

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	1355	(W)	Press
B.P. No.			Mis-
Dated	31-5-	1876	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
31st May 1876.*

Read the following papers:—

No. 525. From T. D. HARRIS, Esq., Officiating District Engineer, Malabar, to Major-General G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Calicut, 17th March 1876, No. 220.

With reference to G.O., No. 423, dated 16th February last, I have the honor to retransmit an estimate for improving the floor of the cook-rooms in use with the European Barracks at Cannanore, with ground plan outside the cook-houses it is proposed to pave, and to append data for the charge.

	RS.	A.	P.
Five carts for carting stone, at 125 per square	0	12	6
Labor for laying one square, one mason, 10 Annas, will lay above fifty stones a-day carefully, including assistant to supply stones.	2	0	0
Chunam and sand	0	9	10
Ramming and levelling floor, including watering	0	7	0
Labor for supplying mason with water and chunam, and pounding chunam	0	10	0
Pointing with cement, including labor, &c.	3	0	0
Sundries, &c., including petty articles	0	8	8
Total	8	0	0

The above is the lowest data, and a sum of Rupees 2 has been reduced from it; the rate of 10 Rupees charged before was taken from the average cost of floors at Cannanore and given in lump.

2. With regard to the cost of removing laterite stone should be covered by the blue, I have the honor to state that Lieutenant Dobson, R.E., reports that the stones are almost worthless, being full of holes and worn out, and in fact he once thought of proposing to put the granite stone over the laterite, but the cost of filling up the holes would be more than their removal. Lieutenant Dobson always sells the broken stones in his works by auction, but it is difficult at present to say what they will fetch, hence recovery under that head has been deducted from the estimate; the sum of Rs. 20 has been retained in the estimate, and he will try and recover that amount when the stones are sold, which is but 5 Rupees for each cook-room.

No. 525-A. From T. D. HARRIS, Esq., Officiating District Engineer, Malabar, to Colonel W. T. F. FAREWELL, Officiating Deputy Chief Engineer, Public Works Department, dated Calicut, 8th May 1876, No. 33.

With reference to your memorandum, No. 639, dated 4th ultimo, I have the honor to submit the following explanation on the points noted therein:—

	RS.	A.	P.
Paragraph I.—By “five carts for carting stones at 125 per square 0-12-6” was meant that it took five carts to convey stones, each cart twenty-five stones 0-2-6 = 5 × 0-2-6	0	12	6

The rate is a contract rate, the cartman taking stones from the range office or from one work to another any where in the cantonment for 2 Annas 6 Pies per trip.

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31st May 1876.*

Paragraph 2.—125 stones = $2\frac{1}{2}$ days' work; one mason for $2\frac{1}{2}$ days' work at 10 Annas or $2\frac{1}{2}$ at 10 Annas = ...

1 Assistant, i.e., cooly who supplies mason with stones, for two days at 0-3-6 = ...	RS.	A.	P.
	1	9	0
	0	7	0
	2	0	0

The rates for masons in the *Cannanore Range* (Cantonment) are from 5 Annas to 10 Annas.

Paragraph 3.—Two parabs chunam and sand 0-9-10; chunam and sand are measured by *parabs*, the quantity given above being two of each, sand and chunam.

2 Parabs chunam at 0-4-6	RS.	A.	P.
2 „ sand at 0-0-5	0	9	0
	0	0	10
	0	9	10

when mixed the four parabs equal about three parabs mortar. It is intended to bed the stones in the mortar, as the stones are undercut like this  a good deal of mortar is required.

The cost of making the mortar is approximately as follows, and is removed from item No. 5:—

By measuring chunam and sand.

Do. mixing the sand.

Do. supplying water for mortar. Two women pounding chunam and sand when mixed.

It is impossible to give the correct proportion of labor, the rate for women and boys being only 1 Anna 8 Pies per diem, or to give a proportion for pounding a proportional part of a day's work; but the whole may be taken as about 7 Annas, the full rate being 8 Annas and 4 Pies.*

Three Boys	RS.	A.	P.
Two Women	0	5	0
	0	3	4
	0	8	4

Paragraph 4.—The charge for ramming includes removing the old stones, clearing away the old mortar and rubbish left, clearing the ground, ramming 100 square feet, and also bringing water. Supposing one man can remove a square a-day and clean the surface for 3 Annas 6 Pies, it certainly will take him another day to ram the surface with a heavy beater = 3 Annas 6 Pies, making two days work = 7 Annas, and water will also be required and a boy to bring it. I therefore think the rate is not too high.

