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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Public works DEPARTMENT

G.O. No. / B.P. No.	854W	Press. / Mis.
Dated	15-3-1883	188 .

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

No. 119.

Read—again—
G.O., dated 5th January 1882, No. 7 W.
" " 2nd February 1883, No. 371 W.

Read—also the following telegram from the Chief Engineer, Vizagapatam State Railway, Vizianagrum, to the Secretary to Government, Public Works Department, dated 12th March 1883.

Your demi-official to hand, thanks. Please do not take further trouble about extra allowance, but alter west to north of Párvatipur for Examiner.

No. 120.

Order—dated 15th March 1883, No. 854 W., Public Works.

The allowances admissible under G.O., No. 6 W., dated 5th January 1883, will be passed for all journeys north and west of Párvatipur and Sálúr.

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, Vizagapatam and Raipúr Survey.
" Consulting Engineer for Railways.
" Examiner, Public Works Accounts.

Exd. A. F. Goodall.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of | 1883 | Madras.

PUBLIC WORKS.

Dated March, 15th.

Read. *Enct.*

G.O., 15th March 1883, No. 854 W.

MARCH.
Nos. 119-120.

Vizagapatam-Raipur Survey Party

Scale of travelling allowances, &c., admissible to members of the —.

2/854

Proceedings of the Madras Government, Judicial Department, 5th May 1868.

Read the following papers:—

No. 39. From the Inspector General, Indian Medical Department, to the Chief Secretary to Government, Fort Saint George; dated Fort Saint George, 3rd April 1868, No. 136.

I have the honor to bring to the notice of Government the great difficulty experienced by this Department in supplying Medical Subordinates for duty at Jeypore, owing to the constant reliefs required on account of the unhealthiness of the climate.

2. Since August 1864 seven subordinates have been sent to that station, six of whom have been disabled by fever, and had to quit on sick leave; and the average time each of them remained at Jeypore was little more than seven months.

3. In the hope of devising some remedy for this state of things, I have been in communication with Captain Smith, Assistant to the Agent to the Governor of Fort Saint George in Vizagapatam, and with Lieutenant Briggs, Superintendent of Police at Jeypore, whose views on the subject I have now the honor to submit for the consideration of Government.

4. Captain Smith considers one chief cause of the Medical Subordinates breaking down so soon to be, the very bad house accommodation at Jeypore. The only building available for them is a thatched mud hut, consisting of one room, 14 feet by 12, badly situated, and in bad repair; the roof leaking much when the rains set in and not then repairable, as thatching materials are not procurable at that season.

5. With regard to provisions, Captain Smith says, nothing is procurable in Jeypore except rice, fowls, and occasionally a sheep. Every thing else, from flour upwards, has to be brought from Vizagapatam, a distance of about 150 miles; and the expense of carriage is very great, so much so that it is simply impossible for an Apothecary, if he be a married man, as almost all our Apothecaries are, to procure the comforts necessary for health, even with the help of the 30 Rupees extra pay granted by the Order of Government noted in the margin.

Judicial Department, No. 1022, of 29th June 1863.

6. Captain Smith is of opinion that the Medical charge at Jeypore should be put on such a footing as to make it a desirable post, rather than one to be avoided, as it certainly is at present, and with this view he suggests, (1st), that a comfortable house should be provided by Government for the Apothecary there, as has already been done at Parvatipoor and some other stations in the hill tracts; and (2ndly), that the pay of the Apothecary should be raised to Rupees 150, and that of the Dresser to Rupees 50 a month, a room being also provided for the latter in the house built for the Apothecary.

7. Mr. Briggs names the same sum, (Rupees 150 a month), as the smallest which would, in his opinion, enable an Apothecary at Jeypore to obtain the comforts requisite for the preservation of health. He mentions, in addition to the high price of all articles of food the necessity of considerable additions in the shape of warm clothing and blankets, not only to the ordinary kit of the Apothecary himself but to that of his servants also, who, unless these articles be supplied to them, will seldom, if ever, agree to expose themselves to a climate which they know to be unusually trying.

8. Mr. Briggs also strongly urges the advisability of providing a comfortable house, well raised from the ground, and impervious to the weather.

9. I would respectfully recommend these suggestions for the favorable consideration of Government. It is an admitted fact that in extremely malarious climates, such as that of Jeypore, what may be considered *luxuries* under ordinary circumstances become absolute *necessaries* for the preservation of health; and, considering the pecuniary loss to Government, direct and indirect, occasioned by so many of its servants being disabled for longer or shorter periods, and by the constant reliefs thus necessitated, I believe that the proposed increased expenditure would be *apparent* only, and would *in reality* effect a saving to the State.

No. 40. From the Inspector General, Indian Medical Department, to the Chief Secretary to Government, Fort Saint George; dated Fort Saint George, 22nd April 1868, No. 152.

With reference to the Under Secretary's Memorandum, No. 142, of the 18th instant, I have the honor to annex, in the margin, the salary and allowances drawn by the Medical Subordinates serving at Jeypore.

	Salary.	Special Allowance.
	Rs.	Rs.
Assistant Apothecary	70	30
2nd Dresser.....	24½	10½

No. 41. ORDER THEREON, 6th May 1868, No. 730.

The Inspector General, Medical Department, brings to the notice of Government in the first of the foregoing letters, that, owing to the evil effects of climate, to the want of good quarters, and to the great cost of the necessaries of life at Jeypore, there have been frequent changes in the Medical Subordinates stationed there. It is stated that since August 1864, no less than seven subordinates have been obliged to quit this station, that six of them were disabled by fever, and that great difficulty is experienced in supplying subordinates for duty at Jeypore.

2. Under these circumstances the Governor in Council resolves to sanction the immediate provision of suitable quarters for the Apothecary and Dresser stationed at Jeypore. Orders will be issued in the Public Works Department for the early construction of the buildings required.

