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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Con 23 12 37

G.O. No. 2362 Press / Mis.

7379

Dated 21—12— 1837

Not to be folded or roughly handled

No. 73. Read the following letter from Colonel C. E. FABER, Chief Engineer; to H. FORBES, Esq Acting Secretary to Government, dated 16th December 1857, No. 6026.

SIR,

1 Letter from the Garrison Engineer No. 521, dated 9th December 1857.
1 Abstract estimate.
1 Plan.

With reference to Extract Minutes Consultation No. 2194, dated 27th November 1857, I have the honor to forward for submission to Government Plans and an estimate amounting to Rupees (27,400) twenty-seven thousand and four hundred, of sheds for patent fuel and Steam Coal, to be built adjoining the sheds of the Peninsular and Oriental Company, on the site of part of the Black Town Fortification, to be removed for that purpose.

2. It would seem from Captain Rawlins' letter, that this site which has been selected in communication with the Secretary to the Marine Board, is the only one available within a reasonable distance from the Beach, the waterage and Marine yards being both fully occupied, or likely to be so for public purposes.

3. The plan of the buildings is suitable, and the rates of the estimate are moderate and sufficient. The estimate includes the sum of Rupees (1,580) one thousand, five hundred and eighty, for removing part of the Rampart to clear the site.

4. Allowance of Rupees (6,320) six thousand, three hundred and twenty, is also provided for constructing a Tramway from the sheds to the beach, as such a work will cause a very important saving in the cost of conveying Coals to the boats, so that by a different arrangement of items, the aggregate could be exhibited as within the 25,000 Rupees to be sanctioned by the Madras Government.

5. The entire site of works have been judiciously and carefully considered by the Garrison Engineer, and appear to me deserving of sanction.

Letter from Captain H. W. RAWLINS, Garrison Engineer; to Colonel C. E. FABER, Chief Engineer, dated 9th December 1857, No. 521.

SIR,

In obidience to the orders communicated in your resolution, No. 5604 of the 30th Ultimo, directing me to prepare and submit as early as possible Plans and estimates of sheds for the patent fuel and Steam coal shortly expected from England; I have now the honor to transmit the same, the amount for which is Rupees (27,400,) twenty-seven thousand and four hundred.

In company with Mr. Franklin, the Secretary of Marine Board, I carefully inspected the sites proposed by him. The waterage yard adjoining Messrs. Parry and Co's. office has already been, bespoken by the Quarter Master General's Department; who wish to appropriate a portion of the premises for the stowage of sick carts and Doolies, required for embarking and debarking troops. A plan of the yard and an estimate for the alterations, were forwarded to you with my letter No. 241 of the 20th July last, and amounted to Rupees (2180) two thousand one hundred and eighty.

3. The marine yard is already so full of Cole sheds that both Mr. Franklin and myself now think it undesirable to erect another there, as the space remaining in the yard is barely sufficient for the stowage of anchors, Cables and such like bulky marine stores besides which, if the whole yard was covered in, the area would not be enough for the accommodation required.

4. The best site for the sheds is between the Boatman's and the Royapooram gates in Black Town, adjoining the four sheds belonging to the P and O Company. A reference to the Plan will shew exactly the position.

5. The accompanying estimate provides the following:—

	Rs.
No. 1. For three sheds as per plan, calculated to hold 3000 tons of Coal, at Rupees 6,500 each	19,500
„ 2. For demolishing a portion of the curtain wall between the two bastions and levelling the ground.....	1,580
„ 3. For laying down a Tramway from the sheds to the beach...	6,320
Total Rupees.....	27,400

6. Each shed is to be 130 feet long by 40 feet broad, supported by two arcaded columns. The timber for the roof to be all of teak, and the floor of clay, well beaten down. There is great ventilation at the top and bottom of the side walls, and the doors will be made of strong wooden railings each shed will hold 1000 tons of coal.

7. In order to make room for the sheds, it will be necessary to clear the ground and remove a portion of the curtain wall of the Black Town Fortification. The cost of this will be rather heavy, but there seems to be no alternative.

8. I recommend the construction of a Tramway to convey the coals to and from the sheds. The saving will be considerable. At present, Mr. Franck pays 14 annas per ton for the conveyance of the coal from the beach opposite his office to the sheds; and the same for bringing it back again, or Rupees 1-12, for the both trips. If a Tramway was laid down, I estimate the same work could easily be done for 6 annas.

