.								
37	Terracing with brick on edge, 3 inches of Jelly, 3 courses of flat tiles, and 3 coats plastering complete including plastering between joists.	„							
38	Sloping terrace, 3 courses of flat tiles, and 3 coats of plaster.	„							
39	Sloping terrace, 2 courses of flat tiles brick jelly 11 inches thick and 2 coats of plaster.	„							
40	Tiled roof, 1 course of flat tiles, pan tiles and chunam borders.	„							
41	Corrugated iron, over teak wood trusses, 10 ft. apart, and purlins with rivets, bolts, straps &c. (complete).	„							

No.	Description of work.	Per	Half year ending			Half year ending			Remarks.
	Pointing								
42	Pointing floors, 6 inches sqr. tiles	Sqr.							
43	„ „ 12 „ „ bricks or stones	„							
44	„ „ 18 „ „ „ „	„							
45	„ „ granite or laterite stone.	„							
46	„ walls „ „ „	„							
	Plastering								
47	Plastering white, one coat of chunam.	„							
48	„ „ two „ „	„							
49	„ „ three „ „	„							
50	„ blue, one „ „	„							
51	„ „ two „ „	„							
52	„ „ three „ „	„							
	Washing								
53	White-washing, 1 coat.	„							
54	„ „ 2 „	„							
55	„ „ 3 „	„							
56	Blue „ 1 „	„							
57	„ „ 2 „	„							
58	„ „ 3 „	„							
59	White „ to ceiling.	„							

No.	Description of work.	Per	Half year ending	Half year ending	Remarks.
	Repairs, Shifting Tiles, &c.				
60	Repairing cracks, with tar, pitch and cloth.	100 Rft.			
61	Removing 1 course of flat tiles, from a terrace and replacing with new, and 3 coats of plaster.	Sqr.			
62	Laying 2 courses of flat tiles, in tar pitch, and black dammer, with brick dust and chunam, for covering cracks.	,,			
63	Repairing cracks, at base of binding or parapet walls &c.	,,			
64	Removing tiles and re-placing them, using ¼ new tiles, and chunam borders.	,,			
65	Removing tiles and re-placing them, using ¼ new flat tiles, ¼ new pan tiles and chunam borders,	,,			
66	Removing tiles and re-placing them, using ¼ new flat tiles, ¼ new pan tiles, and chunam borders.	,,			
67	Shifting tiles and re-paring chunam borders.	,,			
	Wood-work.				
68	Teak wood beams, bressummers, Joists, tie-beams, purlins &c. wrought and put up.	Cft.			
69	Jungle wood as above.	,,			
70	Roofing with palmirah rafters, reepers and nails (18 inches from centre to centre),	Sq.			
71	Roofing with palmirah couples, teak reepers and nails (18 inches from centre to centre.)	,,			
72	Roofing with palmirah couples, 2 collar-pieces teak reepers and nails (for flat tiles),	,,			
73	Roofing with teak wood reepers & nails (for flat tiles)	,,			

No.	Description of work.	Per	Half year ending	Half year ending	Remarks.
	Doors.				
74	Pair batten door with frame hooks, hinges &c. complete. (4 X 8= Rs. As. Ps. .....)	Sft.			
75	Pair panelled door with frame, hooks, hinges &c. complete. (4X8= Rs. As. Ps. .....)	,,			
76	Pair panelled and venetian door with frame, hooks, hinges &c. complete. (4 X 8= Rs. As. Ps, ...)	,,			
77	Pair of panelled and glazed door with frame, hooks, hinges &c. complete. (4 X 8 - Rs As. Ps. .....)	,,			
78	Pair of Venetian door with frame, hooks, hinges &c. complete. (4 X 8 - Rs. As. Ps. .....)	,,			
79	Single batten door with frame, hooks, hinges &c. complete. (3 X 6 Rs. As. Ps. .....)	,,			
80	Pair batten window shutters with frames, hinges &c (3 X 4½= Rs. As. Ps. .....)	,,			
81	Pair panelled window shutters with frames, hinges &c. (4 X 6= Rs. As. Ps. .....)	,,			
82	Pair venetian window shutters with frames, hinges &c. (4 X 6 Rs. As. Ps. .....)	,,			
83	Pair glazed window shutters with frames, hinges &c. (4 X 6= Rs. As. Ps. .....)	,,			
84	Attic window shutters with frames &c. (4 X 2 = Rs. As. Ps. .....)	,,			
85	Semi-circular fan light complete. (4 ft. in diameter = Rs. As. Ps. .....)	,,			
86	Weather boards (for Windows of 3½ X 5)	Each.			
	Painting &c.				
87	Painting with wood-oil 1 coat.	Sqr.			
88	,, ,, ,, 2 ,,	,,			
89	,, ,, ,, 3 ,,	,,			

No.	Description of work.	Per	Remarks.
1			
	Road works.		
90	Gravel	Cyrd.	
91	Laterite stone jelly.	"	
92	Granite stone jelly.	"	
93	Tamping.	"	
94	Rough stone for aprons &c.	"	
95	Blasting rock.	"	
96	Cutard stone granite	Each.	
	Tank works.		
97	New stone revetment	Cyrd.	
98	Mixed " "	"	
99	Old " " (rebuilding)	"	
100	Rough stone or boulders for aprons of calingulas &c.	"	
101	Slab stones, for covering sluices, Tunnels, top of parapet walls &c.	Rcyrd.	
102	Turfing	Sqr.	

