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MADRAS RECORD OFFICE.**Government of Madras.***Public works* **DEPARTMENT.**

G.O. No. 562	Press
533-34	Mis.
Dated 25. 2	1871

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
25th February 1871.*

No. 533. Read the following letter from Lieut-Colonel R A ROBERTS, R E, late Acting Superintending Engineer, 5th Division, to the Secretary to Government, Public Works Department, dated Madras, 30th January 1871, No. 232.—

In compliance with G. O, 10th Decemler 1870, No. 2,996, I have the honour

to submit herewith the original and modified plans and estimates for the sick cart-shed at Bangalore, together with the plan of the locality.

3 Plans.
2 Estimates
1 Report from Executive Engineer
1 Letter to Assistant Quartermaster-General

2. The plan and estimate, revised according to my instructions, have just been received by me from Cuddalore, and, although Colonel Boileau has relieved me as Superintending Engineer of the 5th Division, I imagine that the Government will expect me, in a matter so purely personal to myself, to dispose of the question as far as this office is concerned.

3. I am desirous, in the first instance, to call the particular attention of Government to the fact that, while the Military authorities at Bangalore have themselves failed to act in accordance with the rules laid down by the Government for their guidance, they have not hesitated to quote these very rules in reporting to Government my alleged laxity in this respect.

4. Paragraph 20 of the G. O. C. C, quoted in Major-General Borton's letter, refers, as will be seen on reference, to the "preparation of plan *after* the sanction of Government." The preceding paragraphs of that G. O. distinctly state that for a new building, or the improvement of an old building, a *proximate* estimate is to be first made. "This proximate estimate, should it exceed 500 Rupees, shall be submitted to Government" for sanction, and if the Government approve of the same, they will direct a detailed estimate to be prepared.

5. On the present occasion this ruling was ignored; for without the sanction, or even the knowledge, of Government, and without the slightest intimation to the Superintending Engineer, a plan and detailed estimate of Rupees 700, "approved by the Major-General Commanding the Mysore Division," were forwarded to me for submission to Government for sanction, and because I ventured to express my disapproval, and to request the revision, "notwithstanding that it had met with the approval of the Officer Commanding the Division," of a plan for the suitability of which I am held directly responsible to Government, my conduct is considered reprehensible.

6. My objection to the plan was simply because it did not afford suitable and adequate shelter for the carts in question. Were any private individual possessed of a number of vehicles for which he considered it desirable to erect a coach-house, he would undoubtedly construct a building that would be protected from the weather on three of its sides by walls, and in front by folding doors, and he would so arrange it that the vehicles should, when run in, lock up with each other and occupy as little space as possible. This is the plan adopted for Military vehicles in England, and this is precisely all that I required.

7. In lieu of this, however, a plan and estimate were submitted by the Executive Engineer for a shed open in front and rear, which not only afforded an indifferent shelter for the carts from the inclemencies of the weather, but actually

*Proceedings of the Madras Government, Public Works Department,
25th February 1871.*

required an enclosure wall for its protection. I feel convinced that had this plan been carried out the Sanitary authorities would, in a very short time, have raised objections to a compound of the kind being situated so near the hospitals, and would have called attention to the little benefit that convalescents could be expected to receive from being taken out for an airing in damp bullock-carts, and not only this, but I am satisfied that, in an exposed situation like that of the cart-shed, the enclosure wall, if built of mud as proposed, would have crumbled away during any unusually heavy burst of the monsoon, such, for instance, as occurred in October last, and then, of course, there would have been the usual out-cry against this department.

8. The Executive Engineer was accordingly called upon by me to submit a design calculated to remove these objections; but Captain Wood, so far from attending to my instructions, preferred to raise objections to one and all of them, and to re-submit the original plan and estimate.

9. If my reply to Captain Wood was irritating—and I regret that it should have been so—at least it must be conceded that his procedure was such as to justify a rebuke on my part; and his subsequent action in the matter, namely, communicating his departmental orders to the General for instructions, instead of paying attention to them, has already been unfavourably noticed by Government.

10. It is a matter of great regret to me that Government should consider the language used by me as being disrespectful to the Major-General Commanding; but when it is remembered that the memorandum in question, containing, as it did, departmental instructions, was clearly a privileged communication, which I had no reason to suppose would have gone beyond the office to which it was despatched, I trust that the Government will absolve me from blame on this account.

11. In order, however, to remove all doubts on this point from the mind of the Major-General, I at once, on the receipt of the G. O. under notice, addressed him, through the Assistant Quartermaster-General of the Division, a letter of which the accompanying is a copy; and I was very happy to be informed, in reply, that the General "accepts with pleasure the explanation therein offered."