Paragraph 5.—The assistant, as before explained in item 2, meant a cooly to carry stones, he does not re-appear here, a boy is required to supply the mason with water, another to supply him with chunam, but as the mason cannot lay as fast as he can be supplied with those two articles taking $2\frac{1}{2}$ days to lay a square, I allow only 3 Annas for this supply per square. (This 3 Annas + 7 Annas in No. 3 = the 10 Annas of No. 5 item.)

Paragraph 6.—Pointing with cement was taken from the rate arrived at when the wells in the Cantonment were paved, and again in pointing floor of the Infantry

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31st May 1876.*

Canteen, it is found that the rate for cement alone per square is just Rupees 2-0-10; 1 Rupee per square is not too much to allow for labor, including raking out joints. Sand also has to be supplied, and sometimes the cement has to be ground, occasionally getting caked.

No. 525-B. From T. D. HARRIS, Esq., Officiating District Engineer, Malabar, to Major-General G. W. WALKER, R.E., Chief Engineer, Public Works Department, dated Calicut, 12th May 1876, No. 36.

With reference to your memorandum, No. 384, dated 28th February last, and G.O., No. 27, dated 31st January 1876,

				RS.	G.O., No. 27, dated 31st January 1876,
1.	Constructing dry-earth shed to the latrine of the European Regiment at Cannanore	...	...	825	I have the honor to forward plan and estimates as per margin, and to explain that both of the works should, I admit, have been forwarded as one project; but as the Brigadier-General, Malabar and Canara, having called for plans and
2.	Do. covered passages	...	...	2,175	
				<u>3,000</u>	

estimates for work No. 1 in August last, and that for No. 2 in September, they were forwarded in October and December 1875 respectively, and when they reached Government they were perhaps sent at one time, and it evidently appeared as two separate works.

2. The instructions regarding the woodwork have been attended to as far as possible; the rate for using Mangalore tiles is the same as that for single pantiles, the Brigadier-General preferring Mangalore tiles.

No. 526. ORDER THEREON, 31st May 1876, No. 1,355.

MILITARY WORKS, No. 12.

(a) *Heads of Service*.—Imperial.
Fund.—Ordinary.
Class.—Original Works.
Main-head.—Military.
Sub-head.—Accommodation for European Infantry.
Name of Work.—Alterations and improvements to the European Infantry Barracks at Cannanore.
2,980 Dry earth shed, &c., No. 31-1W.
505 Improving plan of cook-room No. 31-2W.

Amount.—Rs. 3,435.

To be carried out by the Public Works Department.

2. The above sanction has been registered as Imperial No. 31 W. of 1876-77.

(True Extract.)

Colonel,

Offg. Under Secy. to Govt., P.W.D.

To the District Engineer, Malabar.
Examiner of Public Works Accounts.
" Military Department.

Exd. E. C. Shunker.
Spure Copies

Malabar Dist. Engin^g Office
No. 33. Calicut 8th May 1876.

From

The off^r: District Engineer
Malabar

To

The off^r: Dy. Chief Engineer
P. W. Deptt.
Madras.

Sir,

With reference to your Memo. No. 639 of 4th Ultimo, I have the honor to submit the following explanation on the points noted therein:-

Para I. —

By "five carts for carting stones at 125 per sq^{ft}" — 12-6 was meant that it took 5 carts to convey stones, each cart 25 stones — 12-6 = $5 \times 2/6$ — 12-6.

The rate is a contract rate, the cartman taking stones from the Range Office or from one work to another any where in the Cantonment for 2 as. 6 ps. per trip.

Para: II. —

125 stones = 2½ days' work; 1 mason for 2½ days' work @ 10 as. or 2½ @ 10 as. = 1-9-11
1 Assistant, i. e. Cooly who supplies mason with stones, for 2 days @ 3/6 = 1-7-0
2-16-11

The rates for masons in the Cannanore Range (Cantonment) are from 5 as. to 10 as.

Para: III. —

2 Parahs Chumam & sand — 1-9-10
Chumam

No 5-25-66
 Cir. 24/5/76 Onta 2/1/76
 Des 2/5/76

Oct 8th May 1874
Dec 10th May 1874
Feb 3rd May 1874

2-11-1896 Sept.
 No: 2278

to
 The Offr. Diet. Anglican
 Cathedral
 D.D. U.S.

