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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	294	Press
B.P. No.		Mis. —
Dated	2 - 2	6875
		—195—

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
2nd February 1875.*

No 62 . Read the following letter from Major J. N. HUNTER, R.E.,
District Engineer, Salem, to Colonel G. W. WALKER, R.E., Secretary
to Government, Public Works Department, dated Salem, 1st December
1874, No. 164 :—

With reference to paragraph 5 of G. O., No. 3,025, dated 16th December 1873,

3 Plans }
1 Site Plan } By banghy
1 Abstract Estimate.
1 Specification

I have the honor to forward, for the
sanction of Government, an estimate of
Rupees 27,720, accompanied by plans
and specification, for constructing a
Taluk Cutcherry at Kistnagherry.

2. I request that the work may be entered in the Budget of 1875-76, and
an allotment of Rupees 8,000 may be granted.

No. 63 ORDER THEREON, 2nd February 1875, No. 294.

CIVIL WORKS, No. 5.

THE estimate for a Taluk Cutcherry
at Kistnagherry, amounting to Rupees
27,720, is sanctioned. Provision will be

made for the work, if practicable, in the Budget for 1875-76.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the District Engineer, Salem.
.. Controller of Public Works Accounts.
.. Judicial Department.

Exd S T Austin.
Spare Copies

N^o 164 District Engineer's Office,
Salem 1st December 1874.

From
The District Engineer
of Salem.

The Secretary to Government,
Public Works Department.

Sir,

Enclosures 6
3 Plans
1 Site Plan
1 Abstract Estimate
1 Specification

With reference to para 5 of
G.O. N^o 3025 dated 16th December 1873,
I have the honor to forward for the
sanction of Government an estimate
of Rs. 17720 accompanied by Plans
and specification for constructing
a Talook Cutcherry at Kristnapherry.
2. I request that the work may
be entered in the Budget of 1875-76
and an allotment of Rs. 8000 may
be granted.

I have the honor to be,

Sir,

Your most obedt. servant
A Bailey Captain,

Executive Engineer for
District Engineer

616-1-73-0. 19 June 1874

27062

Estimated cost
of construction of
the new building
for the purpose of
housing the
prisoners at the
new station.

27062

27062

27062

27062

Specification report, to accompany
Estimate No 72 of 1874/75; for con-
-structing a Salook butchery, with subor-
-dinary jail, and out buildings, at
Christnaahung, in the Christnaahung Talook,
Coover Range, Salem District.

Amount of Estimate Rupees, 28,200:-
as per accompanying detailed, and abstract
estimates; and consisting of the following
items.

1 Salook butchery, Post Office, Treasury, Inspectors room, and ordinary jail.	Rs 4,490
2 Pyots shed	Rs 1040
3 Jail book room	Rs 520
4 De Latine	Rs 850
5 Public	Rs 1300
Grand Total Rupees	28,200

The main building is to be
constructed, agreeably to the revised standard
G. O. No 2906 of 16 November 1873. Plan, and orders,
No 2309 of 18 September 1873 for a first class
Salook butchery,
No 795 of 23 March 1874 circulated with
No 1218 of 6 May 1874 Government orders,
No 1288 of 13 June 1874 marginally noted,
No 1289 of 13 June 1874 true copies of which,
No 1366 of 22 June 1874 with slight modifi-
No 76 of 5 June 1874 cations, accompany
No 1091 of 24 June 1874 this report.

The main building consists of the following rooms; Sea, Sea, measurements of which are exhibited below.

