596

Govt. of {189 } Madras.

PUBLIC WORKS.

Dated

Read. Encl.

G.O. 15/21 1894 No. 431 W.

Kitchens

Estimate for Rs 3270 for
constg a kitchen with
circular cooking
ranges in the Central
Jail at Rajahmundry
in Godavari Dt
sanctioned, and the
estimate for that at the
Vellore Central Jail
returned to the S.E.
for revision

1-5-

C 16/11

Engineer IV Circle for revision with reference to the Chief Engineer's note recorded above.

10.2.94

DESPATCHED
27 FEB 94

Note It is proposed to place this G.O. on the Editor's Table

W/6.

Estimates for Kitchens at the Rajahmundry and Vellore Central Jails.

DESPATCHED
7 FEB 94

To The S.E.I Circle with plan & estimate (4)
.. " IV " with estimate (2)
.. Escar. P.W. Accts
.. Judicial Dept.
.. Editor's Table

Cuttings

PUBLIC WORKS DEPARTMENT.

No. 431 W. d/15 February 1894

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Ex Cards

READ the following

Pros. in the Judicial Dept. No. 135 d/ 22nd January 1894
Note by the Chief Engineer, P.W.D. d/ 12th February 1894

The estimate, Amounting to Rs. 3270, for Constructing a kitchen with Circular Cooking ranges in the Central jail at Rajahmundry in the Godavari Dt. is sanctioned.

14 Feb

2. The existing grant for the work is Rs. 2500.

3. This sanction has been registered as Provincial No. 141 W of 1893-94 and classified as Civil Buildings, Original Works.

4. The estimate of Rs. 4000 for Kitchen at the Vellore Central jail will be returned to the Supt. Engineer

between the two estimates is due to the variation in the rates at the two stations also to the deviation in the materials of construction for works; they are as follows:-

	Vellore.	Rajahmundry
Concrete work	Rs 10-..-..	again 13-10-..
Brick work	17-8-16	-do-
Random rubble		15-..-..
Fire bricks in fire clay	230-..-..	-do- 40-..-..
Jeakwood work	4-..-..	-do- 3-9-..
Mangalore tile roofing	21-..-..	-do- 20-..-..
Stone slab flooring	40-..-..	-do- 20-..-..
Painting, Chunam & Lime wash painting	3-4-..	-do- 6-8-..
Cast iron covers	30-..-..	-do- 3-12-..
-do- Gratings	30-..-..	-do- 16-4-..
-do- door for fireplace	18-..-..	-do- 9-10-..
Iron cooking plate	15-..-..	-do- 22-8-..

The plinth area of the building is 1118 Sq. ft. & the cost per Sq. ft. will be at Vellore Rs 3-9-3 & at Rajahmundry Rs 2-14-9.

The estimates have been compared by the Insp. General of Jails & approved in the Judicial Dept. with the remark that the cause of difference between the two estimates will be considered in this Dept.

1-II-94

The Vellore rates for Cast iron covers & grating appear when compared with the rates at Rajahmundry. The approximate weight of each cast iron cover is 6 lbs & the grating 16 lbs & allowing 12 as per lb. the fair rate will be Rs 4-8-.. for the covers & Rs 12 for each grating. no duties have been furnished for these items.

There is a great difference in the rate for fire bricks in fire clay between Vellore & Rajahmundry. Vellore being Rs 230 against 40 at Rajahmundry. The rate at Vellore is unreasonably high & that at Rajahmundry very low, unless fire clay is available at site in the latter station.

The approximate rate for 100 Cft. will be

1212 Fire bricks (9"×4½"×2½") at Rs 70 per 1000 ——— Rs 84-12-9.
Carriage of bricks to Vellore by rail way ——— 9-3-3
Cost of fire clay including Cartage ——— 10-..-..
Iron cooking range ——— 3-..-..

The above ests should be returned L.S. for revision of rates in accordance with T's note – Detailed data –

Rajahmundry Kitchen maybe continued

Pulle
6-2-94

B/

Public Works Department.

Current No. 596. 431 W

Letter No. 135.

Dated 22nd Jany 1894.

From the Judicial Dept.

NOTE BY TECHNICAL SECTION.

Name of work – Kitchens with circular cooking ranges at Vellore & Rajahmundry Central Jails.

Amount of estimate { Vellore Rs 4,000 / Rajahmundry 3270

The two estimates under review have been framed strictly in accordance with the Typical design circulated with G.O. No. 1586 W dated 15th June 1893.

The depths of foundations proposed at both the stations are the 4 feet as per Typical design & the materials of construction are the same as that provided in the printed schedule of quantities, except that the walls of the proposed kitchen at Rajahmundry are to be built of random rubble in lieu of brickwork.

The rates as far as can be checked are fair.

The excess of Rs 730 between

2. The approximate weight of a cast iron cover plate is 6 lbs and that of a cast iron grating, 16 lbs. Allowing 12 annas per lb, the cost should amount to something like Rs 4-8-0 for the former and Rs 12 for the latter as against Rs 30 in each case at Vellore.

3. The estimate for the Vellore Jail seems in need of revision, and should, it is considered, be returned to the Suptg. Engineer IV Circle for the purpose. When resubmitted, it should be accompanied by data in support of those rates which are in excess of the Rajahmundry rates as shown above.

Pulle
10-2-94

S
Ex

1,000—20-2-93.

Note by the Chie

3 D

of Engineer P. W. D:—

The estimates for the construction of Kitchens with Circular Cooking ranges at the Vellore and Rajahmundry Central Jails have both been prepared in accordance with the type design approved in G.O. 1586 W of 15th June 1893. But there is a difference of nearly Rs 800 between the amounts of the two estimates. The principal variations are shown below:—

Item	at Vellore	at Rajahmundry
	Rs	Rs
1. Firebricks in fire clay (per 100 cubic feet)	230	40
2. Teakwood work (per cubic foot)	4	3-9-0
3. Stone slab flooring (per 100 square feet)	40	20.
4. Cast iron cover plate (each)	30	3-12-0
5. Cast iron grating (each)	30	16-4-0
6. Cast iron door for fireplace (each)		

Chimneys and flue

ances of Rs 730 betwe

[G. 16] P. W. CURRENT No. 596

Govt. of {189} Madras.

