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MADRAS RECORD OFFICE.

Government of Madras.

Public Works **DEPARTMENT.**

G.O. No. 3348	Press ~~Mis.~~
447-448	
Dated 22-11 —	18.64.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
22nd November 1864.*

No. 447. Read the following letter from Lieutenant-Colonel G. W. WALKER, R. L., Superintending Engineer, 7th Division, to Colonel C. A. ORR, R. E., Secretary to Government, Department Public Works, dated Cannanore, 2nd November 1864, No. 153 :—

SIR,

1. I have the honor to submit for sanction revised plans and estimates for the four bridges on the road below Charmady Ghât in Canara, for which an aggregate sum of Rupees 32,720 was sanctioned in G. O. No. 612 of 13th March 1863. The original papers were drawn up by myself in the monsoon of 1862, just after my return to the South Canara District, for insertion in the Budget of 1863-64, from surveys and sections which I found in the Office, my data being assumed, as no masonry or timber work had ever been carried out on the line before.

2. Last year there were spent Rupees 11,372 of the allotment of Rupees 15,300 on these works, which were all commenced so that they might be quickly taken in hand again this season. I had the opportunity of seeing them myself, and ordered some alterations to fit them to the exact sites, which in one case led to an increase of cost, but in the others would have caused considerable savings, but for the insufficiency of the original rates as shewn by the experience of the season. Lieutenant Filgate sends up his papers so complete, that I will let him speak for himself by extract of his letter and by his comparative statement of original and revised estimates. To that for the Manny bridge, however, I would add Rupees 300 for additional masonry in the shape of buttresses to the abutments and wing-walls. So amended the increased demand amounts to Rupees 7,720, and the total deficit of funds to Rupees 11,348, to be provided as shewn below.

3. The allotments for bridges and for road work below the Karkoor Ghât in Malabar, amount to Rupees 20,000 each. Of the former, Mr. Bailey reports that owing to local causes, which influence the supply of labour and materials, he cannot get through more than Rupees 10,000 under the former, and Rupees 15,000 under the latter head. But he has already completed the traces for the extension of the line from Mambat to tide-water at Areacode, ordered in G. O. No. 3,118 of 26th October 1863; to open which for the traffic of this dry season and for laying the foundations of the necessary bridges, he can find local labour enough to permit of his spending Rupees 6,000. This I have authorized pending preparation and submission of his estimates, and trust Government will not object to. While the balance of Rupees 9,000 remains available for transfer to the Charmady bridges, leaving Rupees 2,348 for entry in the Budget of 1865-66.

No. 448. ORDER THEREON, 22nd November 1864, No. 3,348.

	Original estimate.	Revised estimate
	Rs	Rs
Beltangady bridge ...	8,550	11,100
Moondajah do. ...	8,220	7,920
Weddghub do. ...	11,830	15,000
Manny do. ...	4,120	6,120
	32,720	40,140
		32,720
Excess		7,420

1. Under the explanation afforded, the Government sanction the revised estimates submitted for the four bridges on the road below the Charmady Ghât in the South Canara District, amounting to Rupees 40,140 in the aggregate.

2. The expenditure on the bridges in the past official year is reported to have been Rupees 11,372, and the allotment in the Budget for 1864-65 being Rupees 17,420, a sum of Rupees 11,348 is still required to complete the works. To meet this demand, Colonel Walker makes the proposals mentioned in the last paragraph of this letter, which are approved.

3. The Government request the immediate submission of the plans and estimates for the works which have been commenced in anticipation of sanction between Mambat and Areacode. They observe that these works should not have been proceeded with without authority.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 7th Division.
" Controller of Public Works Accounts.
" Accountant General.
Exd. S. T. Augustin.

Extract from letter No 7 dated 8th September 1884 from
Lieut. A. J. Filgate A.E. Assistant Engineer in charge
of the Porton Range to Lieut Colonel J. W. Walker
R.E. Superintending Engineer 7th Div.

