M.R.O. 1—77,006—8-6-37.

(1) Number of pages 34

(2) Date of repair 22-4-38

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.
Dec 29 to 1857

G.O. No. 980 Press
Mis.

101 102

Dated 28-4 18 57

Not to be folded or roughly handled

No. 101. Read the following letter from Colonel C. E. FABER, Chief Engineer; to J. D. BOURDILLON, Esq., Secretary to Government, dated 30th March 1859, No. 9149.

SIR,

Having in the last para. of my letter of the 4th Instant No. 8365, called the attention of Government to what was said in the letter therewith forwarded from the Acting District Engineer of Kurnool, as to the inadequacy of the sanctioned Estimate for the completion of the Nundy Cunnamah (Ghaut) I have the honor herewith to submit for the consideration of Government, a letter from that officer under date the 8th Instant, giving cover to a revised Estimate of Rupees 66,250, and reporting fully on the circumstances which caused the excess to probably amount to so much as Rupees 16,250.

1 Copy of letter from the District Engineer, Kurnool. No. 633, dated 8th March 1849.
1 Statement in Original.

2. Lieutenant Beckley has very properly prepared and submitted this Estimate with a view of bringing under the notice of Government the state of matters on the Ghaut, and that the earliest measures might be taken to provide the means of carrying on the work to a successful termination, but having as yet had only a brief experience of the difficulties, which the scarcity of labor, combined with the unhealthiness of the locality and the unpopularity of the employment offer to progress, and having obtained no data from actual operations to guide him in estimating the cost of masonry, he expresses himself by no means certain of his calculations, and thinks it would be better to defer the consideration of his revised Estimate till October, by which time the work having extended over the hot and rainey months, will have afforded reliable indications of its average ultimate cost, the chief causes of its comparative expensiveness being the impossibility of obtaining a fair days labor for a days wages, and the toil of conveying water and sand great distances.

3. The Acting District Engineer in describing the operations on the Ghaut, has divided it into three portions, and shews with much clearness what is being done in each, and where the original Estimate is defective, the probable aggregate excess for actual construction being Rupees 10,039, on superintendence Rupees 4,920, and on sundries Rupees 1,291, and deducting from the sum of these, the estimated cost of one of the Choultries allowed for in the original Estimate, but which, if the Government so decide, need not be built, as there is already a good one at Gauzoopully, the total amount requiring sanction according to the best data now available is Rupees 14,700, fourteen thousand seven hundred.

Letter from Lieutenant T. BECKLEY, Acting District Engineer of Kurnool; to the Chief Engineer, dated 8th March 1859, No. 633.

SIR,

Having recently inspected the work going on at the Nundy Canama Ghaut, and finding that the Estimate is insufficient to complete or rather to improve the Ghaut to the extent intended, I have the honor to forward the following Report and a revised Estimate, but as none of the Bridges have yet been commenced, and the masonry rates now allowed therefore not obtained from experience, as we have worked only a few months, and the peculiar advantages and disadvantages that such remaining month of the working season will offer, can only be guessed at, as it is uncertain when the work must be suspended on account of fever and whether or not it will be possible to build any portion of the masonry during the rains, and thereby avoid the expense of conveying water from 1 to 2 miles; and as I feel confident that the water-way allowed in some of the Bridges is far too large, but can have no satisfactory data on which to propose that their dimensions be reduced until observations have been taken during the next rains, I would strongly recommend that no revised Estimate be entertained until the end of October, when there would be no difficulty in making one that, based upon actual experience, might claim thorough reliability, nor is there any danger of the Estimate being much exceeded by that time, the excess lying chiefly on the masonry works and the West Ravine Ghaut, with the exception of a five arch Bridge at Metta, for which the Estimate rates are ample, a small portion only of the former will be executed and the West Ghaut Ravine cannot be touched upon until next year.

2. The chief cause of the rates being insufficient is the difficulty in obtaining a fair days work out of the highly paid coolies employed, the locality of the work is unhealthy and deservedly unpopular, the adjacent country thinly populated and for the most part cultivated, much agricultural labour is required, and work on the Ghaut is therefore not much sought after.

3. To show as clearly as possible the state of the case the work done, and supposing the Government of India unwilling to expend on this Road more than the sum already sanctioned, how it can be most judiciously applied, I have divided the Ghaut into the 5 following Sections. viz:

1st. From Gauzurpully through the low country to the commencement of Trace.