Half year ending

Half year ending

Rates for a Cubic yard of earth-work for repairing tank - banks &c.

NATURE OF SOIL.	Depth of excavation in yards.								Additional for every yard in depth.		Carried a distance of (including the rate for excavation.)								REMARKS.
	1st.		2nd,		3rd		4th.				5 Yards		10 Yards.		Additional. For every 10 yards distance		Per cubic yard if the height of banks exceeds 2 yards.		Per cubic yard for tamping & trimming slopes	
1	2		3		4		5		6		7		8		9		10		11		12
	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	
Sand.....																					
Cotton or alluvial.....																					
Gravel.....																					
Stony.....																					

(7)

The daily hire of a cart is Annas.

DISTANCE.	100 yards to ½ a mile		½ a mile to ¾ "		¾ mile to 1 "		1 mile to 1½ "		1½ mile to 1¾ "		1¾ mile to 2½ "		2½ mile to 3½ "		3½ mile to 4½ "		4½ mile to 5½ "		5½ mile to 8 "		REMARKS.
Number of Trips.....	10		8½		6		5		4		3		2		1½		1¼		1		
	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As.	Ps.	As	Ps.	
Cost per cart load.....																					

No	Description of work.	Per	Half year ending 188	Half year ending 188	Remarks.
	Materials.				
103	Bricks, sun-dried 8¼ X 4½ X 2 inches	1,000			
104	„ well burnt do. „ 1st sort ..	„			
105	„ „ „ do. „ 2nd „	„			
106	„ Arch „ 9 X 4½ X 1½ „	„			
107	„ Cuvice „ 18 X 5 X 2½ „	„			
108	„ Terrace „ 3 X 3 X 1 „	„			
109	„ Pillar „ Diameter 15 „	„			
110	„ „ „ „ 18 „	„			
111	„ „ „ „ 21 „	„			
112	„ „ „ „ 24 „	„			
113	„ Jelly ... ... Cart load	1			
114	Tiles, thick flat	1,000			
115	„ thin „	„			
116	„ pan	„			
117	„ pot	„			
118	„ square 6 inches	„			
119	„ „ 12 „	„			
120	Stone, rough	C. yrd			
121	„ Hammer dressed granite	„			
122	„ „ „ laterite	„			
123	„ Cut granite	„			
124	„ „ laterite	„			
125	„ facing for walls cut granite	Sqr.			
126	„ „ „ „ laterite	„			
127	„ slabs for flooring „ granite	„			
128	„ „ „ „ „ 18 inches square	„			
129	„ „ „ „ laterite	„			
130	„ granite circular slabs diameter 15 inches ..	Each			
131	„ „ „ „ 18 „ ..	„			
132	„ „ „ „ 21 „ ...	„			
133	„ „ „ „ 24 „ ...	„			
134	Chunam	Parah			
135	Sand, ordinary ... ... Cart load	1			
136	„ river ... ... „	1			
137	„ white ... ... „	„			

No.	Description of work.	Per	Half year ending	Half year ending	Remarks.
138	Clay ... ... Cart load	„			
	Wood &c.				
139	Wood, Teak (in rough)	C. ft.			
140	„ jungle „	„			
141	Palmirah rafters 10 ft. long	Each			
142	„ „ 12 „	„			
143	„ „ 14 „	„			
144	„ reepers ... ... R. ft	100			
145	Teak „ „ ... ... „	„			
146	Bamboos, (as used for scaffolding)	„			
147	Iron wrought for hooks, hinges &c	lb.			
148	„ cast	„			
149	„ bar square	„			
150	„ „ round	„			
151	„ round bolt	R. ft			
152	„ screw nails ¾ inch	Dozen			
153	„ „ „ 1 „	„			
154	„ „ „ 1¼ „	„			
155	„ „ „ 1½ „	„			
156	„ „ „ 1¾ „	„			
157	„ „ „ 2 „	„			

No.	Description of Work.	Per	Half year ending	Half year ending	Remarks.
	Labor.				
158	Bricklayers 1st class	Each			
159	2nd „	„			
160	„ 3rd „	„			
161	Carpenters 1st „	„			
162	„ 2nd „	„			
163	„ 3rd „	„			
164	Blacksmiths 1st „	„			
165	„ 2nd „	„			
166	„ 3rd „	„			
167	Painters 1st „	„			
168	„ 2nd „	„			
169	„ 3rd „	„			
170	Sawyers 1st „	„			
171	„ 2nd „	„			
172	„ 3rd „	„			
173	Men, coolies 1st „	„			
174	„ „ 2nd „	„			
175	Women „ 1st „	„			
176	„ „ 2nd „	„			

187 -7

_____ District

_____ Range

From

The _____

in charge _____ Range

To,

The Superintending Engineer

3rd Division.