Room	No.	Length	Breadth	Height
Subordinate front and rear verandah	2	34'	6 1/2'	12'
Do sides do	1	60'	6 1/2'	12'
Do rear do do	1	23'	6 1/2'	12'
Do front do do	1	16'	6 1/2'	12'
Do front do do	1	32'	13'	13'
Do Private room	1	11 1/2'	10'	13'
Last property room	1	10'	6'	13'
Post office	1	19'	14'	13'
Block front verandah	1	26 1/2'	6 1/2'	12'
Do rear do	1	31 1/2'	6 1/2'	12'
Do room	1	24'	7 1/2'	13'
Do do	1	18'	11'	13'
Circular stair case	1	6 ft dia		26'
Shresthah's room	1	17 1/2'	15'	11 1/2'
Treasury and customs room	1	17 1/2'	15'	11 1/2'
Office for Public	1	15'	12'	13'
Shresthah's and Treasury rear verandah	1	32'	6 1/2'	14'
Inspector's room	1	18'	9'	13'
Police guard	1	19'	7 1/2'	13'
Covered way	1	30'	16 1/2'	12'
Male wards	2	16'	15'	13'
Female wards	2	15'	8'	7 1/2'
Plat from to wards	2	20'	4'	
Record room	1	31 1/2'	19'	13'

The excavations are to be taken out to the full bottom breadth, and depths, figured, and drawn in the sections; with properly scraped sides, as to the nature of the soil, so that they will stand without slipping.

Concrete is to be laid in, under the footings of the whole of the foundation walls; 1 foot deep, with 1 1/2 inches offsets on each side from the buckwork, and finished with a perfectly level surface at top, ready to receive the rubble in mortar.

The whole of the foundations are to be built of solid rubble in mortar, or flat burnt stone in chambers, with footings as detailed below.

Principal walls in footings will be 4 1/2 feet at base, with three 1/2 inches footings on each side, at equal heights of 1 1/2 feet to 3 1/2 feet in the whole height; and above this, 2 1/2 feet broad, to 9 inches high, to support level of surface of ground.

Verandahs - base walls to Subordinate Private room, and covered way walls, will be 3 1/2 feet at base, with three 1/2 inches footings on each side, at equal heights of 1 1/2 feet to 3 1/2 feet in the whole height; and above this, 1 1/2 feet broad, to 9 inches high, to support level of surface of ground.

Plat from to wards, 2 feet base,

and 2 feet high, to supposed level of surface of ground.

Stair case, and turret wall, in footings, will be, $4\frac{1}{2}$ feet at base, with three $1\frac{1}{2}$ inches footings on each side, at equal heights of $1\frac{1}{2}$ feet to $3\frac{1}{2}$ feet in the whole height; and, above this, $2\frac{1}{2}$ feet broad, to 2 feet high, to supposed level of surface of ground; also, a foundation of 12 feet square, and 2 feet deep, below footings.

The whole of the basement, on which, will be built of solid rubble in mortar, or flat burnt stone in chimney, as detailed below; and shall have at the horizontal angle of basement, a capping of cut stone in chimney all round, at entrances, doorways, verandahs, covered way, and platform. The cut stone to be splayed, 4 inches at top at the outer angle, and will measure 1 foot broad; and $\frac{1}{2}$ feet thick; laid flush with the floor and face of the basement throughout.

Principal walls $2\frac{1}{2}$ feet broad, and 2 feet high. Verandahs, cross walls of, Saheldars private room covered way, and platform walls, $1\frac{1}{2}$ feet broad, and 2 feet high.

Splayed angles of cut stone capping, not to measure less than 12 inches; and hollow angles, not less than 9 inches.

Outer face of basement, to be slightly pointed.

The whole of the steps will be built, as shown in the drawings, and landed into the basement while it is in progress, on a bed of concrete 1 foot deep, and $\frac{1}{2}$ foot off from the masonry right round; and brick work in chimney, $\frac{1}{2}$ foot deep, and $\frac{1}{2}$ foot off right round the steps. The treads will be built of cut stone, on a bed of masonry, perfectly level, 1 foot broad, and 6 inches rise throughout: the treads to overlap each other 3 inches, and to be built into the bed 4 inches; the first step, from basement, to measure, for Pouch 14 feet, and for all others 5 feet.

There will be 3 steps of 9×3 to house, and Post Office, 2 to black rooms; 1 to Sherida's verandah; and 2 to the covered way; and, 1 of 18×3 to Pouch in front.

The stair case steps will be of cut stone, resting on a spiral arch 9 inches high, according to the standard design; being 21 steps, 11 inches rise, to floor of second room.