No. 1586 W of 15-6-93.

To

The Public Works Dept

Recd: 25-1-94
Encls 7 (Plans)

Proceedings, dated 22d January 189 4
No. 135

Subject.

Approving & transferring to the P. W. Dept, with remarks, plans and Estimates for the construction of Central Kitchens at the Vellore and Rajahmundry Central Jails.

1,000—20-2-93.

Rs: 3.270) will be considered.

(True Extract)

A Butterworth.
Under Secretary.

To

The Inspector General of Jails
" Public Works Department with plans
and estimates √

[G. 58]

Judicial Department

CHIEF SECRETARIAT. MADRAS.

Read the following proceedings:

G.O. dated 22 Jany 1894 No. 135, Judicial

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following papers—

From the Inspector General of Jails, dated 13th and 19th December 1893 Nos. 5220 and 5392 respectively submitting for the approval and sanction of Government estimates for Rs. 4000 and Rs 3270 for the construction of Central Kitchens in the Vellore and Rajahmundry Central Jails, stating that the plans received the sanction of Government in G.O. No. 1586 W. dated 15th June 1893 and adding that he is unable to explain the difference of nearly Rs 800 between the two estimates.

Order 22nd January 1894 No. 135

The plans and estimates for the construction of Central Kitchens at the Vellore and Rajahmundry Central Jails are approved and will be transferred to the Public Works Department where the cause of the difference between the two estimates (Vellore Rs: 4,000, Rajahmundry Rs: 3,270

SUPG. ENGINEERS OFFICE No. 857 29 NOV 93 1 CIRCLE

Rs 5-2
556/84

Extract from memorandum on the Inspection of the Vellore central jail by the Inspector General of jails on the 28th, 29th and 30th July and 1st August 1892.

× × ×

2. Central kitchen – This is at present the most urgent want of the jail. In order not to turn the convict warders guards out of their present quarters, thereby rendering fresh buildings necessary the kitchen should be placed where the Rain guage now is, in the Eastern corner of the Solitary cell yard It will need a wall on two sides to shut it off from the cell yard. The Superintending Engineer will be addressed on this subject.

× × ×

(Sd) Ag. Gordon
Inspector Genl of jails

(True extract)

Vellore Central jail
24 November 1893

(Sd) G. T. Cavendish
Supdt Central Jail

True copy

A. Clarke

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1894} Madras.

PUBLIC WORKS.

Dated February, 15th.

Read. *Encl.*

G.O., 15th Feb. 1894, No. 431 W.

FEBRUARY.

Kitchens

Estimate of Rs. 3,270 for constructing a kitchen with circular cooking ranges in the Central Jail at Rajahmundry in Gódávari district, sanctioned, and the estimate for that at the Vellore Central Jail returned to the Superintending Engineer, IV Circle, for revision.

ORDER—dated 15th February 1894, No. 431 W., Public Works.

The estimate, amounting to Rs. 3,270, for constructing a kitchen with circular cooking ranges in the Central Jail at Rajahmundry in the Gódávari district, is sanctioned.

2. The existing grant for the work is Rs. 2,500.

3. This sanction has been registered as Provincial No. 141 W. of 1893-94 and classified as Civil Buildings, Original Works.

4. The estimate of Rs. 4,000 for kitchen at the Vellore Central Jail will be returned to the Superintending Engineer, IV Circle, for revision with reference to the Chief Engineer's note recorded above.

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, I Circle,
with plan and estimate.
" Superintending Engineer, IV Circle, with estimate (7).
" Examiner, Public Works Accounts.
" Judicial Department.
Editors' Table.

Exd. C. A. Munisawmy
Spare Copies

15th February 1894, No. 431 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following papers :—

G.O., dated 22nd January 1894, No. 135, Judicial.

Read—letters from the Inspector-General of Jails, dated 13th and 19th December 1893, Nos. C-2220 and 5392 A, respectively.

Abstract.—Submitting, for the approval and sanction of Government, estimates for Rs. 4,000 and Rs. 3,270 for the construction of central kitchens in the Vellore and Rajahmundry Central Jails, stating that the plans received the sanction of Government in G.O., No. 1586 W., dated 15th June 1893, and adding that he is unable to explain the difference of nearly Rs. 800 between the two estimates.

Order—dated 22nd January 1894, No. 135, Judicial.

The plans and estimates for the construction of central kitchens at the Vellore and Rajahmundry Central Jails are approved and will be transferred to the Public Works Department where the cause of the difference between the two estimates (Vellore Rs. 4,000, Rajahmundry Rs. 3,270) will be considered.

(True Extract.)

(Signed) A. BUTTERWORTH,
Under Secretary.

Note by the Chief Engineer, Public Works Department.

The estimates for the construction of kitchens with circular cooking ranges at the Vellore and Rajahmundry Central Jails have both been prepared in accordance with the type design approved in G.O., No. 1586 W., dated 15th June 1893. But there is a difference of nearly Rs. 800 between the amounts of the two estimates. The principal variations are shown below :—

Item.	At Vellore.	At Rajahmundry.
	Rs.	Rs. A. P.
1. Firebricks in fire clay (per 100 cubic feet)	230	40 0 0
2. Teakwood work (per cubic foot)	4	3 9 0
3. Stone slab flooring (per 100 square feet)	40	20 0 0
4. Cast iron cover plate (each)	30	3 12 0
5. Do. grating (each)	30	16 4 0
6. Do. door for fireplace (each)	18	9 10 0

2. The approximate weight of a cast iron cover plate is 6 lb. and that of a cast iron grating 16 lb. Allowing 12 annas per pound the cost should amount to something like Rs 4–8–0 for the former and Rs. 12 for the latter as against Rs. 30 in each case at Vellore.