2nd.. From commencement of Trace to Pachurla, the point now reached by the workmen.

3rd. From Pachurla to foot of West Ghaut Ravine.

4th. From West Ghaut Ravine to point where it meets the existing road.

5th. From above point to Kistumsetty pully.

4th. The total excess on 1st Section is Rupees 206-12-1, due to 1 anna being allowed for earth work, instead of 9 pice, but considering that the present traffic is not great and the surface soil hard red clay 6" of gravelling might be substituted for the 9" allowed, and a saving of Rupees 1,253-12 effected on this item, or deducting the excess of the earth work Rupees 1,046-15-11 saved on the 1st Section.

5. The second is the most important Section F. the road now used repeatedly crosses the stony bed of the Pullair River, and for several hundred yards the bed of the Nullah is the only road, it is here that Lieutenant Hankin has employed all available labour; the road-way will be completed in the course of 6 weeks or 2 months, but on account of numerous Nullahs, cannot be opened for bandy traffic this year. The measurements allowed in the Estimate are too large and side hill excavations have not been so extensive as expected, the rates however have proved very insufficient, and in what was supposed to be merely earth and mixed soil, large boulders requiring either burning or blasting have usually been met with; the revised Estimate for the road-way of Section 2 is Rupees 3,749-14-11, an excess over Estimate of Rupees 909-12-3; the revised Estimate for the Tunnels and Bridges Rupees 12,041-11-8, on excess of Rupees 3,436-12-8 or total excess for Section (2) Rupees 4,316-8-11. In explanation of the increased rates it must be understood 9 pice only is allowed for earth works, the Coolies receive annas 2 pice 8 per diem, and it is with the greatest difficulty that each can be made to excavate 2 cubic yards with the mixed soil or Ghaut cutting, it is almost impossible to make the Coolies do any thing approaching to a good days work as each man's excavation cannot be measured; if the whole gang are fined they strike and decamp; rock hitherto has been removed by burning, blasting tools not having arrived until a few days ago, I doubt it being done at a less rate than 12 annas a yard; 1 pie has been found too little for uprooting, &c., the heavy jungle, the want of good axes has been much felt and the cost has been about 4 pice per square yard. I have added 6 pice per foot for masonry, thus raising the rate to annas 2 pice 6; there is a great scarcity of water, and sand has to be conveyed a very considerable distance, a great drawback, as no carts men will hire their bandies out for this work. I cannot however be confident regarding the cost of the masonry until some of the Bridges have been commenced. In this Section a 2 arched Bridge is designed to cross a Nullah of no considerable magnitude with its single pier in the Nullah bed, a Bridge of altogether a bad design, one 25 feet arch would, I think, be sufficient or to avoid an expensive and inconvenient embankment 3 arches 12 feet span.

6. Section 3 has not been commenced, but the road work will be completed this season for which the revised Estimate on ascertained rates amounts to Rupees 2,183-0-9, giving an excess of Rupees 986-0-0 for the masonry, the Estimate amounts to Rupees 3,271-8-2, an excess of Rupees 869-8-2, total excess Rupees 1,856-4-1, but a saving might be effected by striking out a one arch Bridge of 30 feet span and substituting a Bridge of 1-15 feet span.

7. The excess on Section 4 or the West Ghaut Ravine is Rupees 252-2-4 for the Ghaut, and Rupees 2,399-11-10 on the large Viaduct and small Road Dams, total Rupees 2,651-14-2. There is however no absolute necessity for this portion of the work being proceeded with until the country has advanced in prosperity, and money for Public Works more abundant, the present

road could be rendered very passable for an expenditure of Rupees 1,000, and a saving effected to the amount of Rupees 6,993-1-6 on this Section.

8. The total excess of the revised Estimate for the last Section is Rupees 977-3-10 For the Bridge at Metta there was no plan or specification, no section of Nullah either in my office or in the office of the District Engineer of Cuddapah; from the Estimate it would seem the design was a 5 arched Bridge, piers 5 feet high, span either 25 feet elliptical or 30 feet segmental, at the spot where the made road crosses the Nullah it is impossible to build a Bridge of this length, foundations have therefore been dug for 5-20 feet arches and to get in even a Bridge of this length considerable cuttings have been made into either bank, the piers I have ordered to be raised an extra foot. From what I learn from Mr. Norman, it would appear that it was at the time when the Section was taken intended to cross the Nullah much lower down than when the road was afterwards taken.