General No. 9 of 1876-77.

Detailed Estimate of the probable expense and the improvement to the European Infantry
 Barracks at Cambronne 1838

Quantity	Unit	Description
105.	cubic yds	Foundation for the front wall of the shed.
78.	"	" " side wall "
268.5	"	" " back wall & gable ends "
126.5	"	" " side walls "
160.2	"	" " steps & foundations sand base "
200.6	"	" " walls above in front of the shed.
168.	"	" " walls at sides "
200.8	"	" " "
9.3	"	" " "

Total 1000.0 cubic yds

By order of the Committee
J. H. Smith

Brought forward

688.8
579.0 Gable
726.5 Total
36.0 Deduct 14 x 11 x 6
692.5
11.92 1/2 ft. of latrine plaster in latrine am. 18 -- 10 ft 124 32

Plastering

Front wall inside
Side wall inside
Walls outside
Gable both sides
Basement for 3 sides
Ends of steps
Sides and top of doorway
--- quantity of the latrine

Total

Deduct 14 x 6

19 ft. of plastering and whitewashing
12 ft. of airfalling

12.80
22 -- 31.00

1 x 23 x 16 360

2 x 20 x 4 x 3 2

19 ft. of roofing with rafters, collar piece
rafters and bails including Mangalore tiles
14 ft. of timber for roof and put up
Dismantling the existing wall 3 x 6 for the
substance of the latrine including lintel at
the top

10 ft. of 4 x 6 both sides 2 -- 18.00

6 x 6 plastering foundation of filling in and clearing 20 -- 120.00

10 ft. of 4 x 6 10 -- 40.00

10 ft. of 4 x 6 10 -- 40.00

10 ft. of 4 x 6 10 -- 40.00

10 ft. of 4 x 6 10 -- 40.00

10 ft. of 4 x 6 10 -- 40.00

10 ft. of 4 x 6 10 -- 40.00

10 ft. of 4 x 6 10 -- 40.00

10 ft. of 4 x 6 10 -- 40.00

10 ft. of 4 x 6 10 -- 40.00

10 ft. of 4 x 6 10 -- 40.00

Binght Johnson

225

Counting the Eng Biler & Regt into a
Dry earth shed for the latrine and the new
Barracks right wing.

1 9' 3 1/2"
1 9' 4 1/4"
1 10' 1 1/2"

67.6. Foundation to the front wall.
16.5.5. Basement to Do.
41.9. Wall above
6. Step in foundation and base

231.9.5. Deduct 17' 4" x 1 1/2" x 6 1/2" = 200.00
29. Deduct 17' 4" x 1 1/2" x 6 1/2" = 200.00

192.8.5. Also note increase in quantity to small
or 193. Deduct 17' 4" x 1 1/2" x 6 1/2" = 200.00

208. Deduct 17' 4" x 1 1/2" x 6 1/2" = 200.00
24.26. 24.26. 24.26.

Whitewashing the existing wall of the room.
24.26. 24.26. 24.26.

24.26. 24.26. 24.26.

Running tiles with additional tiles, suppose that 12

Diagonally the rear wall 6' x 3' for the
entrance latrine including plastering and
a lintel at the top.

Latrine door 4' x 6' 1/2" with front wall
6' x 3' x 1' 1/2" plastering and clearing
and 1/2" thick

Latrine door 4' x 6' 1/2" with front wall
6' x 3' x 1' 1/2" plastering and clearing
and 1/2" thick

Latrine door 4' x 6' 1/2" with front wall
6' x 3' x 1' 1/2" plastering and clearing
and 1/2" thick

Latrine door 4' x 6' 1/2" with front wall
6' x 3' x 1' 1/2" plastering and clearing
and 1/2" thick

Latrine door 4' x 6' 1/2" with front wall
6' x 3' x 1' 1/2" plastering and clearing
and 1/2" thick

12199 x 61
619 x 6191
34-9

34-9-

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I pay dues Jan 1898
 I am in perfect attendance about 14 4.
 I am in perfect attendance about 14 4.
 I am in perfect attendance about 14 4.