Dated _____ } 187 .

Received _____ }

_____ Talook

Data of prices of building Materials &c. for the Half-year ending

_____ 187 .

No 157

Supg Comrs office 2nd Dn
Camp Saldigera
23rd February 1879.

Sir,

I have the honor to acknowledge the receipt of your letter of the 20th inst: with its enclosures, and to state that I have referred the latter to the Officer in charge of Large projects Department, for his report thereon.

I have also to acquaint you that I have received a letter from the Secretary to the Public Works Department, Dublin, dated 8th January 1879 - Number 1879 - forwarding a copy of a letter from the Secretary to the Board of Works, dated 28th December 1878 - Number 1878 - on the subject of the Navigation of the River Suck, and requesting that I would obtain all the information required by the Commissioners of Works -

I have referred the letter to the Officer in charge of Large projects Department, who will be directly communicated with by the Secretary to the Board of Works, and I have no doubt that they will have the best means of obtaining both works in progress and estimates for future works of

Sir,

Your obedient Servant

No. 1253 Superintending Engineer's Office.
3rd Division.
Bellary 3rd October 1871.

From,
The Superintending Engineer
3rd Division.

To,
The Secretary to Government
Public Works Department
Fort Saint George

Enclosures. 1

Sir, I have the honour with reference to G.O. No. 2424 Dated 22nd Ultimo, to forward for the information of Government as provided Blank forms of Data of prices of buildings and other materials &c. which I require to be submitted half-yearly from every Taluk in this Division.

2. The entries under several of the Heads seconds, could doubtless be increased if adopted by other Divisions, but considering the requirements for works in this Division, I think the details of the Schedule provide for every thing.

I.

I have the honor to be
Sir
Your most Obedt. Servt.

C. Abbott Lt Col. R.E.
Superdg. Engineer 3d Dvn.

Rec'd Sept 1871 Nos 382-382.

From, E. No. 1871 Dept Env. of Govt for Irrig. No. 4734

The Superintending Engineer
3rd Division.

To,

The Secretary to Government.
Public Works Department.
Fort Saint George.

No. 1253

Dated 5th October 1871
Received 5th

Encl 1 S

Forwarded for information of Government as provided Schedule forms of Data of species of building wood other Materials.

No 88

Rec'd 22nd Sept 1871 (R. 23)
E. 1871 Dept Env. of Govt for Irrig. No. 4734

No 1153-1154 - 5th Sept 1871

3

No. 12 Superintending Engineer's Office.
3rd Division.
Bellary 9th October 1871.

From,

The Superintending Engineer
3rd Division.

To,

The Secretary to Government
Public Works Department
Fort Saint George

Enclosures. 1

Sir,

With reference to G.O. No. 28 dated 17th January last, I have the honor to transmit the accompanying return.

2. The Government Order referred to has been forwarded with the above order, that the prescribed form for Engineers Data and the manner of recording the actual data of which work is being executed. Already above four through Taungs (on the information of the ground) be obtained; for a difference between "obtained" and "actual working"

Rates must exist.

3 With my letter No 1253 dated 3rd October 1871, I forwarded for the information of Government a form of Data of prices of bricklaying and other materials. The Schedule is beginning to prove very useful as I insist upon each Range Officer to fill in the Rate Column upon actually calculated data. This necessarily also requires the Overseer to have a knowledge of the details as well as the Values of each Talook.

4. So far as practicable each of these Returns is checked in my Office and Range Officers have been informed how very desirable it is to thoroughly scrutinize each item in the Return for one Half Year as it will save much time and trouble in passing subsequent Returns if they noticed afresh on their Overseers noting differences in Rates on any particular Item during the preceding Half Year.

5

5. So far as this Office is concerned, the object for getting these Data Schedules is to facilitate the checking of Rates given in Estimates, but this does not answer the object the Accountant General has in view that such Schedules should serve to show the Rates at which works of various description are being done.

6. Your note of opinion with the Accountant General in the matter, that the Executive Officer having to deal with the detail of Accounts, can alone supply such Schedules based upon actual working Rates.

At present the Accounts Office is of no practical help to Superintending Engineers as they are kept as best they can, any Expenditure on Estimate being exceeded. This information, as remarked before, can only be obtained when a Superintending Engineer is on tour. Most Range Officers under the false impression of getting

Remedy trouble part of from day to day Report-
ing such matters or to send in supple-
mental or revised Estimates until such
a course become inevitable. Others, from
a sad Closely looking into these details them-
selves, allow Estimates to be exceeded and
then submit revised or supplemental
Estimates. It must therefore be managed
that some strict and timely Control to
Check any tendency exceeding Estimate,
is absolutely called for.