3. The Governor in Council is also pleased to sanction the allowance of the Apothecary being raised from Rupees 30 to Rupees 80, and the allowance of the Dresser from Rupees 10½ to Rupees 25½, which will make the salaries of these subordinates equivalent to Rupees 150, and Rupees 50 per mensem, respectively. The increase will be included in the monthly statement of fresh charges submitted to the Government of India.

Salary.		Allowance.	
Rupees 70	+	80	= 150
„ 24½	+	25½	= 50

(True Extract).

Chief Secretary.

To the Inspector General, Indian Medical Department.
„ Public Works Department.
„ Accountant General.
„ Agent to the Governor of Fort Saint George in Vizagapatam.

Exd. F. R. Bartleman.

No. 89. Read the following letter from T. MOSS, Esq., Officiating Controller of Public Works Accounts, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Fort St. George, 26th August 1873, No. 3,269:—

HAVING with reference to G. O., No. 1,587, of the 18th June 1873, obtained the accompanying copies of orders relating to the rate and nature of the special allowances passed to officers of the Revenue and Police Departments serving in the Jeypore Hill tracts, I find that the allowances are as follow:—

Copies of the Orders of the Government of India, Nos. 2,922 and 1,054, of the 2nd July 1863 and 27th June 1864.
Copy of G. O., No. 1,828, dated 25th November 1863.
Copy of G. O., No. 219, dated 19th February 1864.

Officers of the Revenue Department and their establishments.	Double tentage or batta.	G. O., Judicial Department, No. 1,828, dated 25th November 1863.
Officers of the Police Department.	Rupees 10 per diem.	G. O. G. I. in the Financial Department, Nos. 2,922, and 1,054, of the 2nd July 1863 and 27th June 1864, respectively.

Subject to the condition that a halt in camp of more than one week will entail reduction of allowance by one half, and that when the halt exceeds a fortnight the allowance altogether ceases. G. O., No. 219, dated 19th February 1864, Revenue Board's Proceedings, No. 5,293, dated 23rd August 1873.

2. As these allowances differ in character, I have the honour to request that I may be informed which description may be passed to officers and subordinates of the Public Works Department, and whether their claims are to be subject to the rules quoted regarding halts.

3. I have further to inquire whether the orders of the 18th June last, referred to above, are to have retrospective effect, as the District Engineer, Vizagapatam, considers that they apply to claims for February and subsequent months; also whether they are to be regarded as granting authority for tents being dispensed with during the time only the officers are employed in and above the Potingi Ghaut, and not during halts at the head-quarters, Vizianagram, of the Jeypore Ghaut Range.

No. 89A. ORDER THEREON, 6th October 1873, No. 2,449.

ESTABLISHMENT, No. 5.

THE Controller of Public Works Accounts is authorized to pass double Travelling Allowance to Public Works Officers employed on the new Potingi Ghaut beyond Salur in the low country, or on the Jeypore plateau without reference to halts or the use of tents.

2. The orders of 18th June will be considered to have retrospective effect.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

To the District Engineer, Vizagapatam.
„ Officiating Controller of Public Works Accounts.
Exd. E. C. Shunker.
Spare Chpies.

Govt. of India. Madras.

PUBLIC WORKS.

To

THE DISTRICT ENGINEER, VIZAGAPATAM.

&c., &c., &c.

Dated October 6th

Encl. Read

G. O., 6th October 1873, No. 2,445.

OCTOBER

Nos. 89-89A

Travelling Allowance.—Authority granted for passing double travelling allowance to Public Works Officers employed on the new Potingi Ghaut beyond Salur in the low country, or on the Jeypore plateau with reference to halts or the use of tents, and the Controller of Public Works Accounts informed that the orders of 18th June are to have retrospective effect.

4/8554.

Proceedings of the Madras Government, Public Works Department,
18th June 1873.

No. 235. Read the following letter from Lieutenant-Colonel W. FAREWELL, Inspecting Engineer for Ports and Communications, to Colonel G. W. WALKER, R.E., Chief Engineer and Secretary to Government, Public Works Department, dated Chepauk, 27th March 1873, No. 49/9 :—

With reference to the orders of Government noted in the margin,* I have the honour to report that I have inspected the roads and ghauts leading from the coast at Vizagapatam *via* Salur, Tadevalsa, and Pauchipenta, to the Jeypore hill country, the road across the plateau to Koraput, the head-quarter station of the Assistant Agent, and from thence the plateau road, and Mr. Turner's ghaut leading to the town of Jeypore, situated in the champaign country to the west of the hills.

1 Map, A.
1 Route from Potingi to Raipur, marked B.
1 Sketch Map, C.
1 Section of Ghauts, D.
1 Survey of Mr. Turner's Tadevalsa Ghaut, E.

* G. O. No. 2,774, dated 26th Nov. 1872.
Do. ,, 3,133, ,, 19th Dec. ,,

2. Government being already in possession of various able reports in regard to the geographical position of the Jeypore Zemindary, giving all statistics in reference to its physical aspect, produce, climate, inhabitants, etc., it is unnecessary for me to remark further on these subjects. I therefore confine myself simply to the state of its communications as they exist, and respectfully bring to the notice of Government my views in regard to their improvement, extension, etc., etc.