$9 \frac{2 \frac{1}{2} \times 2 \frac{1}{2} \times 2 \frac{1}{2}}$
 $9 \frac{1 \frac{1}{2} \times 1 \frac{1}{2} \times 1 \frac{1}{2}}$
 $1 \times 3 \times 1 \frac{1}{2} \times 1 \frac{1}{2}$
 $1 \times 1 \frac{1}{2} \times 1 \frac{1}{2} \times 1 \frac{1}{2}$

13-10-10 Foundation for pillars
 22-7-6 Pillars above
 28-1-6 Closing the present opening in the cement wall
 25-10-6 Laying the screen wall for the breadth of
 the trap door. in (100) 5' 6" wide
 29-9-6
 30-9-6

✓ 300 11-24 1840-64 of latitude in Chumpan. 1840-64 1840-64

410
Sept. 11. Clastering
Clastering pairs. Whitewashing 2 in. Apr. 8. 02 ✓

1300
\$9.11 of roofing with rafters, reapers, nail
found many of the tiles including collar pieces 3x5 - 18 on Apr 23rd -

Walter Loomis on each side where the roof brackets are
Carried forward 298 3/4

Brought forward

296 316 3 1208

Wood work

296 316 3 1208

33.3.
33.3.

Preparations

Sept. 1st of timber work for the same

Screen wall frame for the passage

Excavating foundation, filling and cleaning away

Subsoil. The

Summers and Sept. 1st of timber work

Sept. 1st of timber work

Sept. 1st of timber work

Sept. 1st of timber work

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Sept. 1st of timber work

Sept. 1st of timber work

Brought forward

No. 4 Constructing a round parapet from the end of the barracks to the depot quarters. Now as stone goes down near the barracks & round of the European Regiment.

10 2 1/4 x 6 x 6
6 1 1/2 x 6 x 6
4 1 1/2 x 6 x 6
1 2 x 3 x 3
1 2 x 2 x 2
1 2 1/2 x 6 x 6

126.69 Pillars in foundation
14.9.0 do above
85.6 do
15.0 Pillars in foundation in front of depot quarters
9.0 Pillars in foundation
19.65 do above

370.39
11370 6 ft. of plastering chimney 18 - 100 66 93

Planting

6 x 6 x 8 1/2 306
14 6 x 9 1/2 288
1 5 1/2 x 6 1/2 36
1 x 2 x 2 4

Pillar
do
Addition of pillar in front of depot quarters
Base all the sides
Square feet of plastering and whitewashing - 2 118

990
8 ft. of roofing with rafters, rippers, nail

and 1/2 in. along tiles including collar pieces 18 and 1/2 17852

Wood work

1 1 1/2 x 6 x 6
1 2 1/2 x 6 x 6

28 6 x 10.6
34.10.6
2135 6 ft. of timber joist for roof
6.10.6 6 ft. in the middle of last 90 ft. for the section of roof

2135 6 ft. of timber joist for roof 14. 9 1/2 17852

Remounting the roof wall of the barracks
of 6 ft. of rafters including the part dismantled 20

Weather board on each side of the page 2
where the roof breaks.

Carried forward 322. 9 1/2 17852

Excavating foundation filling in and clearing
 and laying out for completion

2300
 322-9400

Stat 327.91
 12.83

Excavating foundation filling in and clearing
 and laying out for completion

340-1
 340-1

Stat for work

680-1

Grand total of estimate of Carpenter
 for the dry earth, sheds, and covered
 passages

12.83
 12.83

Mr. J. M. Angalone tiles are not approved
 if the rate is not be altered as the rate
 for single panthers is almost the same.
 The actual rate for all Angalone tile Roofing
 from last years work was 20¢ p. sq. but I have
 reduced the estimated rate to 18¢ as I think
 I can work at that by keeping a very tight
 hand on the Carpenters. The rate for Calcutta is
 entered 18¢. I can work cheaper than this
 in large works, but as the quantities are small
 I have entered higher rate.

Bannam Range Office
 6th Dec 1896

16/15/16
 16/15/16

A. J. Dorn Lieut. R.E.
 Dist. Engineer Malabar
 D. J. Dorn
 Off. Dist. Engineer Malabar

11

Estimate and Specification
for improvements
to E. 9 Barracks at
Cannara

After Commence large office
Jan 1876 from the office
South. Ings, and also
to the Engineer's Office
Madras

8. 4. 34. 90/146

Specification to accompany estimate
for improvements proposed to be made
to the European Barracks at Cannara
Amount of estimate for 3 Dry earth sheds
825 Rupees.

Utilising the present screen wall as a portion
of the wall for the shed, an opening will be fixed
in this wall to give an entrance from the
latrine into the shed.