7. Unless Some very much mistaken,
the Schedules which the Accountant
General requires the Controller & Com-
pile would be practically useless, if they
are to be prepared for each District: Of much
less use would they be if prepared for a
Division which is Comprised of two or three
Districts

My reason for saying so is, that the
rates between some of the Talukhs, even
neighbouring Talooks, differ and, at times
so widely, that they would form no basis

for check-work and the object of the
Compilation would thereby be wholly
defeated. To be sure therefore, I should
say that these Schedules should be for
each Taluk.

Then again, the Compilers of these
Returns must necessarily have some
knowledge of the various kinds of work they
should enter or the result would be that
the Direction as well as the Construction
branches of the Department, will have
a lot of useless information stored on to
them while items of importance would
probably be omitted.

8. Schedules Compiled on actual rates
would enable Superintending Engineers
to Check the Rates in Estimates with much
greater accuracy than on the data referred
to by me, and which is in use in this Division.
These Schedules of actual working rates might
be supplied annually to Divisions and
to Sangers.

9. It is to be regretted that the
Accountant General has not sent

as far as I can gather from the papers before me, some officers of the Schedules, as well these before one, a better insight of the intrinsic Value of such pecan might be obtained.

Thanking

you

Sincerely

Supervising Engineer

3rd Division.

Lieut Col U.S.A.

W

From, 18
The Superintending Engineer
3rd Division.

To,
The Secretary to Government.
Public Works Department.
Fort Saint George.

No.

Dated
Received 18

Sup.t Engr.s Office 4th Div.n
Madras 21st October 1871

From,
Colonel C. V. Wilkinson R.E.
Superintending Engineer 4th Div.n.

To,
Colonel J. Carpendale R.E.
Secretary to Government P.W.D

Sir,

With reference to Para. 2 of the Government Order dated 22nd September 1871 No. 2424 I have the honor to state that it will be much easier for the Controller to prepare the Statement called for by the Government of India than it will be for the Superintending Engineer, if I understand rightly, a comparison is required between the present schedule rates and that at which the works have actually been carried out.

2. Price lists and Schedules of rates are sent to the Controller of Public Works Accounts to enable him to check the expenditure on works of which he receives detailed accounts.

Under

Under the system in force the Superintending Engineer receives no detailed accounts of expenditure such as those sent to the Controller so it will not be possible for him to strike out the rates from the results obtained in actual work. It is the actual rates that it appears the Government of India require, they can of course be prepared by the Range Officer but his Office is already overworked, they can also be prepared by the Superintending Engineer but it will entail the submission of duplicate copies of the documents that only go to the Controller whereas the papers are now always sent to the Controllers Office and where the required return can be more easily made out.

3. As nearly all work in my Division is done by Contract it is impossible to compare the Schedule

schedule rates with the actuals.

I have the honor to be
Sir
Your most obedient Sv.

Arthur Cotton
Supg Engr 1st Dn

Superintending Engineer's Office
Lt. Dn. Division
Madras 12th January 1875

No 4170.

From

Colonel L. V. Wilkinson RE
Superintending Engineer
Lt. Dn. Division

To

Colonel J. Carpendale RE
Secretary to Government
PW Department

Sir

I have the honor to reply to Government Order
No 18 dated 8th January 1875 which
has been laid before me with Chief Engineer's
Order No 4991 dated 21st October 1874, on the subject of the
Telegraph office at Salem, that I concur in
recommending that the progress report
herewith submitted with the information
given in the last column
and that the same form of Government
Order as issued in the case of
Coimbatore.

2 I consider that the contract has

Rd 12 Jan 1875
5582

Rd 22 Jan 1875
5582

Chief Engineer's Office
Lt. Dn. Division
Madras 20th January 1875

No 4991

From

Colonel L. V. Wilkinson RE
Superintending Engineer
Lt. Dn. Division

To

Colonel J. Carpendale RE
Secretary to Government
PW Department

Sir

I have the honor to submit herewith
for the information of Government
a Progress Report of the
Salem Telegraph Office
with the usual remark
that the Contractor will be
called upon to complete the
Building as per the
Plan and Estimate
and that the
Office will be ready
for occupation
by the end of March
next.

I have the honor to be
Sir
Your most obedient
humble servant

very much over estimated the extra work that would be entailed on his Office, as each of 279 counties in my Division mentioned in para 6, only two would have to be examined for the preparation of a schedule of rates, all the others being under execution or contract.

I beg to add hereby therefore that any thing which would entail on his Office extra work.

3. "In connection I would also suggest that the Secretary to Government of India keep the Inspector General of Roads in every "thing that specially affects the Executive "Officer to watch & superintending Engineers "by preparing such information as may "be required to guide them in working "up estimates received."

I have the honor to be
Sir
Your Most Obedient Servt

Lieut Colonel
Executive Engineer 4th Div.

Superintending Engineer's Office, 5th Division.
Cuddalore 18th January 1872.

№ 229

From,

Captain James Vetch R.E.,
Officiating Superintending Engineer,
5th Division.

To,

Colonel J. Carpendale R.E.,
Secretary to Government P.W.D.,
Madras.