9. As the Ghaut cannot possibly be completed in less than two years, I have added 50 per cent. to the superintendence.

10. Rupees 750 is insufficient for sundries, the cost of Tools alone will far exceed that sum.

11. Rupees 950 is allowed for a Tank Bund, but this work is not absolutely necessary.

12. Two Choultries are entered in the Estimate and from a remark in a letter from Captain Hemery, I should include the intention to be to build one at eachend of the Ghaut, but as there is a very good one at Gauzurpully one might be dispensed with.

No. 102. ORDER THEREON, No. 980; dated 28th April 1859.

The Chief Engineer lays before Government a report from the late Acting District Engineer of Kurnool of the progress of the work in the Nundicanama Ghaut. The sanctioned Estimate amounts to 50,000 Rupees but Lieutenant Beckley on a careful review of the facts of the work hitherto done, anticipates that the work will not be completed for less than Rupees 66,250. The chief cause of the excess is the high cost of labour in comparison with that assumed in the Estimate, in consequence of the peculiarities of the locality. Lieutenant Beckley however thinks it undesirable that any order should be passed on the revised Estimate until October by which time much more experience will have been gained as to the actual cost of working. The Governor in Council directs accordingly that the present District Engineer of Kurnool shall be desired to submit a careful report on the work done and the probable cost of completing the Ghaut, as soon as possible after the close of the present working season.

2. It appears from the Statement which accompanies Lieutenant Beckley's letter that the work performed under the Estimate up to the 8th March, was only 2,538 Rupees. Lieutenant Hankin was nominated to the charge of the work on the 5th November 1858, and the work is believed to have commenced in that month. The Governor in Council is surprised to find that after above three months of the short working season had elapsed, so little had been done; and the Chief Engineer will obtain and submit explanation of this circumstance.

(Signed) J. D. BOURDILLON,
Secretary to Government.

No 633

From Lieutenant J. Beckly
Dy Quartr Engr of Kurnool.
To The Chief Engineer in the C. P. Works
Fort St. George.
Sir,

Having recently inspected the works going on at the Mundycanama Ghaut and finding that the Estimate is insufficient to complete or rather to improve the Ghaut to the extent intended, I have the honor to forward the following report and a revised Estimate, but as none of the Bridges have yet been commenced, and the Masonry rates now allowed therefore not obtained from experience, as we have worked only a few Months and the peculiar advantages and disadvantages that such remaining Months of the working Season will offer can only be guessed at: as it is uncertain when the work must be suspended on account of fever and whether or not it will be possible to build any portion of the Masonry during the rains and thereby avoid the expence of conveying water from 1. to 2 Miles and as I feel confident that the waterway allowed in some of the Bridges is far too large, but can have no satisfactory data on which to propose that their dimensions be reduced until observations have been taken during the next rains, I would strongly recommend that no revised Estimates be entertained until

The

ended the end of October, when there would be no difficulty in making one that, based upon actual experience, might claim strength reliability, nor is there any danger of the Estimates being made exceeded by that time, the excess lying chiefly on the Head in works and the West Ravine Chaut with the exception of a few Rocky Bridges at Heller, for which the Estimates have also been framed, a small portion only of the former will be executed and the West Ghaut Ravine cannot be touched upon until next Year.—

2. The Chief cause of the labor being insufficient is the difficulty in obtaining a fair days work out of the highly paid Coolies employed, the locality of the work is unhealthy and deservedly unpopular, the adjacent Coomlys thinly populated and for the most part cultivated, much agricultural labour is required and work on the Ghaut is therefore much sought after.—

3. The Ghaut as clearly as possible the cause of the work done, and supposing the Government of India unwilling to expend on this road more than the sums already sanctioned, how it can be most judiciously applied.— I have divided the Ghaut into the 5 following Sections viz:—

1st From Sangaghully River to low Country to mile Commencement of Ghaut.—

2d From Commencement of Ghaut to Ghaut reached by the workmen.