12. The estimate for the modified plan amounts, as will be observed, to Rupees 900, whereas the amount of the estimate for the shed originally proposed was Rupees 700. The stone tramway and the heightening of the roof, etc., now introduced are, if not absolutely required, at least decided improvements, and I think that there can be no comparison between the two buildings as regards the respective suitability of each for the purposes required.

13. I think it right to mention, in conclusion, with reference to the last paragraph of Major-General Borton's letter, that when I suggested to the Executive Engineer the alterations of the site of the cart-shed, I did so solely in consequence of Captain Wood's having informed me, in his letter, No. 667, dated 14th October 1870, that the shed is "far removed from any of the other buildings of the Race-course Barracks." The site was not marked on any plan in my office, and I was not aware by whom it had been selected. On reference to the accompanying Sketch "D," it will be seen that the shed is situated at a very convenient distance from the hospitals.

*Proceedings of the Madras Government, Public Works Department,
25th February 1871.*

No. 534. ORDER THEREON, 25th February 1871, No. 562.

MILITARY WORKS, No 20.

THE Government are of opinion that of the alternative designs for a sick cart-shed now submitted by the Acting Superintending Engineer of the 5th Division, in compliance with G. O., No. 2,996, of the 10th December 1870, that recommended by Lieutenant-Colonel Roberts will afford so much more effective shelter than the other as to more than compensate for the small additional cost of its construction. His Excellency the Governor in Council therefore resolves to approve of the new design and to sanction the estimate of Rupees 900.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the Superintending Engineer, 5th Division.

.. Military Department

.. Controller of Public Works Accounts

Exd E C. Shunker.

N^o 155
A.

11/10/1870
Bangalore 17th December 1870

The Asst. Secy. to the Govt. of India
3rd Floor

The Secy. to the Govt. of India
His Office
Bangalore

Sir,

I have the honor to acknowledge the receipt of your letter of the 11th inst. in relation to the proposed establishment of a public library in Bangalore. I am glad to hear that the Government of India are considering the matter, and I am sure that the Government of India will be able to do all that is possible for the benefit of the public. I am, Sir, very respectfully,
Yours very truly,
J. H. M. J. H. M. J. H. M.

that it is my duty, as a participating
inquire of this Union, to submit to
Government for sanction, in the event of
any further inquiry, and subject
to the same authorities as before, and no
personally to the authorities for
the purpose, and that the same
from one of my subordinates, which
which I do not consider to be out of place
the inquiry, to be of a more, to be that
it is, indeed, and that to it, to be the
being raised, in accord, as it is of
most of the same.

2. To my surprise, and as it is, it
to be from the fact, to the displacement
of Government, the Executive Inquiry, at
this Station instead of attending to my
instructions in the particular case in
question, has, on this end of the paper,
and previous occasion, in passing of the
instructions from me, reached them up to
the Major General, and as it appeared
that I was not only thwarting the
expressed wishes of the General, to be in
a disrespectful if not insulting manner.
Whereas I am from not being the case, it

had been my intention to submit the
original and revised plans to the opinion
of the General, and a draft to be right to
in a fair position to decide which of the
two designs to prefer.

3. I am, however, after the
above explanation, to the Major General, to
be pleased to receive that opinion of my
subordinates, that I should be thought
capable of the conduct imputed to me.
4. I believe, however, that it is of
great importance to be known, and I
therefore have to state that it is
requested the Executive Inquiry, to be
a being called upon to prepare a plan of
I think for and in relation to the
be applied, to be in conformity with
the instructions to be received from
a last occasion, but not to submit the
same for the official appearance of the
Major General commanding until it has
first passed the scrutiny of the
General.

By order of R. S. Roberts, Major General
Adj. Gen. to the 1st Div.
(True Copy) R. S. Roberts
Lt. Col. R. S.
late det. Inf. Regt. 5th Div.

No 780/1870/11

Estimate of the Probable cost of Constructing additional
 Sick cant shed for Hospital and compound wall
 with gate for the same on the Race Course prepared agreeably
 to requisition received from the Assistant Quarter Master
 General Mysore Division No 80 dated 4th March
 1870