3. In the accompanying map, marked A., the Jeypore Zemindary boundaries are shown, and the most direct line of communication through the country from the principal seaport towns of the Vizagapatam District, viz., Vizagapatam and Bimlipatam to the town of Raipur in the Central Provinces, is drawn in lake colour, the existing portions being lined continuously, and those it is proposed to complete merely dotted. I understand a railway is in course of construction to Raipur,* to which the communication under notice take will the position of a very important, if not principal feeder, etc., etc., while it will, at the same time, tend much to improve and open out a fertile and valuable country now without interior communications. The map shows that a tongue of the Jeypore territory, about seventy miles long by twenty or thirty broad, runs up between the Independent States of Bustar and Kalahundy, till, about ten miles north of the town of Raigurh, it meet. with the boundary of the Central Provinces, under the administration of the Government of India ; thus tolls or taxes on salt, etc., etc., I am informed, are only once paid by carriers who travel this route which, though much of it consists of mere jungle tracks, even now is a favourite one, and an immense traffic flows along it to and from the coast. The Assistant Agent, Mr. Turner, who is thoroughly acquainted with the wants of the Jeypore country, with which he has been so long intimately connected, quite concurs with me in the advisability of opening out this through line of communication with the coast ; and on my mentioning to him my views on the subject, assured me he had long seen the advantage of such a line, but had not brought it to notice from want of the support such projects invariably require Mr. Turner has travelled over much of the proposed line, and to him I am indebted for the information given regarding the country beyond the town of Jeypore to the frontier of the Zemindary, and from all he has told me of the features of the

* *Vide* Indian Traveller's Guide for March 1873.

country, I believe that no engineering difficulties will be met with, and that the line can be cheaply, easily, and rapidly constructed.

4. The proposed new road avoids the town of Jeypore, as, though it is the capital of the Zemindary, its situation immediately under the ghauts, in close proximity to a huge tank, much of which dries up in the hot weather, renders it a most unhealthy locality; the town is of no note, consisting of mere collection of wretched huts, with but a bazaar or two and a population of about 9,000 persons; its chief importance is that it contains the residence of the Rajah of Jeypore. Eventually, as the country is opened out, doubtless the interests of the capital will receive the usual impetus due to improved means of communication, and thus necessitate its being connected with the town Cheptaamb, through which the new line runs, which can easily be done.

5. The total distance from the coast to Raipur *via* Salur, Koraput, Cheptaamb and Raigurh is 317 miles, of which about eighty-one miles will have to be made by the Government of India in the Central Provinces, of the remaining 236 miles, sixty-seven from Salur to the coast have been made and about forty-seven miles of road, temporarily bridged, from Potingi to Cheptaamb has already been opened to traffic leaving, including the new ghaut from Salur and its approach in the plains, a length of about 122 miles to be taken in hand.

6. Statement B. enclosed gives the names of the towns, their distances apart, etc., etc., through which it is proposed to take the road in the Jeypore country; many of the towns passed through are already centres of trade, frequented particularly by the hill tribes of Jeypore and adjacent Zemindaries, who exchange their field produce for salt, etc., and unquestionably these towns will all increase in importance as soon as greater facilities for locomotion are provided.

7. Except for short distances, as there are no cart roads in the Jeypore country, goods are now carried either by pack-bullocks or cavady-coolies to the foot of the ghauts eastwards, whence from the towns of Salur, Rambadrapuram, and Gazzapatynagaram in the Vizagapatam District, the goods are laden on carts for delivery at the seaport towns of Bimlipatam and Vizagapatam, etc., etc.

8. The traffic on the whole line across the ghauts to and from the coast exceeds anything I have seen on a single line in any other part of the Presidency, while on the hills when any where near the road, I saw herd after herd of lades Brinjary bullocks and lines of cavady-coolies continually passing towards and from the old Pauchipenta and Mr. Turner's Tadevalsa Ghauts, and between the ghauts and the coast the cart traffic appeared very heavy.

9. The existence of traffic such as described seem sufficient to warrant investigations being made as to the probable remunerativeness of constructing either a tramway or narrow gauge railway from the town of Rambadrapuram to Vizagapatam, with a short branch of four miles to Bimlipatam. I believe this question has already been mooted by the Rajah of Vizianagram, and the project will, I am sure, meet with strong support from the mercantile community of Bimlipatam and Vizagapatam; the country through which the railway or tramway would pass is very easy, and, comparatively speaking, but little drainage is crossed; the line would pass close to the large town of Vizianagram, and generally its advantages are such that I deem the project worthy of the notice of Government.

Proceedings of the Madras Government, Public Works Department,
18th June 1873.

10. I noticed that the carts used in the Vizagapatam District are very roughly constructed, fragile looking vehicles, with wooden axles, and consequently cannot carry any thing like the load the bullock carts of the south do. Of the draught cattle employed at least nine-tenths of what I saw were buffaloes, and the few bullocks I met with appeared to me to be of an inferior breed; but I have no doubt that when direct communication by cart road is once established with the Central Provinces, the fine draught cattle from those Provinces will soon find their way to the coast and effect a revolution in the local system of carriage, as has been the case in Malabar and Canara, where, until the ghaut roads to the Coorg and Mysore countries were made, but few carts or draught cattle were to be seen, whereas now the tolls collected on the main lines of road only of these districts amount to close upon 73,000 Rupees.*

* Local Fund Budget of 1872-73.

11. I will now describe the existing communications from the coast inland. At the village of Chittavalsa, at the 16th mile of the road from and to the north of Vizagapatam and Waltair, the road is joined by a branch line four miles in length from the seaport town of Bimlipatam, and then, after a distance of thirteen miles, reaches the populous and wealthy town of Vizianagram; from thence it is continued a further distance of twenty-eight miles *via* Gazapatynagram to the village of Rambadrapuram. At this point a branch road of twenty-four miles in length runs nearly north to the Senior Assistant Agent's head-quarter station at Parvatipur, on which line also great traffic exists; from Rambadrapuram, the other branch of the road leading to the ghauts is continued for six miles in a westerly direction until it reaches the town of Salur, situated about ten miles from the foot of the old Pauchipenta Ghaut, and fifteen from Mr. Turner's Tadevalsa Ghaut.

12. The road from Rambadrapuram to Salur is now laid out to cross two large rivers, on the left bank of the most westerly of which the town of Salur is situated. Some three miles east of Salur these rivers effect a junction, four miles below which junction, as one river, they are crossed by the Parvatipur road; thus the present condition of the roads involves the construction of three large bridges at some time or another; this I propose should be avoided by a bridge being built at the point noted in the sketch map of these communications (marked C) herewith forwarded, and the roads diverted so as to admit of the bridge serving both the Salur and Parvatipur lines in addition to a more direct line from the foot of the proposed new ghaut. Considering the heavy traffic, the roads now in use are in excellent order, and the District Engineer proposes that they should be metalled throughout and treated as first class lines.