The whole of the superstructure walls will be built of, solid brick in chimney, from basement level, to top of rafters and joists; and will measure, as under: All principal, and second $1\frac{1}{2}$ feet broad, and 10 inches walls, to top of rafters and joists.

Endeavour was
= a good day

Treasury, Chamberlains, and
bachelors rooms; front, and
near wall. } $1\frac{1}{2}$ feet broad, and $11\frac{1}{2}$ feet
to top of joints inside.

D^g - one cross wall } 1 1/2 feet broad, made 11 1/2 feet
 D^g - two cross walls } to top of joists inside.

wood walls of jail, and
Pillars

Gross walls: of Lost property } to top of ingers, inside.
 water inside } 10 inches broad, and 15 feet
 drain } to top of ingers, inside.

walls _____ }
 the position of each }
 residence, to the }

reference to the drawings, is all that is necessary.

ventilators, and bulldozes, etc., are to
be built in, as shown in the drawings
according to their respective
will.

with various, as under: -

property, tools, and books }
 Office: Done }
 Dr. - Inc. -

2.4. Insects Ventilators }
 2.5. Archwigo }

Chicks, and Sheshtidars
vornat & Dostin
—Dziesswall

2

[illegible]

the Treasury, and cashiers rooms, will be
divided off in the center, by a strong wrought
iron railing; joined to the beams, above and
below, and into the side walls, with a strong
wrought iron railing, down $4\frac{1}{2}$ ft. high, joined
in the center.

Provided, and of various strong
hard wood doors, with frames, bolts, hinges,
locks, &c. complete, will be provided for

Job 67
m. 1000

all exterior doorways in Court house, Quarters,
and Look property rooms, and Post office;
blakes, Shustadars, and Inspectors rooms;
Strong teakwood, Panelled (semi circular
at top) doors, with frames, hinges, bolts &c
complete, will be provided for Stair case entrances.
Strong iron railed, teak wood, doors, with
Panel, and 2 Vention shutters, with frames,
hinges & bolts, &c complete, will be provided
for the Treasury, and Cashiers rooms.
Strong iron railed, teakwood, lullum doors,
with frames, hinges, bolts, locks, &c complete,
will be provided for the Male, and Female
wards.
Strong (semi circular at top) iron barred,
teak wood, windows, with Panel, 2 Vention,
and 2 glazed shutters, with frames, hinges, bolts
&c complete, will be provided to the Records
room.
Strong iron barred, teak wood, windows,
with Panel, and 2 Vention shutters, with frames,
hinges, bolts, &c complete, will be provided
for the Treasury.
Strong iron barred, teakwood, panelled, circular
windows, with frames, hinges, bolts, ropes, &c
complete, will be provided to the Records
room.
Strong fixed Vention, teakwood, ventilators,
with frames, &c complete, will be provided
to the Court house, and Post office.
The Peep holes in the Treasury, and

Stair case, will have iron bars built into the
walls; so that no entrance may not be so
effected.
The spaces between the iron bars throughout,
will not exceed $1\frac{1}{2}$ inches from centre to centre
of the bars.
Circular archwork, with correct
voussoir joints, will be built $1\frac{1}{2}$ feet deep
throughout; over the archways in the Court
house, Porch, Police Guard Rooms, and
downways in cross walls of clerks, Shustadars
Treasury, Inspectors, and Police Guard rooms,
and staircase entrances; above windows, and
bulbages in Record room, and Peep holes in
Stair case, and Treasury.
Star archwork, properly summered,
with correct voussoir joints, will be built $1\frac{1}{2}$
feet deep throughout; over all downways, and
ventilators; in Male and Female wards, in
Court house, Private and Look property rooms,
and Post office; doors and windows in main,
and cross walls of clerks, Shustadars, Treasury,
Inspectors, and Police Guard rooms.
The whole of the interior, will be
plastered with 2 coats of white chunam, and
the whole of the exterior, 2 coats of stone colored
plaster in chunam. The stone color to be approved
by the Range Officer.
The spaces in the open archways
of the Police Guard rooms, will be filled up

1875-76, 19 Jan 1876

The floor of the whole building, excepting the Record room, and Men's and Female wards, will be of 8 inches square bricks in chunam, neatly pointed, laid over a leveling course of $4\frac{1}{2}$ inches concrete; and covered with 2 coats of coal tar, after the filling in of the basement, has been thoroughly consolidated.

and in front the floor of the Record Room, and
a flake and a triangle wards, with be of $\frac{3}{4}$ inch
thick asphalt, over a leveling course of $1\frac{1}{2}$
inches of concrete for the latter, and, coat of
plaster for the former.