Ref 490/71

Particulars of work	Measurement			Cost
<u>Dismantling</u>				
Wall between stone pillars	3	8 $\frac{1}{2}$	$\frac{3}{4}$ 4	75
Total Cft. of Dismantling brick work				75
Do. Roofing	1	29	1 $\frac{1}{2}$ "	43 $\frac{1}{2}$
<u>Excavation</u>				
Side walls	2	10 $\frac{3}{4}$	2 2 $\frac{1}{2}$	107 $\frac{1}{2}$
Foundation for stone pillars	2	2	2 2	16
Total Cft. of Excavation				123 $\frac{1}{2}$
Total Cft. of Foundation stones in chunam				123 $\frac{1}{2}$
<u>Superstructure</u>				
Side walls	2	10 $\frac{3}{4}$	1 $\frac{1}{2}$ 11	35 $\frac{3}{4}$
Wall between stone pillars	3	8 $\frac{1}{2}$	$\frac{3}{4}$ 4	75
Total Cft. of Superstructure brick in chunam				429 $\frac{3}{4}$
Qty. of Cornice				26
<u>Painting</u>				
Wall between pillars inside	6	8 $\frac{1}{2}$	" 4 $\frac{1}{2}$	225
Side walls in and outside	2	23 $\frac{1}{2}$	" 11	517
Total Sq. of Painting				742
<u>Whitewashing inside</u>				
Centre wall	2	26	" 12 $\frac{1}{2}$	650
Side walls	4	12 $\frac{1}{2}$	" 11	537
Total Sq. of Whitewashing				1187

Particulars of work	No.	Measurement	Contents	Total
<u>Blue washing Outside</u>				
Side walls	2	22½	11	500½
Total sq. of Blue washing				500½
No. of stone pillars (10½ x 1½ x 4½)	2		2	2
<u>Wood work</u>				
Bressummer	1	27½	1/3 7/12	5-25
Rafters	20	13½	1/4 1/2	33 3/4
Struts	6	4	1/4 1/3	2
Over Struts	3	4	1/4 1/3	1
Brackets	4	1½	1/3 1/2	1
Total Cft. of Teak wood wrought & put up				43 7/12
<u>Roofing</u>				
So	1	30	13½	405
Total sq. of Roofing				4.05
No. of Nails 8 inches long	40		40	40
Drilling holes	2		2	2
<u>Flooring with gravel</u>				
So	1	26	11	286
Total sq. of flooring with gravel				2.86
<u>Wood Ceiling</u>				
Bressummer	1	26	1½	39
Rafters	20	13	1/4	325
Struts	6	4	1/6	28
Carried forward				392

Particulars of work	No.	Measurement	Contents	Total
Over Struts	3	4	11/12	392
Brackets	4	1½	1/3	10
Total sq. of wood Ceiling two Coats				4.13
<u>Compound wall & Gate</u>				
Excavation Compound wall around the cart shed		336½	1¾ 1/2	883 5/16
<u>Mud wall</u>				
2 Compound wall around the Cart shed		336½	1¼ 5/4	2208 2/3
1 Foundation for "do"		336½	1¾ 1/2	883 5/16
Total cft. of Mud wall				3091 19/32
<u>Mud plastering</u>				
Compound wall around the cart shed		336½	10½	3533 1/4
Total sq. of Mud plastering				35.33
Total sq. of Blue washing				336½ 336½
Pft. of Tile Capping	2	1	1 7	2 7 2
Stone pillars (7½ x 1 x 1)	1			1 1 1
Gate Complete				

Abstract of foregoing Estimate

13

Quantity	Description of work	Rate	Per Amount	Total
75	Qty. of Ironmongery, brick work	" 2 9/16	1	
44	Qty. of " " " Roofing	" 8 " "	1	
124	Do of Excavation	" 1 " "	1	
124	Do of Foundation Stone in Chumam	" 2 6 "	19	
430	Do of Superstructure brickwork - do	" 2 9 "	74	
26	Qty. of Carriage	" 4 " 0 9/16	7	
7.42	Qty. of Paving	1 8 " 1 1/2	11	
11.89	Do of Whitewashing, two Coats	" 8 " "	2	
5.00	Do of Bluewashing, do - do	" 4 " "	1	
2	Qty. of Stone pillars (10 1/2 x 1 1/2 x 4 1/2)	" 2 " 4	4	
43 1/2	Qty. of Teakwood, rough and put up	3 8 " 0 9/16	151	
4.05	Qty. of Roofing	18 " 1 1/2	73	
40	Qty. of C Nails 8 inches long	" 8 " "	2	
2	Qty. of Drilling - holes	" 6 " "	1	
2.86	Qty. of Flooring with gravel	1 " 1 1/2	3	
4.13	Do of Wood Ceiling - two Coats	9 " " "	8	
	Compound wall and gate			
883	Qty. of Excavation	" 1 0 9/16	5	
3092	Do of Mud, wall	" 6 " "	97	
35.33	Qty. of Mud p. lastings	1 " 1 1/2	35	
35.33	Do of Bluewashing	" 4 " "	9	
337	Qty. of Tile Roofing	" 5 " 0 9/16	105	
2	Qty. of Stone pillars including deeping	7 " 1 1/2	14	
1	Gate with painting, &c. complete	45 " " "	45	

