M.R.O. 1—77,006—8-6-37.

(1) Number of pages 24

(2) Date of repair 21.12.38

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

No. 2911/58

G.O. No. 2911 Press / Mis.

71.72

Dated 14-12- 18 58

Not to be folded or roughly handled

IV

Proceedings of the Madras Government, Public Works Department, for the month of December 1859.

No. 71. Read the following Proceedings of the Madras Government in the Military Department, dated 9th December 1859, No. 4351.

Approving for entry in the budget of 1860-61 the estimates for works in the Gun Carriage Manufactory. } (Vide Military Proceedings from 1st to 10th December 1859, Nos. 259-260.)

No. 72. ORDER THEREON, 14th December 1859, No. 2911.

The work will accordingly be entered in the budget in the Government office.

(Signed) L. FORBES,
Dy. Secretary to Government.

Carried Cost 4118 551

Building [New Work]

Abstract of Estimate No. of 185 .5

District Madras

Work alterations and additions to the Smiths Shed & building & engine & Boiler Room Fy^d.

Quantities	Description of Work	Rate			Amount	Amount for each part
C. Yds	Fy^d.	Rs.	a^s	P.	Rupees	Rupees
	To Building Engine and Boiler Room for Smithy and Laying down the Fans and Blasts Pipes.					
	To raise the present wall 3 feet higher and to build 8 New Pillars.					
1153½	Cft^s. Brick work in Chunam Cft^s	"	2	"	144	
1212	Superft^s. Plastering with 2 Coats Chunam Superft^s	1	12	"	21	
1008	" Terrace work Superficial Superft^s	10	"	"	101	
172	" Cornice work Superft^s	"	2	"	22	288
166-9-9	Cft^s. Timber Teak Cft^s	1	1	7	215	
33½	Sawyers Each	"	4	3	9	
60	Carpenters do	"	7	6	28	
20	Coolies do	"	3	2½	4	
110	Nails Rafter 7 lbs lbs	"	1	"	3	
1000	do Roofer 8 do lbs	"	8	"	4	263
	Engine and Boiler Room & Chimney and laying down the Fans					
3558½	Cft^s. Brick work in Chunam Cft^s	"	2	"	1118	
	Carried Each				1118	551

Quantities	Description of Work	Rate			Amount	Amount for each part
C. Ft.s.		Rs	As	P	Rupees	Rupees
	Brought Cost				448	551
2000	Sft. Plastering with 2 Coats of Chunam — Squares	1	12	"	35	
1	Granite Stone 7 × 10 × 1 foot in 2 pieces —				110	
1	Qr. — Qr. 6 × 3 3/4 × 1 do —				15	
1	Qr. — Qr. 3 3/4 × 1 3/4 × 1 do —				13	
1	Qr. — Qr. 3 × 1 1/4 × 1 do —				7	
2	Qr. — Qr. 2 1/2 × 1 1/4 × 1 do —				13	
10	Qr. — Qr. 2 1/2 × 1 × 1/4 do —				11	
	Bricklayers & Coo. hire for laying the Stones —	"	"	"	11	
	For Digging the foundation	"	"	"	9	
	Sundry materials —				15	
	For Laying down Blast Pipes				513 +	
11223 1/4	C. Ft. Brick work in Chunam do C. Ft.	"	1	9	151	
6633	Sft. Plastering with 2 Coats Chunam	1	12	"	116	
	For Digging the foundation	"	"	"	12	
	Sundry materials —				25	
					604 +	
222-6-6	C. Ft. Timber Teak — C. Ft.	1	4	7	286	
68	Sawyers — Each	"	4	3 3/5	15	
80	Carpenters — do	"	7	6	35	
1500	Nails Rafter = 11 1/2 lbs lbs	"	8	"	6	
					342	
	To Build 70 Yards here.					
17640	Wall Bricks (Less, Store do and Z. 1400 —	3	8	"	19	
1915	Cart hire for Bricks Hard	"	6	"	7	
	Carried Cost —				26	2316