Dentil cornice with be. bust and moulded, in the interior and exterior of the Record room, below the rafters; exterior of the turn right round, in a line with the outer cornice of the Record room, and in the interior of the whole of the rooms, (excepting the jail) just below the rafters.

horizontal cornice with buttressed
and, around all the tops of the archways; doors
in cross walls of clerks, Shinscadans, Treasury,
and Police rooms; around the tops of the windows,
and around the bullseyes in the record room,
and all the Peep holes, as shown in the draw-
ings.

the "Vandal" for the Court

offices, and clerk rooms; will be supported by ⁶ cast-iron Posts 5 inches square, and 8 feet high, let in at the foot into a stone mortice in the basement; and those for the rear windows of the Treasury, will be 6 inches square, and 10 feet high. The brasses being in both cases, 5x7", and 6x8" respectively.

The roof of the jail, covered with
and Police, will continue in the same incli-
- nation from the main walls, and roof, and
shall measure 32 feet horizontally, from
the face of the outer walls, to the eaves of the
unsupported verandah; this verandah will be
strutted up at each rafter; the details of
construction of which, will be carried out
according to the revised standard designs.
Just below the projected roof, and in-
front of the wards, a platform will be
built, for the ingress and egress of the
Prisoners.

The ceiling throughout, excepting over
treasury, and Shumstad's room, will be
made up of teak wood. Bridge joists, purlins,
wall plates, rafters, ropers, struts, and Pan
tiles, and durable boards; the rise being $\frac{3}{12}$
of the full span between the eaves.
The roof of the Treasury, and

of the full span
The roof of the Treasury, and
Escudero room with its joists resting on
a beam, and the front and rear walls; and
will be covered with one course of tiles
brick on edge, 3 courses of flat tiles, and 3.

inches of fine Bricks jolly, the ceiling to be plastered with 3 coats of chunam plaster, and the terrace with 1 coat of plaster in chunam; over which, there will be $\frac{3}{4}$ inch thick of asphalt flooring.

Scantling of timbers to be used are, as under:

	Breadth.	Depth.
Ridge Poles	2" x 9"	
Purlins	7" x 8"	
Wall plates	4" x 4"	
Record room	5" x 1"	
Ship rafters	5" x 7"	
Common rafters	2 1/2" x 4"	
Beams in Shustudans, and treasury	2 1/2" x 5"	
Joists	1 1/2" x 7"	
Scantling for Susses, and Verandah slats, etc.	5" x 7"	

Scantling for Susses, and Verandah slats, etc., will be, according to the revised standards designs.

The eaves of the roof throughout, will have a near eave board 6 x 2" nailed to the rafters.

All valleys, to have the valley rafters, concealed on the upper side, and sheeted with lead or zinc sheeting, as a valley gutter.

The turret will be built, and fitted, entirely of teakwood, hexagon shaped, according to the revised standard design; it will be bolted down to the masonry below, by 8 bolts into the masonry, and the under side

of the curb of the turret, the masonry, and curb will be cut, so as to prevent the water from getting inside. The lower portion of the turret will be, of fixed open ventilators, and the upper, or weather-boards, will overlap each other 2 inches. A neatly cut roll, notched to fit the weather boarding, on the outside, and rounded on the top, will run up the outer angles. A solid wooden cap will carry the funnel. The apex of the turret will be surmounted, with a funnel on an approved plan, and a lightning conductor.