Total 869

Captain R. G. D. 31

Sg. Superintending Engineer 5th
Total Estimate Rs. 700

W. M. M. D. Captain R.

Resident Engineer Bangalore

Asst. Commr. Off-
Bangalore
22nd August 1870

11/10/71

PM 470/71

卷之五

Estimate of the probable cost of altering
and improving the present site carted on
attached to Hospitals on the River bank to
accommodate 6. beds

Particulars of work	Measurements				Content	Total	of 5612
	No.	L	B	D			
Dismantling roof	1	29	5		145	1.45	brick
Brick work							
Knocking down walls	3	8 $\frac{1}{4}$	1 $\frac{1}{4}$	3	92 $\frac{13}{16}$		the
between the stone posts	3	8 $\frac{1}{4}$	3 $\frac{1}{4}$	10	185 $\frac{5}{8}$		ins
Circular holes for ventilation	2	7	area	1 $\frac{1}{2}$	21		%
Total Dismantling brick work					299 $\frac{7}{16}$		man
Excavation							
End walls	2	12 $\frac{1}{2}$	2	2 $\frac{1}{2}$	125		of
Rear wall	1	29	2	2 $\frac{1}{2}$	145		
Total Exc. of Excavation					270		many
Total Exc. of Foundation stone in channel					270		all
Superstructure							
End walls	2	13	1 $\frac{1}{2}$	10	390		is not
Gables over	2	13	1 $\frac{1}{2}$	1 $\frac{1}{2}$	58 $\frac{1}{2}$		it is
Rear wall	1	29	1 $\frac{1}{2}$	10	435		top of
Total					883 $\frac{1}{2}$		touch
Deduction							
Holes for Ventilation	7	7	area	1 $\frac{1}{2}$	73 $\frac{1}{2}$		id
Total Deduction					73 $\frac{1}{2}$		
Total Est. of Superstructure brick in channel					810		the

Drawn

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Wm. B. B. B.

Amounting to No 750

Particulars	No.	Measurements			Content	Total
		L	B	D		
<u>Arch work</u>						
Circular holes for Ventilation	9	8	$\frac{3}{4}$	$1\frac{1}{2}$	81	
Total cft of arch work						81
Running fut of rough cornice work	34	"	"	"	34	34
<u>Pointing</u>						
End walls	4	13	"	$11\frac{1}{2}$	598	
Bar wall	2	29	"	10	580	
Circular holes for Ventilation	4	7	ans	"	28	
Total sqrs of Pointing						12.06
<u>White washing</u>						
End walls	2	$27\frac{1}{2}$	"	$11\frac{1}{2}$	632 $\frac{1}{2}$	
Bar wall	1	26	"	10	260	
Total sqrs of white washing						8.92 $\frac{1}{2}$
<u>Blue washing</u>						
End walls	2	$27\frac{1}{2}$	"	$11\frac{1}{2}$	632 $\frac{1}{2}$	
Bar wall	1	29	"	10	290	
Total sqrs of Blue washing						9.22 $\frac{1}{2}$
Stone posts $16 \times \frac{1}{4} \times 7\frac{1}{2}$	2	"	"	"	2	2
Do $15 \times \frac{1}{4} \times 7\frac{1}{2}$	2	"	"	"	2	2
<u>Work work</u>						
Bressummers	1	29	$\frac{5}{12}$	$\frac{7}{12}$	$7\frac{7}{144}$	
Rafters	19	13	$\frac{1}{4}$	$\frac{1}{2}$	$30\frac{7}{8}$	
Do	19	6	$\frac{1}{4}$	$\frac{1}{2}$	$14\frac{1}{4}$	
Wall plates	1	27	$\frac{1}{3}$	$\frac{1}{6}$	$1\frac{1}{2}$	
		6.3				

Particulars	No.	Measurements			Content	Total	No.
		L	B	D			
<u>Struts</u>							
Brought over	6	4	$\frac{1}{4}$	$\frac{1}{8}$	2		
Over do	3	$4\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$	$1\frac{1}{2}$		
Brackets	4	$1\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{2}$	1		
Total cft of timber brought up						$57\frac{109}{144}$	
Nails 8" long	76	"	"	"	76	76	
<u>Roofing</u>							
Over eart sheds	1	30	3	"	390		
Do	1	30	8	"	240		
Total sqrs of Roofing						6.30	
<u>Honey Comb Tile work</u>							
Circular holes for ventilation	9	$1\frac{1}{2}$	"	"	9		
Total sq of circular holes with honey comb						9	
<u>Graveling</u>							
Present sheds	1	26	$10\frac{1}{4}$	"	$279\frac{1}{2}$		
Proposed do	1	26	$32\frac{1}{4}$	"	$97\frac{1}{2}$		
Do	1	26	8	"	208		
Between stone posts	6	$8\frac{1}{4}$	$1\frac{1}{4}$	"	$61\frac{7}{8}$		
Do	3	$8\frac{1}{4}$	1	"	$24\frac{3}{4}$		
Total						$671\frac{5}{8}$	
<u>Deduction</u>							
Stones 12" wide	6	$22\frac{1}{2}$	$\frac{1}{4}$	"	$168\frac{3}{4}$		
Total Deduction						$168\frac{3}{4}$	
Total square of Graveling						$5.02\frac{2}{8}$	
Stone 12" wide & 3" thick	6	$22\frac{1}{2}$	"	"	135	135	
Guard stone $2 \times 6 \times 1\frac{1}{4}$	8	"	"	"	8	8	