Quantities	Description of work	Rate			Amount	Amount for each part
	Brought Cost —				26	2316
21	Curts Clay — Each	"	1	"	5	
35	Bricklayers — do	"	6	3	14	
70	Coolies — do	"	3	"	13	
	No. 2.					58 +
	To Pulling down and removing the Roof of the present Coal Shed and altering and Converting 10 Nails of one of the Timber Sheds for a Coal Shed —					
2064	C. Ft. Brick work in Chunam 7 C. Ft.	"	2	"	258	
2838	Sft. Plastering with 2 Coats Chunam Sq.	1	12	"	50	
511	C. Ft. Brick work in Chunam — C. Ft.	"	2	"	64	
618	Sft. Plastering with 2 Coats Chunam Sq.	1	12	"	11	
218	do Cornice work — Sft.	"	2	"	27	
2040	do Terrace work — Sq.	21	"	"	128	
	For digging the foundation —				20	
	Sundry Charges —				32	
	To Remove the roof of the 10 Nails —				21	
						911 +
315-6-9	C. Ft. Timber Teak — C. Ft.	1	4	7	166	
61	Sawyers — Each	"	4	3 3/5	16	
35	Carpenters — do	"	7	6	16	
20	Coolies — do	"	3	2 2/5	4	
300	Nails Rafters = 20 lbs — lbs	"	7	"	9	
						151
	Carried Cost —					3736

Quantities	Description of work		Rate			Amount	Amount for each part
		Brought Over					3736
	To Pulling down the Old Coal Shed and removing the same		"	"		76	
							76¾
	No 3						
	To Raising the roof of the Smithy						
546	Cft^{ts}	Brick work in Chunam	Cft^{ts}	"	2	"	68
5338	Inft^{s}	Plastering with 2 Coats Chunam	Sq^{re}	1	12	"	94
1216	do	Terrace work Mofsc top	Sq^{re}	21	"	"	255
1116	do	Cornice work	Inft^{s}	"	2	"	18
61½	Square	To remove the Old roof	Sq^{re}	1	"	"	62
12	do	Do the Terrace roof	do	1	8	"	18
61500	Tiles	Found to replace broken ones	M^{r}	2	8	"	108
61½	Cart hire for tiles		Cart	"	6	"	23
300	Ft^{s}	Chunam	M^{r} 18 Ft^{s}	3	8	"	58
86	Cart load	river sand	Cart	"	5	"	27
		Bricklayers Coolies M^{r} hire					77
		Sundry Materials					50
63-1-3	Cft^{ts}	Timber Teak	Cft^{s}	1	½	⅞	339
83½		Sawyers	Coast	"	¼	3⅓	22
210		Carpenters	do	"	⅞	6	113
100		Coolies	do	"	3	2⅔	20
600		Nails Rafters = 10 Inft^{s}	Cft^{s}	"	½	"	17
5000	do	Ridges = 38½ do	do	"	8	"	19
							530
		Carried Over					5200

858+

Quantities	Description of work		Rate			Amount	Amount for each part
		Brought Over					5200
	To Gravelling & Levelling the floor of the Smithy						
519	Carts	Gravel	Cart	"	8	"	260
173	Squares	Levelling Coolys hire	Square	"	3	"	32
							292
		Total Rupees					5492
	Deduct the Amount of Timber and Metal works which can be supplied by the Gun Carriage Manufactory						1592
		Net Amount requiring Sanction					3900

Central Office of Ord^{ce}
Fort Saint George,
2 November, 1859

Lieut^{t} Colonel
Chief Engineer D. of H

Enclosure

In a Letter

From

The Chief Engineer

Dated 2nd Nov 1859

In D

Letter No 5502 of 1859.

To

The Secretary to Govt

Dated 2nd Nov 1859

In D

Letter No 5547 of 1859.

Dated 2nd November 1859
Received 3rd 325 3012/159

No 6795

Abstract Estimate for alterations & additions to the Smiths Shed building Engine & Boiler Room for Smithy & Laying down the Fans & Blast Pipes as well as pulling down & removing the roof the present Coal Shed & altering & Covering 10 Rails of one of the Timber Sheds for a Coal Shed at Madras.

Amounting to Rupees excluding timber & Metal &c. 3900 — —

9

Buildings ( ) [New Work]

Abstract of Estimate No of 185 .5

District.