Before being put in position, all exposed wood work of the turret, beams, posts, doors, windows, ventilators, etc., will be painted with a priming coat; and on the completion of the wood work, masonry, plastering, flooring, and roof, the other 2 coats will be applied. Various paint to be used, and the color of the painting to be approved of by the Range Officer, and shall be, for turret both inside and outside, dark color: for joists, and brisomines, lead color: for all doors, windows, ventilators, Brown or chocolate color.

After the entire completion of the whole building, and before the painting is applied; all exposed wood work of Beams, joists, Purlins, Ridge poles, Rafters, etc., will be wood piled 3 coats.

The interior of the male, and female, wards, and the Record room, will be floored with $\frac{3}{4}$ inch thick asphalt, as before described under flooring.

Roofs, excepting hips, will be flushed with lead or zinc gutters, with a lap of 7 inches under the tiles.

A Lightning conductor will be fixed to the gurch, from the apex; and carried down, perpendicularly along the curb, and spiral, and to 2 feet in depth into the ground; the end of which will be 8 feet away from the basement of the building.

The Pyote shed, jail cook room, and Latrine, and Public Latrine, are to be constructed, agreeably to the revised standard design, circulated with Government Order No. 1014 of the 20th April 1874. True copy of which, with slight modifications, accompanies this report.

The buildings will measure between walls, to basements, and bottom of rafters as under;

Pyote shed	1. 31 $\frac{1}{2}$ x 11 $\frac{1}{2}$ x 8 $\frac{1}{2}$	2 to bottom of basements
Public latrine	1. 35 x 10 x 8 $\frac{1}{2}$	
Jail	1. 10 x 10 x 8 $\frac{1}{2}$	
Pyote shed	1. 8 x 10 x 8 $\frac{1}{2}$	
Pyote shed	1. 16 x 12 x 9 $\frac{1}{2}$ to top of rafters	

The excavations are to be taken out as for the main building; and concrete is to be laid in, under the foundations, as for the main building; 1 foot

deep, and 7 inches off set on each side of the brick work, for main and cross walls; under the basement, and also for the Pyote shed, and cook room, $\frac{1}{2}$ foot deep, with $\frac{1}{2}$ foot off set from the edge; under the seats and partitions for Latrines, 1 foot deep, and 3 inches off set on each side of the brick work; under floor of Latrines, $\frac{1}{2}$ foot in depth, under Latrine sub divisions, 1 foot deep and 3 inches off set on each side, and under earth store wall, 1 foot deep and 1 foot broad

The whole of the foundations are to be laid in, solid brick, in chumam, as detailed below;

Pyote shed	2 feet broad, and 1 $\frac{1}{4}$ foot deep
Public and jail Latrines, and jail Cook room	2 feet — do — 3 feet — do —
Under seats of Latrines	3 feet — do — 1 foot — do —
Earth store walls	2 $\frac{1}{2}$ feet — do — 1 foot — do —
Sub divisions	2 $\frac{1}{2}$ feet — do — 1 foot — do —

The basement of the whole of the building will be, of solid brick in chumam, and will be raised, 6 inches above the level of the ground for Pyote shed, and Latrines; and 1 foot for the cook room; the breadth of the superstructure will be 2 feet 6 inches, 17 feet broad, and 1 $\frac{1}{4}$

deep, 19 inches of which will be under ground, is to be built around the Ryots shed. Tub cisterns to be 2' x 2' x 3', with a 9 inch wall on the three sides. 2 cisterns to Public Latrine, and 1 to Jail Latrine.

8 steps will run the full length of the back room, and cut stone coping for the steps, at entrances, will be provided, as under:

Ryots shed ————— 4 — 1 1/2 x 1/2 —
Back Room ————— 2 — 1 1/2 x 1/2 —

The steps to be built into the basement while it is in progress, and as for main build

The whole of the superstructure walls, and pillars, will be built of solid brick masonry, from basement or floor level, to bottom of boussummers, and top of rafters, and will measure, as under:

Ryots shed — 12 Pillars, 1 1/2 feet square, and 8 1/2 feet to bottom of boussummers, with a parapet 10 inches broad, and 2 1/2 feet high, from base level, between the pillars, excepting at the two fronts, and near entrances.