2. One of the prime causes for the increased Estimates is the rise that has taken place in the District in the price of Labour and Materials. Besides this in the case of the Wellhangady Bridge 4268 c. ft of Masonry were taken down and reconstructed by your order, but a reduction of over 3000 c. ft was caused by reducing the batter given to the Piers from 1" to $\frac{1}{2}$ " to a foot. The increase in the rate for earthwork is due to the great difficulty that was experienced in sinking the foundations and the increase in the cost of baling is due to the same cause. The experience of the present Monsoon shows that at least two of the Piers in the deep bed of the River, ought to be faced with cut granite, and I have accordingly entered this in the Estimate.

In the Midagul Bridge, the decrease in quantity in the Estimate in Chumam, is due to the lessened batter allowed to the Piers, and to a decrease of two spans by a change in the site, the extra cost is due to the high rate paid for carriage of materials and the difficulty of obtaining labor. The great increase in the clearing and levelling work is due to the amount of work necessary to make a good

foundation, and also to the number of boulders in the bed of the River, that obstructed the waterway - The high rate for Earthwork is due to the hardness of the soil, which is greatly impregnated with stone. The rise in the cost of the Timber is caused from there not being any of the required. Dealings within a reasonable distance of the River - It is absolutely necessary for the safety of the Bridge that the four Piers in the deep bed of the River should be faced with cut granite, for which I have made an allowance in the Estimate.

At Moondag I found a site for the Bridge for which 14 spans were sufficient, instead of the nine originally allowed, but I had to go to a greater depth for a good foundation. The high rate for laterite is due to amount paid for carriage of materials and the scarcity of labour. The total cost of the Timber has been considerably reduced, owing to the decrease in the number of spans.

The increase in the Estimate for the Mummy Bridge is owing to the distance from which the stone has to be carried, there being none of good quality procurable in the neighbourhood and an increased depth had to be given to a portion of the foundation, which has added to the quantity of Masonry and Earthwork.

The additional allotment necessary to complete the Bridge is Rs 11348 (increased to Rs 11348 - *Est.*) -

Abstract Estimate No. 1884/65

In a letter to dated
21st October 1884
From
The Supg Engineer
To
The Secy to Govt
D.M.
Madras

MR 4809/63

Extract from Genl. Lib.
pages letter on the sub-
ject of required plans &
Estimate for Bridge on
the road below the place
- many spans -

- Carried over Rs 34,020 -

foundation, and also to the number
of holders in the bed at Shon Pina

Abstract Estimate No. of 1884/85
District South Cañons

Work: Constructing 3 Timber and one Masonry Bridges
on the Road from Buntual to Chamaung.

Quantity	Description of Work	Rate	Amount	Total
<u>Bridge over Balthazaga River</u>				
30066			51.12	129
30016	Cft of Lignite in Chamaung	\$100 cft	18	5402 44
352 1/2	Archwork		19 1/2	69 10 6
126	Cft of Cordwork	Pcft	5	39 6
8894	Cft of Painting with Chamaung	Pcft	18	133 67
1570	Cft of Earthwork	Pcft	3 10	378 24
2150	Cft of Good junglewood	Pcft	11	2284 6
540	Planking		15	708 12
180	of cut granite		18	720
	Baling water			750
	Sundries and Superintendence			273 1/2

Total Repairs 11,100

<u>Bridge over Madaga River</u>				
25794	Cft of Lignite in Chamaung	Pcft	20	5038 12 10
88	Cft of Cordwork	Pcft	5	27 8
10202	Cft of Painting with Chamaung	Pcft	19	159 6 6
	Clearing and building Rock			1100
1200	Cft of Earthwork	Pcft	4	300
888	Cft of cut granite	Pcft	18	1584
3830	of Good junglewood			
1000	Planking		14	6037 8
	Baling water			200
	Sundries and Superintendence			713 3 2

Total Repairs 15,000

<u>Bridge over Maungaj River</u>				
16431	Cft of Lignite in Chamaung	Pcft	21	3450 8 1
72	Cft of Cordwork	Pcft	5	22 8
5257	Cft of Painting with Chamaung	Pcft	10	85 5 3
	Clearing and building Rock			300
950	Cft of Earthwork	Pcft	4	237 8
1930	Cft of Good junglewood	Pcft	11	2050 10
500	Planking		15	656 4
	Baling water			350
	Compensation for land &c			174 9 5
	Sundries and Superintendence			542 11 3