3. The estimate for the Vellore Jail seems in need of revision, and should, it is considered, be returned to the Superintending Engineer, IV Circle, for the purpose. When re-submitted, it should be accompanied by data in support of those rates which are in excess of the Rajahmundry rates as shown above.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Chief Engineer, P.W.D.

12th February 1894.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1893} Madras.

PUBLIC WORKS.

Dated June, 15*th*.

Recd. *Encl.*

G.O., 15th June 1893, No. 1586 W.

JUNE.

Kitchens with circular cooking ranges for Central and District Jails

Circulating for information and guidance standard plans, &c., for —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From H. IRWIN, Esq., C.I.E., Consulting Architect to Government, to the Chief Engineer, Public Works Department, dated Chepâk, 10th February 1893, No. 3354.

With reference to G.O., No. 3197 W., dated the 30th November 1891, I have the honour to submit plans and estimates for kitchens for central and district jails with circular cooking ranges prepared in communication with the Inspector-General of Jails.

ENCLOSURES.

DESCRIPTIVE specification to accompany the standard plan and estimate for constructing a cook house for central jails with circular cooking range as per drawing sheet Nos. 1 and 2 signed by the Consulting Architect to Government, dated 27th January 1893.

Foundations.—A depth of four feet is provided in the quantities, but this should be settled locally in accordance with the nature of the soil.

Superstructure.—The walls will be constructed of well-burnt stock bricks two bricks thick about 18 inches) or of stone if the latter is cheaper.

Cut stone.—Stone slabs should be placed at bearings of trusses and for door cills; the side posts of doors to be let into a mortice in the stone about 2″ square and 2″ deep.

Woodwork.—The trusses to be of well-seasoned Burma teak; the minor roof supports may also be of teak or any other approved country wood proof against white ants.

Doors and windows.—Frames and shutter frames to be of well-seasoned Burma teak with ½″ mesh galvanized iron wire netting stretched and secured to shutter frames.

Roof covering.—The roof covering to be of No. 3 patent Mangalore tiles or tiles of a somewhat sir ila.: description manufactured at the Government Brickfields at Madras.

Flooring.—The flooring to be of stone dressed two lines and set in mortar over concrete bed and the joints pointed with Po land cement.

Castings and iron work for fire place.—The cast and wrought iron fittings should be in accordance with the detailed drawings.

Estimate Form—Detail Measurements.

Detail of work	Number.	Measurements in feet.			Area or contents.	Total quantity of each description of work.
		Length.	Breadth.	Depth.		
1	2	3	4	5	6	7
Excavation for foundation.						
Circular fire place, 15′ 6″ diameter	1	189 0	area.	4 0	756	
Outer walls of fire place shed	1	96 0	3 6	4 0	1,344	
Do. of ragi pudding shed	1	67 0	3 0	4 0	804	
For floor in fire place shed	1	22 6	22 6	0 4	169	
Do. in ragi pudding shed	1	26 0	14 0	0 4	121	
					3,194	
Deduct for fire place, 14′ diameter	1	154 0	area.	0 4	51	
Total cubic feet ..	..	..	..	..	..	3,143

Estimate Form—Detail Measurements—*cont.*

Detail of work.	Number.	Measurements in feet. Length.	Breadth.	Depth.	Area or contents.	Total quantity of each description of work.
1	2	3	4	5	6	7
Concrete.						
Circular fire place	1	189 0	area.	1 6	284	
Outer walls, fire place shed	1	96 0	3 6	1 6	504	
Do. ragi pudding shed	1	67 0	3 0	1 6	302	
For floor in fire place shed	1	22 6	22 6	0 6	253	
Do. in ragi pudding shed	1	26 0	14 0	0 6	182	
					1,525	
Deduct for fire place, 14′ diameter	1	154 0	area.	0 6	77	
Total cubic feet						1,448
Brick in chunam for foundations.						
Circular fire place, 14′ diameter		154 0	area.	2 6	385	
Outer walls, fire place shed		96 0	2 0	0 9	144	
Do. do.		96 0	1 6	1 9	252	
Do. ragi pudding shed		68 6	1 6	0 9	77	
Do. do.		69 0	1 6	1 9	181	
Total cubic feet						1,039
Brick in chunam for superstructure.						
Circular fire place, 16′ 6″ diameter		214 0	area.	1 2½	259	
Do. do. 14′ 0″ do.		154 0	,,	1 7½	250	
Outer walls of fire place shed		96 0	1 6	13 1	1,884	
Gables do.	2	25 6	1 6	4 0	306	
Outer walls, ragi pudding shed		69 0	1 6	9 9	1,009	
Gable	1	17 0	1 6	2 10½	73	
Do.	1	7 0	1 6	1 0	11	
Screen wall at sink	1	8 0	0 9	3 0	18	
						3,810
Deductions—						
Flue, 2′ diameter	1	3 1½	area.	2 1½	7	
Void below cast-iron plates	3	10 6	2 6	1 6	113	
At fire places	3	1 6	2 6	1 0	11	
Flues do.	3	2 9	0 10	0 6	3	
Door and archway	2	5 0	1 6	8 0	120	
Windows in fire place shed	4	4 0	1 6	5 0	120	
Do. in recessed cills	4	4 0	0 9	3 0	36	
Do. in ragi pudding shed	4	8 3	1 6	4 0	198	
Do. in recessed cills	4	8 3	0 9	5 0	124	
Arch work as per details					56	
Fire brick do.					144	
						932
Total cubic feet						2,878
Brick work in chimney.						
Base 4′ 8″ diameter		17 0	area.	1 6	26	
Shaft { Bottom 4 0 do. / Neck 2 3 do.						
6 3 ÷ 2 = (33′ 1½″) mean diar.						
		7 9	area.	18 9	145	
Cap 3′ 3″ diameter		8 3	Do.	0 9	6	
						177
Deduct—						
Flue in base, 2′ diameter		3 1½	Do.	1 6	5	
Do. in shaft { Bottom 2′ 0″ diameter / Neck 0′ 9″ do.						
2′ 9″ ÷ 2 = 1′ 4½″ mean diar.		1 5	area.	18 9	26	31
Total cubic feet						146
Arch work in chunam.						
Over door and archway	2	6 0	1 6	1 1½	56	
Do. windows	4	5 3	1 6	1 1½		
Total cubic feet						56