3rd From Pacherla to foot of West Ghaut Ravine.—

4th From West Ghaut Ravine to point where it meets the existing road.—

5th From above point to Kistumsetty pully.—

4th The Total except on 1st Section is Rupees 206-12-, due to 1 anna being allowed for Earth Work instead of 9 pice, but considering that the present traffic is not great and the surface soil hard red clay 6" of gravelling might be substituted for the 9" allowed and a saving of Rupees 1253-12-0- effected on this item, or deducting the excess of the earth work Rs. 1046-15-11. caused on the 1st Section.—

5. The Second is the most important Section the road now used repeatedly crosses the stony bed of the Pullair River, and for several hundred Yards the bed of the Nullah is the only road, it is here that Lieut. Hankin has employed all available labour the roadway will be completed in the course of 6 Weeks or 2 Months, but on account of numerous Nullahs, it cannot be opened for bandy traffic this Year. The measurements allowed in the Estimates are too large and side hill excavations have not been so extensive as expected, the rates however have proved very insufficient and in what was supposed to be merely earth and mixed soil, large boulders requiring either burning or blasting have usually been met with, the revised Estimate for the roadway of Section 2 is Rupees 3749-14-11. an excess over Estimate of Rs. 909-12-3

the ground

the revised Estimate for the Culverts and Bridges Rupees 2183-11-2. an excess of Rupees 1986-12-2. on that work for Section 5th Rupees 196-8-0. An explanation of the increased rates it must be understood is given only as allowed for on the works the Excise requires 6 - 5. per diem and that with the greatest difficulty that much can be made to excavate 2 Cubic Yards with the mine steel or Chaut cutting, it is almost impossible to make the Excise do any thing approaching to a good days work as such mine excavation cannot be measured if the whole gang are found they shake and decamp, rock hitherto has been removed by blasting, blasting tools not having arrived until a few days ago; I doubt if being done at a less rate than 12 Annas a Yard; if it has been found too little for excavating for the heavy Jungle, the want of good water has been much felt and the cost has been about 8 pice per Square Yard. I have added 6 pice per ft for Masonry there having the rate 2-6 more in regard scarcity of water; such Lands has to be conveyed a considerable distance, a great drawback as Carts cannot with their Bandies out for the work. I cannot however be confident regarding the cost of this Section of Country until some of the Bridges have been commenced. In this Section at Richoli Bridge is designed to cross a Nullah of no considerable magnitude with the Bridge here in the Nullah but one Bridge of all gables in head design, one 50 feet and one 30 feet Arch but sufficient or to avoid an expensive and inconvenient embankment 3 Arches 12 feet span.—

6. Section 3 has not been commenced, but the road works will be completed this season for which the revised Estimate on ascertained rates Amounts to Rupees 2183-11-9- giving an excess of Rupees 986-12- for the Masonry, the Estimate Amounts to Rupees 3271-8-2. an excess of Rupees 869-8-2.- Total an excess Rupees 1856-4-1- but a saving might be effected by striking out a one arch bridge of 30 feet span and substituting a bridge of 1-15 feet span.—

7. The excess on Section 4 on the West Chaut Ravine is Rupees 252-2-4- for the Chaut, and Rupees 2399-11-10- on the large Viaduct and small road dams Total Rupees 2651-14-2- There is however no absolute necessity for this portion of the work being proceeded with until the Country has advanced in prosperity, and money for Public Works more abundant, the present road could be rendered very passible for an expenditure of Rupees 1000-0-0- and a saving effected to the Amount of Rupees 6993-1-6- on this Section.—

8. The total excess of the revised Estimates for the last Section is Rupees 977-3-10- For the Bridge at Mettur there was no plan or specification no section of Nullah either in my Office or in the Office of the District Engineer of Cuddapah

Ghaut

Cuddapah, from the Estimate it would seem that no
design was at 5 Arched Bridges, four 5 feet high
span either 25 feet Elliptical or 30 feet Segmental,
at the 4th foot where that made Road crosses the Nullah
it is impossible to build a Bridge of this length, some
Estimates have therefore been drawn for 5-20 feet Arches
and hope to prevent a Bridge of this length considerable
Cuttings have been made into either Bank the Earth
Thence ordered to be raised one Foot. Some
what Memo from Mr Forman it would appear
that it was at the time when the Section was taken
intended to cross the Nullah much lower down than
where the Road was afterwards taken.—

9. As the Estimate cannot be possibly discom-
pleted in less than two Years, Three added —
50 per Cent to the Expenditure.—

10. Rupees 750 is insufficient for Sundries, the
Cost of Tools alone will far exceed that Sum.—

11. Rupees 950 is allowed for an Establishment, but
this work is not absolutely necessary.—

12. Two Chaultries are entered in the Estimate and
from a remark in a letter from Captain Thomas I should
include the intention to have a Bridge over a branch end of the
Chaut, but as there is no water good over at Tangutchilly and
might be dispensed with.—

Madras Engr Office
Comptd at Kurnool
8th March 1850

Signed J. Buckley
Lt & Engr in Charge
Kurnool

A True Copy
Charles A. Ellis Captain
Asst Engr in Charge

Note

gtmt

No 9149.