Work Consisting a Building with Furnace and Chimney and Fitting up the Nasmyths Steam Hammers at the Gun Carriage Manufactory for the use of Steel & Iron Foundry

Quantities	Description of Work	Rate			Amount	Amount for each part
		Rs	as	P	Rupees	Rupees
	No 1				—	—
	Building for Nasmyths Steam Hammers					
1533½	Cub.ft Brick work in Chunam Mt	"	2	"	192	
7636	2cc 2cc 2cc 2cc	"	2	"	955	
310	2cc Circular arch work in 2cc 2cc	"	3	3	63	
180	2cc Flat arch work in Chunam over the attic Windows 2cc	"	2	2½	31	
160	2cc Cornice work in Chunam 2cc	"	3	"	30	
754	Sup.ft Terracing with Brick on edge 2 Tiles 3 ins thick 3 Courses Flat tiles and Plastering 3 Coats Chunam to the Ceilings and tops of the Terrace 2cc					
		"	21	"	165	
100	Sup.ft Plastering with 2 Coats Chunam to the Cornice 2cc	2	13	9	11	
5200	Sup.ft Plastering with 2 Coats Chunam to the walls	1	13	9	97	
					Carried over	1544

Quantities	Description of Work	Rate			Amount	Amount for each part
C. Yds.		Rs	As	P.	Rupees	
	Brought forward				1514	
65c	Supplg Masonry with Lime dressed Granite Stone in Chunam and a Levelling Course of wall both under and beneath ——— Qr	22	10	0	1167	
15	Masonry Embrasures in the wall both Sides plastering over with 2 Coats Chunam ——— Rec	"	5	"	4	
	Embanking two Masonry Ramps with Masonry foundation and Brick on edge Floors &c Complete in front of the 2 archways ———	"	"	"	20	
	Cutting Hole for setting up the 2 water trunks with wooden blocks to leave a Space of 2 ins between the walls and trunks ———	"	"	"	12	
	Excavating the foundation raising and handling the earth and also baling the water with hand Buckets clearing the Rubbish of the works &c complete	"	"	"	110	
	Carried over				1870	

Quantities	Description of Work	Rate			Amount	Amount for each part
C. Yds.		Rs	As	P.	Rupees	Rupees
	Brought forward				1870	
	12 Panelled Upper windows with Frames architraves Sashes Cabinet and Cellar doors Complete ——— Nr	8	15	0	107	
20	Cubic Feet Teakwood weighed & put up ——— Ft	1	13	"	370	
	Giving teakwood Planks between the Joists over the beams ———	"	"	"	6	
1	Teakwood water bucks with iron hoops Complete and painting over with Cardinal Cloth &c Complete ——— Ea	13	2	"	53	
4	Teakwood half Circular water Spouts each 2½ feet long ——— Nr	1	"	"	4	
6	Frames Stones each to fixing under the beams ——— Nr	1	12	"	9	
	Supplg Wood of 3 Coats to the beams and Joist ——— Qr	1	"	9	8	
310	Lead Color 3 Coats to upper windows ——— Rec	2	12	"	1	8
	Difference of Rate in 35 Cubic Ft of teakwood between 93 Cft 7 3/2 Rupees charged in the Data and the Rate of the Market. ———				1	102
	Carried over				2535	

Quantities	Description of work	Rate	Amount
Cyds		Rs as p	Rupees
	Brought forward		2535
	Cubic feet for Constructing a Furnace with fire Bricks in clay of 12½ sq. ft. by 6 feet Complete as per Plan the Bricks and clay to be obtained from the Gun Carriage Department	" " "	200
	Cubic feet for Constructing a Round Chimney of 15½ feet long by 2 feet and 9½ in. out Side diameter with fire Bricks in clay as per Plan Over the upright boiler. the Bricks and clay to be supplied by the Gun Carriage Department	" " "	300
	Cubic feet for laying and fitting up the Steam pipes to the large and Small Hammers as per Plan and also fitting up the iron borders obtained from the Gun Carriage Department to the Boiler and fire Brick work &c.	" " "	100
	Sundry Charges and Scaffolding &c.	" " "	115
	Pr. 2		
	Setting up 1577 Cubic Yards of the Steam Hammers		
36	Anchoured Bolts each with plate on top & Shut on Shoes &c. Complete &c.	12 " "	432
	Carried over		3232