Estimate Form—Detail Measurements—*cont.*

Detail of work.	Number.	Measurements in feet. Length.	Breadth.	Depth.	Area or contents.	Total quantity of each description of work.
1	2	3	4	5	6	7
Fire bricks in fire clay.						
Outer walls, 13′ 3″ diameter		41 9	0 9	1 11	60	
Inner 7′ 1″ do.		22 0	0 5	1 11	18	
Bottom of chambers	3	10 0	2 6	0 5	31	
Partitions in do.	3	2 6	0 5	1 11	6	
Fire places floor	3	3 1½	1 7½	0 5	6	
Do. sides	6	2 6	0 5	1 5	11	
Do. back	3	1 3	0 5	1 5		
Flues	3	2 3	4 3	0 5	12	
Total cubic feet						144
Cut stone ashlar two lines dressed.						
Bed stones for trusses	4	1 6	1 6	0 6	9	
Door cill	1	6 0	1 6	0 6		
Total cubic feet of cut stone work						9
Teak wood wrought and put up.						
Fire place shed—						
Two trusses to span 22′ 6″. Tie beam	2	25 6	0 4½	0 7	11	
Principal rafters	4	13 3	0 4½	0 6½	11	
Struts	4	6 6	0 4½	0 4½	4	
Block at head	2	1 3	0 9	0 9	1	
Purlins at ends	4	8 6	0 5	0 6	10	
Do. at centre	2	8 2				
Do. over wall at ends	4	8 6	0 4	0 5	7	
Do. do. at centre	2	8 2				
Ridge	2	11 0	0 3	0 6	3	
Rafters	20	16 0	0 3	0 4	27	
Eave board	1	24 0	0 ¾	0 8	2	
Do.	2	10 6				
Ragi pudding shed—						
Bressummers	2	13 0	0 4	0 6	9	
Do.	2	15 0				
Rafters	28	14 3	0 3	0 5	84	
Braces	28	13 6				
Filling pieces between braces	14	2 0				
Struts in openings	20	3 6	0 3	0 4	8	
Do. in piers	8	3 0				
Cleats attached to rafters	28	0 10½	0 3	0 2	2	
Do. to ventilator uprights	20	1 0				
Brackets in piers	8	1 0	0 3	0 6	1	
Eave boards	2	26 6	0 ¾	0 8	2	
Cubic feet						182
Wrought iron work in trusses, &c.						
Fireplace shed—						
1″ king rod	2	7 9	×	2 62	41	
1″ hexagon nut and head fords	6	..	×	0 27	2	
3″ diar. ⅛″ thick washers	6	..	×	0 32	2	
2″ × ⅜″ flat iron heel straps	4	3 6	×	2 50	35	
2⅜″ × ⅜″ bearing plates for do.	4	0 7½	×	3 13	8	
⅝″ hexagon nut for plates for do.	8	..	×	0 14	1	
½″ bolts to secure wall purlins to tie beam.	4	1 1½	×	0 66	3	
½″ hexagon nut and head	4	..	×	0 13	1	
2″ diar. ⅛″ thick washers	8	..	×	0 14	1	
Ragi pudding shed—						
½″ bolt at intersection of braces	14	0 10½	×	0 66	35	
⅜″ bolt to secure braces to rafters	56	0 7½				
½″ bolts to secure rafters at head	14	0 4½				
½″ hexagon nuts and heads	84	..	×	0 13	11	
2″ diar. ⅛″ thick washers	168	..	×	0 14	24	
Total lb.						164
Sheet lead for valleys.					per foot lb.	
⅛″ thick	2	8 0	1 6	..	7·4	178 lb.

Estimate Form—Detail Measurements—*cont.*

Detail of work.	Number.	Measurements in feet. Length.	Breadth.	Depth.	Area or contents.	Total quantity of each description of work.
1	2	3	4	5	6	7
Doors and windows with galvanized wire-netting ½" mesh stretched across sashes including frames and fastenings complete.						
Door	1	4 6	..	8 6	38	
Windows	4	3 6	..	4 6	63	
Total square feet	..	..	..	..	..	101
Galvanized iron wire netting ½" mesh in double teak frames.						
For ragi grinding shed	4	8 3	..	4 0	132	
Total square feet	..	..	..	..	..	132
Roofing with No. 3 patent Mangalore tiles including 2" × 1" teak reepers wind tie complete.						
Fire place shed	1	24 0	32 0	..	768	
Ragi grinding shed	1	26 6	28 0	..	742	
Total square feet	..	..	..	..	..	1,510
Flooring with stone slabs set in mortar and pointed with cement, 4" thick.						
Fire place shed	1	22 6	22 6	..	506	
Window recesses	4	4 0	0 9	..	12	
Archway	1	5 0	1 6	..	8	
Ragi pudding shed	1	26 0	14 0	..	364	
Do. window recesses	4	8 3	0 4½	..	12	
					902	
Deduct for fire place 14 feet diameter	..	..	..	..	154	
Total square feet	..	..	..	..	..	748
Plastering with two coats of chunam.						
Interior walls—						
Fire place shed walls	4	22 6	..	12 7	1,133	
Do. gables	2	22 6	..	3 6	158	
Do. sides, 16' 6" diameter	..	52 0	..	2 6	130	
Do. upper part, 14' diameter	..	154 0	area	..	154	
Base of chimney, 4' 8" diameter	..	14 6	cir.	1 7½	24	
Chimney	..	10 0	..	19 6	195	
Do. upper part, 3' diameter	..	7 0	area	..	7	
Door and arch jambs and soffits	2	21 3	..	1 1	46	
Window do. do.	4	18 6	..	1 1	80	
Do. recess below cills	8	0 9	..	3 0	18	
Ragi pudding shed walls	..	80 0	..	9 0	720	
Do. gables	2	14 0	..	2 6	85	
Do. window jambs	8	0 4½	..	5 0	15	
Do. do.	8	1 3	..	4 0	40	
Do. cills	4	8 3	..	0 6	17	
Screen wall at sink	1	8 0	..	6 9	54	
						2,876
Deduct—						
Door and archway	3	5 0	..	8 0	120	
Windows	4	4 0	..	5 0	80	
Do.	4	8 3	..	4 0	132	
Fire place, 10' diameter	..	31 4	cir.	2 6	78	
Chimney, 4' 8" diameter	..	17 0	area	..	17	
						427
Total square feet	..	..	..	..	..	2,449
Pointing exterior.						
Walls	..	102 0	..	13 1	1,335	
Do.	2	27 6	..	9 9	536	
Gables	2	25 6	..	4 0	204	
						2,075
Deduct—						
Door	1	5 0	..	8 0	40	
Windows	4	4 0	..	5 0	80	
Do.	4	8 3	..	4 0	132	
						252
Total square feet	..	..	..	..	..	1,823