Sir,

With reference to G.O. №28 of 8th Instant on the matter of the Schedules of Rates called for by the Government of India, I have the honor to state that it appears to me very immaterial by whom these Schedules are prepared, but that I conceive it can be far more readily done in the Superintending Engineers' Offices, they having far readier access to the Records &c. of the Range Officers, and having also greater opportunities for personal Communication with the Range Officers, from whom of course the greater part of the information required must come.

2. The Schedules by whomsoever prepared should be prepared for the use of Superintending Engineers, whose very proper duty should be

be to check and scrutinize rates, with which it seems to me the Controller should have nothing whatever to do.

3. If the Controller is to be vested with this power, as would seem to be contemplated by the Government of India, it would be far better to relieve Superintending Engineers of the trouble and responsibility attaching to it. It is same a sheer waste of time to put two men to do the same work, the one being in my opinion at least far less competent to perform it than the other. With however great care these Schedules are prepared there must be occasional deviations from them to account for these would entail, if the Controller is to set in judgment on them, a great deal of correspondence which is equivalent to delay of work, and if I understand aright, the Controller does not desire the duty, and is unprepared to undertake it without additional Establishment, and I think he is quite right.

4. The system of check and counter-check is, I think, one of the curses of this Department, operating fearfully to accumulate correspondence, and retard work.

5. I think then that the preparation of these Schedules can be best performed in the Superintending Engineers Offices, that the check and scrutiny of Rates should rest with the Superintending Engineers, and I would further suggest that the contemplated Schedules be revised annually instead of Half-yearly, as the changes likely to occur in 6 months are so very trivial that one document will be almost a literal transcript of that of the preceding Half year.

I have the honor to be
Sir,
Your most Obedient Servant,

Lewis Tellet Captain R.E.
Officiating Superintending Engineer,
5th Division.

No 881 -

No 8 January 1872
51

Public Works 1872 Department
Dist of Govt Orders
From
No 318
The Offg Supt Engr
5th Circle.

To
The Secy to Govt P.W.D.
Madras.

Dated 18th January 1872
Rec'd 22nd January 1872

No 229.

Schedules.

Reporting his opinion that the preparation of the Schedule of Rates can be best performed in the Supt Engineers' Offices, and that the sanctioning of rates should rest with the Supt Engineers; also suggesting that the Schedules be revised annually instead of April yearly.

No 118 dated 4th January 1872

Ack
Intimate

No 236

Supt Engineer's Office, Camp Cochin 10th February 1872.

From,

The Supt Engineer,

Ist Division.

To,

The Secretary to Government,

Fort St. George, Madras.

Sir,

In reply to G.O. No 28 of the 5th January 1872, I have the honor to express my opinion that as pointed out by the Secretary to the Government of India in his letter quoted with the G.O. under reply, the Schedule of Rates can be more accurately prepared by the Contractor than by Superintending Engineers. The Range Progress Reports supplied to the Contractor give the Quantity, rate, and Cost of Each Sub head of Estimate, which as such can only be seen by the Supt Engineer on Inspection of Ranges and the several ——— registers of works in progress, as the Progress Reports submitted to Supt Engineers give only such information as is necessary under G.O. No 2986 dated 9th October 1865. Under G.O. No 1534 dated 5th June 1865, Abstracts of all Sanctioned Estimates are regularly supplied to the Contractors who draw from the Range Officers Progress Reports

Rec'd 5th January 1872. Supt Engineer's Office, Camp Cochin 10th February 1872.

From,

The Supt Engineer,

1st Division.

To,

The Secretary to Government,

Fort St. George, Madras.

Sir,

In reply to G.O. No 28 of the 5th January 1872, I have the honor to express my opinion that as pointed out by the Secretary to the Government of India in his letter quoted with the G.O. under reply, the Schedule of Rates can be more accurately prepared by the Contractor than by Superintending Engineers. The Range Progress Reports supplied to the Contractor give the Quantity, rate, and Cost of Each Sub head of Estimate, which as such can only be seen by the Supt Engineers on Inspection of Ranges and the several ——— registers of works in progress, as the Progress Reports submitted to Supt Engineers give only such information as is necessary under G.O. No 2986 dated 9th October 1865. Under G.O. No 1534 dated 5th June 1865, Abstracts of all Sanctioned Estimates are regularly supplied to the Contractors who draw from the Range Officers Progress Reports

Rec'd 5th January 1872. Supt Engineer's Office, Camp Cochin 10th February 1872.

From,

The Supt Engineer,

1st Division.

To,

The Secretary to Government,

Fort St. George, Madras.

Sir,

In reply to G.O. No 28 of the 5th January 1872, I have the honor to express my opinion that as pointed out by the Secretary to the Government of India in his letter quoted with the G.O. under reply, the Schedule of Rates can be more accurately prepared by the Contractor than by Superintending Engineers. The Range Progress Reports supplied to the Contractor give the Quantity, rate, and Cost of Each Sub head of Estimate, which as such can only be seen by the Supt Engineers on Inspection of Ranges and the several ——— registers of works in progress, as the Progress Reports submitted to Supt Engineers give only such information as is necessary under G.O. No 2986 dated 9th October 1865. Under G.O. No 1534 dated 5th June 1865, Abstracts of all Sanctioned Estimates are regularly supplied to the Contractors who draw from the Range Officers Progress Reports

Rec'd 5th January 1872. Supt Engineer's Office, Camp Cochin 10th February 1872.