getting

Amounting to Rs. 700

Particulars	Measurements				Contract	Total
	12	13	14	15		
<u>Work on</u>						
Pressure mers	1	26	0	12	41 1/8	
Do to present shed	2	26	0	12	82 1/8	
Rafter	19	12	0	14	285	
Do	19	6	0	14	142 1/2	
Struts	6	4	18	0	28	
over do	3	4 1/2	12	0	12 3/8	
Brackets	4	1	12	0	6 2/3	
Rafter to present shed	19	14	1 1/2	0	332 1/2	
Total sq. of work on						9.52
Pair of gate including wooden posts hinges locks & keys including painting	3	0	0	0	3	

Abstract of the foregoing Estimate 21

Quantity	Description of work	Rate	Per	Amount	Total	Notes
1.45	Sq. of Dismantling the roof	8	"	11.60		
2.99	Sq. of Brick work	3	"	8.97		
2.70	" Excavation	1	"	2.70		
2.70	" Foundation stone in ch.	2	"	5.40		
8.10	" Superstructure brick in chunam	2	"	16.20		
8.1	" Arch work	4	"	32.40		
3.4	Sq. of Cornice work	2	"	6.80		
12.06	Sq. of Painting with lime putty	1	"	12.06		
8.93	" White washing two coats	3	"	26.79		
9.23	" Blue washing two coats	4	"	36.92		
2	Sq. of Stone pillars (15' x 1 1/4' x 7 1/2')	7	"	14.00		
2	" Do (15' x 1 1/4' x 7 1/2')	6	"	12.00		
57.09	Sq. of Teak wood wrought & put up	3	"	171.27		
76	Sq. ofails 8" long	8	"	608.00		
6.30	Sq. of Roofing with teak ropers nails flat and fan tiles chunam borders etc complete	18	"	113.40		
9	Sq. of Circular hole with honey comb tile work	8	"	72.00		
5.03	Sq. of flooring with gravel	1	"	5.03		
135	Sq. of Stone for wheels to stand on (12' x 3')	3	"	405.00		
	Carried over			593		

Amounting Rs 900

Quantity	Description of work	Rate	Per amount	Total
	Brought over			596
8	No of Guard stones	1	8 " 8	12
8.84	Sqrs of Floor oiling two coats	2	" " 4.00	19
3	Pair of Gate including wooden posts hinges locks and keys &c with painting complete	68	" " 8	204
	Levelling ground and removing rubbish			5
	Total			861
	Lundries			39
	Total Estimate Rupees			900

Rs 470/71

C.E. Engg office
 Bangalore
 24th January 1871
 W. J. Purches
 Lieutenant. P. E.
 Assistant Engineer
 for Executive Engineer Bangalore

Specifications to accompany plan and Estimate for altering and improving the present Sick cart shed attached to Hospital on the Race Course to accommodate 6 carts. Amount of Estimate Rupees 900---

Dismantling The whole of the rear wall and a portion of the roofing to be demolished and the rubbish carted away.

Excavation The excavation for foundation to be taken out to such a depth as the Executive Engineer may consider necessary and the bottom taken out perfectly level any superfluous excavation to be filled in again and well rammed.

Foundation The foundation to be laid with stone in chumam stones laid closely fitted with good bond and well flushed up with chumam 3 parts of sand to two of fresh and well burnt lime slaked on the work every sixth stone at least to be a through header.

Superstructure The Superstructure to be of best bricks 19" x 4 1/2" x 2 1/2" in chumam 3 parts of sand to two of fresh and well burnt lime slaked on the work. The bricks to be soaked in water before they are used and English bond to be observed throughout. The old and new brick work to be well bonded together by bond stones 3 ft lengths.

The arches to be neatly turned and only selected hard bricks used. The joints all to radiate correctly according to the nature of the arch. Bricks to be ground down to required shape and the key bricks to be well driven home joints not to exceed $\frac{1}{4}$ " inch thick and to be scraped out before plastered.

The description of the common cornice should be of the pattern supplied by the Executive Engineer. Cornice bricks to have proper bearing not less than $\frac{1}{4}$ " inches and set with lime.