Excavation After the centre lines of the three
walls have been pegged out and the
breadth of the foundations located, the
excavate the trenches to the full depth
as per plan.

On the completion of the excavation
the centre lines will be carefully laid
out and the footing courses of 4 1/2 on
each side commenced as per section.

The walling will consist of latrick
stone in Chunar stone broad 1 1/2 feet.
The roof to be of Mangalore tiles
super 2x1 placed as to fit the

the edge of the tiles; rafters 3x5. Concrete
by a collar piece placed 2 feet apart
from center to center.

The floor of the shed to be
of asphalt $\frac{3}{4}$ " thick poured on three
inches laterite concrete. Carefully
laid and rammed. The laterite concrete
to be made in this way. Take picked
small laterite stones or pebbles and
mix with Chanam and sand in pro-
portion 5 stone, 3 sand and 2 Chanam.

The material to be mixed dry at
first, afterwards as much water as
will just cause it to bind and the
whole again thoroughly mixed. Any
previous day's work to be dampened
before next day's work begins, when
the whole is thoroughly dry the
asphalt to be poured on hot in the
usual way in sections.

The interior and exterior of walls
to be plastered with 1 coat of Chanam
plaster and whitewashed.

The room to be tatted for a height
of about 4 feet after being plastered
the battens door is to be given in
the side wall of the shed through
which earth can be brought. The
door to be well tatted and
converting the big building into
a dry earth shed amounting to 103 Rs.

Foundation
Basement

The foundation to the proposed
wall in front to be 3 wide and 2 ft
deep and basement $2\frac{1}{4}$ wide and 9"
deep and to be constructed of laterite
in Chanam.

Plastering

The outside of basement and
walls of structure both sides to be
plastered with one coat of Chanam
plaster and whitewashed.

Shifting

The flooring to be of asphalt
same as before mentioned in
the shed.
The tiles to be shifted and
8 new tiles and pipes to be added.

An opening ^{6 1/2 x 3} to be made in the wall of the latrine, to serve as an entrance by means of which men can take earth from the shed. A doorway will be given opposite as an entrance from which the shed can be filled with earth. The door to be well tarred.

Apr 7. Constructing a covered passage from the end of the old Barracks to the latrine near the ^{High Mass} ^{Expt} ^{Expt} Amount of Rupees 330.

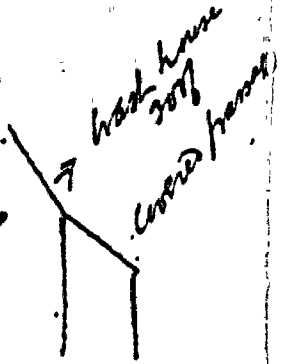
The covered passage to consist of 5 rows of square pillars, each of which foundations are 3 1/2 wide and 4 1/2 deep. Superstructure 1 1/2 off and 8 high and the whole to be constructed of latite in Chuan and lime plaster. The roof to be of Mangalore tiles, rafters 2 1/2 x 4 1/2, 2 feet apart.

from center to center, rafters 2 x 4 and placed so as to fit the edge of the tiles. A small offset to be given to the wall house opposite floor. After making an opening in the present screen wall, a wall 6 x 3 1/2 to be built inside within the archway to hide the seats for men coming along the passage.

Apr 8. Constructing a covered passage from the end of the new Barracks to the latrine near the Bay Boiler shed now proposed to be converted into a dry earth shed. Amount 392.

The passage to consist of 4 rows of pillars and an odd corner front of the bath room, all dimensions same as above except superstructure which will be 6 1/2 high. The roof of passage where it comes opposite to the bath room will

be one sided only and be a continuation of
 Bath room roof but with rather a less
 slope. There will be a slight break in
 roof of the passage which will be filled
 in with weather board on both sides.



The brisannade supporting the roof of the passage
 will rest on the brisannade of the barracks at the
 point marked A.
 Ch 3 Constructing a covered passage from
 the end of the low barracks to the latrine
 near the Middle Alley Co. Regiment
 Amount of estimate Requested by Am
 Same as prospect be 2 and height
 of Pillars as per section.

Are hand on Constructing covered
 passage one from the end of the old
 barracks to the high gate house as
 storerooms and the other from
 the barracks to the latrine near
 the Barrack of horse to the wall.

Amount of Request = 680
 The passage to consist of 6 rows of
 pillars of which the height of the

two rows will be a little more than the
 others for the passable of carriages.