From,

The Supt Engineer,

1st Division.

To,

The Secretary to Government,

Fort St. George, Madras.

Sir,

In reply to G.O. No 28 of the 5th January 1872, I have the honor to express my opinion that as pointed out by the Secretary to the Government of India in his letter quoted with the G.O. under reply, the Schedule of Rates can be more accurately prepared by the Contractor than by Superintending Engineers. The Range Progress Reports supplied to the Contractor give the Quantity, rate, and Cost of Each Sub head of Estimate, which as such can only be seen by the Supt Engineers on Inspection of Ranges and the several ——— registers of works in progress, as the Progress Reports submitted to Supt Engineers give only such information as is necessary under G.O. No 2986 dated 9th October 1865. Under G.O. No 1534 dated 5th June 1865, Abstracts of all Sanctioned Estimates are regularly supplied to the Contractors who draw from the Range Officers Progress Reports

Reports is able to check the rates, and
supply satisfactory Schedules. I consider
it unnecessary and undesirable that the
Controller should examine and report
upon Estimates prior to their submission
for the Sanction of Government. This
duty clearly belongs to Supt Engineers
who before submitting the Estimates
to Government satisfy themselves that
the Rates are reasonable and in ac-
cordance with the Schedules to be
hereafter furnished them by the Contractor
Annually.

I have the honor to be
Sir,
Your most obedt Servant
W Bernard Trant
Supt Engineer

2

No 1911 Superintg Engineer's Office 8 Dn
Ore Circuit Vagaciebum 21st March 19

From

Lieut Colonel R N Roberts RE
Superintg Engineer 8 Dn,

To

Colonel J Carpendale RE
Secretary to Government D&Pr

Sir,

I've reply to G O 8 January
1872, No 28, and your reminder
No 20, dated 19 ultimo, calling
for a report on the preparation
of schedules of rates of work
of different kinds actually current
in this Division, I have the honor
to state as follows:—

2 Whatever may be the custom
of the Government of India in regard
to rates being fixed by their Controller,
the system here practised of rates
being fixed by the superintending
Engineer has no alternative,

Rec'd 5 Jan 1911
Superintg Engineer
8 Dn

Rec'd 5 Jan 1911
Secretary to Govt
D&Pr

Dated Ootacamund
the 2nd September 1910

Sir,

In reply to your letter No 1911 dated 21st March 1910, I have the honor to forward herewith a statement showing the rates of different kinds of work actually current in this Division.

2 The rates are fixed by the Superintending Engineer, who has no alternative in the matter.

I have the honor to be
Sir
Your most obedient servant
Sd/ R N Roberts Lieut Colonel
Superintending Engineer
8 Division

pri as much as the Controller, though so called is de facto merely Accountant and Paymaster, and were the name of Controller dropped, it appears to me that much confusion of ideas would be avoided.

3. Under existing circumstances it must be manifest that it would be simply ridiculous to impose upon the Controller at Madras the fixing of rates in the different Divisions of this Presidency; and the amount of additional correspondence that such a system would entail is something too awful to contemplate.

4. Moreover the circumstances of one work differ so much from another that except within certain limits it is not possible to fix rates without local knowledge. Rates often vary in different localities of an Executive charge more than they vary in different Executive charges. And not only this, but in the same localities rates differ under our present system with the object of the work, that is to say Villagers interested in the speedy repair of an irrigation work will undertake it at rates for which they would not work on the roads.

5. These and similar circumstances can be known only to the Superintending Engineer with local knowledge and not to the Controller, and it requires the most constant watching on the part of the Superintending Engineer to regulate these rates.

6. I may mention, as an instance in point, that since I have had charge of this Division I have reduced the rates all round

on an average about 25 per cent - How could the Controller at Madras venture upon such a sweeping reduction? It was only, however, by most careful enquiry on the spot as to the cost of materials, and by ascertaining the actual cost of work executed, that I arrived at a conclusion that authorized my acting as I did. - This reduction, moreover, has resulted in superior work - For it would appear that natives are not slow to understand that those who are unable to check properly the cost of work will show equal inability in gauging its quality. -

7. I hope to be able to submit shortly a form of schedule showing data and rates for this Division, but in consequence of the extreme confusion in which the Department has unfortunately been allowed to fall in this Division, it has been rather an up hill task.

8. I have only in conclusion to remark that I cannot understand the necessity of these frequent submissions of "complete and exhaustive" schedules, as directed by the Government of India - In the War Department, in England, the schedules for each station stand good for 3 years, and as the people of this country are far more conservative than is the case with us at home, I cannot myself see any justifiable or legitimate cause or excuse for throwing every 6 months on this Department the laborious duties of preparing complete & exhaustive schedules for submission to the Government of India. With the form of schedules that will be submitted by me an attempt will be made however, to reduce this labor

to a minimum

I have the honor to be
Sir
Your Most Obd. Servant

Recd. Advice Visd: Col. RE
Superintg Engineer &c

P. W. 1872 Department
Progress for Week ending 9th
From 8th 1872
The Supg Engineer
8 Division
To
The Secy to Govt
P. W. D.