The joints scraped out and tuck pointed with strong lime putty.

The building to be blue washed outside and to have a uniform color throughout to be approved of by the Executive Engineer and to be white washed inside each with two coats. The following portions to be used in mixing the Blue wash.

For Blue washing 10 $\frac{1}{2}$ lbs one coat
Charcoal sufficient to give slate color

$\frac{3}{4}$ Parrak of Stone chumam

5 Pallums of gum

$\frac{1}{2}$ Measure of raw rice

For white washing 10 $\frac{1}{2}$ lbs one coat

$\frac{3}{4}$ Parrak of Stone chumam

5 Pallums of gum

$\frac{3}{4}$ Measure of raw rice

Archway

Cornice

Pointing

Colouring

Stone pillars

The stone pillars to be of the dimensions marked on the plan and to be firmly fixed in the ground. The top of these stone pillars must be cut into the shape and dimensions of the bresssummers and carrels that are to come over them.

Timber

The whole of the timber to be of well seasoned and sound teak free from all shakes and knots and neatly finished off. No timber to be put up until passed by the Executive Engineer.

Roofing

The roof to consist of teak rafter nails. flat and handiles and chumam borders. The rafters are to be laid $\frac{1}{2}$ feet apart from centre to centre.

Flooring with gravel

The cart shed to be floored with 6 inches gravel well watered and rammed till thoroughly consolidated.

Stone for wheels

The Stone on which the wheels run in the shed to be $22\frac{1}{2}$ feet in length 12 inches in breadth and 3 inches in thickness and to be sunk flush with the floor. At each end of the stones, a stone to be fixed 6 inches higher than the floor to prevent the carts from damaging the rear wall.

Guard stone

At each side of the stone pillars

yellow
bricks
off
slab

black
the
two

W.

unmarked

7

of

among

wall

dist

it is

near

end of

tail of

touch

side

the

by

fitting

yellow
brandy
off
solid
black
the
ins
C.P.
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Richd. Roberts
W. Va. N.S.

late next July-Aug. 5-6-71

W. J. Purchas.

Lieut. R. C.
Asst. Engineer

24th January 1871

No. 148. *Asst. Supp. Engr. Office*
Cuddalore 8. October 1870.

Memorandum.

The Executive Engineer Bangalore is requested to be so good as to revise, in conformity with the following remarks, the Estimate of Rs. 700, received with his letter No. 5612 of 7th September 1870, for constructing additional Pick Cart shed accommodation at Bangalore.

- Enclosures. 3.
 1 Plan.
 1 Estimate.
 1 Specification.

1. As G.O. No. 5968 of 24th July 1869 directs the discontinuance of brick in mud constructions in all Public buildings erected by the P.W. Department; and intended to be of a permanent character, it is clear that the construction of a mud wall, as proposed, for the enclosure of the Cart shed would militate still more against that order; and to say the least, among so many handsome buildings, a mud wall would be quite out of place.

2. The necessity for an enclosure wall is not apparent; and in a sanitary point of view it is positively objectionable both in the stagnation of air on occasions and the receptacle that such an enclosure would form for rubbish and filth.

3. It appears to the undersigned that the protection sought can best be obtained by fitting

From
The Sec. Engineer
Bangalore

To
The Asst. Engr.
Cuddalore

Recd
Dated 24th January 1871.
Estimate of the probable cost of altering and improving the present shed cart shed attached to Hospital on the Race Course to accommodate 6 carts.

Amounting to Rs. 900
Amounting to Rs. 700

fitting gates of open wood work to each of the 6 stalls, as is the practice in Barracks in England. One or two of these can be fitted with padlocks, and the rest bolted inside. And it would be a convenience to have a central open archway to connect the two sets of stalls. The Esceinte Engineer Bangalore is requested to submit a revised Estimate in conformity with the above instructions.

By R. A. Roberts Captain &
Adj. Supg. Engineer

Secy. Secy. of Office
Bangalore 14 Oct/70

The Supg. Engineer

5th June

For

In reference to your Memo No 14838^o Oct/70 I have the honor to state as follows. The enclosure wall of the sick Cart shed is designed to be of the cheap material brick as the sick cart shed itself is far removed from any of the other buildings of the Race Course Bk with the appearance of which, it could not therefore interfere; nor was it thought that such a mere

enclosure

enclosure wall come under the head of the buildings referred to in G.O. No 5968 24 Feb 1869.

