M.R.O. 1—77,006—8-6-37.

(1) Number of pages 58

(2) Date of repair 3-5-43

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 3020. Press ~~M.I.~~

692-693

Dated 21-9- 1867.

Not to be folded or roughly handled

No. 692. Read the following letter from the Inspector General of Military Works to the Government of India, Public Works Department, to the Secretary to the Government of Madras, in the Public Works Department, dated Simla, 9th September 1867, No. 982 M :—

	Amount of Estimate. Rs.
Male Hospital (two pavilions)	1,50,000
Administrative rooms and colonnade	25,100
Two separate wards	27,200
Out-offices for Hospital ...	10,020
Female Hospital	36,550
Subordinates' Quarters	12,700
Canteen	21,200
Quarters for the Pay Master Sergeant, Saddler Sergeant, and Instructor of Musketry of Cavalry in one Block	10,270
Two Bowling Alleys for Cavalry ...	4,640
Skittle and Bowling Alley in one block for Artillery.	8,140
Two Harness-rooms with Store-room for do.	8,640
Two Gun sheds with guard and Store-room.	21,900
One block of Married men's Quarters with Day-room.	20,750
One do. do. do.	20,750
One do. do. do.	20,075
One do. do. do.	20,075
A Forge for the Artillery	2,550
Sick Stables for do.	8,350
Stables for Cavalry	50,400
Total...	4,79,310

1. I am directed to acknowledge receipt of your letter No. 1,421, dated the 9th May last, submitting for sanction the estimates detailed on the margin for certain Military buildings in progress on the Race Course at Bangalore, as also of Major Shaw Stewart's subsequent letter No. 2,287, dated the 29th July 1867, forwarding the plans. In reply I am directed to state as follows.

2. HOSPITALS.—Judging from the plans, the designs though not according to standard (having been prepared before the principles of Hospital construction were decided on,) are satisfactory, but before passing final orders upon them the Governor General in Council desires to be furnished with the usual report which should accompany every estimate, and which should explain the number of patients to be accommodated, the way in which the patients are to be distributed over the several wards, and all other general arrangements provided for in the designs.

3. As regards the *Canteen*, it is presumed that the standard plan referred to in the statement "of the reasons for departure from the standards," which accompanied Major Stewart's letter above quoted, was an old one, and not the one lately* circulated. The latter should in future be followed. The one sanctioned by the Government of Madras is good, but it is on a considerably more extensive scale than the new standard.

* Circular No. 16, dated 14th Feb. 1867.

4. The standard plan of *Forge* should also be followed in future.

5. A large *Day-room* has been provided in each of the blocks for the married men of the Artillery. This accommodation has not been authorized by the Government of India, and should not therefore have been provided without permission. I am to take the opportunity to enquire whether these rooms are much resorted to, and whether they are really useful. They should not, however, be provided again without further orders.

and 3 Copies of Chinnam Pasteing)
Received Date — 8229

† Public Works Department letter No. 823 M, dated 5th ultimo (paragraph 2).

6. The question regarding *Stables* has already been disposed of in another case, orders† having been issued for the standard plan to be adhered to.

	Amount of Estimate. Rs.
Canteen	21,200
Quarters for the Pay Master Sergeant, Saddler Sergeant, and Instructor of Musketry of Cavalry in one block ...	10,270
Two Bowling Alleys for Cavalry ...	4,640
Skittle and Bowling Alley in one block for Artillery	8,140
Two Harness-rooms with Store-room for Artillery	8,640
Two Gunsheds with guard and Store-room	21,900
One block of Married men's Quarters with Day-room	20,750
One do. do. do.	20,750
One do. do. do.	20,075
A Forge for the Artillery	29,075
Sick stables for do.	2,550
Stables for Cavalry	8,350
	50,400
Total ...	2,17,740

7. With the foreging remarks I am to convey the sanction of the Governor General in Council to the plans and estimates, aggregating Rupees 2,17,740 in amount, for the buildings specified on the margin, and to state that orders on the remaining estimates, aggregating Rupees 2,61,570 in amount, and which relate to the Hospitals and other buildings connected therewith, will be deferred pending the receipt of the report above called for.

8. Finally, as regards the remarks (contained in paragraph 2 of Major Stewart's letter) on the question of standard plans, I am directed to refer you to the communications specified on the margin, which direct the submission for the appproval of the Government of India of all designs for proposed Military buildings not according with standards, and which define the powers of Local Governments with reference to the sanctioning of new Military works.

P. W. D. Standing Order No. 20 of 1864.
Do. Letter No. 579M, dated 17th Aug. 1864.
Do. Circular No. 56, dated 16th ,, ,,

9. The sanction above accorded has been entered as No. 68 M of 1867-68 in the Register of this Office. The plans and estimates that have been sanctioned are herewith returned.

No. 693. ORDER THEREON, 27th September 1867, No. 3,020.

MILITARY WORKS, No. 44.

1. Communicated to the Superintending Engineer of the 5th Division for information and guidance with reference to the Orders of Government No. 1,420, dated 9th May 1867.

2. Colonel Foord will, in communication with the Military authorities, furnish as early as practicable the particulars called for in paragraph 2, regarding the patients to be accommodated in the new Hospitals on the Race Course at Bangalore, as well as the information required in paragraph 5 as to the usefulness of the Day-rooms attached to the blocks of quarters for the married men of the Artillery and the extent to which they are resorted to.