9. The annual expenditure of coal for the Government Steamers is not less than 5,000 tons; and if this is multiplied by Rupees 1-6, the product will amount to Rupees 6,875. But even if half this was saved, the amount would still be very large, and shews the advantage of the proposed tramway. The rails can be obtained from the Arsenal and expeditiously laid down, as the distance is only 600 yards, and the ground already tolerably level. I propose to run the rail along the side of the road, and close to and around Clive's Battery outside, on the top of the bulwark stones. The gauge is only 4 feet, and the debries from the curtain wall would answer to fill up the interstices between the stones so that none of them would have to be removed. At the north east end of the battery there would be a common wooden turntable.

10. In addition to the Tramway, a large weighing machine (like those used at every turnpike in England,) would be an improvement. At present all the coal is twice weighed by hand with the common scales and weights at a great unnecessary expense of time and trouble; while with a weighing machine placed near the rails, the Wagons would run over, and the quantity of coal carried, would be correctly and quickly ascertained. The cost of a weighing machine is only about 300 Rupees, and there are some now in store at the Arsenal.

No. 74. ORDER THEREON, No. 2362; dated 21st December 1857.

Ordered to be referred to the Marine Department with reference to Extract Minutes of Consultation in that Department, dated 20th November 1857, No. 494.

(Signed) H. FORBES,
Acting Secretary to Government.

No. 521.

Garrison Engineer's Office
75

From

Captain H. W. Rawlins
Garrison Engineer

To

The Chief Engineer
D. P. W.
Fort St. George

Sir

In obedience to the orders communicated in your resolution, No. 5604, of the 30th Ultimo, directing me to prepare and submit as early as possible plans and estimates of sheds for the patent fuel and Steam Coal shortly expected from England, I have now the honor to transmit the same, the amount for which is Rupees (27,400,) Twenty seven thousand and fourhundred.

2. In company with Mr. Franklin, the Secretary of the Marine Board, I carefully inspected the sites proposed by him. The waterage yard adjoining Messrs. Parry & Co's Office has already been bespoken by the Quarter Master Generals' Department; who wish to appropriate a portion of the premises for the stowage of Sick Carts and Doolies, required for embarking and debarking troops. A plan of the yard and

an

an estimate for the alterations, were forwarded to you with my letter No 241 of the 20th July last; and amounted to Rupees (2180) Two thousand one hundred and eighty—

3. The Marine Yard is already so full of Coal sheds that both Mr. Franklin and myself now think it undesirable to erect another there, as the space remaining in the yard is barely sufficient for the stowage of Anchors, Cables and such like bulky Marine stores—besides which, if the whole yard was covered in, the area would not be enough for the accommodation required.

4. The best site for the sheds is between the Boatmans and the Royapooram Gates in Black Town, adjoining the four sheds belonging to the P and O Company—A reference to the plan will shew exactly the position—

5 The accompanying estimate provides the following:—

		Rs.
No 1.	For three sheds as per plan, calculated to hold 3000 tons of Coal, at Rs. 6500 each.	19,500
2.	For demolishing a portion of the curtain wall between the two bastions & levelling the ground	1,580
3.	For laying down a Tramway from the Sheds to the Beach	6,320.
	Total Rupees	27,400

6 Each shed is to be 130 feet long by 40 broad, supported by two arcaded columns. The timber for the roof to be all of teak, and the floor of clay, well beaten down. There is great ventilation at the top and bottom of the side walls, and the doors will be made of strong wooden railings. Each shed will hold 1000 tons of coal.

7. In order to make room for the sheds, it will be necessary to clear the ground & remove a portion of the curtain wall of the Black Town Fortification. The cost of this will be rather heavy, but there seems to be no alternative

8 I recommend the construction of a tramway to convey the coals to and from the sheds. The saving will be considerable. At present, Mr. Franck pays 8 annas per ton for the conveyance of the coal from the beach opposite his Office to the sheds, and the same for bringing it back again, or Rs. 1—12—0 for the both trips. If a tramway was laid down, I estimate the same work could easily be done for 6 annas.