Total Repairs 7920

Inspector 1048 (increased to Rs 11348 - Ann.) -

Carried over Repairs 34020

Brought forward Rupees 3402

Bridge over Mining Ralls

19541	Cft Lateral in Chumans	8100ft	17	"	3321 158
5700	Archwork with 8"		20	"	1220
90	Rft Centring	8100ft	4	8	405
344	Boardwork		"	4	86
6830	Sqft Painting with Chumans	8100ft	1	8	102 7 2
2355	Sqft Plastering under the arch with vit	8100ft	4	"	94 3 2
1311	Cft Exc Excavation	8100ft	-	2 9	225 58
	Baling water				170
	Carried over to former balance				395

Total Rupees 582

Grand Total Rupees 398

Amount sanctioned in G. O. No 612 of the 13th March 1863 327

Amount now requiring sanction 713

Post Office Office
South Canara
Dapinjan, 8th September
1864.

Ch. J. P. K. K. K.
By Assistant
South Can

Walker Lieut Col M. E.
Supy Engr. to Govt

No 158

Supg. Engrs Office, 7th Division
Bombay 21st October 1864

From
Lieut. Colonel G. W. Walker R.E.
Superintending Engineer, 7th Div.
To
Colonel C. A. Ome R.E.
Secretary to Government - B.M.
Madras

Sir, I have the honor to submit for sanc-
tion revised Plans and Estimates
for the 4 Bridges on the road below
Channaray, Ghaut in Canara, for
which an aggregate sum of Rs 32,720
was sanctioned in G.O. No 812 of 13th
March 1863. The original papers were
drawn up by myself in the November
of 1862, just after my return to the
North Canara District for in-
spection in the Budget of 1863/64
from surveys and sections which
I found in the office; my data being
assumed as no masonry or timber
work had ever been carried out
on the line before.

2 Last year there were
spent Rupees 115 1/2 of the allotment
of Rupees 1500 on these works, which
were all commenced so that they
might be quickly taken in hand
again this season. Had the oppor-
tunity of seeing them myself, and
ordered some alterations to fit them
to the exact sites, which in one
case led to an increase of cost,
but in the others would have
caused considerable savings, but
for the insufficiency of the original

A.P.M.

Enclosed letter No 158 dated 21st
October 1864 from
the Engrs Office, 7th Div.
to the Secretary to Govt
at Madras.

Estimated at Rs 32,720

with Canals

77774 809/63

Engrs Office, 7th Div.