Estimate Form—Detail measurements—*cont.*

Detail of work.	Number.	Measurements in feet. Length.	Breadth.	Depth.	Area or contents.	Total quantity of each description of work.
1	2	3	4	5	6	7
Cornice for gables.						
	2	30 0	..	..	60	
	1	20 0	..	..	20	
Total lineal feet	..	..	..	..	..	80
Painting three coats silicate paint.						
Fireplace shed—						
Tie beams	2	25 6	..	1 11	98	
Principal rafters	4	13 3	..	1 10	97	
Struts	4	6 6	..	1 6	39	
Block	2	1 3	..	3 0	8	
Purlins	2	24 0	..	1 10	88	
Do.	2	24 0	..	1 6	72	
Ridge	1	24 0	..	1 6	36	
Rafters	20	16 0	..	1 2	373	
Eave board	..	45 0	..	1 5½	66	
Ragi pudding shed—						
Bressummers	2	27 0	..	1 8	90	
Rafters	28	14 3	..	1 4	1,036	
Braces	28	13 6	..			
Struts	20	3 6	..	1 2	110	
Do.	8	3 0	..			
Cleats	28	0 10½	..	0 7	26	
Do.	20	1 0	..			
Brackets	8	1 0	..	1 6	12	
Eave board	2	26 6	..	1 5½	77	
Door frames	1	21 0	..	1 4	28	
Do. sashes	1	4 7	..	8 4	38	
Window frames	4	23 6	..	1 4	125	
Do. sashes	8	1 8½	..	5 0	68	
Frames for ragi pudding shed window	8	8 3	..	0 9	102	
Do. do. do.	20	3 6	..			2,589
Deduct—						
Space taken by wire-netting in fireplace shed door	2	1 6	..	6 6	20	
Space taken by wire-netting in fireplace shed windows	8	1 0	..	4 0	32	
						52
Total square feet	..	..	..	..	..	2,537
Cast iron cover plates with T iron joints, bolts, &c., complete	..	..	..	..	12	No segments
Cast iron gratings complete	..	..	..	..	3	No.
Cast iron door for fireplace with fastenings complete	..	..	..	..	3	No.
Dampers with levers to raise and lower including fixing complete	..	..	..	..	3	No.
Iron cooking pots complete	..	..	..	..	12	No.
Petty supervision at 2½ per cent.	..	..	..	..	..	
Contingencies at 5 per cent.	..	..	..	..	..	

Estimate Form—Abstract.

Quantity.	Description of work.	Rate.	Per.	Amount.	Total.
1	2	3	4	5	6
		Rs. A. P.		Rs.	Rs.
3,143 C. ft.	Excavation for foundation		1,000 C. ft.		
1,448 ,,	Concrete with broken bricks in chunam		100 ,,		
1,039 ,,	Brick work in chunam for foundations stock bricks		do.		

Estimate Form—Abstract—*cont.*

Quantity.	Description of work.	Rate.	Per.	Amount.	Total.
1	2	3	4	5	6
		RS. A. P.		RS.	RS.
2,878 C. ft.	Brick work in chunam superstructure stock bricks		100 C. ft.		
146 ,,	Brick work in chunam in chimney stock bricks..		do.		
56 ,,	Arch work in chunam		do.		
144 ,,	Fire brick in fire clay		do.		
9 ,,	Cut stone ashlar 2 line dressed		C. ft.		
182 ,,	Teak wood wrought and put up		do.		
164 lb.	Wrought iron work in trusses and roof work ..		lb.		
178 ,,	Lead sheet in valley including fixing		do.		
101 Sq. ft.	Doors and windows including frames galvanized iron wire-netting shutters, &c., complete ..		Sq. ft.		
132 ,,	Galvanized iron inner netting in frames fixed ..		do.		
1,510 ,,	Roofing with No. 3 patent Mangalore tiles including teak reepers 2" × 1" &c., complete ..		100 Sq. ft.		
748 ,,	Flooring with stone slabs set in mortar and pointed with cement		do.		
2,449 ,,	Plastering with 2 coats of chunam		do.		
1,823 ,,	Pointing exterior, black, with tar asphalte and sand		do.		
80 L. ft.	Cornice for gables		L. ft.		
2,537 Sq. ft.	Painting with Charlton silicate paint 3 coats ..		100 Sq. ft.		
12 Segmts.	Cast iron cover plates with T iron joints, bolts, &c., complete		Each		
3 No.	Cast iron gratings complete		do.		
3 ,,	Cast iron doors for fireplace with fastenings complete		do.		
3 ,,	Dampers with levers to raise and lower including fixing complete		do.		
12 ,,	Iron cooking pots complete		do.		
	Petty supervision at 2½ per cent.				
	Contingencies at 5 per cent.				
	Grand total ..				

MADRAS,
9th July 1893.

(Signed) H. IRWIN,
Consulting Architect to Government.