3. Adverting to paragraph 8, the Government request that in hereafter submitting plans for the construction of Military buildings, Superintending Engineers

will distinctly state whether such plans are in accordance with the standard designs, and, if not, that they will explain the nature and cause of the deviations proposed.

(True Extract.)
(Signed) J. H. M. SHAW STEWART, Major, R. E.,
Under Secretary to Government.

To the Superintending Engineer, 5th Division.
,, Controller of Public Works Accounts.
,, Accountant General.
,, Military Department.
To all Superintending Engineers.

Exd. S. T. Augustin.

and 3 Cost of Chunam Casting
Dated 8th Dec 8229

Abstract Estimate of the 42 Perches

Embankment of Revetment

Note. Contractors Pay Master allowance Sluice Gates of Iron Bolts and Holdfast Timber Iron Spikes Quarter Pivot Posts Rails Pannels Wrought Iron Work

Quantity	Description of Work	Rate	Per Perch	Total
6 4 8 1/8	Excavation	0 0 1	4 1/2	34
6 4 8 1/8	Foundation of Stone Rubble Masonry	0 2 0	25	810
3 4 2 3 5/8	Ditto Masonry Stone in Mortar	0 2 2	41/3	663
11 8 0 5/8	Ditto Brick Masonry	0 2 4	45	2180
5 5 10 3/16	Ditto Brick Masonry	0 2 4	45	282
11 6 1/2	Ditto Rubble Masonry	0 1 0	25	284
2 0 9 25/100	Ditto Masonry in Mortar	2 3 0	3 1/2	700
16 28/100	Plain Ashlaring in Mortar	0 2 6	25	26
11 2 17/100	Plain Ashlaring Rusticated	0 3 6	25	25
1 13 1/2	Running Feet of Coarse Work	0 4 0	12 1/2	178
333	1/3 of Ditto Steps 1 1/2 Broad	0 4 0	25	83
4 5 17/100	Coarse Granite Ashlar Headers Risers and Coping in Mortar	8 0 0	45	361
1500	Ditto Rubble Masonry with Earth or Sand	0 0 2	45	16
160/100	Dressing System Floor for Prisons	2 0 0	45	3
5/1	Dressing of Parish Coping Complete	0 5 0	12 1/2	16
555	Ditto of Pipes in the Walls	0 1 0	25	35
468. 5. 10	Stone Foundations Plinth and Rubbish	3 2 0	6 1/2	1464
1/8	Master Masons for Contractors	0 0 6	£	2
55 86/100	Square of Fine Granite Ashlar on Edge 3' of Solid 3 Courses of Plinths and 3 Courses of Chimney Stacks	27 8 0	25	1536
	Carried Over			8229

No 982. M

Government of India.
Public Works Department.
Military Works.

To The Secretary to the Govt. of Madras,
in the Public Works Department.

Simla 9th September 1867.

Sir,

I am directed to acknowledge receipt of your letter No 1421 dated the 9th May last submitting for sanction the Estimates detailed in the margin for certain Military Buildings in progress on the Race course at Bangalore, as also of Major Shaw Stewart's subsequent letter No 2287 dated the 29th July 1867 forwarding the plans. In reply I am directed to state as follows.—

	Amt of Estimate
Male Hospital (two pavilions)	Rs 150,000.
Administration rooms and Colonnade	" 25,100.
Two Separate Wards	" 27,200.
Court Offices for Hospital	" 10,020.
Female Hospital	" 36,550.
Subordinates Quarters	" 12,700.
Canteen	" 2,200.
Quarters for the Regt Master Serjt, Saddler Serjt and Instructor of Musketry of Cavalry in one Block	" 10,270.
Two Bowling Alleys for Cavalry	" 4,640.
Skittle and Bowling Alley in one Block for Artly	" 8,140.
Two Harness rooms with Store room for Do	" 8,640.
Two Gun Sheds with Guard and Store room	" 21,900.
One Block of Married Privates Quarters with day room	" 20,750.
One Do Do Do	" 20,750.
One Do Do Do	" 20,075.
One Do Do Do	" 20,075.
A Forge for the Artillery	" 2,550.
Lofty Stables for Do	" 8,350.
Stables for Cavalry	" 50,400.
Total Rupees	479,310.

2. Hospitals. Judging from the plans, the designs, though not according to Standard, (having been prepared before the principles of Hospital construction were decided on) are satisfactory, but before passing final orders upon them

designs for proposed Military buildings not according with Standards and which define the powers of Local Governments with reference to the sanctioning of new Military works.—

9. The sanction above accorded has been entered as No 68 - A of 1867/68 in the Register of this Office.— The plans and estimates that have been sanctioned are herewith returned.—

I have the honor to be
Sir
Your most Obedient Servant
W. Hammeln Colonel
Inspector General of Military Works

E. Woods

151

No 10.

1421

36
12.069.

Carried over

C.W. Office Despatch
Prov. of Grant for letter
A. B. Bs

From

The Inspector Genl
of Military Works.

Dated 3 Septr 57
Rec'd 12th

Ex. 992 Rs.
Exd. H.
Pass H.

Copies sent to
the estimates for certain
Military works in Con-
nection with the Main
Coorg Barracks at
Bangalore.