13. Town of Salur.—At present the town of Salur is very far from being in a desirable condition; without exception, I consider it to be the dirtiest native town I have seen in the district, and its shelter for travellers is very defective.

14. Road beyond Salur to the Ghauts.—Close to Salur for a mile or two, a road leading to the foot of Mr. Turner's Tadevalsa Ghaut has been commenced, *i.e.*, some of the earthwork has been completed; but the road cannot be used, and Tadevalsa is reached by a bandy track of some fifteen or sixteen miles in length,

the direction it takes and the villages it passes through are shown in the sketch map marked C; the line crosses the huge Rallagadda stream, draining the Tadevalsa and Pedda Bauregaum valleys at Mamadipilli.

15. Mr. Turner's Tadevalsa Ghaut.—From the small deserted village of Tadevalsa, situated two miles up a very narrow valley, the ascent of Mr. Turner's Ghaut commences; after following the left bank of the stream, with various slopes, (some of which are reversed) for two miles, the large Tadevalsa valley branch of the Rallagadda river is crossed, and the ghaut runs up on the right bank of this stream, and with six zigzags and every description of slope, from 1 in 8 to 1 in 228, distributed haphazard, first up and then down, evidently with the mistaken economical notion of avoiding blasting, in a distance of eight miles reaches the Sheeverah saddle, an approximate height of 2,460 feet above the foot of the ghaut, and from thence descends by irregular and some very steep gradients to the village of Potingi, a further distance of two and a half miles, making a total length from Tadevalsa to Potingi of twelve and a half miles; the trace has been widened and cleared to a width sufficient to admit of a cart being taken up the whole way, but in some places the revetments are so poorly constructed as to be likely to collapse at any moment from their own weight; and I believe that one heavy fall of rain will render much of the ghaut impassable even for pack-bullocks. Mr. Turner, the Assistant Agent, when visiting the ghaut in my company, himself described the whole ghaut as a mere "eye trace," opened out by a Native Maistry under his immediate direction, a few portions only, between the 2nd and 8th miles, having here and there been levelled and corrected by Mr. Assistant Engineer Turner and Mr. Overseer Fletcher. The whole trace, however, is so very irregular as to render it out of the question to try and improve it, and I can therefore only recommend its being abandoned entirely, which the mere fact of being able to avoid crossing the river twice as hereinafter pointed out would of itself justify.

16. The result of the close reconnoissance of the country made by Major Beatty, R.E., Mr. Nordmann, and myself, shows that great credit is due to Mr. Turner, the Assistant Agent, in having selected so favourable a line of communication with the plains as he has done, as though the work he has executed must, for the reasons given, be thrown out, I hope with the new ghaut head selected, a ghaut with a steady gradient, without zigzags, with its foot thrown some two miles further into the plains, crossing only the Pedda Bauregaum branch of the Rallagadda river, may without meeting with any very serious difficulty be worked out.

17. The features of the Tadevalsa, or, as I shall hereafter call it, the Potingi Ghaut valley, as indeed the features of the whole adjacent country above the ghauts, are intricate in the extreme, but in the Tadevalsa or Potingi Ghaut valley, to my mind, fewer obstacles will be met with than elsewhere.

18. Reconnoissance of country in the vicinity of the edge of the Ghauts.—Major Beatty, R.E., Mr. Nordmann, and myself spent several days in closely reconnoitring the whole of the country above the edge of the ghauts, between the head of Mr. Turner's Tadevalsa Ghaut and some eight or ten miles to the south of it, including a thorough examination of the old Pauchipenta and Mr. Turner's

Tadevalsa Ghauts. The enclosed diagram, marked D, gives the result of our barometrical observations of the two ghauts, and the various saddles and ridges visited, which appeared to be most worthwhile noting.

19. Potingi Ghaut.—I have marked the new saddle selected as the head of the new Potingi Ghaut; this saddle, close to the commencement of the old Pauchipenta Ghaut, in a direct line with the existing road to Koraput, is somewhere between fifty and sixty feet below the Sheeverah Saddle at the head of Mr. Turner's Ghaut, and is about the lowest saddle we found; for two miles below this saddle the ground falls gently to the Karedi water-fall at the head of a branch of the Rallagadda river, a fixed point, which an easy gradient of 1 in 28 or 1 in 30 will reach; from this point I have directed the trace to be continued, if possible, at a steady gradient of 1 in 19, till it runs into the low country at a short distance from Pedda Bauregaum, and from thence, after crossing the river, it can be taken to Salur, in a further distance of about ten or twelve miles, or, as noted in paragraph 12 of this report, direct to the bridge site marked in the Sketch Map C.

20. The deceptive and intricate nature of the ground is such as, in my opinion, to render it absolutely necessary that other trial traces should be made before anything can be decided as to which line will be the shortest and most economical to adopt. I have therefore, in addition to the Potingi valley line above described, selected two other lines, which I have personally requested the District Engineer to have trial traces run on, these are marked in blue and yellow dotted lines on the Sketch Map marked C; the

Deopotingi Ghaut.

first of these, named the "Deopotingi line" (dotted blue in the map), starts from the Koraput road some three miles south of the bungalow at Potingi, continues south for another two or three miles, till it crosses the "Deopotingi" Saddle, which is lower than the Sheeverah, and passing through a fine, well-watered and cultivated upland plain, containing many villages, crosses what has been named the "Jeypore Saddle," a little higher in elevation than the Sheeverah, and runs into the old Pauchipenta Ghaut near the village of Merealapadoo at an elevation of 2,520 feet above the foot of the old ghaut, and at a point which, after inspecting the ground, appeared favourable for a down trace through the Bedda Bauregaum valley crossing the outer ridge of the hills either at a saddle said to exist near Cunkadapalli or reaching the plains near the Pedda Bauregaum river junction with the Rallagadda. The second line, a modification

Sunki modification of Deopotingi Ghaut.

of the lower portion of the Deopotingi one, was suggested by Mr. Nordmann; it is marked dotted yellow, and consists of a down trace from the Sunkicottah Saddle on the old Pauchipenta Ghaut at an elevation of 1,530 feet above the foot of the ghaut, and from it an up trace to run in at the Merealapadoo junction with the old ghaut above. I fear, however, that both these lines will run into very difficult and steep ground, and neither are likely to effect any very great reduction of distance, at the same time it is as well that they should be carefully examined, as if found to be even as I surmise they will be useful in proving that the Potingi valley line is the only correct approach from the plains which I believe it to be; the result of these various trial traces will in due course be communicated to Government.