3 Bridges and one

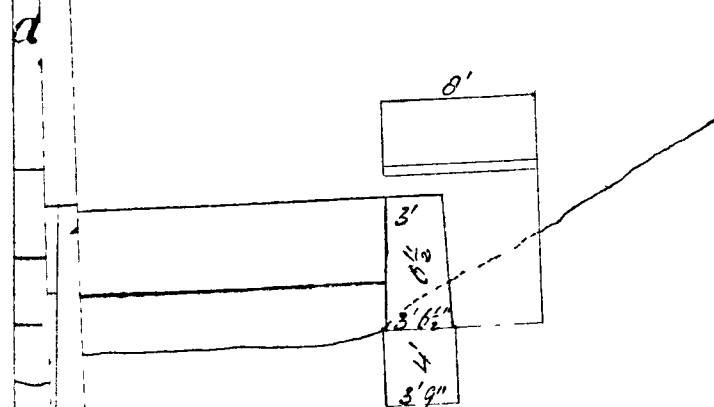
Passing Bridge on

the road from

Bombay to Channaray

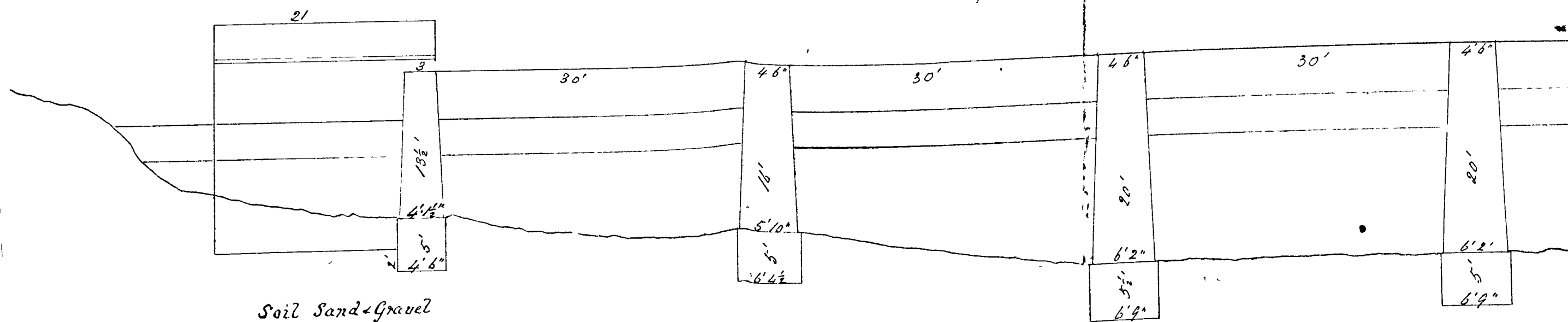
rates as shown by the experience of the season - Lieut Filgate sends up his papers so complete that I will let him speak for himself by extract of his letter and by his Comparative Statement of original and revised Estimates - So that for the Mannu Bridge however I would add Rs 200 for additional masonry in the shape of Buttresses to the Abutments and Wingwalls - So amended the increased demand amounts to Rs 7720, and the total deficit of funds to Rupees 11348, to be provided as shown below -

The allotments for Bridges and for Roadwork below the Haroon Ghaut in Malabar, amount to Rupees 20000 each - Of the former Mr Bailey reports that owing to local causes which influence the supply of labour and materials he cannot get through more than Rs 10,000 - under the former, and Rs 15,000 - under the latter head - But he has already completed the traces for the extension of the line from Mannu to the water at Krescode, ordered in G. O. No 3118 of 26th Oct 1883; to open which for the traffic of this dry season and for laying the foundations of the necessary bridges, he can find local labour enough to permit of his spending Rupees 6000 - This I have apprised pending preparation and submission of his Estimates; and trust Government will not object to - While the balance of Rupees 9000, remains available for transfer to the Mannu bridges, leaving Rs