No. 692

No 3020-275 Dated 7 Sept 1857

5th Division P. W. 171

Military — Bangalore — New Work

Abstract of Estimate No of 1866/67

Work. Constructing Eight Married men's Quarter and a Day room in one Block for Artillery on Race course Barrack Bangalore.

Quantity	Description of work	Rate			Per	Amount	Total
9018 7/16	Cubic feet of Excavation	"	"	1	C foot	47	
9018 7/16	do Foundation stone in chunam	"	2	"	do	1127	
5106 3/8	do Basement do	"	2	1	do	665	
19.933	do Brick in chunam	"	2	4	do	2,907	
1.302	do Archwork in chunam	"	4	"	do	325	
1145 1-9	do Teak wood wrought & put up	3	2	"	do	3,578	
588	Rafter Nails 8 Inches	"	"	8	Each	25	
47 26/100	Square of Terracing with brick on Edge jelly 3 course of flat tiles &c complete	27	8	"	square	1299	
62 25/100	Squares of sloping Terrace with Teak reepers nails 4 Course of flat-tiles 3 coats of Chunam &c complete	19	4	"	do	1198	
31 77/100	Squares of plastering with chunam	2	8	"	do	862	
228 59/100	do Whitewashing 2 coats	"	2	6	do	36	
	Carried over						12.069

Quantity	Description of Work	Rate	Per	Amount	Total
	Brought forward			12.069	
116 15/100	Squares of Blue washing 2 coats	3 6	square	23	
65	Columns complete 10 feet	13 2	each	853	
692	Running feet of stone sleper	3	Rft	130	
81 13/100	Square of paving with granite slabs bedded in sand and pointed with Chunam.	8	square	649	
11	Stone slabs under the girders	2	each	1	
505	Running feet of Cornice	1 1	Rfeet	126	
845	do of pipes 3" diameter	1	do	53	
9018	Cubic feet of Filling the basement with excavation earth	2	Cfeet	12	
5918	do do from a distance	2	do	61	
27	Pairs of Panelled Venetioned and glazed door 8 x 1	12	each	1134	
16	Pairs of Ballened doors for Bathroom 3 x 6	18	do	288	
19	do of Venetioned windows with glazed shutters inside 5 x 3 2	33	do	627	
65	Zinc Ventilators	5 8	each	358	
16	do do for wash house	5 8	do	88	
81	do Lintles	3	do	13	
96	Planks for shelves	1 12	do	168	
81 13/100	Squares of wood oiling 2 coats for beams rafters and joists	2	square	162	
	Carried over			16.519	

Quantity	Description of Work	Rate	Per	Amount	Total
	Brought forward			16.819	
38	Squares of wood oiling for doors and windows	2	square	76	
2	Marking boards	5	each	10	
25	Inventry boards	12	do	19	
					16,924
	Cook rooms				
981	Cubic feet of excavation	1	foot	5	
981	Foundation stone in chunam	2	do	123	
385	Cubic feet Basement stone in chunam	2 1	do	50	
3036	do Brick in chunam	2 4	do	443	
162	do Archwork do	4	do	41	
43 5 2	do Teak wood wrought & put up	3 2	do	136	
63 70/100	Squares of Plastering with chunam	2 8	square	159	
3655	do of Whitewashing 2 coats	2 6	do	6	
27 20/100	do Blue washing do	3 6	do	6	
16 62/100	do Terracing with brick on Edgewise complete	27 8	do	456	
330	Cubic feet of filling the foundations earth to basement height	1/4	cft		
1 11/100	Squares of Paving with granite slabs bedded in sand and pointed with chunam.	8	square	33	
	Carried over			1458	16.924

Quantity	Description of work	Rate	Per	Amount	Total
	Brought forward			11.55	16.924
144	Running feet of pipes	" 1 "	Rft	4	
210	do Cornice work	" 1/4 "	do	53	
8	Pairs of Battened door 3 x 6	18 " "	each	144	
8	do do do windows with Iron bars 3 x 5	21 " "	do	168	
8	Inventry boards	" 12 "	do	6	
3	Squares Red paint	3 " "	square	9	
1	do woodoiling 2 coats	2 " "	do	8	
8	Fire places including fyal complete	3 " "	each	24	
					1879
	Privy and Earth store				
650	Cubic feet of excavation	" " 1	cft	3	
650	do Foundation stone in chunam	" 2 "	do	81	
275	do Basement stone do	" 2 1	do	36	
1721	do Brick in chunam	" 2 1/4	do	251	
61	do Archwork in do	" 4 "	do	15	
3064	Squares of Plastering 2 coats	2 8 "	sqre	76	
12 15/100	do Whitewashing	" 2 6	do	2	
1846	do Blue washing	" 3 6	do	4	
32-5-0	Cubic feet of Teakwood wrought and put up	3 2 "	cfoot	101	
	Carried over			569	18.803