Public Latrine — 12 Pillars, 1 1/2 feet square, and 8 1/2 feet to bottom of boussummers. Partition, and seat partition walls, 1/2 foot broad, and 5 1/2 feet high. Seats, drains, and sloping floor to be built

as per drawings — Earth store wall, 1/2 foot broad, and 1 1/2 feet high. Jail Latrine: 4 pillars, 1 1/2 feet square, and 8 1/2 feet to bottom of boussummers — one cross wall, 1 foot broad, and gabled up to the roof. Partition, and seat partition walls, 1/2 foot broad, and 5 1/2 feet high. Seats, drains, and sloping floor to be built, as per drawings. Sewer seats will be provided in the Public Latrine, and one seat in the Jail Latrine: of the latter, 2 will be for females, and 4 for males. Pillars, seats, seat partition walls, and earth store wall, to be built, as shown in the drawings.

Back Room: Walls from sides, with gables at ends, 1 1/2 feet broad, and 9 feet to top of rafters.

Ryots shed, open between pillars — 4 — 7 1/2 x 8 1/2
Public Latrine — 2 — 1 1/2 x 8 1/2
— 2 — seats near holes — 10 — 8 x 1 1/2
Jail Latrine, open between pillars — 3 — 1 1/2 x 8 1/2
— 2 — seats near holes — 4 — 8 x 1 1/2
— 2 — open between pillars, females — 1 — 3 x 8 1/2
seats near holes — 2 — 8 x 1 1/2
Back Room open between walls — 2 — 4 x 8
— 2 — smoke holes — 2 — 8 x 8

The openings in the partition walls, in each seat of the Latrines, will be arched over with a 9 inch brick arch.

impediments, rocks, soil, trees, rubbish, &c.
necessary to leave the site clear, and
unencumbered. The bottom, or bed to be
formed fair, level, and consolidated, perfectly
sound, by well watering and ramming, &
this layer of sand is to be laid over the bed,
ready for the concrete foundations. In the
event of any water appearing in the excavations,
means for removing of the same, by a talutap,
or baling, will be attended to. The excavations
will be kept perfectly free from water, until
the foundations are completed. The spaces
around the concrete, and footings, and
inside of basements, to floor level, to be filled
in, well rammed, and grouted, after the
brick work is carried up, and inspected, by
the Range Officer; due allowance will be
made for settlement in, filling in, which
will be accelerated, by being well watered.
Should slips occur, they will be cleared, and
the sides properly scarped and shored, that will
stand without slipping.

So soon as the excavations are
ready, concrete is to be thrown in, (not laid,)
slightly watered, and thoroughly rammed,
level, for the brickwork foundations.

The concrete is to be composed of
6:—Parts of broken stone, or hard burnt, or
vertified brick jelly; not larger than an egg

2:—Parts of brick powder, from recently burnt
brick bats. in a mortar.

6:—Parts of clean, sharp, river sand; if it
is very earthy, or vegetable matter.
1:—Parts of unslaked fresh lime stone,
thoroughly burnt.

The stone lime - river sand - and brick
powder - are to be ground in a mortar
mill; and the brick, or stone jelly, is to be
thoroughly saturated with water, before it is
mixed with the mortar.

The concrete is only to be made, and
mixed, the same day it is to be used.

The proportions are to be exactly
measured, before being mixed; thus: spread
out 18 parabs of the jelly, 9 inches in depth,
and intersperse, and grind together with
water, 6 parabs of brick powder, 6 parabs of
sand, and 3 parabs of unslaked fresh
burnt lime; this mortar will then be
thoroughly incorporated with the jelly, after
it is well watered, and the mass gradually
carried away, and thrown into the founda-
tions.

Puddle in mortar is that
commonly called, "flat burnt stone in the
mortar," must consist of flat bedded stones,
of the best, and most approved description,
free from defects of any kind, as fire cut
stone, which to be procured as large as can
be obtained. The whole must be carefully

latter concrete to be the same as for the
other, and to be thoroughly rammed and
laid. The whole hard must be
to be used, all others to be rejected, and the
mortar to be the same as for brickwork joints
not to exceed $\frac{1}{2}$ of an inch, which should be
raked out $\frac{1}{2}$ an inch, and neatly pointed
flush with the flow, with fine mortar.