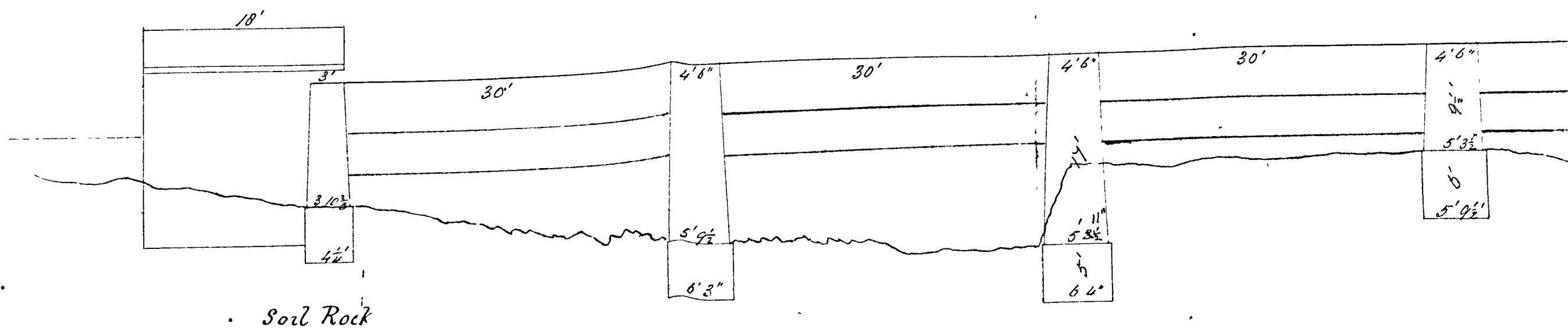


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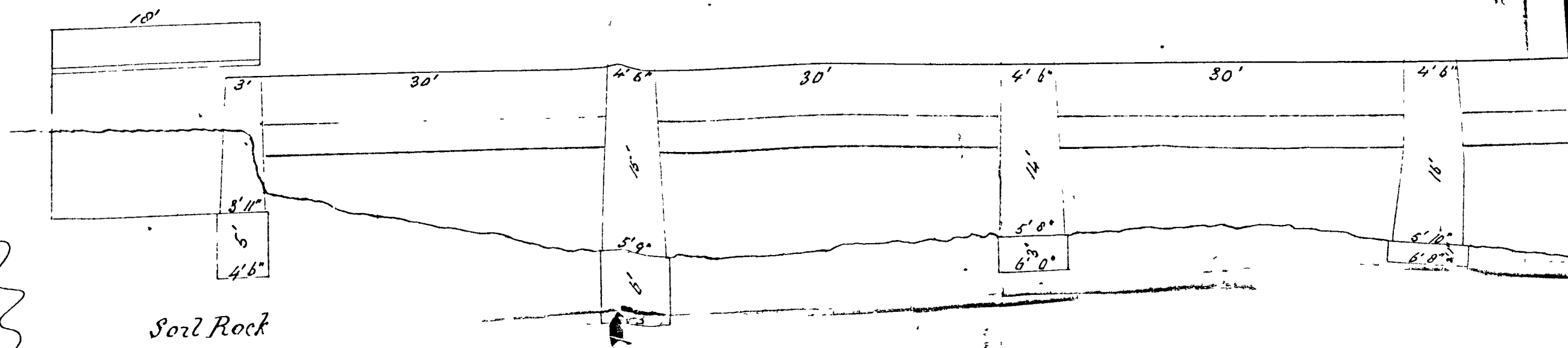
Bellanga