Quantity	Description of works	Rate	Per	Amount	Total
	Brought forward			569	18,803.
1 12/100	Squares of Terracing with brick on Edge jelly & co complete	2-7 8 "	square	111	
91	Running feet of Cornice	" 1/4 "	Rft	23	
1	Square of Paving with granite slabs bedded in in sand and pointed with chunam	8 " "	square	8	
1 61/100	Squares of Flooring with Punjab dry system	4 " "	do	6	
52	Running feet of Coving	" 5 "	Rfoot	16	
1	Pair of battened door 3 x 6	18 " "	each	18	
6	Privy seats complete	6 " "	do	36	
3	Zinc Ventilators	3 5 8	do	10	
8	Sheet Iron partition complete	9 6 "	do	75	
1	do Womens Privy 5x3 10x5	31 4 "	do	31	
1	do Mens do 5 x 5	15 10 "	do	16	
3	Inventry boards	" 12 "	do	2	
1/4	Squares of Red paint	3 " "	square	1	
2 1/2	do of Wood oiling two coats	2 " "	do	5	
1	Column in the Day Room complete (diameter 2 1/2 ft)	45 " "	each	45	975
	Total Rupees for One Block				19.778
	Carried over				19.778

Brought forward	17.778
Total Rupees for two Blocks	34.556
Sundries including Registering fee.	1.944
Grand Total Rupees	11.500.

Rupees Thirty one thousand and five hundred.

/Signed/ H.C. Sullock Captain R.E.

Exc= Engineer, Bangalore.

Exc= Engineer's Office
Bangalore 7th June 1866

/True copy/

Edward Lieut- Col. R.E.
Superintending Engineer, 5th Division.

Abstract Estimate No 9 of 1866/67

Cantonment of Bangalore

Work Constructing a Skittle and Bowling alley in one Block for Artillery on Pucca Court Barracks at Bangalore

Quantity	Description of work	Rate	Per	Amount	Total
1379	Cubic feet of Excavation	.	1	6½	7
2192	do Basement and Foundation Stone in Chunam	.	2	0	267
3282	do Brick in Chunam	.	2	4	479
79	do Arches in Chunam	.	4	0	20
157	Running feet of Cornice	.	4	6½	89
65 6/100	Sqrs of Plastering 2 Coats	2	8	0	163
38 46/100	do White washing do	.	2	6	6
26 86/100	do Blue washing do	.	3	6	6
~~425-6-3~~ 431-11-6	Cubic feet of Teak wood wrought and put up	3	2	0	~~1347~~ 1330
125	Plaster Nails 5"	.	0	5	Each 3
24	Stone plates under the girders	.	2	0	3
30	Sqrs of Terracing with Arrack & Ox Ego Jelly 3 Coats of plastering and plastered with 3 Coats of Chunam	27	8	0	825
5 48/100	Sqrs of Planking floor including Nails &c complete	90	—	0	493
120 6/100	Sqrs of Flooring the Skittle alley with 6" inches of gravel watered and well rammed	1	—	0	12
	Carried over				~~3683~~ 3670

Abstract of Estimate of the probable cost of constructing a Skittle and Bowling alley in one Block for Artillery on Pucca Court Barracks at Bangalore

Estimate Rupees 4.1.500.

27 A

Abstract Estimate No 49 of 1866-66

Quantity	Description of Work	Rate	Per	Amount	As Tender
	Brought over			3670	
11	Benches for Skittle alley	7	00 Each	77	
90	Pegs in back of Skittle frame or Jack Diamond of Rods	0	12 0	68	
17	Iron Wood Pillars for Covering	2	00 Each	35	
1	Set of Skittle frames	12	8 0 Each	13	
	Fixing Rods Pillars with Castle and placing Skittle frames complete			3	
	Total Rupees for one Bungalow			3866	
	Do Do Two			7732	
	Sundry Rupees			531	
	Contingencies per			17	
	Grand Total Rupees			8140	

Rs. Eight thousand, one hundred and forty

Executive Engineer Bangalore

Ex Engineers Office
Bangalore
11th June 66

Ex Engineer Bangalore

Ll Col RE
Superintending Engineer

Bangalore Vol
Circle 2 1/7/66
Abstract 1
Army
Accommodation for Troops

Troops — The Ex Engineer Bangalore

Do — The Supdg Engineer 5 Division

Dated 18/6/66 3585/67
Remd per P 25/7/66

Abstract Estimate for Constructing a Skittle and Bowling alley, in one Block for artillery at Race Course Barracks at Bangalore

Amount of Estimate per Rs 100

4826/13

Ex Engineer Bangalore

Ll Col RE
Superintending Engineer

Abstract Estimate No. 49 of 1865/66

Cantonment of Bangalore

Work Constructing a Bowling alley for Cavalry on race course Barrack at Bangalore

Quantity	Description of Work	Rate			Per	Amount	Total
1015	Cft. Excavation	"	"	1	cft	5-	
1594	do — Foundation and Basement	"	2	"	do	199	
35-13	do — Brick in Chunam	"	2	4	do	5-2+	
23	do — Brick work in Chunam	"	4	"	do	6-	
33 75/100	Sqrs — Clustering with Chunam	2	8	"	Sqrs	84	
20 92/100	do — White washing	"	2	6	do	3	
12 83/100	do — Blue washing	"	3	6	do	3	
59	Rft. of Cornice work	"	4	"	Rft	13	
198-6-"	Cft. of Teak wood wrought & put up	3	2	"	cft	622	
368	Rafter Nails 6"	"	"	6	each	12	
16 50/100	Sqrs of Roofing with Tile	16	"	"	Sqrs	265	
100	Rft. Gaullies for returning Balls	"	6	6		41	
200	do — Channel to receive the Balls when Bowling	"	10	"		125	
5 44/100	Planking floor including Rails 4 Sqrs Complete	90	"	"		490	
47	Rft. Packing the bags of Bowling alley	1	1	8		5-2	
						2200	
	Rupees					2439	
						120	
	Sundries					1-24	
						2560	
	Total Rupees					2320	
	Total Rupees for two						5120

Rs. Four thousand, five hundred and forty.