21. Existing tracks.—Sixteen miles south of the Koraput road near Potingi, with the lofty Mahasingaram hill at its head, lies the Pauchipenta river valley, which on the map promises well as a line of approach to the plateau, but from

what I could judge at a distance the plateau approach to the head of the valley would be a difficult one; the character of the hills about Potingi generally show that the nearer the Galliparvati hill in the south is approached the higher the ridges become, while all the apparently easy approaches to the plateau of the Jeypore country lie north. I did not examine the immediate head of this valley, but I was informed that the track leading through it, marked in the Sketch Map C, is precipitous, impassable for cattle, and a long way round, and from what I saw of the embouchure of the valley near the town of Pauchipenta, I deemed it any thing but an encouraging line for a trace; further, being a very close ill-ventilated valley, of a length necessitating a halt, in what is sure to be an unhealthy locality, I deem it a very undesirable line for a ghaut road.

22. The only other line in the vicinity and north of the Potingi valley, shown in the map as a ghaut track, is that known as the Turia Ghaut, leading from the plateau to the village of Thonaum in the plains. Mr. Turner, the Assistant Agent, told me he had had the line examined by Mr. Fletcher, and that he reported unfavourably of it, the head being very high, which the map shows it to be; I have, however, pointed the line out to Mr. Nordmann, and requested him at his leisure to have a look at it.

23. Old Pauchipenta Ghaut.—The old Pauchipenta Ghaut, though steep, and for twelve and a half miles one succession of reversed slopes, has evidently at one time or another received considerable attention, and even now in its present neglected condition bears a favourable comparison with the old Coonoor Ghaut, while it is infinitely superior to either the old Goodalore or Kotergherry Ghauts to the Neilgherries. The traffic on the ghaut in this apparently remote locality is surprising; indeed, it appeared to me to be equal to if not in excess of what takes place on the Coonoor Ghaut on market days. Like all old ghauts it is impossible to improve anything but the actual road surface of the ghaut, and furnish it with bridges and drains; at present the bridges are nearly all destroyed and the drains have ceased to be; it is however so important a communication that I urge its immediate repair, as also that of the plateau road above leading to it; until a new ghaut is constructed the old one is indispensable, and even after the new ghaut is finished it would still, in my opinion, continue to be a useful line, tending much to relieve the cart ghaut of the, at all times, troublesome pack-bullocks; the old Pauchipenta Ghaut sixteen and a half miles in length and three miles of the road above—nineteen and a half miles—might, I believe, be kept in fair order for about 110 Rupees per mile. If the ghaut is not at once looked to possibly double this amount will be required next season.

24. Mr. Turner's Tadevalsa Ghaut.—I do not recommend any maintenance grant for Mr. Turner's Tadevalsa Ghaut, as if what I believe takes place after the first heavy rains, the ghaut could only be restored at a heavy outlay.

25. Roads on the Plateau.—On the plateau of the Jeypore hills and leading down the low ghauts to the plains west of the hills, the Assistant Agent has opened out the roads described below, viz., a road of thirty-two miles in length from Potingi to Koraput, the Assistant Agent's head-quarters, though the road is only a fair-weather one the line itself requires little or no alteration; it is now temporarily bridged; the sooner it is permanently bridged and drained the better. A road of fifteen miles in length, from Koraput to the town of Choptaamb below the ghauts, has been made; the line runs down a gentle incline nearly the whole

way, and its starting point, which I saw, appeared well chosen; from Koraput to the town of Jeypore, about fourteen miles, a good cart road on the plateau and ghaut to the plains has also been constructed; the ground the ghaut runs through is singularly favourable and well adapted for a steady and easy slope. I rode over the whole of the line with Mr. Turner; it is very direct, and shows great judgment has been used by him in its selection; the gradients on the ghaut are steeper than they should be and are irregular, but there are no zigzags, and the slopes are such that at all events there is no immediate necessity for altering them.

26. Executive.—Mr. Nordmann, the Special Assistant Engineer appointed to trace the Jeypore Ghaut, thoroughly understands what he has to do; he has been provided with two first class ghaut tracing instruments, and has already commenced his work. A temporary Overseer, an intelligent European named Murray, formerly belonging to the Sappers, has been appointed by the District Engineer to assist him, and the services of Overseer Manikavasagam Pillay of the Coimbatore District, who is well acquainted with ghaut tracing, have also been applied for. An excellent site for the Special Assistant Engineer's residence has been selected, and he has been directed to push on with its construction as early as possible.

27. Jeypore being a peculiarly exceptional and specially expensive country to reside in, I understand both the Revenue and Police Officers employed there receive an increase to their salaries, while their travelling allowance is doubled; I therefore beg respectfully to urge that the officers of this department when working in Jeypore country should be similarly liberally treated, and their pay proportionately increased as is done in the Wynaad and other unhealthy and expensive localities; and further that the certificate attached to their Inspection Reports, regarding "carriage for tents having been maintained," be, as is at present the case on the Neilgherries and West Coast Districts, considered unnecessary.