Central Office of Pub Works.
Fort St George, 30 March 1859.

Public Communications

From,
The Chief Engineer
To,
The Secretary to Government
Public Works Department.

Sir,

Enclosures 2
1 Copy of letter from the Dist Engr Kurnool No 538 5th March 59.
1 Statement in Orgl

Having in the last para of my letter of the 1st Instant No 0365, called the attention of Government to what was said in the letter therewith forwarded from the Acting District Engineer of Kurnool as to the inadequacy of the sanctioned Estimate for the completion of the Nundy Cummum /Ishaut/ I have the honor herewith to submit for the consideration of Government a letter from that Officer under date the 5 Instant, giving cover to a revised Estimate of Rupees 16,250, and reporting fully on the circumstances which caused the excess to probably amount to so much as Rupees 16,250.-

2. Lieutenant Brekley has very properly prepared and submitted this Estimate with a view of bringing under the notice of Government the state of matters on the Ishaut; and that the earliest measures might be taken to provide the means of carrying on the work to a successful

termination

which, if the Government so decide, need not be built as there is already a good one at Lanzoopully. The total amount requiring sanction according to the best data now available is Rupees 14700-- -- -- fourteen thousand seven hundred.—

I have the honor to be,
Sir,
Your most obedient Servant
[illegible] Colonel.
Chief Engineer.

Central Office of P W
Port Blair
30th March 1859

To
The Secretary to Government
Public Works Department.

termination, but leaving as yet had only a brief experience of the difficulties, which the scarcity of labor combined with the unhealthiness of the locality and the unsubstantiality of the supply must offer to progress, and having obtained no data from actual operations to guide him in estimating the cost of labour, he represents himself by no means certain of his calculations, and thinks it would be better to defer the consideration of his revised Estimate till October, by which time research having extended over the hot and rainy months will have afforded reliable indications of its average ultimate cost, the chief causes of its comparative unexpensiveness being the unprofitableness of obtaining a fair days labor for a days wages, and the high cost of conveying water and sand to distances.

3 The Acting District Engineer also describing the operations on the Islands has divided it into three sections and shows in the annexed plan which is being done in each, and where the original Estimate is defective, the first table appended gives for actual construction being Rupees 11,958 and Superintendence Rupees 1,232 and in addition Rupees 1291 and deducting from the sums so three the Rupees 1,781 the charges of Establishments allowed for in the original Estimate, but not which

Memorandum

The Inspectors of Levying the Duties on Goods imported by the Annalyne Line of Communication by the Louisiana Company, pray to be allowed the Sum of 1852 Livres 10 Sous for Expenses incurred by them in the Execution of their Duty in that Employment.

The Director General of the Royal Domain is of Opinion that the Petitioners ought to be allowed the Sum of 1852 Livres 10 Sous for the Expenses incurred by them in the Execution of their Duty in that Employment.

The Director General of the Royal Domain is of Opinion that the Petitioners ought to be allowed the Sum of 1852 Livres 10 Sous for the Expenses incurred by them in the Execution of their Duty in that Employment.

From the Chief Engr 4th March 59
& N° 578 in Cons.
Dft to Cons. 21st Decr 58 ff 4416

Pd 6 March 1759 Department
Dft to Cons. 29 April 771

21 Sous
The Chief Engineer
The Secretary to Council
&c.

Dated 30 March 1759
Recd 3 April 1759
Cons. Rol 31 Dec. 1759

A continuation
of Letter of the 4th Instant
N° 0565 Inclosing Copies of
Operations on the Annalyne
Communication which were
by the Chief Engineer and a general
Estimate of the Expence
of Completion.

Copied

Read 28th April 59.

15 Dec. 1761

of Rupees. This latter sum with Rupees 2,700 for superintendence was sanctioned by the Government on the 12th February 1856. The total amount sanctioned was therefore Rupees 18,398, but the actual expenditure, as since reported, amounted to Rupees 20,233.

2. Captain Boileau afterwards prepared a further estimate of Rs. 58,700 for completing the line, and the Engineer assigned by him for the reasons stated by the Chief Engineer to be as follows:

1st That for the first sum of Rupees 15,698 sanctioned by the Government of India there was no estimate but only a rough memorandum attached to Lieut. Emery's report.