Quantities	Description of work	Rate	Amount	Amount of each part
Cyds		Rs as p	Rupees	Rupees
	Brought forward		432	3280
	Cubic feet for shoring the above Bricks to the said depth with the walls on Both Sides &c.	3 " "	105	
Cubic ft.	Iron wood wrought put up &c.	1 13 "	30	
	& Bonded with Scrow and nuts of 5/8 Inch Iron diameter each inclusive of Carpenters Cubic feet for getting them on the Piles for Connecting with the Brick work as per Plan	5 " "	30	
	Carpenters, Smiths and other daily hire for Setting and getting up the Steam Hammer machinery with Cathead wedges &c. as per Plan	" " "	175	
	Excavating the foundation removing the Earth and filling the Sides and interstices of the Piles with Brick Jelly and Sand and well rammed over with water as per Plan	" " "	75	
20	Horse of Fire in 23 Cubic feet Cathead between 4 & 5 Cubic ft. 3½ Rupees Charged in the Labor and the Market Price	" " "	7	
	Carried over		854	3280

Quantities	Description of work	Rate	Amount	Amount of each part
Cy.d.		Rs. a. p.	Rupees	Rupees
	Brought forward		857	3250
	Sundry Charges and Scaffolding &c.	" " "	43	
	For 15 Coal Steam Hammers			900
	For 1 Coal	2 Co		700
	No 3			
	Pairing the west wing of the Smiths Shed			
1509	Cubic Ft. Brickwork in Chunam	Cy.d. " 2 "	189	
55	Nos. Course work in Do.	Do. " 3 "	10	
1216	Sup.ft. Terracing with brickbat edge 9 by 3 ins. thick 3 Courses flat tiles and plastering 3 Coats Chunam to the Eaves and top of the terrace to the Verandah	Sq.r. 21 " "	255	
6970	No. Covering the roof and Ventilators with old tiles adding one 3rd of new Pantiles and laying new Chunam borders	Rs. 2 11 8	191	
4125	No. Pairing the Plastering with 2 Coats Blue Chunam to the old & new Portions of the Pillars	Rs. 2 " 3	83	
1356	No. Plastering with 2 Coats Cement Chunam to the Chairs	Rs. 1 13 9	25	
	Carried over		752	4350

Quantities	Description of work	Rate	Amount	Amount of each part
Cy.d.		Rs. a. p.	Rupees	Rupees
	Brought forward		752	4350
250	Sup.ft. Plastering with 2 Coats Chunam to the Building walls of the Terrace Sq.r.	1 13 9	9	
5550	No. Laying with Laterite Stone Jelly in Clay and Gravel Cy.d 3 ins. thick and well beaten down with water to the Floor where required	Rs. 1 5 "	93	
	Only Five for Cutting the Terrace removing the old rubbish and Collecting the Joists	" " "	12	
	Only Five for taking and removing the old Couples, rafters, purlins and Battens of the roof Collecting the Materials and removing the rubbish &c.	" " "	150	
	Excavating the foundation to the Verandah and levelling the floor with old rubbish &c.	" " "	20	
88-3	Sup.ft. Teakwood in roughly squared pieces	Cft. 1 13 "	160	
1500	Sup.ft. Lining the old teakwood purlins with new ones over the Couples and rafters to the portion of the main roof and Verandah	" 14 "	42	
	Carried over		1218	4350

Quantities	Description of Works	Rate			Amount	Amount of each part
Cy.ds		Rs	a	p	Rupees	Rupees
	Brought forward				1218	1550
1600	Supplg. Lining with new Teakwood Rafters and nails over the Couples and Rafters of &c. ——— Sq.re	5	4	"	84	
	Carpenters Coolyhire for getting up the breadsummers, Truss Couples and Rafters with new nails &c. to the main Sheds and Verandahs and also repairing them with new frames where required ———	"	"	"	100	
	Carpenters Coolyhire for getting up the old Teak Rafters and Battens &c. of the 11 Ventilators with new nails and also Supplying new pieces of wood as are found decayed ———	"	"	"	35	
5	Teakwood half Circular water Spouts of 3 feet long ——— Ea	1	"	"	5	
	Difference of Price in 200 Cubic ft. of Teakwood between 4 and 3 Cubic per 3/4 Rupees Charged in the Estimate and the Market rate ———	"	"	"	68	
	Sundry Charges and Scaffolding &c. ———				70	
	To one Shed on the west Side ———				1610	
	Carried over				1610	1550