Dated 21st March/72
Regd 28th "
Read 3rd April 1872

Reports on the
preparation of
Schedules of
rates of work of
different Kinds
which may occur in
this Division
during the ensuing
year

Special Executive Engineer's
Office Wynaad Vythery
13th January 1872

No. 19.

From

The Special Executive Engineer
Wynaad

To

The Secretary to Government
Department Public Works
Madras.

Sir,

In reference G. O. No 28 dated
8th January 1872.

With reference to above
have of opinion that there can be
little difficulty experienced by Divisional
Officers in drawing up schedules of
Rates from the reports of their Range
Officers, and the result of their own
observation; but to assist them in this
it would probably be better for Range
Officers to furnish each half year, a
copy of the entries in their Registers
of work, during that period, as the
monthly Progress report do not give
sufficient

sufficient details from which to compile a schedule of rates

2. I think a short and easy form would be the present heading of the Work Register, with 3 lines added showing

1st Quantity of work under each sub head and cost as per previous half years report

2nd Quantity and cost during the half year to which report refers

3rd Total to be carried forward to next report.

3. I certainly think that the duty is one far more within the province of Officers who have to countersign and submit estimates to Government, than of the Accountant, independent of the question of cost for extra establishment.

I have the honor to be

Sir.

Your most Obedient Servant

M T S Kennedy Major

Special Dy Engineer, Mysore

Ex. Documents. No. 52. 3d Session. 42d Congress.

A 96

Exhibit No. 20

No. 1572 Refers to
No. of Letter Sent
From Jan. 2 1873.
The Special Asst. Engineer
Mississippi

To
The Secretary to Govt.
Levee Com.
Calcutta

Date Jan. 15
Rec'd 16 January 1873.

Reports upon the preparation of the Schedule of Current rates.

No. 1153-1154. 6 Enclosures

11

P. W. 1872. Oct. and Nov. 85.

No. 877 A.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.

To

THE Secretary to the Govt. of Bombay
P.W. Department

Dated Fort William the 30th January 1872.

No. 877 J.G., dated 10th Jan. 1871.

SUBJECT.

Regarding preparation of Schedules of the rates of work of different kinds usually current in each Division.

The undersigned is directed to invite attention to the reference from this Department marginally noted, and to request the favour of an early reply thereto.

I have &c.

Deputy Secy. to Govt. of India.

No. 1153-1154 dated 9th May 1872.

12

Dec. 22nd Answd 22nd Jan. 1872 No. 250
18 Abl/pre Bl. 208

P. W. 1872 Depart.
Pro. of Govt. for May No. 1607.

No. 877/2 A.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.

To

The Secy to the Govt of Madras, P. W. Deptt

Dated 22nd March 1872.

Recd 30

No. 877/4/11, dated 10th Nov. 1871.

SUBJECT.

Asking explanation on certain points in regard to the preparation of the schedule of rates of work of different kinds by Controller of P. W. Accounts.

The undersigned is directed to invite attention to the reference from this Department marginally noted, and to request the favour of an early reply thereto.

J. Hopkins
for Depy. Secy. to Govt. of India.

No. 1153-1154 - 6 May 72

No. 98

Rec 22nd April 72 A. 22nd
24/4/72 R. 20

13

Public Works Department

No. 1153

Proceedings of the Madras Government

Read the following

From The Ag Supdg Engr 1st Dn	No. 3178 dd 18th January	172
From do 2nd do	87 dd 23rd February	"
From do 3rd do	1558 dd 3rd October	1871
From do do	77 dd 9th April	1872
From do 4th do	2421 dd 12th October	1871
From do do	4870 dd 17th January	1872
From do do	229 dd 18th	"
From do 6th do	381 dd	February
From do 7th do	235 dd	"
From do 8th do	4916 dd 21st December	"
From do do	dd 12th January	"
From The Special Ex. Engr Wynaad	dd February	"
From The Govt of India No. 43 Account General	dd March	"
From		

After a full consideration of the reports of the Superintending Engineers and the Controller of Public Works accounts, the Government are confirmed in their opinion that the duty of checking and reporting on estimates and rates should devolve upon Superintending Engineers and that they are best able to prepare the schedules of rates referred to by the Government of India in their Circular

circular No 381 of the 12th July

1871.

The Schedules should be carefully revised from time to time with reference to the cost of work actually executed as shown in the Range accounts and particularly in the Register of works and the Government concur in the opinion expressed by the Special Executive Engineers Wynaad that it would facilitate the task of Superintending Engineers if they were furnished periodically with copies of the Register of works in each Range modified in form to exhibit clearly the information

required. That is to say, in addition to the quantity and cost of work under each sub head the resulting rate should be shown. The number of the plan in the Range Schedule of rates corresponding to the character or class of work under the sub head should be attached and work executed at contract rates should be distinguished from that carried on by departmental agency. Until the rates in the Schedules can be considered well established the Range lists and the copy of the Register of works should be sent to Superintending Engineers half yearly.