All the rubbish to be cleared away
 on completion of ^{each} work.

Pannam Range Office Aldobm Lieut. R. E
 6th May 1906 Assistant Engineer Malabar
 W. Pearce
 offy D. Eng. Malabar

No 36

Malabar Distt. Engrs. Office
Calicut 12th May 1876

From

The offg: District Engineer
Malabar

To The Chief Engineer
P.W. Department
Madras

Sir,

With reference to your

1. Constructing dry earth shed to the station of the European Regt at Cannanore Rs. 825 Memo: No. 384 of 28th February last, and G. O. No. 27 of 31st January 76, I have the honor to forward

2. - do - Covered passages - $\frac{2175}{3000}$ Plan & estimates as per margin and to explain that both of the works should, I admit, have been forwarded as one project, but as the Brigadier General Malabar & Canara having called for plans and estimates for work No. 1 in August last and that for No. 2 in September they were forwarded in October & December 1875 respectively and when they reached Government they were perhaps sent at one time, and evidently appeared as two separate works.

2. The instructions regarding the wood work have been attended to as far as possible - the rate for using Mangalore tiles is the same as that for single pan tiles,

the

7/4/55.

18

Ver.

Your most obt. Servant

Edwards

Offg. Dist. Engineer, Malabar

[illegible]

1876 Department
823490

Copied 2032 No 639 d/1
Letter No 220 dated 17 March 1876
from the Hq District
Engineers Malabar.

The details given in the
data for laying granite
slabs (which are in stone)
are insufficient and re-
quire explanation.
The points mentioned
where the first Sargam
is to be put is to
be put -
The first slab is to be
required to cut the stone
from the stone to the
10th. The distance
is to be 10 feet or
more -

The first list of
labor for laying the
granite is to be
very large, over 1000
is to be to be 1000
men to lay the first
schedule of Rates & Wages
is to be 5 or 10
per man. The first
details of 2 or 3 men
is to be given.

3. Chinese and other
at 10 p.m. is to be
that the people given
the data should be
that the people
which is to be
which is to be
which is to be
which is to be
which is to be

From
The Dist. Engineer
Calicut
To
The Chief Engineer
B. G. Dept.
under

Dated 12 July 1876
Recd 18/7
2 Encl

12/7/76
Encl. 4
X 2 Plans sent to the
subordinate plan and
estimated for contract.
-ing by the stone to
the stone of 8. 8. 8.
and covered passage,
at Calicut.

No 525-13 -
Civ. 24/8/76 P.W. 2/8/76
Despatch No 20-5-76

11/13
 Abstract of the Probable Expense of Improving the flooring of the rooms in the
 Barracks at Cantonment

Contd.

Particulars		Rate	Amount	Remarks
5 1/2	Square of granite flooring	80	440	
5 1/2	Waste with cement	15	82 1/2	
5 1/2	Square of removing old floor	25	137 1/2	
	Gravel and inferior material			
Total of estimate			660	

Commr. Barracks Office
 14th March 1876

Major J. B. ...
 1876

J. B. ...
 J. B. ...
 J. B. ...

4. The charge for maintaining
 appears to be correct - the
 particulars should be
 given.
 5. The estimate of the work
 at 10 a day appears to
 be from part of item 2
 appears in the fifth
 item - and the charge
 for porter is not
 up in it.
 6. Printing in Cement
 3 Rs. can hardly be
 sufficient. Explanation
 for so being? The way
 in which the work is
 done should be
 detailed.
 It is remarked that
 data prepared in the
 form supplied is
 calculated to rather
 mislead than
 assist should do be
 a to the officers
 guide to the truth
 of the basis on which
 an estimate is
 prepared.
 The best measure
 attention is called
 to the necessity of
 submitting in form
 after the receipt of
 a more accurate
 in future.

21
Pr 2032/1
 2

Estimate for flooring
 the flooring of 4 rooms
 in the Josephson Baracks
 at Canning
Amount of Rupees 576-

Estimated Military charges

Rs 108 Canning Range office

Abstract estimate for
 flooring the flooring
 of 4 rooms in the
 Josephson Baracks at
 Canning
Amount of Rupees 505-

Estimated Military charges

Pr 2032/1
 3

Rs 108 Canning Range

Imperial Military Original

Detailed Estimate of the probable expense of Improving the flooring of the Cook rooms, in connection with the European Barracks at Camanora