9. The annual expenditure of coal for the Govt. Steamers is not less than 5000 tons and if this ~~xxxxx~~ is multiplied by Rs. 1—6—0 the product will amount to Rupees 6875—

But

But even if half this was saved, the amount would still be very large, and shews the advantage of the proposed tramway. The rails can be obtained from the Arsenal and expeditiously laid down, as the distance is only 600 yards, and the ground already tolerably level. I propose to run the rail along the side of the road, and close to & around Clives Battery outside, on the top of the bulwark stones. The gauge is only 4 feet, and the debris from the curtain wall would answer to fill up the interstices between the stones so that none of them would have to be removed. At the North east end of the Battery there would be a common wooden turntable.

10. In addition to the tramway, a large weighing machine (like those used at every Turnpike in England,) would be an improvement. At present all the coal is twice weighed by hand with the common scales and weights at a great unnecessary expense of time and trouble; while with a weighing Machine placed near the rails, the wagons would run over, and the quantity of coal carried, would be correctly and quickly ascertained. The cost of a weighing machine is only about 300 Rupees, and there are some now in store at the Arsenal.

I have the honor to be
Sir,
Your most Obt. Servant.

Fort St George
9th December
1857

H. Rawlins. Captain
Garrison Engineer.

No 19541 1857.

Central Circle

Engineer Departt

Upon

The Garrison Engr

Chief Engr &c &c

Dated 9th December/57

Rec'd 11th

No 521

W 2486/57

Submits a plan for the erection of Coal Sheds and for a tramway from them to the beach, and also recommends the erection of Turnpike & Weighing Machine instead of the present tedious and troublesome method of weighing the Coals by scales & weights

1 Plan W/57. D.

1 Estimate & Abstract W/57

No 521.

To Genl 626. Dec 1857.

and levelling & fixing rails for 100 Yards	"	8	"	700	"	"
300 Cubic yards of masonry debries & gravel for ballasting levelled & well rammed down	"	6	"	112	8	"
1 Teakwood turn table with iron Pivot & bow plate rings brass rollers bearing &c. Complete	"	"	"	300	"	"
Fixing same in cut stones & fitting side rails	"	"	"	150	"	"
6 Double switches & fixing same with hand guides for sidings	40	"	"	240	"	"
9 Pints with side guides	10	"	"	do	90	"
Side guards to both sides of rails across the road for 100 feet	2	"	"	100	200	"
4 Common Trucks or wagons with wheels axles, bearing &c. Complete.	300	"	"	75	300	
Sundry Charges &c					291	8 3
						6320 " "
Total Company's Rupees Twenty seven thousand and four hundred						27400 " "

Fort St. George
9th December 1857

A. W. Rawlins Captain
Garrison Engineer

N.1149 1857

Marine

Abstract of an Estimate of the probable expense of erecting three sheds near the Boatmans Gate at Black Town Madras for the Stowage of Government Coal and Patent Fuel and also constructing a single line of railway from the new sheds to the south end of the Clives Battery for the Conveying of the Coal to and from the shed to the beach. prepard incon=sequence with the Secretary of the Marine Board agreeably to the orders of the Chief Engineers P.W.D. No 5604 dated 30th November 1857.

					Rs	As	P.	Rate	Rupees	Annas	Pie	Rupees	Annas	Pie
				No.1 For 1 Shed.										
13.00				Brick work in chunam			1	1½	Cft.	1489.	5.	2.		
1063½				Circular arch work in chunam.			3	3	do	216	-	1.		
6916				Covering the roof with pantiles and laying chunam borders		5	3	9	Sq.ft.	362	-	2.		
11800				Plastering with 2 Coats Blue chunam to the walls			2	-	9	do	237	13.	6.	
4500				Laying with laterite stone Jelly in clay & gravil of 6 ins thick and well beaten down with water		2	7	½	do	116.	5.	11		
				Excavating the foundation raising & levelling the earth.			-	-	-	-	25	-	-	
942-8-7¼				Teakwood wrought and fixed complete			1	13	-	Cft.	1708	10	9.	
614.5½				Lining with teakwood rafters & nails over the rafters of the roof		5.	4	-	Sq.ft.	338	11.	5.		
				Teakwood railing gate shutter with frames hooks hinges and bolts &c. complete as per plan.		72	2	-	Sq.ft.	288	6	-		
				18 Teakwood railings with top & bottom frames &c. complete		18	-	-	Sq.ft.	324	-	-		
				8 Teakwood do do		14	1	-	do	112.	8.	-		
				4 Iron Cross bar bolts of 1¼ feet long. each.			1	8	-	do	6	-	-	
				4 Iron Padlocks of 4 ins each.			1	4	-	do	5.	-	-	
				70 Iron gratings each complete.			1	8	½	do	105.	-	-	
3100				Red paint 3 Coats to the doors railings & Breastsummers &c.		12	-	6	Sq.ft.		62	15	6.	
				Difference of price in 1570 Cft of Teakwood between 4 & 2½ Cft @ 3½ Rs. charged in the data & the market rates			-	-	-	-	824.	4.	-	
				Sundry Charges & Scaffolding &c.			-	-	-	-	277	14.	3.	
				For 1 Shed.							6500	-	-	
				For 3 Sheds			-	-	-	-	-	-	-	19500.	-	-
				Carried over			-	-	-	-	-	-	-	19500.	-	-