17

Quantities	Description of Works	Rate			Amount	Amount of each part
Cy.ds		Rs	a	p	Rupees	Rupees
	Brought forward				1610	1550
	To another Shed on the east Side ———				1610	
						3220
	Total Rupees ———					8100
	Deduct Amount of Timber and Metal works which can be Supplied by the Gun Carriage Manufactory including Sundries as per Recpt ———					2180
	Estimate beginning Sanction					5990

Central Office of Ordnance
Fort Saint George
2d November 1859

J. M. Lill Lieut. Col.
Chief Engineer Dept. Works.

Enclosure
In a Letter
From
The Chief Engineer
29th
M/D
Lr No 5532 of 1859
To The Secretary to Govt
Dep.d 29th
Lr No. 5747 of 1859
Dated 23
Received November
3257
1859
No. 6798

Abstract Estimate of Expenditure for Erecting a Building with Furnace and Chimney and Setting up the Nasmyth's Steam Hammers at the Gun Carriage Manufactory for the use of that Department and Blacksmiths Amounting to Rupees 5920 ...

71 1/2

MILITARY DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following letter :—

From the Chief Engineer, Fort Saint George, 28th November 1859. *No.* 7712 ; *to the Secretary to Government, Public Works Department.*

Military.
No. 2726, *dated* 22*nd November* 1859.
Enclosures 4.
2 *Estimates and*
2 *Plans.*

With reference to the orders of Government quoted in the margin, I have the honor to re-submit for their sanction, and for entry in the Budget now under preparation in this Office, the following Estimates for works in the Gun Carriage Manufactory.

1. For a building with furnace and chimney, and for setting up the Nasmyth's Steam Hammer... ... ...Rupees...	5,920	0	0
2. For an Engine and Boiler room for Smithy ; for laying down the fans and blast pipes, for pulling down and removing the roof of the present Coal shed, and altering and converting 10 stalls of one of the Timber sheds for a Coal shed... ... ...Rupees..	3,900	0	0
Total Rupees: ...	9,820	0	0
which must be added...Rs..	6,000	0	0
r the Estimate submitted with letter No. 2667, dated 12th aly last, aggregating....Rs...	15,820	0	0
Of this sum however,..... „ ...	10,000	0	0
... ...Rs....	5,820	0	0

Military Department, No. 2592, *dated* 21*st* 1859, *communicated in the Public Department, No.* 1815, *dated* 29*th idem.*

have been authorized to be expended, so that the additional sum now requiring sanction, is only.. ... ...

2. I beg to observe that as the Plan ate for the Foundry were quite distinct from the other Estimates submitted with m he 2nd November 1859, No. 6798, there was no occasion for revising those now laid overnment.

ORDER, No. 435 *December* 1859.
Approved for entry Budget for 1860/61.
(Tru act.)

Acting Dy. Secretary to Government.

To the Department of Public Works, with 2 Estimates and 2 Plans. 720 spare copies
„ Quarter Master General.
„ Inspector General of Ordnance, for information.

Exd. J. Davis.

W. 31st November/59 No 39)
40)

D.H. 1859 Disparate

7:3257.

Proceedings of the Inacha
Sent in the Military
Disparate

(Inclosed 9th
Received 13th December 1859.

E-4- Returned 2d Aud. 2d Dec. 4357.
2 Dy 1444 Dec. 1-2-60
Requesting for enlarge
in the budget of 1860-61 the
Estimates for works in
the Gun Carriage Department
Darling -

Copy of the Ltr of 23d March 60
Encl. 905 with Plan No 790
Ty Capt

2 Dy 11-14 December
William Acton