House of work	Measurements	Particulars	Amount paid	Remarks
		<u>No. 1 Cook room</u>		
	1 x 20 1/2 x 10 1/2 - 20 1/2 x 10 1/2	602 Linen room		
	1 x 20 1/2 x 10 1/2 - 3 x 12 x 10 1/2	396 & Pantry		
	1 x 40 1/2 x 10 1/2	302 & Pantry outside		
		1100 Total		
		1100 Paid for another for No. 2 Cook room		
		<u>No. 2 Cook room</u>		
	1 x 20 1/2 x 10 1/2 - 40 x 10 1/2	609 Linen room		
	1 x 66 x 12 - 4 x 24 x 10 1/2	641 & Pantry		
	1 x 66 x 12 x 10 1/2	488 Pantry outside		
		1768 Total		
		1768 Paid for another for No. 3 Cook room		
		<u>No. 3 Cook room</u>		
		on 57 1/2 square of granite flooring laid in Pantry & Pantry outside with cement including well running floor	8 - 1/2 - 400 - 1/2	
		57 1/2 square of removing old floor	20 - 1/2 - 1	
		Indies and Superintendent	25 - 1/2 - 1	
		Total estimated Price	505 - 1/2 - 1	

The present kitchen flooring is entirely worn out and the therefore propose to plan with granite blocks in place and stone that are to be removed from the first building

Camanora Range Office
14th March 1876

A. S. Dobson
Assistant Engineer

Robert
Offg. District Engineer

22

Malabar Distt. Engineer's Office
1876

Malabar

Specification to accompany estimate for
improving the flooring of the 400 rooms
of the European Regiment at Cannanore
Amount of estimate Rupees 800....

The latrite flooring of the 400 rooms
in the corners of the Barrack square being
worn out and full of holes to be entirely re-
moved and granite flooring used instead

The ground after removing the stones to be
be well watered and rammed before laying
the granite stones which are to be laid in
Chunans and afterwards carefully pointed
with Cement

The granite stones that are in the
Range Office and also those removed from
the Fort buildings to be used and as they
will be obtained free of cost no allowance
beyond labor and expense of carting is
made in the estimate.

All the rubbish to be cleared away on
Completion of the work

Cannanore Range Office } Aldoburn Gent. R.E.
14th March 1876 } Assistant Engineer
O. M. S. }
Offg. District Engineer Malabar.

Received from the
Cannanore Range Office
14th March 1876

Received from the
Cannanore Range Office
14th March 1876

Malabar District Engineer's Office
 No. 220. - Calicut - 17th March 1876

PW 2034/1

From
 The Offg. District Engineer
 of Malabar
 To
 The Secretary to Government
 D. P. W. Madras.

Sir,
 With reference to G. O. No. 423 dated 16th February last, I have the honor to acknowledge the
 an estimate for improving the floor of the Cook
 rooms in use with the European Barracks at
 Cannanore, with joined plan outside the Cook
 houses. it is proposed to pave and to append
 data for the charge.

	Rs	to	per
5 baits for carting stone at 125 per square as	"	12	6
2 nd Labor for laying one square one mason 10	"		
with lay alone 50 stones a day carefully in			
cluding Assistant to supply stones	2	"	"
Chunam and sand	"	9	10
ramming and levelling floor including watering	"	7	"
labor for supplying mason with water	"	10	"
and chunam and pounding chunam	"	3	"
Pointing with Cement including labor &c	"	8	8
Sundries &c including petty articles	"	8	"
Total Rupees	8	"	"

The above is the lowest data, and a sum
 of Rupees 2 has been reduced from it,
 the

