M.R.O. 1—77,006—8-6-37.

(1) Number of pages 20

(2) Date of repair 1-5-64

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 556-57	279	Press / Mis.
Dated	30-1	1811.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 30th January 1871.

No. 556. Read the following letter from the Acting Superintending Engineer, 1st Division, to the Secretary to Government, Public Works Department, dated Dowlaishweram, 22nd December 1870, No. 3,317 :—

I HAVE the honour to forward herewith an estimate, amounting to Rupees 2,200, accompanied by plans, etc., for constructing masonry works on Trunk Road No. 6, between Mahandra river and Chetterpore, to prevent future damage to the road during exceptional heavy bursts of storm and rain, and in so doing to request that the necessary sanction of Government may be obtained for the same.

1 Sketch Map.
4 Plans.
1 Abstract Estimate.
1 Specification.
1 Copy of a letter.

2. A copy of letter* received from the Assistant Engineer in charge of Berhampore Range, explaining the circumstances under which this estimate was prepared, is herewith enclosed for information.

* No. 163, dated 28th November 1870.

3. In the event of Government according their sanction to this estimate, I have to request that the necessary funds may be placed at my disposal from the Reserve of next year. It will be seen from Mr. Harris' letter he can collect materials in this official year without incurring any outlay, and that Captain Beckley, R.E., appears to have satisfied himself the works are absolutely necessary and suitable. I have as yet received no orders regarding the Trunk Road estimates, and so beg to transmit these documents for further instructions, having marked on the plans and specifications some alterations which I deem advisable.

No. 557. ORDER THEREON, 30th January 1871, No. 279.

CIVIL WORKS, No. 42.

UNDER the circumstances brought to notice in these papers the Government sanction the estimate of Rupees 2,200 for the construction of certain masonry works on the portion of the Great Northern Road between the Mahandra river and Chetterpore in the Ganjam District which are designed to prevent future damage to the line during exceptional bad weather, but looking to the smallness of the Reserve under "Communications" in the Budget of 1871-72 His Excellency the Governor in Council does not see any early prospect of his being able to provide the requisite funds.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Acting Superintending Engineer, 1st Division.
" Controller of Public Works Accounts.

Exd. S. T. Augustin.

Specification Report to accompany the Plan and Estimate of a Bridge of 1 Arch 15 Feet Span proposed to be erected over Pimchima Nullah on Trunk Road No VI.

Foundation of Abutments Wings, Retaining Walls and Flooring will be built with Rough Stone in Chunam as per detail as follows

Abutments	2 × 23 × 2½ × 4½
Ditto	2 × 27½ × 3¾ × 4½
Cutwaters	4 × 1½ × 1½ × 4½
Wings	4 × 10¾ × 3 × 4½
Flooring	1 × 24½ × 12½ × 1½

† Superstructure of Abutments, Wings Backing to Abutments and face walls will be built with Stone in Chunam Rough dressed only as follows

Abutments	2 × 23 × 1½ × 3¾
Ditto	2 × 26½ × 2½ × 8
Cutwaters	4 × 1½ × 1½ × 8
Backing to Abutments	2 × 23 × 5 × 1
Face Walls	2 × 18 × 1½ × 3

Arch work and Parapet walls will be built with well burnt Bricks and Chunam mortar as follows

Arch work	1 × 23 × 70 × 1½
Parapet walls	2 × 46 × 1 × 2

The entrados of the Arch to be plastered also Parapet walls, exterior faces of wings and face walls

† I would not have the interstices of every 3rd course filled up

H.

The interior Roadway over Bridge will be
21 Feet clear from Parapet to Parapet

Guard Stones to be provided on Approaches and
over abutments Cutwaters to protect Parapets

The Centring and Excavating for foundations as
shown in Estimate

This Bridge is to replace one of 12 Feet Span
washed away during the late heavy floods —

No II Range Office
Peshawur
November 1870

D Keith
Assistant Engineer

Lieutenant Major RE
Executive Engineer Pdr

Communications

New Works

Abstract

Estimate No 5 of 1870-71

Gangaw District

Yerhampoon Valley

Work. Construction of Sunnels of 6 Feet Span proposed to be built on Trunk Road No VI One North One South of the Goosanagaram Nullah in 2d Mile and One North One South of Dendageddah Nullah in 18th Mile on the Road between Yerhampoon & Thone