28. Medical aid.—The unhealthiness of the Jeypore plateau is so well known that I need say nothing further on this subject than respectfully point out the necessity of a first-class Hospital Assistant, well provided with medicines, etc., etc., being attached to the Special Assistant Engineer's camp, to afford prompt medical aid when required to all employed on the ghaut works.

29. Labour.—The labour question, a serious one, has not been lost sight of, and has received the attention of the District and Special Assistant Engineers in the present early stage of the ghaut works; no very great difficulties will be met with, and it is hoped that with a system of liberal ready-cash payments, the confidence of the people will be gained, and when the ghaut work is commenced in earnest, labourers will gladly flock to it.

30. Working season.—From the inquiries made during our sojourn on the hills and in the district, Major Beatty and myself came to the conclusion that the working season should commence from the 1st November and terminate within 15th of May, and that at all events till greater experience is gained, it would be unwise to work either officers or men on the ghaut during the rest of the year.

No. 236. Order thereon, 18th June 1873, No. 1,587.

CIVIL WORKS, No. 14.

His Excellency the Governor in Council is glad to learn that the results of the visit of the Inspecting Engineer for Communications to the Jeypore country are not only a confirmation of the

propriety of the general line of ghaut and road previously taken in hand by the Assistant Agent in charge, but also a well founded expectation that this line, already much frequented by pack-bullocks and coolies, will in time be converted into a main trunk road running through British Territory, connecting the railway system of Central India with the sea at Bimlipatam and Vizagapatam.

2. The most important link of that line of communication will be the new Potingi Ghaut, which should clearly be laid out in the valley line so judiciously selected by Mr. H. G. Turner, but commencing from the Podapodoor Saddle selected by Lieutenant-Colonel Farewell, instead of from the loftier Sheeverah Saddle, and terminating at Pedda Bauregaum instead of Tadevalsa—conditions which, coupled with its faulty trace, preclude any of the earthwork already carried out from being utilized. For the prosecution of this work under Mr. Nordmann, the Assistant Engineer specially detailed for the duty, a sum of Rupees 20,000 is allotted in the Provincial Budget of 1873-74. Of the further sum of Rs. 10,000, annually allotted for general improvement of communications on the Jeypore plateau, the Assistant Agent will reserve three-fifths for bringing the main line year by year into more perfect order, and maintaining the Pauchipenta Ghaut. The Chief Commissioner of Nagpore will be communicated with on the subject of perfecting the communication from Raipur to the Jeypore frontier, a distance of eighty miles, it being of great importance that access to the interior be facilitated, and the use of an improved breed of cattle and better conveyances be made available to the inhabitants of Jeypore and the coast. The Local Fund Board will be invited, through the Financial Department, to co-operate in the work by placing at the District Engineer's disposal such sums as they can spare for connecting the foot of the ghaut at Bauregaum with the town of Rambadrapuram.

3. The rules regarding special allowances to officers of the Revenue and Police Departments serving in Jeypore will be made applicable to officers and subordinates of the Public Works Establishment while employed on and above the Potingi Ghaut, and the use of tents will be dispensed with as adding to the difficulty of moving about where the supply of labour is so scanty.

4. Paragraph 28 of the Inspecting Engineer's Report will be referred to the Inspector General of Hospitals, for report of such arrangements as can be made for providing subordinate medical assistance at Potingi between the 1st November and the 15th May.

5. The necessity of immediately and effectually repairing and hereafter maintaining the Pauchipenta Ghaut from the annual allowance of Rupees 10,000, insisted on in paragraph 23, will be borne in mind by the Assistant Agent.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

To the Inspecting Engineer for Ports and Communications.
" District Engineer, Vizagapatam.
" Financial Department.
" Revenue do.
" Controller of Public Works Accounts.
" Inspector General of Hospitals, Indian Medical Department.

Ext. S. T. Austin.

Spare Copies.

Govt. of Madras

PUBLIC WORKS.

To

THE INSPECTING ENGINEER FOR

PORTS & COMMUNICATIONS,

&c., &c., &c.

Dated June 1873

Read

G. O., 18th June 1873, No. 1,587

JUNE

Nos. 235-236

Jeypore Ghaut Roads.—Passing orders on letter from the Inspecting Engineer for Ports and Communications reporting on the roads.

5TH JANUARY 1883, No. 7 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

No. 7.

READ—the following papers:—

From the Engineer-in-Chief, Vizagapatam State Railway, to the Secretary to Government, Public Works Department, dated Camp, Waltair, 28th November 1882, No. 4 V.R.

As a line of railway is now projected from Vizagapatam to the Central Provinces, and as the staff for a portion of the line may be expected to arrive shortly, it appears desirable to submit for your consideration and sanction the scale of allowances to be drawn by the staff.

2. The line of railway is to traverse the open country between Vizagapatam and Párvatipur, but beyond this point a route is to be selected which will more or less be determined by the location of the Nagpore Seetarampore State Railway, now I believe in progress of final location.

3. This will necessitate the location of a considerable portion of this line from Vizagapatam northwards through an extremely unhealthy district, especially beyond Párvatipur.

4. Public Works Officers are at all times exposed to severe climatic influences in the prosecution of their duties, and where ordinary public works are carried on this exposure is chiefly confined to Executive Engineers and their Assistants and Subordinates. But in railway work the Engineer-in-Chief has equally with others of his staff to bear the brunt of exposure, and in times of pressure, when works have to be pushed, the key to rapid construction not infrequently depends upon his constant presence amongst his staff. This has been my own experience under the Director-General of Railways, and there is nothing on this line which will I apprehend interfere with the system on which work on the State Railways will be carried out.

5. Under the ordinary conditions in force in the Public Works Department, Madras, it is the custom to allow all Executive Officers and their Assistants and Subordinates 50 per cent. on their pay and 50 per cent. on their travelling allowances on the Potinghy Ghât under paragraph 673 of the Madras Code and Addenda by Standing Order No. 195, while in the Wynaad and Malabar Districts a similar consideration is granted.