2nd That the second estimate of 50,000 Rupees was a guess estimate which Lieut. Emery thought would prove sufficient, but that until the whole line had been opened up on the first sanction, no decided opinion could be formed on that point.

3rd That the roads had not been made where Lieut. Emery intended it should have been, but roads had been cut up other lines which that officer stated, to make the roads, especially at great expense, would be impracticable.

4th That the lines then pronounced as impracticable except at a great expense, were the only practicable lines at all.

5th And that upon that line both carefully and skilfully traced by Lieutenant Walker, Captain Boileau had worked and expended the money.

3 The Chief Engineer also stated that Rupees 9,275 of the amount expended had been laid out in repairing & maintaining what had already been done, and that some waste of money had also been occasioned by "undertaking to push on the work to save the season with inadequate supervision".

4 Captain Boileau's estimate of Rupees 58,700 was reduced by Colonel Farber to Rupees 46,270 and was sent up to Government on the 26th January 1856 with several others, but all were returned as coming too late for the then Budget; the Government however directed that these should be again sent in proper time for entry in the Budget of 1857-58. Before this period could arrive, or on the 10th May 1856, Colonel Farber urged on Government the necessity of immediately undertaking and completing this road: but the Government did not regard the work of such emergency as to warrant their compliance with his application.

5 On the 17th September 1856 the Chief Engineer submitted

submitted an Estimate stated to have been framed with great judgment by Lieut.t Bewery after a careful examination of the ground and of the work already performed. The estimate amounted to Rupees 50,000 and included Rupees 9,840 for superintendence. The Government admitted the importance of completing the roads at an early date, but adverting to the circumstances under which the original items had proved insufficient, they were unwilling to sanction any further expenditure without expressed authority. They therefore directed the entry of the Estimate in the Budget of 1857/58, which was accordingly done. The Government of India however did not sanction any of the projects for public improvements proposed in that Budget, and the Merely-commenced Road remained unsanctioned.

* 49,231

Com.rs Coll.r Sutton 30 Oct.r 1857 No 213.

6 In this letter of the 26th March 1858 Major Lawford treated this road as one of those already sanctioned but kept in abeyance in consequence of the restrictive orders, and again urged the importance of it in a Military point of view stating early measures for completing it. No reply has been received informing that the work had not been sanctioned by the Government of India, and that it was not in the power of this Government to order its commencement.

Com.rs 27 April 1858 No 124

Mos.

7 The arrangements for constituting Dumoh a Collectorate and zillahs, led to a resolution in the Judicial Department declaring it to be of importance that the work of improving this Pass should be soon completed. This led to a special letter to the Government of India dated 27th July 1858, and one of the arguments used to obtain the assent of that Government was that the half lac of Rupees already laid out on the line would be in jeopardy.

Com.rs 27 July 1858 No 82

A copy of this letter was sent to the Central Office, and two days after, or on the 29th July 1858 Colonel Lawford again addressed the Government respecting the weakness of this Establishment and asking for an Executive Officer and two Assistant Overseers to be added to his establishment in order, as he said, "to push on the operations as rapidly as possible

Com.rs 1st August 1858 No 78-79

possible during the healthy
season which extends from December
till May. The Government pointed
out to Major Lawford that the
Estimate of 50000 Rupees already
provided an Executive officer on
200 Rupees a month, besides sub-
ordinates for 2 years, and they
engineer what more was needed.
In reply Major Lawford stated that
that he had overlooked the
item of 9,840 Rupees included in
the Estimate for superintendance,
but said it was necessary that the
work should be actively pushed
on and completed in one season,
he suggested a rearrangement
of the establishment. He
scale provided a salary and full
travelling allowances to both
officers and overseers, but he
kept the total amount within
the sum provided for by the Es-
timate Viz Rupees 9840 a month.