Quantity or Number	Description of Charges	Rate	Amount	Total
12 11/27 / 648	Cyds of Rough Stone in Chunam — per Cyd	1 11 -	135 5 7	✓
11/2	D° of Arch work in D° — D°	3 - -	31 8 -	
2 2/9	D° of Brick in D° — D°	2 10 -	5 13 4	✓
11 3/4	Squares of Plastering in D° — Sqrs	1 7 -	16 11 3	✓
1	Centering		9 - -	✓
4	Guard Stones — Each	- 8 -	2 - -	✓
	Excavating formation &c		7 4 -	
	Contingencies & Superintendence	10 - -	26 13 12	
	Total for One Sunnel		225 - -	
	Total for 5 Sunnels		908 - -	1140

Construction of a Sunnel of 6 Feet Span proposed to be built at Nundeah between 5th and 6th Mile

147 70/81	Cyds of Rough Stone in Chunam	1 11 -	277 3 11	✓
15 1/3	D° of Arch work in D°	3 - -	46 - -	✓
3 23/27	D° of Brick in Chunam	2 10 -	10 1 9	
17	Sqrs of Plastering in D°	1 7 -	24 7 -	
4	Guard Stones — Each	- 8 -	2 - -	
1	Centering		13 - -	
	Carried Over		372 12 8	1140 908 - -

Pl. Sep 1871

Estimate valued at Rs 3317 Rupees from the Executive Engineer Kanduyboo Goes Dated Phoonga-

	Brought Over Rupees		372	12 8	1140 908
	Excavating formdation &c			8	7
	Contingencies & Superintendence	10		37	3 4
	Total Rupees				417 20

Construction of a Bridge of 15 Feet Span proposed to be built over Pinchama Nullah in the Hills

225 4/20	Cubs of Rough Stone in Chemam		1 14	420	15 12 2
25 6/9	Do of Arch Work in Do		3	76	10 8
6 22/27	Do of Brick in Do		2 10	17	14 2
28 1/2	Squares of Plastering in Do		1 7	26	9 6
8	Guard Stones	Each	8	4	
1	Centering			20	
	Excavating formdation &c			7	15
	Contingencies & Superintendence		10	57	9 1
	Total Rupees				630 40
	Grand Total Rupees				1955 2200

No II Range Office
Berhampoor
17th November 1870

Assistant Engineer

Acting Collector, Ganjam

Lieut. Richmond Major RE.
Asst Superintendent

PW 5294/10

Enclosure in a letter 24317 dd 2nd Instant from the Secy Engineer to the Secretary to Govt & D.P.W. Works

Estimate for construction Tunnels and a Bridge on Trunk Road No VI from Berhampoor to Mahendra Gangam District

No 163

Camp Tumuk'ottapur
28th June 76

From The Officer incharge
Nth Range Gangam

To The Secy Engineer 1st Division

Sir

I respectfully beg to forward herewith Plans and Estimates for Bridges and Tunnels on Trunk Road No 6 required to prevent future damage to the Road during Exceptional heavy bursts of Storm and rain. I enclose also a Sketch Map showing the position of each work proposed Tunnels of 15 span each 1 and 2 are in the 2nd Mile from Berhampoor to Mahendra one North and one South of the Gorge or opening called the water being impounded for Irrigation purposes in the fields above during heavy floods when all Bunds give way the water rushes down with great force and is impelled over the Road in these places before it can find its way into the Nullah these tunnels will prevent future damages No 3 Bridges of 9 span is required in the Valley at Ramah below the water shed of the Hills above where no drainage has hitherto been provided it is absolutely necessary during Extraordinary floods the water is impounded around the Hills and in all manner of ways through the fields down for Irrigation purposes all gives way during exceptional heavy bursts of

of Storm and Rain and the water Rushes down upon the Road in this Locality I was obliged to cut a drain here to save the Road on both occasions during the late floods and to keep it open for several days. At the Bridge of 15' span that is to replace one of 12' span washed away during the late floods the site is situated at the 7th Mile over the Ponchama Nulla. No 5 and 6 are proposed as the approaches nearly so of the Dandagedda in 19th Mile and are required to carry off water during heavy floods the water is impounded in all manner of ways for Irrigation purposes and is further impounded by the prolongation of Embankments upstream of the Dandagedda so what is impelled over the Road before it can find its way into the Dandagedda these Tunnels will prevent future damage in this Locality during heavy Storms and Rain. The sketch map from Derhampone to Gonjam shews site of proposed Tunnel of 6' span at Kadasinga where the drainage way is insufficient during exceptional floods where all the Irrigation Bunds of fields are broken nothing that I could do could prevent the water going over the Road in this place and doing much damage in the 14th and 15th Mile during the late Storm. These plans I may add for your information