DESCRIPTIVE specification to accompany the standard plan and estimate for constructing a cook house for district jails with circular cooking range as per drawings, sheet Nos. 3 and 4 signed by the Consulting Architect to Government, 27th January 1893.

Descriptive specification.

Foundations.—A depth of four feet is provided in the quantities, but this should be settled locally in accordance with the nature of the soil.

Superstructure.—The walls will be constructed of well burnt stock bricks, 2 bricks thick (about 18 inches) or of stone, if the latter is cheaper.

Cut stone.—Stone slabs should be placed at bearings of trusses and for door cills; the side posts of doors to be let into a mortice in the stone about 2 inches square and 2 inches deep.

Wood work.—The trusses to be of well-seasoned Burmah teak; the minor roof supports may also be of teak or any other approved country wood proof against whiteants.

Doors and windows.—Frames and shutter frames to be of well-seasoned Burmah teak with ½ inch mesh galvanized iron wire-netting stretched and secured to shutter frames.

Roof covering.—The roof covering to be of No. 3 patent Mangalore tiles or tiles of a somewhat similar description manufactured at the Government brickfields at Madras.

Flooring.—The flooring to be of stone dressed 2 lines and set in mortar over concrete bed and the joints pointed with Portland cement.

Castings and iron work for fireplace.—The cast and wrought iron fittings should be in accordance with the detailed drawings.

(Signed) H. IRWIN,
Consulting Architect to Government.

Estimate Form—Detail measurements.

Detail of work.	Number.	Measurements in feet.			Area or contents.	Total quantity of each description of work.
		Length.	Breadth.	Depth.		
1	2	3	4	5	6	7
Excavation for foundation.						
Circular fireplace 13 feet 6 inches diameter ..	1	143 0	Area.	4 0	572	
Outer walls fireplace shed	..	78 0	3 0	4 0	936	
Do. ragi pudding shed	..	49 6	3 0	4 0	594	
For floor in fireplace shed	..	18 0	18 0	0 4	108	
Do. in ragi pudding shed	..	18 0	12 0	0 4	72	
	..	..	..	..	2,282	
Deduct—for fireplace 12 feet diameter ..	..	113 0	Area.	0 4	38	
Total cubic feet ..	..	..	..	..	..	2,244
Concrete—						
Circular fireplace 13 feet 6 inches diameter.	1	143 0	Area.	1 6	215	
Outer walls fireplace shed	..	78 0	3 0	1 6	351	
Do. ragi pudding shed	..	49 6	3 0	1 6	223	
Floor in fireplace shed	1	18 0	18 0	0 6	162	
Do. ragi pudding shed	1	18 0	12 0	0 6	108	
	..	..	..	..	1,059	
Deduct—for fireplace 12 feet diameter ..	..	113 0	Area.	0 6	57	
Total cubic feet ..	..	..	..	..	..	1,002
Brick work in chunam for foundation.						
Circular fireplace 12 feet diameter	1	113 0	Area.	2 6	283	
Outer walls fireplace shed	..	78 0	1 6	2 6	293	
Do. ragi pudding shed	..	51 0	1 6	2 6	191	
Total cubic feet ..	..	..	..	..	..	767
Brick work in chunam for superstructure.						
Circular place 14 feet 6 inches diameter ..	1	165 0	Area.	1 2½	199	
Do. 12 feet diameter	1	113 0	do.	1 7½	184	
Outer walls of fireplace shed	1	78 0	1 6	12 10	1,502	
Gables	2	21 0	1 6	3 9	236	
Outer walls of ragi pudding shed	..	51 0	1 6	9 6	727	
Gable of ragi pudding shed	1	15 0	1 6	2 9	62	
Screen wall of sink	1	5 0	0 9	3 0	11	2,921
Deductions—						
Flue 1 foot 6 inches diameter	..	1 9	Area.	2 1½	4	
Void below cast iron plates	2	12 6	2 6	1 6	94	
Do. at fireplaces	2	1 6	2 6	1 0	8	
Flues	2	2 0	0 10	0 6	2	
Door and archway in fireplace shed ..	2	5 0	1 6	8 0	120	
Windows do. do. ..	2	4 0	1 6	5 0	60	
Do. recessed cills	2	4 0	0 9	3 0	18	
Do. in ragi pudding shed	4	6 3	1 6	4 0	150	
Do. recessed cills	4	6 3	0 9	5 0	94	
Arch work as per details	..	..	..	..	38	
Fire brick	..	..	..	..	111	699
Total cubic feet ..	..	..	..	..	..	2,222
Brick work in chimney.						
Lower portion 3' 6" diameter	..	9 9	Area.	1 6	15	
Shaft bottom 3' 6" diameter } 5' 9" ÷ 2 = 2·10½						
Do. neck 2' 3" do. } mean diameter.	..	6 6	do.	18 9	122	
Cap	1	3 3	do.	0 9	2	139
Deduct.						
Flue at bottom 1' 6" diameter	..	1 9	Area.	1 6	3	
Flue in shaft bottom 1' 6" } 2' 3" ÷ 2 =						
diameter. } 1' 1½" mean	..	1 0	do.	18 9	19	
Flue at neck 0' 9" diameter } diameter.						22
Total cubic feet ..	..	..	..	..	..	117