The Military authorities applied for an enclosure wall to prevent the followers of the troops living in Barracks from approaching and damaging the sick Carts kept in the shed. As regards the stagnation of air caused by an enclosure wall - it has already been said that the shed is distant from all occupied buildings and in reference to the proximity of filth accumulating within the enclosure the responsibility of this of course rests with the Military authorities. It is impossible to fit gates of open wood work to the shed as suggested in para 3. The Carts used are not of the same sort as in England; they are drawn by bullocks and the poles of the Carts project beyond the line of roofing without the shed. It will be inadvisable to have a central open archway to connect the two sets of stalls as the partition wall is necessary to preserve the perfect stability of the existing tall stone pillars on which the summit of the roof rests.

With

Enclosure
1 Estimate
1 Plan
1 Specification

With the above explanation I have
the honor to resubmit the estimate referred to.
I have, &c.

Lt H. W. Wood Captain R.E.
En. Secy. Bangalore

To secure uniformity of appearance
it would be as well to restore the item of
belm washing struck out of the Estimate.

Lt H. W. Wood Captain R.E.
En. Secy. Bangalore

Supg Secy's office 6th Dec
Cuddalore 20th Oct/70

No 156

Memorandum.

With reference to the En. Secy's letter
of 14th Oct/70, No 867, giving his reasons for
not attending to the instructions from this office
in regard to the erection of a Cart-shed of
a more suitable pattern than the kind of
"bandy Khana" proposed by him; the
undersigned can only regret that Captain
Wood has no better arguments to advance
for the line of conduct he has chosen to adopt.

And

And he is now requested to hasten the
preparation of a plan in conformity with
the instructions contained in the letter from
this office dated 8th Oct/70 No 148.

2. He will also be so good as to submit
a hand-sketched with the figured distances
of the shed from the principal and nearest
buildings of the Race Course Barracks.

3. The undersigned can only express his
surprise at the persistence of an officer of
Captain Wood's standing and attainments
in recommending a design as faulty as it is
pathetic, and conjuring up so many diffi-
culties in preparing a plan not in the
native groove.

4. The imperfect shelter that the Cart
shed affords appears, alone, quite
sufficient to the undersigned to prevent
his recommending it for the sanction of
Government.

5. With the money proposed for the
bandy-Khana, a neat shed of appropriate
design might be constructed in a more
convenient position than that of the
present

present shed, so far removed, as
it appears to be, from all other buildings.

By R. A. Roberts Captain Rb
Ag. Supg. Eng. 5th Decree

True Copy
R. A. Roberts Captain Rb
Ag. Supg. Eng. 5th Decree

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No 232.

Report to Engrs Office, D.C. 1874
The 30th January 1874

From: Lieut. Col. H. S. Roberts, R.E.
late of 1st Infantry, Engrs, D.C. &c.
Colonel Charles. S. Roberts, R.E.
forwarding to you some of the

Sir,

- 4 Enclosures viz:
- 3 Plans
- 2 Estimates
- 1 Report from Lieut. Col. Roberts
- 1 Letter to Asst. Dir. Mr. General.

Enclosure as with Lt. Col. Roberts
1874. 1874. These to
be submitted herewith the
original and signed plan and
Estimates for the site of the
Bangalore together with the plan
of the locality.

The plan and Estimate, revised
according to my instructions, have just
been received by me from Lieut. Col. Roberts
and although Colonel Roberts has retired
me, as Superintendent Engineer of the
5th Division. I imagine that the Govern-
ment will respect me, in a matter so
fully personal to myself, to dispose
of the question as far as this office is

1874 4542/70

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1874 4542/70

as a rule -

5. I am desirous in the first instance, to call the particular attention of Government, to the fact that while the Military Authorities at Bangalore have themselves failed to act in accordance with the rules laid down by the Government for their guidance, they have not hesitated to quote these very rules in reporting to Government my alleged lousiness in this respect.

The para 20 of the G.O. C.C. quoted in the Major General Boston's letter refers as it can be seen as reference, to the "Preparation of Plans after the sanction of Government." The preceding sentence of that G.O. distinctly states that for a new building, a preliminary estimate is to be first made. "This preliminary estimate, should it reach 5000 rupees, shall be submitted to Government for sanction, and if the Government approve of the same they will direct a detailed estimate to be prepared."

5. As the facts occur, it is not only not ignored - It is without the sanction of

39
even the knowledge of Government, without the slightest intimation to the Superintendent Engineer, a Plan is a detailed estimate of a year's expenditure by the Major General "to the effect of the Mysore Division" even forwarded to me for submission to Government for sanction. And because I venture to express any disapproval or to report the same, it is the kind of "that it had not with the approval of the officer commanding the Division" of a Plan for the "necessity of which" I am held directly responsible to Government, and must be considered responsible.