Nidagul Bri

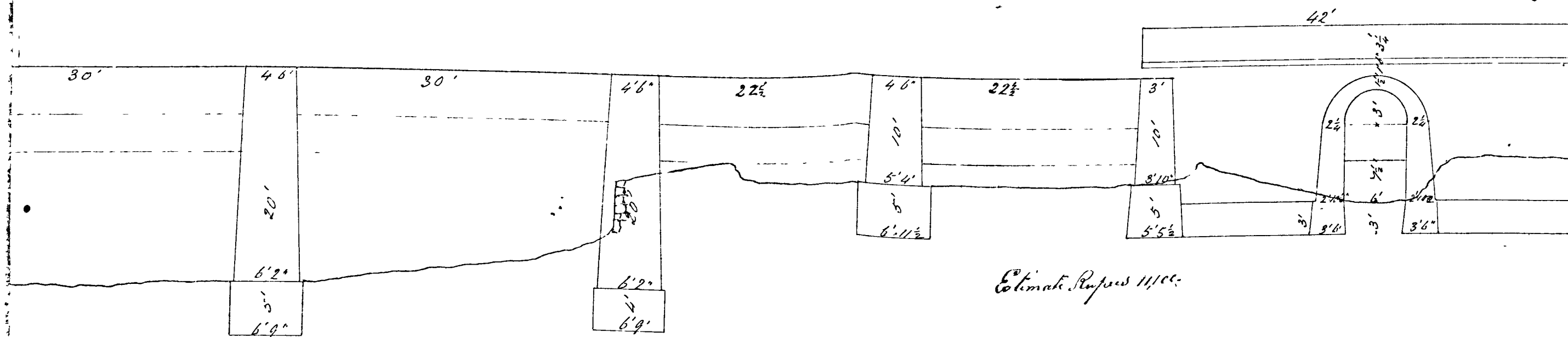


Moondagee Bridge



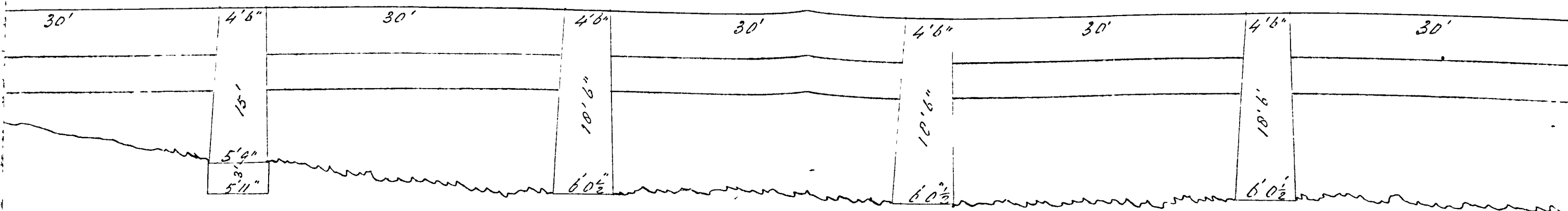
Chowhan Range Office
 & the General
 Engineer, 8th September
 1864

ly Bridge

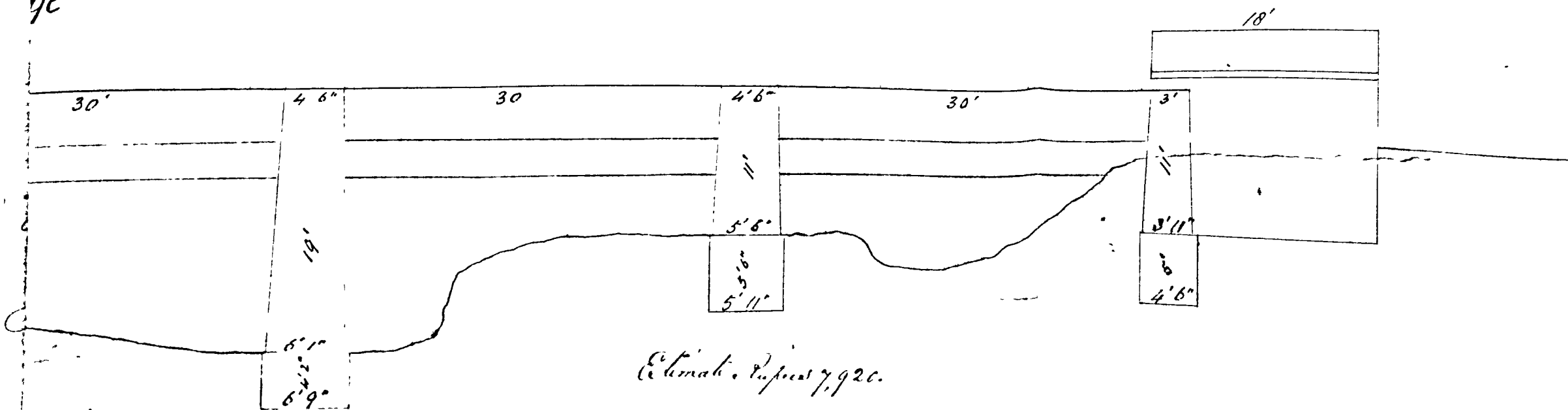


Estimate, Rapids 11/100.

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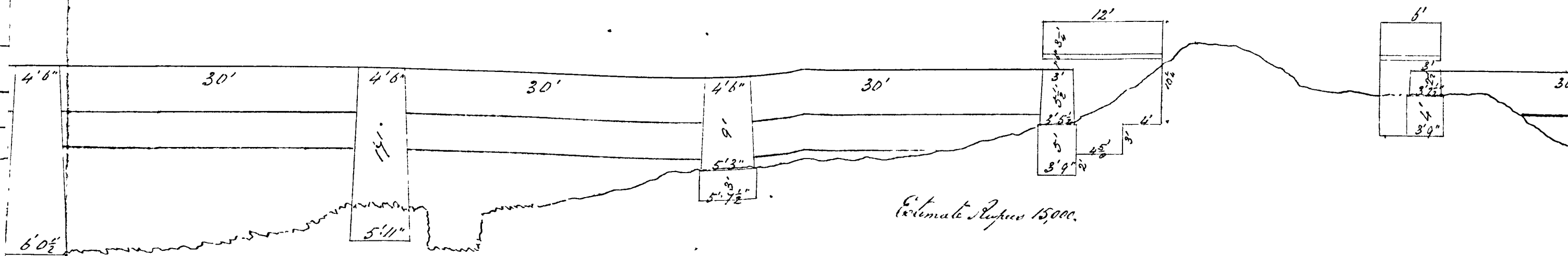