Malabar District

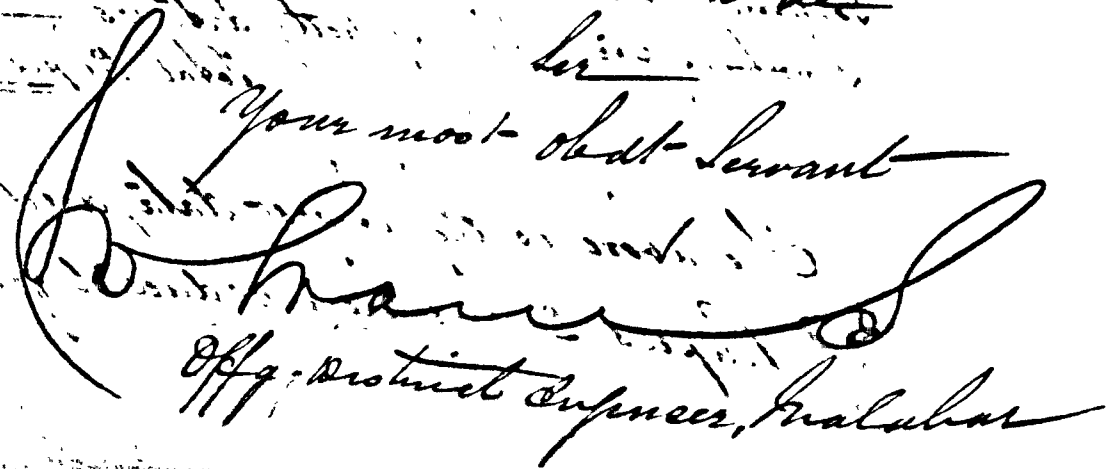
Rs 505

the rate of 10 Rupees charges before was taken
from the average cost of floors at Cannanore
and given in lump.

2. With regard to the cost of removing
lignite stone shown as covered by the
value, I have the honor to state that Lt.
Dobson R. E. reports that the stones are
almost worthless being full of holes and
worm wit, and in fact he once thought
of proposing to put the granite stone over
the lignite, but the cost of filling up
the holes would be more than their re-
moval. Lt. Dobson always sells the
broken stones on his works by auction
but it is difficult at present to say
what they will fetch, hence no recovery
under that head has been deducted
from the estimate, the sum of Rs 27
has been retained in the estimate
and he will buy and recover that
amount when the stones are sold which
is but 5 Rupees for each Cook room.

I have the honor to be
Sir

Your most obedt servant


Offg. District Engineer, Malabar

of 187

of 187

”

”

”

№ 525

Ci-24/6721

[illegible]

28
 Feb 4
 Dear Mr. [unclear]
 I have just received
 your letter of the 1st
 inst. and am glad to
 hear that you are
 well. I am well and
 hope this finds you
 the same. I am
 very truly
 Yours
 [unclear]

M. WORKS FORM No. 3.

Current No. 2032

From

The St Engineer
Malabar

No. 220
Dated 17
Recd. 20

March 1876

Chicago No 639 d/ 4-4-76

Subject :—

Subject:— Retrausmitting
Est^e for renewing the
flooring of the Cooks
rooms of the European
Infantry Regt at Lar
uanale

ENCLOSURES.

From

X 1 Row with letter

Orders and Proceedings in file.

Orders and Proceedings.			ENDORSEMENTS.		
Department.	No.	Date.	Department.	No.	Dated.
P. W.	2939	15-10-74			
	2940	20-2-75			
	274	22-1-			
	423	16-2-			

(a) Heads of Service—*Imperial*

Fund.	Primary
-------	---------

Class. *Original Works*

Main-head. *Military*

Sub-head. *Accommodation for European Infantry*
Name of Work. *alt*

Name of Work.	Value of Work.
Alterations & improvements to the European Infantry Barracks at Camanore -	100000

Dry earth shed-
2980 Dry earth shed No 3177.
505-
Re 3177

Amount. Rs 3485 Improving plan of work - 31 W.
To be carried out by the P. W.

To be carried out by the P. W. Department.

To be carried out by the P. W. Department.

Print in the margin of G. O. N^o 1355 of 31-5-76-

N^o 1355 Public Works Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the 31st May 1876.

Read the following:—

From
The District Eng^r Malabar (H.C. N^o 220 of 17th March 1876).
— do — do — 33 — 8th May —
— do — do — 36 — 12th —

The papers above
quoted refer to the Estimates
for alterations and improve-
ments to the European Infantry
Barracks at Cannanore
returned to the District
Engineer of Malabar for
revision in G.O. N^o 274 of
31st January and 423 of
16th February. The former
now aggregate Rs 2980, and
the latter amounts to Rs 505;
which sums are sanctioned
and

and provided from the Reserve
under Military.

G.M.W.

The above sanction has
been registered as Imperial
No. 31 W. of 1876-77-

29

No 525/26

Dist. Engr. Malabar
Ex: P. W. Accounts
Military Department.

Decd 16/8/76

KATH

2132
2036
3378 3490
Govt. of Madras
PUBLIC WORKS.

The D. C. Malabar

G. O. No. 1353

525/26

European Infantry
Barracks at Can
namore Malabar

Dr Estimates for
alterations and im-
provements to the

Annex

11-1-1916