After the flow is thoroughly dry, 2 coats of
boiled coal tar will be applied.

The flow in the verandah to have a
fall of 2 inches, to drain off the rain water
which may beat in.

The joints of the brick work to be
with "raked out", and cleaned $\frac{1}{2}$ an inch,
the surface to be saturated, with washed,
and cleaned with water, and plastered, with
2 coats of white plaster in chumari.

First coat, to consist of 1 part of
fresh sifted lime, and $\frac{1}{2}$ parts of clean
sifted sand, well ground together, and well
rubbed and floated on in a layer $\frac{3}{4}$ of an inch
thick, the joints being well stopped up; and
the second coat to be of a creamy paste, composed
of 3 parts of freshly sifted lime, to 1 of clean
sifted sand, well ground, and slowly worked
to a smooth and proper surface, with
bricklayers pebbles and kullapanni. Free from
all blisters, and blemishes. Putty holes to be
filled up prior to the plaster being applied;
and the whole of the surface of a wall,

29/13
between corners, and flow as smooth as
polished. If the same day flow troubles
all moldings, and dusts, &c., to be
worked to a true finish.

First and second coat to the finish
and similar to white plastering, with the
addition of a suitable stone color of lump
black, red, and yellow ochre to be mixed
with second coat; samples of which will be
tied; and approved of by the Range Officer.
All corners, dusts, &c. to be white
plastered.

The tiling will be executed in
fine mortar, with brick on edge, (3 $\frac{1}{2}$ inches
thick), three courses of flat tiles, (3 inches thick)
and a course of fine concrete with brick jelly
(2 $\frac{1}{2}$ inches thick) the eaving being plastered
coats, and the flow, or terrace, with one coat
of chumari plaster, as above described, ready
for the asphalt.

The brick on edge to be laid di-
agonally, over the joints, in the usual way;
the flat tiles being laid over this, and to
overlap each other, breaking joint, and the
brick jelly concrete to be laid, and putted on
the surface with light wooden knife, beating
thereon from time to time at right angles, until the
concrete has been thoroughly consolidated and
laid. The mortar to be composed of 1 part
of quick lime, and 1 part of sand, with

ground or powdered air, as mortar is used. Each course will be grouted in before the next course is laid. The terrace to bond into the walls, three inches.

Terrace bricks in mould $5\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{2}$
Flat tiles $5\frac{1}{2} \times 6\frac{1}{2} \times \frac{5}{8}$

The roofing will be constructed of small scale, and country wood, rafters and rippers, the former wood for the main building, and the latter for the out buildings. Flat and pane tiles, and chimney bricks. The best, hard burnt, flat, and pane tiles, to be used. The flat tiles to be dipped three times in white wash after each coat is dry. Before being laid on the rafters, the horizontal joints of the flat tiles, will be in the center of the rippers throughout, and a course of rich of mortar plastered over them with the joints well filled up, before the pan tiles are placed in position. The pan tiles will be laid in the usual way, with their convex sides resting on the plaster, for the bottom courses, closely packed, and the top courses covering the aperture between the 2 bottom tiles, closely packed as a gauge of 2 inches. Chimney bricks to be 9 inches wide and placed 4 feet apart, from top to bottom, along the ridge, valleys, gables, and hips. Large gutter tiles being provided for the ridges, and hips, and also in lead gutters for the valleys. The laying of the pan tiles.

The chimney borders, to be finished with at the same time the flat tiles, and no work will be allowed to walk over the same.

The rafters to be well fitted, and nailed down into the ridge pole, purlins, wall plates, and cross members, 12 feet apart from center to center. The rippers to be well nailed down to every alternate rafter, 6 inches apart from center to center, and the rippers along the eaves, to be specially prepared, to form a slope inwards, 3 inches broad, and 2 inches thick, so that the eaves may not fall outwards.