6. But in view to equalize and similarize the extra pay which could only be drawn by a portion of the staff under present rules, I would submit for your consideration that taking into account the unhealthiness of the lower districts and the constant exposure which the staff will undergo in the prosecution of their duties, it would be to the interest of Government if the extra allowances were apportioned much as follows.

7. To the Engineer-in-Chief 33 per cent. on salary as additional allowances, on account of the very unhealthy climate to which he will be exposed. His duties will constantly take him into the worse districts on this line, he will be equally exposed

with others, and on his thorough acquaintance and knowledge of the district can the permanent location of the line and future construction be carried out. But his residence will not be quite so continuous in the worse parts of the district as the officers directly concerned in the carrying out of details.

8. To the officers stationed north of Párvatipur 50 per cent. of pay, as is now granted to Public Works Officers.

9. To officers south of Párvatipur the pay of the next higher grade in the department.

10. The mean of this allowance would fall perhaps within the limit of 50 per cent. on salaries now allowed to Public Works Officers borne on the Madras Establishment, and as nearly the whole of the staff of this railway will be located in the district and thoroughly exposed the whole year round to the unhealthiness which the Madras Government in their Code and all local authorities are unanimous in pronouncing as extremely exceptional, I would suggest for the consideration of the Madras Government that the extra allowance now asked for on behalf of the staff may be conceded to us from the date of joining at Vizagapatam.

No. 1.

No. 7-A.

MEMORANDUM.

Letter from Engineer-in-Chief, Vizagapatam State Railway, No. 4 V.R., dated 28th November 1882, forwarded to the Examiner of Public Works Accounts for report.

MADRAS,
7th December 1882.

(Signed) C. J. SMITH, Lieut.-Col., R.E.,
for Consulting Engineer for Railways.

No. 1051 X.

No. 7-B.

Remarks by Examiner.

Any extra allowances that may be proposed for the Engineer-in-Chief and party of the Vizagapatam Railway Survey will require the sanction of the Government of India, and if considered necessary by the Government the approval of the Secretary of State.

2. The request of the Engineer-in-Chief to be allowed to draw the extra allowances from the date of joining at Vizagapatam appears inadmissible, as similar request was refused by the Government of India in the case of Mr. Nordmann and party, who were deputed for the reconnoissance of country for a line of railway between Raipur and the littoral of Vizagapatam.—*Vide* letter communicated with G.O., No. 476 W., dated 21st February 1882. Attention is also invited to G.Os., Nos. 2294 W. and 2658 W., dated respectively 16th September 1881 and 29th October 1881.

3. The limits within which the additional allowances are to be drawn should be definitely fixed.

MADRAS,
16th December 1882.

(Signed) D. C. GORDON,
Examiner, Public Works Accounts.

No. 8.

ORDER—dated 5th January 1883, No. 6 W., Public Works.

The Right Honorable the Governor in Council is prepared to recommend, for the sanction of the Government of India, the grant of extra pay and travelling allowance

10/854

to the members of the Vizagapatam-Raipur Survey Party on the scale fixed in the case of the preceding reconnoitring party, viz., 50 per cent. on salary and travelling allowance for all journeys west of Párvatipur and Sálúr.

2. The allowances of the Superintending Engineer will be fixed at 33 per cent. as proposed by that officer.

(Here enter No. 7 W., dated 5th January 1883.)

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, Vizagapatam-Raipur Survey.
" Consulting Engineer for Railways.
" Examiner, Public Works Accounts.

No. 9.

ENDORSEMENT—dated 5th January 1883, No. 7 W., Public Works.

Copy of the above forwarded for the confirmation of the Government of India with advertence to their letter, No. 87 R.E., dated 11th February 1882.

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

Exd. C. Howarth.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of {1883} Madras.

PUBLIC WORKS.

Dated January, 5th.

Recd. *Encl.*

G.O., 5th January 1883, No. 7 W.

JANUARY.

Nos. 7—9.

Vizagapatam-Raipur Survey Party.

REGARDING the grant of extra pay and travelling allowance to the members of the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General Establishment.

No. 26.

READ—the following letter from A. CREGEEN, Esq., Engineer-in-Chief, Vizagapatam and Raipur Railway Survey, to the Joint Secretary to Government, Public Works Department, Railway Branch, dated Vizianagrum, 18th January 1883, No. 40 V.R. :—

I have the honor to acknowledge the receipt of G.O., 5th January 1883, No. 6 W., General Establishment, regarding the grant of extra pay and allowances to the members of the Vizagapatam-Raipur Survey Party, in which the Right Honorable the Governor in Council is pleased to recommend for the sanction of the Government of India the grant of extra pay and allowances to the members of the Survey Party to the extent of 50 per cent. on salary and travelling allowance for all journeys west of Párvatipur and Sálúr, and that of the Superintending Engineer at 33 per cent.

These rates were suggested by me as fixed monthly allowances to be drawn by officers whether in or out of the district.

But as it is clear that the Right Honorable the Governor in Council is of opinion that these allowances, if granted, should only extend over such periods as an officer may be on duty beyond Párvatipur, I would suggest that the allowances to all members of the staff should be fixed at the same rate.

The allowances to the Superintending Engineer, viz., 33 per cent., was suggested as a *fixed* monthly allowance simply because it was supposed that about two-thirds of his time would be spent in the districts beyond Párvatipur; otherwise there is no reason for suggesting a reduced allowance for this officer.

I would also suggest for your consideration the use of the words "*districts beyond*" Párvatipur and Sálúr, instead of west of Párvatipur and Sálúr.

No. 27.

ORDER—dated 2nd February 1883, No. 371 W., Public Works.

The Government are of opinion that the additional allowance of 33 per cent. to the Superintending Engineer is ample, and there seems no sufficient reason for raising it to the higher proportion of 50 per cent. allowed to officers on smaller salaries.