Cy. Engineers Office
Bangalore
18th April 1866

E. Jukes Captain R.E.
Executive Engineer Bangalore
Ill Asst Lieut Col R.E
Superintending Engineer

Abstract Estimate No. 20 of 1866/67.

Contonment of Bangalore

Work Constructing a Sick Stable for Artillery on Race Course Barrack Bangalore

Quantity	Discription of work	Rate	Per	Amount	Total
2710	Cubic feet of Excavation	. . 1	Cft.	24	
—	do — Foundation Stone in Chunnam	" 2 "	do	495	
—	do — Basement — do	" 2 1	do	203	
2	do — Superstructure brickwork — do	" 2 4	do	1313	
—	do — Arch work in Chunnam	. 4 "	do	327	
—	Rft of Cornice work — do	. 4 "	Rft	98	
130	Sqre of Plastering with two Coats of do	2 8 "	Sqre	454	457
26	do — white washing two Coats do	" 2 6	do	23	
—	do — Blue — do — do	. 3 6	do	7	
3	Cubic feet of Teak wood wrought and put up	3 2 .	Cft	1343	1553
—	Stone plates underneath the tie Beams and principal Rafter	. 2 .	Each	8	
—	Rft of Cut Stone Drain Cut in Segmental form	3 . .	Rft	840	
2	do — Ridge Ventilator	3 7 4	do	519	
47/100	Sqre Roofing with Teak Rafters nails flat & pantiles &c Complete	19 4 .	Sqre	1241	
20/100	do — of Gravelling	1 . .	do	40	
92/100	do — Paving with granite Slabs bedded in Sand and pointed with Chunnam	8 . .	do	119	
—	Iron Rings to be fixed in Stones for tieing horse	3 8 .	Each	84	
	Carried Over				7345

4320/3

Abstract Estimate No. 46. of 1865/66

Contractor

Quantity	Description of work	Rate	per	Amount	Total
	Brought Over			7735	
64 36/100	Sqrs of Wood Oiling Two coats	2 . .	Sqr.	129	
25 1/27	Cubic yards of Raising a Ramp Round the building with Earth	5 . .	Cyd.	23	
48	Bamboos 8 feet Long	4 . .	Each	12	
20	— Do. — 6¼ feet Long	3 . .	Do.	4	
700	Nails for Rafter 6 inches Long	6 . .	Do.	22	
240	— Do. — Purlins and Brackets 9 inches Long	9 . .	Do.	11	
1	Marking board	5 . .	Do.	5	
1	Inventory board	12 . .	Do.	1	
	Sundries			7562	
				381	
	Registering fee			17	
	Total Rupees			7960	8350

Executive Engineers Office
Bangalore 17th July 1866

Lt. Colonel Engineer
Executive Engineer Bangalore

Lieutt Col RE
Superintending Engineer

Signature

July 1866. Superintending Engineer

B 2/116/66 1/31/66
Bang[alore]

No 20.

Military —

Army[s]

Recommendation for Sanction

From

The Exe Engineer
Bangalore

To

The Supdg Engineer
5th Division
Bangalore

Dated 17/4/66 Rs 3585/87

Remd

Abstract Estimate for Work Constructing a Sick Stable &c for Artillery on Race Course Barrack at Bangalore

Amount of Rupees 7950

Sy 8424

4826/13

Abstract Estimate No 46 of 1865/66

Cantonment of Bangalore

Work Constructing a Forge for the artillery on Race Course Barrack at Bangalore

Quantity	Description of Work	Rate			Per	Amount	Total
15·85							
24·25·36	Cubic feet of Excavation	0	0	1	cft	8	
15·85							
24·25·36	do Foundation stone in Chunam	0	2	0	do	195	
845·1/2							
8·30·1/2	do Pavement do	0	2	0	do	110	
31·86							
31·86	do Brickwork do	0	2	4	do	465	
25·3							
24·5	do Rockwork do	0	4	0	do	63	
31·2							
65·1/2	Running feet of Coarse work	0	4	0	Rft	61	
68·1/2							
65·1/2	Squares of Plastering	2	8	0	Sq	78	
68·1/2							
65·1/2	do Blue washing	0	3	6	do	163	
362·1·9	Cubic feet of Teak Wood	3	2	0	cft	819	
21 42/100	Square of Roofing with flat and pointed Country Tiles Complete	16	0	0	Sq	343	
12 62/100	Square of Paving with granite Slabs bedded in Sand and pointed with Chunam	8	0	0	do	141 104	
1/4	Running feet of Steps	0	3	0	Each	8	
200	Nails for fasting the Purlins and Rafters	0	0	8	do	8	
						2418	
	Sundries Rupees					117	
	Total Rupees					2535	

Rupees two thousand five hundred

H. Fuller Captain R.E.
Ex Engineer Bangalore
Ex Brevet Lieut Col R.E
Superintending Engineer

Ex Engineers office
Bangalore
25th July 1866.

S/124/66

Bangalore

No 46.