information have been proposed in conformity with Captain J. Beetley's instructions and he has the Maps and sites marked thereon already sent to him they are Same time as what you would like to have done and if you will kindly inform me of your approval if it be your wish I shall prepare the materials ready in each case I will incur no expense in the current Official year but will have all built in April and May and they will be perfectly safe before the next Monsoon, but if funds are available and you approve I will have the work done before the close of the Current Official year if you grant me sanction in time. I hope that this is all the special grant that I will require to repair the damages: the Roads are in good order now I beg your kind instructions as early as convenient.

I have the &c.,

(Signed) J. D. Harris

Asst. Engr. Gonjam

(True Copy)

Lieut. Tuckey Major R.E.

A.S. Supdg. Engr. 1st Dr.

No 3317

Supt.g Engineers Office 1st Div.
Doveiaiswaram 22nd December 170

From

Major J.D. Fischer Supt.g
A.g Supt.g Engineer
1st Division

To

Colonel C.A. Orr R.E.
Secretary to Government
P.W.D.
Madras.

Sir,

I have the honor to forward herewith an Estimate Amounting to Rs. 2200 accompanied by plans &c.a for Constructing Masonry Works on Trunk Road No 6 between Madhandra Reiun and Chetterpin to prevent future damages to the Road during Exceptional heavy Sunets of Storm and Rain, and in so doing to request that the necessary Sanction of Government may be obtained for the same.

2/ A Copy of Letter* received from the Assistant Engineer in charge of Berhampin Range explaining the circumstances under which this Estimate was prepared, is herewith Enclosed for information.

3/ In the event of Government according their Sanction to this Estimate, I have to request that the necessary funds may be placed at my disposal from the reserve of 1871 Year. It will be seen from Mr. Harris'

* No 163 dated 28th November 170

Rs 2200/-

Estimate Amounting to Rs 2200/-
for Constructing Masonry Works
on Trunk Road No 6 between
Madhandra Reiun and Chetterpin
to prevent future damages to the
Road during Exceptional heavy
Sunets of Storm and Rain.

Dated 22nd December 170

Harris Cotton, he can collect materials
in this Official year without incurring
any outlay, and that Captain Pickler R.E.
appears to have satisfied himself, the works
are absolutely necessary and suitable. I have
as yet received no orders regarding the Trunk
Road Estimates, and so beg to transmit
these documents for further instructions,
having marked on the plans and specifications
some alterations which I deem advisable.

I have the honor to be
Sir.
Your most obt. Servant
Wm Strachan Major R.E.
A.S. Supt. Engineer 1st Div.

No. 27 Public Works P.W.D.

Proceedings of the Madras Govt.

Read the following

From,

The Acting Chief Engineer
1st Circle

(No. E. 82, 33/79, 22nd Dec. 1870)

Under the circumstances
I am brought to notice
in these papers the
Govt sanction the
Estimate of Rs 2,200
for the construction
of certain masonry
works on the Northern
of the Grand Northern
Road between the
Pakanadrum and
Nellimpur in the
Ganjam District which
are designed to

Dy No 1870 Dated
Inward 23rd January
Dis No 5294
The Dy Supdg Engineer
1st Circle

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

Dated 22nd December 1870

Received 31 do

S.E. No

Forwards for sanction
of Government plan
and Estimate amounting
to Rs 2,200 for constructing
Masonry Works on the
Trunk Road between
Mahendra Reservoir
Chellerhow

No 279-30 Dec 70

No 55-6

6 18 Jany 71 Rs 19

prevent future da-
mage to the line du-
ring exceptional bad
weather, but looking
to the smallness of the
Revenue under Commu-
nications" in the Budget
of 1871/72 His Excellency
the Govr in Council doe
not see any early pros-
pect of his being able
to provide the requisi
funds.

To
The S. Engr 1st Dn.
in Court.

Decr 31/1/71

C/ No 5294

Govt of Madras. 1871

PUBLIC WORKS.

To The Acting Superintending Engineer 1st Division

Dated

Recd. Rec.

G. O. 30th Dec 1871, No. 279.

Nos. 556-557

Masonry works - The estimate of Rs 2,200 for the construction of certain masonry works on the South West Coast Northern Road between the Mahanadi River & Cuttack in the Sambalpur Dt, forwarded with remarks.