6. My objection to the Plan was simply because it did not afford suitable and adequate shelter for the cars in question - how many private individuals possessed of a number of vehicles for which it is desirable to erect a coach-house, he would undoubtedly construct a building that would be protected from the weather on 3 of its sides by walls, and in front by folding doors. And he would so arrange it that the vehicles

should, when run in, lock up with each other, and occupy as little space as possible. This is the plan adopted for Military vehicles in England, and this is precisely all that I required.

In lieu of this, however, a plan and estimate were submitted by the Executive Engineer for a shed, open in front and rear, which not only afforded an indifferent shelter for the carts from the inclemencies of the weather, but actually required an enclosure wall for its protection.

I feel convinced that had this plan been carried out, the Sanitary Authorities would, in a very short time, have raised objections to a compound of the kind being situated so near the Hospitals, and would have called attention to the little benefit that Convalescents could be expected to receive from being taken out for an airing in damp bullock-carts. And not only this, but I am satisfied that in an exposed situation like that of the Cart-shed, the enclosure wall, if built of mud, as proposed, would have crumbled away during any unusually heavy burst of the monsoon, such, for

instance, as occurred in October last. And then, of course, there would have been the usual out-cry against this Department. The Executive Engineer was accordingly called upon by me to submit a design calculated to remove these objections; but Captain Wood, so far from attending to my instructions, preferred to raise objections to me and all of them, and to resubmit the original plan and estimate.

If my reply to Captain Wood was irritating - and I regret that it should have been so - at least it must be conceded that his procedure was such as to justify a rebuke on my part. And his subsequent action in the matter, viz: communicating his Departmental orders to the General for instructions, instead of paying attention to them, has already been unfavorably noticed by Government.

This is a matter of great regret to me that Government should consider the language used by me as being disrespectful.

to the Major-General Commanding. - But when it is remembered that the Memo: in question, containing, as it did, departmental instructions, was clearly a privileged communication, which I had no reason to suppose would have gone beyond the office to which it was despatched, I trust that the Government will absolve me from blame on this account. -

11. In order, however, to remove all doubts on this point from the mind of the Major-General, I at once, on the receipt of the G.O. under notice, addressed him, through the Assistant Quarter Master General of the Division, a letter of which the accompanying is a copy. - And I was very happy to be informed in reply that the General "accepts with pleasure the explanation therein offered."

12. The estimate for the modified plan amounts, as will be observed, to Rs. 900. whereas the amount of the estimate for the shed originally proposed, was Rs. 700. The stone knee-ways and the heightening of the roof, &c., now introduced, are, if not absolutely required, at least decided improvements, and I think that there can be no comparison between the two buildings as

regards the respective suitability of each for the purposes required. -

13. - I think it right to mention, in conclusion, with reference to the last Para. of Major-General Burton's letter, that when I suggested to the Executive Engineer the alterations of the site of the cart-shed, I did so solely in consequence of Captain Wood's having informed me, in his letter, No 667, dated 14th October 1890, that the shed is "far removed from any of the other buildings of the Race Course Baracks." The site was not marked on any plan in my office, and I was not aware by whom it had been selected. - On reference to the accompanying sketch "D" it will be seen that the shed is situated at a very convenient distance from the Hospital. -

I have the honor to be
Sir

Your most obedient Servant,
Richd. J. Roberts Brevet Col. R.E.,
late Adj. Superintg. Engineer, 5th Division.

No 562

Proceedings of the Madras Government
Under date the 25th Feby/71

Read the following

From The late Lt Col J. H. E. No 232 of 30th January/71
Engineer 5th Div

The Government
are of opinion that
of the alternative
designs for a sick
bent shed now sub-
mitted by the Acting
Superintending Eng^r
of the 5th Divⁿ in
compliance with G.O.
No 2996 of the 10th
Decr 1870, that recom-
mended by Mr. J. H. E.
Col Roberts will
afford so much more

1871 Dec 31
No of 470
The 5th Divⁿ
The 5th Divⁿ
The 5th Divⁿ
The 5th Divⁿ

Order 30th Jan 1871
No 154
No 232
No 232

Order 30th Jan 1871
No 154
No 232
No 232

Public Works Department

No 562

6115 Feb 17/13

effective shelter than
the other as to more
than compensate for
the ^{small} additional cost
of its construction

(31)

His Excellency the
Governor in Council
therefore resolves to
approve of the new
design and to sanction
the estimate of Rs.
9000

To
The S. Engr. ^{5th Bn}
Military Dept
Bombay

Dec 28/12

Pro 10 December 1892

47

6115 Feb 17/13

1870
Govt. of 1871 Madras.

PUBLIC WORKS.

The Superintending Engineer
S. A. Division

25 Feb 1871, No. 562.

No. 533-534

Sick Cart shed at Bangalore.

The new design for the Sick
Cart shed at Bangalore, ap-
proved, & the estimate of
Rs 900, sanctioned.