Estimate Form—Detail measurements—*cont.*

Detail of work.	Number.	Measurements in feet. Length.	Breadth.	Depth.	Area or contents.	Total quantity of each description of work.
1	2	3	4	5	6	7
Arch work in chunam.						
Over door and archway	2	6 0	1 6	1 1½	38	
Do. and windows	2	5 3				
Total cubic feet	..	..	..	..	..	38
Fire bricks in fire clay.						
		Cir.				
Outer walls 11′ 3″ diameter	..	35 3	0 9	1 11	51	
Inner do. 5′ 1″ do.	..	16 0	0 5	1 11	13	
Bottom of chambers	2	12 6	2 6	0 5	26	
Partitions in chambers	2	2 6	0 5	1 11	4	
Fireplace floor	2	3 1½	1 7½	0 5	4	
Do. sides	4	2 6	0 5	1 5	7	
Do. back	2	1 3	0 5	1 5		
Flues	2	1 9	4 3	0 5	6	
Total cubic feet	..	..	..	..	..	111
Out stone ashlar 2 lines dressed.						
Bed stones for trusses	4	1 6	1 6	0 6	9	
Door cill	1	6 0	1 6	0 6		
Total cubic feet	..	..	..	..	..	9
Teak wood wrought and put up.						
Fireplace shed—						
Two trusses to span 18 feet. Tie beam	2	21 0	0 4	0 6	7	
Principal rafters	4	11 0	0 4	0 6	7	
Struts	4	5 6	0 4	0 4	2	
Block at heads	2	1 0	0 7½	0 9	1	
Purlins at ends	4	7 0	0 4	0 6	7	
Do. centre	2	6 1½	0 4	0 6		
Do. over wall at ends	4	7 0	0 3	0 5	4	
Do. do. centre	2	6 1½	0 3	0 5		
Ridge	2	8 6	0 3	0 6	2	
Rafters	20	13 0	0 3	0 4	22	
Eave board	2	19 1½	0 0¾	0 8	2	
Ragi pudding shed—						
Bressummers	4	10 6	0 4	0 4	5	
Rafters	20	13 0	0 2½	0 5	46	
Braces	20	12 6	0 2½	0 5		
Filling piece between braces	10	2 0	0 2½	0 5		
Struts in openings	16	3 3	0 2½	0 4	4	
Do. in piers	4	2 9	0 2½	0 4		
Cleats attached to rafters	20	0 10½	0 2½	0 2	1	
Do. do. to uprights	16	0 10½	0 2	0 2	1	
Brackets in piers	4	1 0	0 2½	0 5	1	
Eave boards	2	18 6	0 0¾	0 8	2	
Total cubic feet	..	..	..	..	..	114
Wrought iron work.						
Fireplace shed—						
1″ King rod	2	6 9	×	2 62	35	
1″ hexagon nuts and head	6	..	×	27	2	
3″ diameter ⅛″ thick washers	6	..	×	32	2	
1½″ × ⅜″ flat iron heel straps	4	3 0	×	1 87	22	
2″ × ⅜″ bearing plates	4	0 6	×	2 50	5	
⅝″ hexagon nuts for bearing plates	8	..	×	14	1	
½″ bolts to secure wall purlins to tie beams	4	1 0	×	66	3	
½″ hexagon nut and head for tie beams	4	..	×	13	1	
2″ diameter ⅛″ thick washers for do.	8	..	×	14	1	
Ragi pudding shed—						
½″ bolt at intersection of braces	10	0 9	×	66	20	
Do. to secure braces to rafters	40	0 6				
Do. to secure rafters at head	10	0 3½				
⅝″ hexagon nuts and heads for do.	60	..	×	13	8	
2″ diameter ⅛″ thick washers for head	120	..	×	14	17	
Total lb.	..	..	..	..	..	117

Estimate form—Detail measurements—*cont.*

Detail of work.	Number.	Measurements in feet. Length.	Breadth.	Depth.	Area or contents.	Total quantity of each description of work.
1	2	3	4	5	6	7
Doors and windows including frames with galvanized iron wire-netting.						
Door	1	4 6	..	8 6	38	
Windows	2	3 6	..	4 6	32	
Total square feet	..	..	..	..	..	70
Galvanized iron wire-netting ½″ mesh in double teak frames.						
Ragi pudding shed	4	6 3	..	4 0	100	
Total square feet	..	..	..	..	..	100
Roofing with No. 3 patent Mangalore tiles including teak reepers 2″ × 1″.						
Fireplace shed	1	19 0	..	27 0	513	
Ragi pudding shed	1	18 6	..	26 0	481	
Total square feet	..	..	..	..	..	994
Flooring with stone slabs, set in mortar and pointed with cement, 4″ thick.						
	..	18 0	..	18 0	324	
Fireplace shed	2	4 0	..	0 9	6	
Window recesses	1	5 0	..	1 6	8	
Archway	1	18 0	..	12 0	216	
Ragi pudding shed	4	6 3	..	0 4½	9	
Do. window recesses	..	..	..	..	563	..
	..	113 0 area	..	..	113	..
Deduct for fireplace 12′ diameter	..	..	..	..	..	450
Total square feet	..	..	..	..	..	
Plastering with 2 coats chunam interior walls.						
Fireplace shed	4	18 0	..	12 6	900	
Do. gables	2	21 0	..	2 9	116	
Fireplace sides 14′ 6″ diameter	..	45 6	..	2 6	114	
Do. upper part 12′ diameter	..	113 0	Area.	..	113	
Base of chimney 3′ 6″ diameter	..	11 0	..	1 6	17	
Chimney, upper part	..	9 0	..	19 0	171	
Do. do. 3′ diameter	..	7 0	Area.	..	7	
Door and arch jambs and soffits	2	21 3	..	1 1	46	
Windows do.	2	18 6	..	1 1	40	
Ragi pudding shed walls	..	60 0	..	9 0	540	
Do. gables	2	15 0	..	2 0	60	
Do. window jambs	2	0 4½	..	5 0	15	
Do. do.	8	1 3	..	4 0	40	
Do. cills	4	6 3	..	0 6	13	
Screen wall of sink	1	5 0	..	6 9	34	2,226
Deduct—						
Doors and archway	3	5 0	..	8 0	120	
Windows	2	4 0	..	5 0	40	
Do.	4	6 3	..	4 0	100	
Fireplace 8′ diameter	..	25 0	..	2 6	63	
Chimney 3′ 6″ do.	..	9 6	Area.	..	10	
Total square feet	..	..	..	..	..	333
						1,893
Pointing interior.						
	..	84 0	..	13 0	1,092	
Walls	2	19 6	..	9 9	380	
Do.	2	21 0	..	3 6	147	
Gables						1,619
Deduction—						
Door	1	5 0	..	8 0	40	
Windows	2	4 0	..	5 0	40	
Do.	4	6 3	..	4 0	100	
						180
Total square feet	..	..	..	..	..	1,439
Cornice—					66	..
For gables	..	..	..	..		66 Lineal ft.