Military Army

Accommodation for Troops

From

The Cont Engineer

Bangalore

To

The Supt Engineer

5th Division

Salem

Dated 25/7/66

Received [illegible]

Abstract Estimate

No 46 of 1865/66

Cantonment of Bangalore

Work Constructing a

Forge for the Artillery

on Race Course Barrack

at Bangalore

Amount of Estimate Rs. 255

4826/13 £ 23 7 7

Abstract Estimate for
constructing a Forge
Shed and Running Shed
Shed and 2 Fires at the
Race Course Barracks
Bangalore Artillery

Amount Estimate Rs: 255

4826/13

Abstract Estimate No 8 of 1866/67

Construction of Bungalow

Work Constructing Married quarters for Artillery at Kaccaburee

Barrack Bungalow

Quantity	Description of work	Rate	per	Amount	Total
847 7/8	Cubic feet Excavation	- - 1	Rs	44	
847 7/8	do Foundation Masonry	- 2 -	do	1060	
776	do Basement do	- 2 1	do	971	
504 6	do Brick Masonry	- 2 -	do	657	
5744	do Brick work in Chunam	- 2 4	do	666	
20273	do Arch work in Chunam	- 2 4	do	2375-6	
4973	do Terrace work in Chunam	- 1 -	do	5784	
1163	do Teak wood in Roof	- 1 -	do	291	
1630-2-0	do Teak wood in Rough				
1412 8	and Split up	3 2 -	do	3212	
340	Roofer Nails 6" Inches	- - 8	Each	14	
125 12/100	Square Terracing with Brick				
493	on Edge 4 1/2 3 Course				
	& Plastered with				
	3 Coats Chunam Ceiling				
	Square Complete	27 8 -	100	1182	
				1241	
97 72/100	Square Flooring with Brick				
	Kiosks Square Complete	19 4 -	100	1027	
337 72/100	Square Plastering 2 Coats	2 8 -	100	544	
223 48/100	do White washing do	- 2 6	do	845 35	
114 47/100	do Colour washing do	- 3 6	do	25	
54	Columns 11" x 10" 8"	13 2	Each	709	
5	do 1' - x 12" 8"	15 12 -	do	72	
	Carried over			12 21	11661

Abstract Estimate for ... 1867-68

Quantity | Description of work | Rate | per | Amount | Total

Quantity | Description of work | Rate | per | Amount | Total

Brought over

Square Flooring 6 Inches Rs 1 Cubic feet

and 2 Inches Rs 1 and Cleaning finish Cubic feet for

Covering Ozed Glass Annexe, Rangabad

Square Flooring with Rs 1 Cubic feet for

Square Flooring with Rs 1 Cubic feet for

Square Flooring with Rs 1 Cubic feet for

Quantity	Description of work	Rate	Per	Amount	Total
	Brought over			1111	16305
7 5/100	Superficial Feet of Terracing	2 7	Each	206	
166/100	do Paving with Granite Slabs laid on sand and pointed with Cement	8	do	37	
168	Running Feet of Joists	0 1	do	11	
248	do Cornice	0 4	do	62	
9	Pairs of Paltoned doors 3×6	15	Each	162	
9	do do Single doors with do	21	do	189	
9	Inventory boards	0 12	do	7	
3 31/144	Superficial Feet Partitions	3	do	11	
5 12	do Deal Ceiling	2	do	9	
9	Fire Places including Grate	3	Each	27	1832
				1111	1805
	Earth Work				
645	Cubic Feet of Excavation	0 1	do	3	
665	do Foundation Stone in Cement	0 2	do	81	
275	do Basement do	0 2	do	36	
1614/1728	do Brick in Cement	0 2	do	270	
60	do Brick in Mortar	0 4	do	15	
31 65/100	Superficial Feet of Plastering 2 Coat	2 8	do	79	
12 15/100	do White washing do	0 2	do	2	
19 47/100	do Blue washing do	0 3	do	4	
36.5.0	Cubic Feet of Earth Excavation brought and spit for Carriage Drive	3 2	do	101	1813
				557	16941

Quantity	Description of work	Rate	Per	Amount	Total
	Brought over			557	16941
12/100	Superficial Feet of Terracing	27	Each	112/144	
91	Rods of Cornice in Chunam	0	4	23	
1	Superficial Feet of Paving with Granite	8	do	8	
162/100	Superficial Feet of Flooring with Punjab Deyastum	4	do	7	
52	Running Feet of Joists	0	5	16	
1	Pairs of Paltoned doors 3×6	18	Each	18	
6	Privy Seats Complete	6	do	36	
3	Zinc Ventilators	3	5/8	11	
8	Iron Bucket Crops Complete	9	6	75	
1	do at the back in Bomoo Privy	31	6	31	
1	do do do Mans do	15	0	16	
8	Inventory boards	0	12	2	
1/4	Superficial Feet Partitions	3	do	1	
2 1/2	do Wood Ceiling	2	do	5	
					919
					1786
	Sundries at 5 Per Cent				90
	~~Add Deficiency in stock~~				~~100~~
	Total Rupees for one Block				2876
	do do Two				3753
	Engineering Fees				3
	Grand Total Rupees				3756

Ex Engineers Office
Bangalore
29th May 1866

John Pennycuick Lieutenant R.E.
for Ex Engineer Bangalore
Edward Lieutt Col R.E.
Superintending Engineer