Sanctioned			As the Estimate calculated for 24 months		Major Lawford's proposal
1 Executive Officer	at 200 Rs.	—	4800	1 Executive officer with full travelling allowance	370
1 Overseer	at 60	—	1440	1 Overseer	130
1 Foreman	at 35	—	840	2 Assistants for 12 months	230
1-2nd class P.W.	at 25	—	600		730
Gomastahs	6 Carpenters	—	2160	Gomastahs 12 months	8760
			9840		1080
					9840

10 On the ground of the
difficult nature of the work to
be performed, and to the desira-
bleness of engaging energetic men
and encouraging them to exertion,
the Government in Extract from
Home Dept. 13th September 1858 agreed to
give as a special case full travel-
ling allowance for the time
that the officers might be employ-
ed on this duty, provided Major
Lawford could assure them that
the work would be completed in
twelve months. They also point-
ed out to him that he was in
error in calculating the salary
and allowances of the Executive
officer at Rupees 370 which it
could

could be only Rupees 320 viz 200
salary and travelling allowance
at 4 Rupees a day 120

11 In terms of his letter Com. 19 Oct 1858 No 13.
of the 28th September 1858 Major
Lawford said that he had no
doubt of the completion of the
Pundicanama in one year under
the management of an able and
energetic officer, but he added
"I think there should be time"
allowed not only for "selection"
but for the removal to make pre-
liminary arrangements." Lt
Col. Lawford afterwards confirm-
ed this assurance in his letter
of the 29th November 1858, and said
that to ensure this result it
was absolutely necessary to supply
a large quantity of Cooly which
the Estimate could not afford
to meet, and on this representa-
tion Government on the 16th De-
cember 1858 sanctioned an Indent
for Cooly of the value of Rupees 2538.

Dy 21 Dec 1858 No 168.

&c.

12 The Government of India
Com. 12 Oct 1858 No 153 in their letter of the 20th September
1858 replying to the application of
for sanction to the Estimate of 50000 R
this Government to say they are of
opinion "that the work is neither
a military work, nor an inexpen-
sive work; and that as an urgent
work, the "case is but a weak
"one; still in deference to the
"strongly expressed desire of the
"Government of Fort St George,
"sanction to the outlay has been
"accorded."

It appears from Lt Beckly's
Current A/71. 13
letter and statement that the
rates allowed are insufficient.
Of the Estimate of Rupees 50,000 the
sum of Rupees 2,538 has been
expended, and Rupees 63,712 are
still required, the total amount
Rupees 66,250 will therefore be Rupees
16,250 above that estimate. It is
not certain even that Rupees
66,250 will complete the work.
Lt Beckly advises that the
consideration

consideration of his Estimates
should be deferred until October
next when further experience of
the probable cost will have been
gained.

16 April 1809
C.M.

Nundydroog Papers

P.W. Depart

№ 980

Extract from the Minutes of Consultation
Under date the 28th April 185

Read the following
letter from the Chief
Engineer

Bangalore 30th March 185
№ 314

The Chief Engi
neer lays before Gover
ment a report from
the late acting Di
trict Engineer of Nun
of the progress of the wo
in the Nundidroog
Ghaut. The sanction
Estimate amounts
50,000 Rupees but Li
Beckley in a carefu
review of the facts
the work hitherto do
anticipates that th
wor

work will not be completed for less than Rupees 66,250. The chief cause of the excess is the high cost of labour in comparison with that assumed in the Estimate, in consequence of the peculiarities of the locality. Lt Barkley however thinks it undesirable that any order should be based on the revised Estimate until October by which time much more experience will have been gained as to the actual cost of working. The Governor in Council directs accordingly that the present District Engineer of Thana shall be desired to submit a careful report on the work

done and the probable cost of completing the plant, as soon as possible after the close of the present working season.

2. It appears from the Statement which accompanies Lt Barkley's letter that the work ~~done~~ of the Estimate up to the 8th March was only 2,538 Rupees. Lt Rankin was nominated to the charge of the work on the 5th November last and the work is believed to have commenced in that month. The Governor in Council is surprised to find that after above three months of the short working season had elapsed

elapsed, so little
had been done; and
the Chief Engineer will
~~beyond enough to~~ ob-
tain and submit an ex-
planation of this in-
circumstance

[signature]

10 Copies to the Chief Engr. Dist. 9th

Mn. Com: 12th April 59
32 a 35.

Public Works 1859 Lett.
Dt. 29th April

No 682.

Extract Minute of Com:
Dt 28th April 1859.

Read the Lett: Engr. dt 17th July
1859 Lett. 1787 in Com:
29th Aug. 10—

The present Distt
Engr of Kimmel to subt
mit a careful report on the
works done at the Hindu
Cumana Plant and the
probable cost of completing
the Plant: Calling for explan:
ation as to the Millones
of the work done during
about 2 Months of the
working Season.

No 101 & 102.