Subsequently it will be
sufficient to prepare the
statements once in the year.
The Divisional Schedules
will be forwarded to the
Chief Engineer who will
compile the abstracts re-
quired by the Govt of India.

Rec'd
10-4-72

[illegible]

[illegible]

To The Secretary to the
Government of India.

Sir,

In reply to the
letter of the Government
of India marginally
noted I am directed
to inform you that
after reference to the
Controller of Public Works
Accounts and Super-
intending Engineer
the Honorable the
Governor in Council
is

P.W. Dept.

No 1157.

10th Nov. 1871. No 877 A.G. of India

[illegible]

[illegible]

[illegible]

To The Superintending Engineer
Central Circle

Dated 28/5/72

Rec'd 22nd April 1872 - 28

is confirmed in his opinion
that the duty of Carefully
the rates paid for work
as well as checking and
reporting upon Estimates
should devolve upon the
latter Officers, who are
the professional advisers
of Government and who
with their intimate
knowledge of local
peculiarities affecting
rates and their close
correspondence with the
Range Officers actually
carrying out works, are
far better fitted for it
than the Controller, who
~~is not required to be,~~
~~and in fact he is not~~
an ~~act~~

an Engineer.
~~of professional standing~~
~~Utility, practical knowledge~~
~~Systems employed by~~
~~the Superintending Engineer~~
~~Circle, Engineers~~
~~&c., the Engineers~~

2. It follows
from to point out that
the detailed Schedules
of rates for each Divi-
sion, directed to be
prepared by the Govt
of India in their Cir-
cular No 381 of the
12th July 1871, can be
most readily and
correctly furnished by
the Superintending
Engineers but that it
is at the same time
obvious

obvious that the general
abstract must be compiled
in a Central Office with
which all these Officers
are in correspondence,
and further that it
will also be necessary
that the Schedules should
be carefully scrutinized
in order that discre-
-pancies may be rec-
-tified and that uni-
-formity in nomencla-
-ture, in the classification
of the different descrip-
-tions of work and
in the units of mea-
-surement adopted may
be secured.

3 Item to add

that

that apart from the
fact explained by the
Controller in his
letter accompanying
that the Progress
returns furnished to
him at present only
exhibit rates for
work executed during the
current month and not for work
up to date & that consequently
they do not supply
the necessary informa-
-tion, it is the connec-
-tion of this Govern-
-ment that the investi-
-gations indicated
are entirely beyond
the province of a
Controller of Accounts
Controller, who is not
necessarily

necessarily an Engineer and that centralisation in reference to such matters should be effected in the Office of the Chief Engineer, who should be aided by a Subordinate staff of a sufficiency professional character to cope with subjects of this nature.

Lastly to say that, it must be admitted that aid of this character has not yet been supplied and that it was a knowledge of the defect which induced the Government to provide in

think this had better be omitted - no increase of establishment can possibly be granted and indeed I do not think that any special staff for this purpose is required - the examination and condensing of schedules is a simple matter that any Clerk guided by the Chief Engineer or Under Secretary can manage.

J.

in their scheme for the reorganization of the Department, submitted to the Government of India last year, what was required in this direction? Notwithstanding this deficiency the Government must consider that the work of digesting the schedules furnished by the Superintending Engineers can hardly be entrusted to any other Officer, and I desired to add that to this view effect will be given in order

to

to meet the requirements of the Supreme Government.

4. In reference to the question of the desirability of deriving the rates for estimates from the cost of similar work previously executed, adverted to by the Govt of India in their Circular. Jam to observe that if the schedules are periodically revised from such data they should afford correct information on a basis for estimates and rates in order to enable Superintending Engineers to carry out this revision readily and comprehensively they should be furnished periodically with Copies of the Register of works of their Charge Officers. Jam to state that orders to this effect will be issued and to add in conclusion that the Govt consider that although it may be desirable at first to correct the schedules at half yearly intervals, it will be sufficient, so soon as these rates are well established to revise them once a year only.

Dept. 8/5/72 via Secy Govt Genl No 1158 dt 23/5/72 No 28 Genl 8th June 1872

Revised 10-4-72

Ofer 790, 5012, 260, 318, 748, 820
628, 213, 4734, 361, 1020, 1607,
785, 783

Govt. of India Sd. of
Public Works.

Superintending Engineers
and
Jo Undersecretary to the
Govt of India

Simla 1st July 1853-1854.

No 88 Opy & 100

The Rules of Rates. Taking
down in Correspondence
Relative to the preparation
of Schedules of Rates of work.

Colonel Edmondstone has
the duty of checking
& Scrutinizing Estimates sent
up for the Govt and
and has many occasions
to prepare the Schedule of Rates

1153-54.

6.5.1892