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Estimate, Rapids 7,920.

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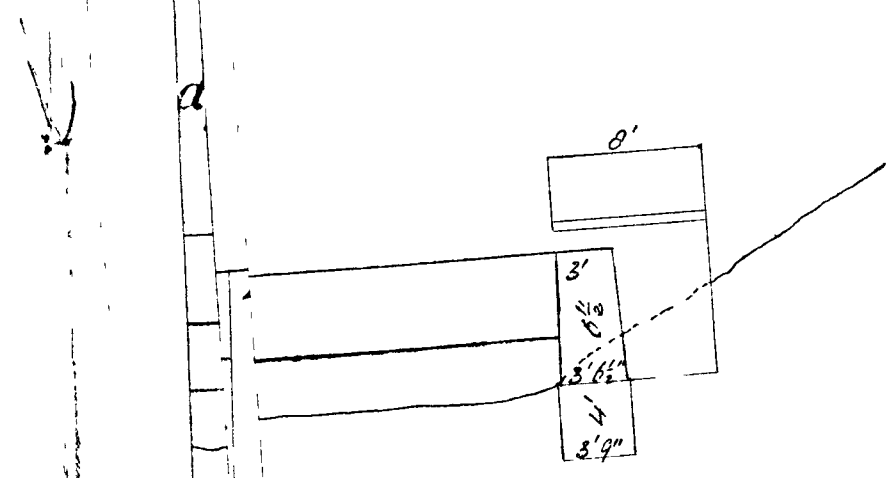


Estimate Super 15,000.

Scale



13-



Alex. J. Fildes. Sept. 22

2348 for entry in the Budget of 1865/3

Have the house to be,
 for

Love most Westward.

Charles L. Thompson
Superintendent of the

been proceeded with without authority -

Chépank
22 Nov 1964

[illegible]

612-3

Back to 180-1

0715340/84

Dated 22nd November 1864
 Received of

158

See 19

Mr. J. B. Hunt
O. P. O.
Shaw

Sept 21 1864 C. W. Allen
of the same name
of No. of Main St. & 1st St.
New York is
the subject of the
the subject of the

Admission for three
days reduced from
admission for
weeks on the new
plan. Learn why that

103318. 22nd Nov / 64

William Fisher

	Wright's Col	Amos's Col
Belt and Gads. Bonds	8550	11100
• Moonlight - do	8220	7920
• Field - do	11830	15000
• Malm - do	4120	6120
	<u>32720</u>	<u>40140</u>
		<u>32720</u>
		<u>7420</u>

Q 110, 3248

Under the supervision of Bonch-Bruyevich

the 1905th recollection the revised estimate submitted for the 1st 1906th on the road below the Pharmacy Shop in the South Census with amounting to \$2.40 1/40 in the aggregate -

2 The expenditure on the Range
in the past fiscal year is reported to
have been Rs. 11,379 and the allotment
in the Budget for 1894/5 being Rs. 17,000
a sum of Rs. 11,348 is still required to
complete the work - It must thus
be noted, both for the money the pro-
posed expenditure in the past year
- It is better, which are approved.

5 The Govt request the immediate
submission of the Memorandum on
the works which have been commenced
in anticipation of operation between
Aloulat and Chenouade - they
to be done, until the summer should not
be too

2. 12. 1843 15/4 09.17 $\frac{1}{2}$ •