		Brought over				16,309
810	Running feet of Cornice work in Chunam	Rft.	..	4	..	202
535	—"— Stone flags for Steps	..	..	3	..	100
241	Nails for Joists (8" long)	each	..	.. 8		10
26	Stone plates for Beams	..	..	4	..	6
29 19/48	Cubic feet of Teak wood wrought and put up for grated doors	Cft.	4	..	..	118
82	Superficial feet of Pannelling the two grated doors	Sft.	1	4	..	103
570	Running feet of one inch iron bars for grated doors placed 6" apart	Rft.	..	4	..	143
1	Counter to D° large	each	130	..	..	130
1	—D°— D° small	..	40	..	..	40
26	Pairs of fixed Venetioned and glazed Doors with Circular tops in Stock which can be used in the Building	..	26	2	..	679
D°	—D°— D° Repairing them fixing panes of Glass and fitting them	..	6	..	..	156
16	—D°— Venetioned and glazed Doors with Circular tops in Stock which can be used in the Building	..	27	1	..	433
D°	—D°— D° Repairing them fixing panes of glass, fitting and furnishing them with locks and Keys	..	8	..	..	128
6	—D°— Pannelled Doors without Cicular glazed tops in Stock which can be used in the Building	..	25	13 4		155
D°	—D°— D° Repairing & fitting them & furnishing with locks & Keys	..	5	..	..	30
	Carried over					18742

	Brought over					18,742
2	Pairs of Venetioned windows with Glass Shutters and without Circular tops in Stock which can be used in the Building	each	20	..	..	40
2	—D°— D° Repairing and fitting them	..	2	..	..	4
6	Glazed Circular tops to the above Pannelled doors in Stock	..	8	8	..	51
2	—D°— D° tops to the above Venetioned windows in Stock	..	6	4	..	13
66	Glazed Swing windows with cleats ropes &c Complete	..	10	..	..	660
57	Squares of Green painting two Coats	Sqrs	5	..	..	285
82	—D°— Moorooling —D°	..	2	..	..	164
1	Building marking Board	each	5	..	..	5
	Total Rupees					19964
	Sundries Rupees					936
	Add deficiency in Stock account Rupees					275
	D° Charges already incurred as per bill passed Rupees					25
	Total Amount of Rupees					21,200

Executive Engineer's Office
Bangalore 9th September 1865

J. Fulcher Captain R.E.
Exc: Engineer Bangalore.

Endd. Lieut. Colo. R.E.
Superint. Engr. 5th Div.

Abstract Estimate No 15. of 1866/67

Government of Bangalore ...

Work Constructing Harness Room for Artillery at the Race Course Bangalore

Quantity	Description of work	Rate	Per	Amount	Total
2128 cft	Cubic feet of Excavation	0	1 cft	11	
2128 cft	do Foundation stone in Cumam	0	2 do	266	
1617 sft	do Basement stone in Cumam	0	2 do	185	
603 / 853 sft	do Brick in Cumam	0	2 do	171 / 65	
881 sft	do Brick work in Cumam	0	2 do	183	
87 56/100	Sqrs of Plastering with Cumam Sand Coat	2	8	22 / 219	
55 97/100	Sqrs of Whitewashing two Coats	0	2 6	9	
82 85 1/2 / 100	Sqrs of Whitewashing two Coats	0	3 6	7	
20	Running Feet of Cornice mould	0	1 6	2	
98	do of Sills	0	2 0	24	
1456	Cubic feet of filling in the Basement	0	0 1/2	5	
1962/100	Sqrs of Pavingquatta granite Slabs bedded in sand with pointed quatta Cumam	8	0	155	
	Carried over			1763	1423

(14)

From The Executive Engineer Bangalore

To Lieut. Colonel Commanding Artillery

Bangalore

Dated 1st September 1866

Sir

I have the honor to submit for the favorable Consideration of Government the Estimate for the Construction of a Harness Room for the Artillery Horses on the Race Course at Bangalore -

Total Rupees 1423/

Approved

By Proceedings of the Board

No 134 dated 13th Sept 1866

[illegible]

Quantity	Description of work	Rate	Per	Amount	Total
	Brought over			1763	
243 3 0	Calico Quilt of Scaffolding				
	mortar stands & planks	3	2 0	7 65	
2	Steps with all Scaffolding complete	62	Each	124	
12	Raster Nails 8"	0	8 d.	1	
128	do 6"	0	6 d.	4	
16 32/100	Sqrs of Roofing the Main Rooms with Slate Rafters Laths & plastering with Common boards	16	0	261	
110 4/100	Sqrs Terracing with Lime & Coarse Sifted & Coarse Hair complete	27	8	303	
28	Rft of Ridge Ventilator	3	7½	166	
60	Harness or Saddle Rocks Complete	3	8 Each	210	
60	Accountrement pegs	0	12 d.	45	
5	Pairs of Panelled doors with Frames and all Ironwork Complete	45	Each	225	
1	Pair of Panelled Wainscot doors with Louvers and Frames complete	25	d.	25	
10	Sashing windows Complete	9	d.	90	
2	Backing boards	5	d.	10	
				4012	
	Carried over			3947	

Quantity	Description of work	Rate	Per	Amount	Total
	Brought over			3947	
2	Inventey boards	0	12 Each	2	
23	Sqrs of Floor Boarding 2 coats	2	0 Sqr	46	
105/100	Sqrs of Stucco Plaint 2 Coats for Windows	5	0 Sqr	6	
25	Calico yards of Ramps around the building with earth	0	8 d.	22	
11½	Sqrs of Travelling Gan[illegible]	1	0 Sqr	12	
	[illegible]			10	
	Total Expenses for one			8035	
	do do Two			8204	
	do do three Gan[illegible]			8370	
	Sundries and Repairing			130	
	Grand Total Expenses			8500	

Received the Amount of the above Contract

H Gallwey Captain R.E.
Ex Engineer Barrackes

Edmd Lieut Colonel R.E.
Superintd Engineer 5th Div

Ex Engineer 1st Div
Banyahee
27th June 1866.