Estimate form—Detail measurements—*cont.*

Detail of work.	Number.	Measurements in feet. Length.	Breadth.	Depth.	Area or contents.	Total quantity of each description of work.
1	2	3	4	5	6	7
Painting with 3 coats silicate paint.						
Fireplace shed	2	21 0	..	1 8	143	
Tie beams	2	21 0	..	1 8		
Principal rafters	4	11 0	..	1 4	29	
Struts	4	5 6	..	2 9	6	
Block	2	1 0	..	1 8	67	
Purlins	2	20 0	..	1 4	53	
Do. over walls	2	20 0	..	1 6	26	
Ridge	2	8 6	..	1 2	303	
Rafters	20	13 0	..	1 5½	56	
Eave board	2	19 1½	..	..	..	
Ragi pudding shed	..	..	..	1 4	53	
Bressummers	2	20 0	..			
Rafters	20	13 0	..	1 3	663	
Braces	20	12 6	..			
Filling pieces	10	2 0	..			
Struts in openings	16	3 3	..	1 1	68	
Do. in piers	4	2 9	..			
Cleats	20	0 10½	..	0 4	11	
Do.	16	0 10½	..	1 3	5	
Bracket	4	1 0	..	1 5½	54	
Eave board	2	18 6	..	1 4	28	
Door frames	1	21 0	..	8 4	38	
Do. sashes frames	1	4 7	..	1 4	63	
Window frames	2	23 6	..	5 0	34	
Do. sashes	4	1 8½	..			
Frames for ragi pudding shed windows	8	6 3	..	0 9	80	
Do. do.	16	3 6	..			1,780
Deduct—						
Space taken up by wire-netting door	2	1 6	..	6 6	20	
Do. do. windows	4	1 0	..	4 0	16	36
Total square feet	..	..	..	..	..	1,744
Cast iron cover plates with T iron joints, bolts, &c., complete	..	..	..	..	No. 6	Segments.
Cast iron gratings complete	..	..	..	..	No. 2	
Do. doors for fireplace complete	..	..	..	..	No. 2	
Dampers with covers to raise and lower including fixing complete	..	..	..	..	No. 2	No. 2
Iron cooking pots complete	..	..	..	..	No. 6	„ 6
Petty supervision at 2½ per cent.	..	..	..	..	..	
Contingencies at 5 per cent.	..	..	..	..	..	

Estimate form—Abstract.

Quantity.	Description of work.	Rate.	Per	Amount.	Total.
1	2	3	4	5	6
		Rs. A. P.		Rs.	Rs.
2,244 C. ft.	Excavation for foundation		1,000 C. ft.		
1,002 „	Concrete with broken bricks in chunam		100 „		
767 „	Brick work in chunam for foundation with stock bricks		do.		
	Brick work in chunam for superstructure		do.		
2,222 „	Brick work in chimney do.		do.		
117 „	Archwork in chunam do.		do.		
38 „	Fire bricks in fire clay		do.		
111 „	Cut-stone ashlar 2 lines dressed		C. ft.		
9 „	Teak wood wrought and put up		do.		
114 „	Wrought iron in trusses and roof work		lb.		
117 lb.					
70 Sq. ft.	Doors and windows including frames galvanized iron wire-netting shutters complete		Sq. ft.		
100 „	Galvanized iron wire-netting in frames fixed		do.		

Estimate form—Abstract—*cont.*

Quantity.	Description of work.	Rate.	Per	Amount.	Total.
1	2	3	4	5	6
		Rs. A. P.		Rs.	Rs.
994 Sq. ft.	Roofing with No. 3 patent Mangalore tiles including teak reepers 2″ × 1″, &c., complete		100 Sq. ft.		
450 „	Flooring with stone slabs set in mortar and pointed with cement		do.		
	Plastering with 2 coats of chunam		do.		
1,893 „	Pointing exterior black with tar asphalte and		L. ft.		
1,439 „	sand		100 Sq. ft.		
66 L. ft.	Cornice for gables				
1,744 Sq. ft.	Painting with Charlton selicate paint, 3 coats		Each.		
6 Seg.	Cast iron cover plates with T iron joints, bolts, &c., complete		do.		
2 in No.	Cast iron gratings complete		do.		
2 „	Cast iron doors for fireplace complete		do.		
2 „	Dampers with levers to raise and lower including fixing complete		do.		
6 „	Iron cooking pots complete				
	Petty supervision at 2½ per cent.				
	Contingencies at 5 per cent.				
	Grand total of estimate				

No. 1716 C.

Forwarded for the approval of Government to the Judicial Department, with reference to G.O., dated 6th November 1891, No. 2286, Judicial.

(Signed) O. V. BODDY, Major, R.E.,
Under Secy. to Govt., P.W.D.

13th April 1893.

G.O., dated 10th May 1893, No. 975, Judicial.

Read—the following papers:—

Endorsement of the Public Works Department, dated 13th April 1893, No. 1716 C., forwarding letter from the Consulting Architect to the Government of Madras, dated 10th February 1893, No. 3354.

From the Inspector-General of Jails, dated 2nd May 1893, No. 1898.

I have the honour to return the papers received under Mr. Butterworth's endorsement, No. 776, dated 26th April 1893, and to state that, as reported by the Consulting Architect in his No. 3354, dated 10th February 1893, the plans were prepared by him in communication with me, and in pursuance of para. 4 of G.O., dated 6th November 1891, No. 2286, Judicial. They were countersigned by me on the 3rd February last, and as the construction of central kitchens in two Central Jails is deferred, pending the sanction of Government to these standard plans, I trust that early orders may be passed.

Order—dated 10th May 1893, No. 975, Judicial.

The standard plans and estimates for kitchens with circular cooking ranges for Central and District Jails are approved and will be transferred to the Public Works Department.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.