Central Office of Works,
Fort Saint George,
16th December 1857.

Public

No. 6026

From,

The Chief Engineer

To,

The Secretary to Government

P. W. D.

Sir,

With reference to Extract Minutes Consl: No. 2194, dated 27th November 1857, I have the honor to forward for Submission to Government plans and an Estimate amounting to Rupees (27,400) Twenty Seven thousand and four hundred, of Sheds for patent fuel and Steam Coal, to be built adjoining the Sheds of the Peninsular and Oriental Company, on the site of part of the Black Town fortification, to be removed for that purpose.

2 It would seem from Captain Rawlins's letter, that this site which had been selected in communication with the Secretary to the Marine Board, is the only one available within a reasonable distance from the Beach, the waterage and Marine yards being both fully occupied

Enclosures 3

1 Letter from the Garrison Engineer No 521 dated 9th Dec 1857

1 Abstract Estimate.

1 Plan.

3

No 2.

Removing the portion of the Fortification wall for constructing the Sheds

2750 Demolishing brick in Chunam walls @ 8 Rs 1/10 p. M. Rs 220

3740 or 1385 Cft. Taking down & removing the earth behind the walls @ 1 Rs 2 p. 13 C.

1400 Cubic Cubic feet for removing the Rubbish { " 3 " 2800 " 8 " 350

" " " 23 1/2 " 550

Sundry charges &c. " " " " " " 80

Rupees 1,200

No 3.

Building of 700 Yards long by 4 feet distance

700 Stakes each one at every 3 feet distance @ 3 Rs p. 100 Rs 21

700 Bridge rails for a single line to be driven in compound @ 40 " " " 280

2800 Yards to fix rails to stakes two to each @ 5 Rs p. 100 " 140

1 Gate " " " " " " 4

Rupees 445

Carried over Rs 1,645

occupied, or likely to be so for public purposes.—

3 "The plan of the buildings is suitable, and the rates of the Estimate are moderate and sufficient. The estimate includes the sum of Rupees (1,580) one thousand five hundred and eighty, for removing part of the Rampart to clear the site.—

4 Allowance of Rupees (6,320) Six thousand three hundred and twenty, is also provided for constructing a tramway from the Sheds to the Beach, as such a work will cause a very important saving in the cost of conveying coals to the boats, so that by a different arrangement of items, the aggregate could be exhibited as within the 25,000 Rupees to be sanctioned by the Madras Government.

5 The entire set of works have been judiciously and carefully considered by the Garrison Engineer, and appear to me deserving of Sanction.

I have the honor to be,
Sir,
Your most Obt Servt
[illegible] Colonel.
Chief Engineer.

Central Office of P. W.
Fort Saint George,
16th December 1857

Vol [illegible]

Rec.d 1st December 1857 No 2495

From Marine Dep.t 12th Nov.r 58 No 120 in 6 Encls.

No 73 & 74.

Pub.c Works 1857 Department
No 2486.
Dated 23d Dec.r

From, The Chief Engineer.

To, The Secretary to Government
C. W. D.

Dated 16th December 1857
Received 19th

No 6026.

Enclosures 3

With an Order of
Submits for the Sanction of Go-
vernment an Estimate amounting to
Rupees (27,600) Twenty Seven Thousand
and four hundred, for building 3 Sheds near
the Boatmen's gate at Black Town for the
use of Government Coal and patent fuel &
for constructing a single line of Railway from
the new Shed to the South end of Cuives Battery.

No 2362

Ordered to be referred
to the Marine department with
reference to the Minute of Consultation
that Department of 20th November
1857 No 4964.

Fort St George
21st Dec.r 1857

To Govt to the Marine Dep.t Dis.d 22d
with 3 Encls.