Abstract Estimate No 18 for 1866/67

Cantonment of Bangalow

Work Construction of Quarters for Artillery on Base Square Barrack Bangalow

Quantity	Description of Work	Unit	Rate	Amount	Total
4654	Cubic feet of Excavation		1	24	
4654	do Foundation Stone in Cement			58	
3189	do Basement do			1165	
6468	do Brick in Cement			1646	
1134	do Pucka in Cement			373	
1134	do Pucka in Mortar			355	
167 64/100	Sqrs of Plastering with Lime Coat			118	
129 72/100	do White washing do			13	
59 62/100	do Colour washing do			18	
1175	Cubic feet of Teak wood in Framework and Split ash			2742	
76	Drops Complete with all its Iron Work			1152	
79 62/100	Sqrs of Flooring with Teak Rafters Battens & Country Tiles			1274	
10 870/100	Sqrs of Terracing and Glazing Edge Tiles & Country Tiles			239	
60/100	Sqrs of Stone Coping Cut & Rubbed to Gable ends			297	
639	Running feet of Cornice			30	
105	Nos of Holes for Insertion of Stays			20	
1000	do Stone Slabs for Insertion of Stays of Iron Bars 9" x 1"			500	
				9031	
	Carried over			1050	

Estimate Passed for Rupees 35 Thirty five only
Rupees 35 Thirty five only
Executive Engineer
Bangalow
Superintendent
Abstract Estimate
for Construction
of Barrack Bangalow
for Base Square Artillery
Amount of Estimate Rupees
4826/73

Public Works Dept

Quantity	Description of Work	Part	Per	Amount	Total
	Brought over			9.031	100 10 0
6	Columns complete	20	8 c Each	120	
16	Galvanized Iron Gauts to Carry off waters over the Center pillars	1	12 ½	196	
2	Pairs of Pattoned doors Folding for Store room 6×10	86	2 Each	160	
10	Iron Grated windows for Lights	24	10 ½	240	
2	Pairs of Pattoned and Iron Grated windows for Store room	2	12 ½	10 4	
2	Pairs of Sunk windows 6×2	18	2	36	
77	Sqrs Boarding for Partitions Doors and windows	2	10 ½	16 4	
32	Iron Rails under the Verandas	1	0 ½	8	
5 20/100	Sqrs of Flooring under the Verandas waterd and well Rammed	1	12 ½	5 5	
1	Reaching boards	5	Each	5	
4	Linnen Boards	6	10 ½	3	
	Total Rupees for one			104 15	
	Ditto Ditto Two			11 12 4	
	Sundries and Registering Fee			20.83 1	
				22 8 4 8	
				10 7 0	
				1 4 2	
	Grand Total Rupees			21 9 0 1	
				6 4 0 2	

Measurement Two thousand and nine hundred and eighty six Cubic feet

H. Rules Lt Captain &c
By Engineer & Surveyor

Ed Smith Lieut Col &c
Superintg Engineer 5th Div

By Engr & Surveyor
Bangalore
23d June 1846

3-30

Public Works Dept

No 3020

Proceedings of the Madras Government
Under date the 27th September 1867.
Read the following.

From the Inspector Genl of
Military Works.

Dated enter 9th Sept 1867.
No 982. M.

Communicated to
the Superintending Engineer
of the 5th Division for in-
formation and guidance
with reference to the
orders of Government No
1420 dated 9th May 1867.

Colonel Ford will,
in communication with
the Military Authorities,
furnish as early as
practicable the particulars
called for in para 2
regarding the patients

WDM

Date	Description of Labour	Rate	Payments	Date

13 / 85

Mason — Rs 2-8 per day

Do — Rs 1-8 per day

Labour 2166
Head Do 23 2866

Statement showing the Number of Labourers employed on the Public Works at Trichinopoly during the week ending the 31st August 1867.

Number of Labourers employed

4826
13

to be accommodated in the new Hospitals on the race course at Bangalore, as well as the information required in para 5 as to the usefulness of the day rooms attached to the blocks of quarters for the married men of the Artillery and the extent to which they are resorted to -

Adverting to para 8, the Government request that in ~~submitting~~ subsequent hereafter plans for the construction of Military buildings, Superintending Engineers will distinctly state whether such plans are in accordance with the standard designs, and, if not, that they will explain the nature and cause of the deviations proposed.

H.

To The Sup Engr 5 Div
" Controller of Works
" Asst Genl
" Military Dept
All Supt Engrs
Capt Kennedy

Desp 30/3/67

Pub: Works 1867 Department

Pro: of Govt. for September

No. 9010

Pro: of the Madras Govt.

Dt 27th September 1867

No. 692-693