2. The verbal alteration proposed by the Superintending Engineer does not appear necessary.

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, Vizagapatam-Raipur Survey.
" Consulting Engineer for Railways.
" Examiner, Public Works Accounts.

Exd. A. F. Goodall.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of {1883} Madras.

PUBLIC WORKS.

Dated February, 2nd.

Rect. *Encl.*

G.O., 2nd Feb. 1883, No. 371 W.

FEBRUARY.

Nos. 26-27.

Vizagapatam-Raipur Survey Party.

Declining to alter the scale of travelling allowance sanctioned for the Superintending Engineer of the —.

Proceedings of the Madras Government, Public Works Department, 17th July 1873.

No. 304. Read the following letter from Deputy Inspector-General J. L. RANKING, Acting Inspector-General of Hospitals, Indian Medical Department, Fort St. George, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Fort St. George, 30th June 1873, No. 249 :—

With reference to paragraph 4 of the Order of Government, Public Works Department, No. 1,587, of the 18th instant, I have the honour to report, for the information of the Right Honourable the Governor in Council, that the Deputy Inspector-General, Indian Medical Department, Presidency and Northern District, will be requested to detail an experienced Hospital Assistant of the reserve in the division to afford medical aid to the Special Assistant Engineer and his establishment to be employed on the Jeypore Ghaut from the 1st November to the middle of May; and he will be directed to indent for an ample supply of medical stores on the Depôt at Madras.

2. In consequence of the unhealthiness of the climate of Jeypore, Government were pleased in their order entered in the margin to grant a special allowance of Rupees 25½ to the Hospital Assistant attached to the Police Hospital at that station, raising his salary of Rupees 24½ to Rupees 50; but the re-organization of the Subordinate Medical Department subsequent to that date has considerably improved their salaries, raising the pay of a second class Hospital Assistant from Rupees 24½ to 40, and of first class from Rupees 35 to 60, so that if a second class Hospital Assistant be now restricted to the maximum salary sanctioned for duty at Jeypore under the old rate of pay, the liberal intention of Government for service in this malarious district will not be realized, and it will preclude the employment of a first class Hospital Assistant, as his salary, without allowance, exceeds the maximum named above. I have therefore the honour to recommend that an extra allowance of Rupees 25 be sanctioned for the Hospital Assistant to be employed in Jeypore without reference to the pay of his rank.

Judicial Department, No. 730, of 6th May 1868.

No. 305. Order thereon, 17th July 1873, No. 1,830.

ESTABLISHMENT, No. 31.

Communicated to the District Engineer, Vizagapatam; also to the Judicial Department, with reference to G. O., No. 730, of 6th May 1868.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

To the District Engineer, Vizagapatam.
,, Judicial Department.

Order

Extd. S. T. Austin.
Spare Copies.

Order in the Ind.l Depart.t
25.th July 1873 No. 1173.

The special allowance of Rupees (25) Twenty five will be continued to the Hospital Assistant employed in Jeypore, without reference to his rank.

True Extract,
A. Elwood
Asst. Under Secretary
for Chief Secretary

Govt. of [illegible] Madras.

PUBLIC WORKS.

To

THE DISTRICT ENGINEER, VIZAGAPATAM.

&c., &c., &c.

Dated July 17th.

Read. Read.

G. O., 17th July 1873, No. 1,830.

JULY

Nos. 304-305

Jeypore Ghaut Works.—Letter from the Inspector-General, Indian Medical Department, reporting that instructions have been issued for detailing an Hospital Assistant to afford medical aid to the Special Assistant Engineer and his establishment to be employed on the ghaut works, and recommending the grant of an extra allowance to the Hospital Assistant, communicated to the District Engineer, Vizagapatam, and to the Judicial Department.

To
The Inspector General
Indian Medical Depart.t
" Public Works Department
" Agent in Vizagapatam
" Accountant General
[illegible]

Traffic Code Form C.

INDIAN TELEGRAPH. Local No. 3553 16 Jeyp

S. W. 1873 Report
Vizagapatam
No 4249.

Proc. of the Mc Govt.
Judicial Depart.

Dated 25th
Rect 30th } July 73.

No 1173.

Mrs

Intimating
that the special
allowance of Rs 25
will be continued
to the Assistant employed
at Jeypore without
reference to his
health.

No 29

Withdrawn Order

Communicated to the Govt Agent
Vizagapatam
Ganjam
Kalahasti

By Order

Traffic Code Form C.

Class DS | INDIAN TELEGRAPH. | Log No 50

To (Station) Madras | From (Station) Vizianagram

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To (Person) Works | From (Person) C. E. Vizag. State Railway

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take	further	trouble
about	extra	allowance
but	after	west
to	north	of
parvatipore	for	examiner

Recd. from ... L. N. At ... Hrs. ... Mins. By

Sent to ... L. N. At ... Hrs. ... Mins. By

Date ...

Telegraph Master.

MADRAS 13-3-83

Co. 7. W 5: 1.13
" 371. W. 2. 2. 83
" 730 - 6.5: 68. Prod.
" 1387 - 18. 6. 73
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Rec'd 13/3/13

Map accompanying

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A/

No 854 W Public Works Department. 16 Sept 1882

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 15th March 83

Read the following again

G.O No 7 W dated 6th January 1882.

" No 371 W dated 2d February 1883

Telegram from the Chief Engr Vizagapatam Stat Rly dated 12th March 83

The allowance admissible under G.O. No 6 W dated 5th January 1883 will be passed for all Journeys North and West of Parvatipur and Salur

Dy W 17/3

S. E. V. & R. Survey 3
Comg Engr for Rly 4
Exam P. W. Accts 4

L/17/3

L.A

2109

Govt. of (1883) Madras.

PUBLIC WORKS.

Dated 19

Rcvd. Encl.

G.O. 15 Jan: 1883. No. 834. W.

Nos. 119 - 120 -

Vizagapatam - Ranpur
Survey party

Scale of travelling allow-
-ances &c admissible
to members of the -

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Entered in R Receipt Register