Pan tiles to measure in mould $10\frac{1}{2} \times 5\frac{1}{2} \times \frac{5}{8}$
Flat tiles $6\frac{1}{2} \times 5\frac{1}{2} \times \frac{5}{8}$

All the stone used on the work will be of the best, and most approved description, sound, hard stone, free from shakes, flaws, or defects of any kind - to be worked full and true, to the proper profile - truly bedded, and set in mortar, as specified for brickwork. Stones will not be less than 2 feet in length and 1 foot in width. Worked squares to the face, and without exceed $\frac{1}{4}$ of an inch thick, which will be raked out $\frac{1}{2}$ an inch, and pointed with fine mortar, and the whole of the outer surface, or exposed work, to be fair faced or dressed three times, all over. All exposed angles, notched

holes for posts, tins, posts, &c. &c. to be wrought
square, and made

To be executed as specified for
brickwork, and plastering: Bricks to be
thoroughly cemented together, sloping outwards
for Police guard, so that any thing may be
seen from the inside; and for the Latines
a greater slope, so that nothing may be
seen from the inside, or outside.

To be executed as for brickwork,
and white plastering, and while the walls
are in progress, to be smoothed, and until to be
smoothed, smoothed and polished to a true
finish.

All wrought iron work, in
rings, bars, plates, bolts, nuts, straps,
cranks, levers, or wedges &c. or made use
of in any other form, or manner what-
soever, are to be of the best description of
malleable iron, as shall be approved of by
the Range Officer.

The greatest care will be taken
in all respects, forging, fitting up, and other
workmanship, to insure perfect soundness, and
security of first rate quality. All wrought
iron to be heated, and coated, while hot
with as many coats of boiled coal tar, and
pitch, as will cover the iron, and protect it
from rust.

Dimensions of iron to be used, to be used

15
standard designs and the estimate accompanying
may be used.

Each word for the main building,
and country word for the out buildings, will
be used.

The whole of the timber, and plank
to be used, shall be of the best description of
dealwood, and country wood - clean - straight
and sound, free from shakes, sap, and
or unsound knots - dry rot - or any other defects
whatsoever, and thoroughly seasoned. The
workmanship to be of the best style, sound,
and firmly fitted - planed - and boarded if
necessary. All joints, mitres, mortises, &c.
to fit perfectly close, and tight - and to all
surfaces which are in contact.

All planing, doors, windows,
&c. &c. to be executed in the best style of
workmanship, wrought and joined perfectly
true - closely jointed, glued, and firmly
screwed or spiked, and fitted sound. To be
provided with proper iron fastenings, mortice
and Pin bolts, with brass mountings, butt
knives, bolts, locks, latches, jambes, screws,
iron bars &c. &c. &c.
Record room window sashes, to be
glazed with the best crown glass, with neat
neatly putted.
All wall nests to be coal lined in

Dimensions of wood work to be as previously described, and vide standard designs.

All exposed wood work of beams, joists, Purlins, Ridge poles, Rafters, &c., will be painted 3 coats with the best boiled wood oil. All the rest of the wood work, in Posts, Braces, Doors, Windows, Frames, &c., to be painted with 3 coats of Carsons oil paint; each coat to be thoroughly dry before the next is applied. All painting to be of the best description, free from stains, hollows, blisters, bluishness, and defects of any kind. The surface must be thoroughly dry before, and after completion, and the paint should only be applied in dry weather. All iron or brass fixtures to be left unpainted, but must be lacquered, or coal tarred, as previously described.

To be carefully laid in squares or rectangles with $\frac{3}{4}$ of inch gauged laths, $\frac{3}{4}$ of inch thick, over a perfectly level surface as before described. Of the best description of asphalt, a proportion of 1 of asphalt and $\frac{1}{2}$ of clean sand, to be thoroughly incorporated while being mixed, and poured on hot. The surface being floated over while hot, and worked to a level and smooth surface after completion of the

wood joints, hollows, blisters, and defects to be filled up with powdered asphalt, heated with the trowel, thoroughly compacted and fused together, and made flush with the floor.

Very little mineral, (not vegetable,) tar to be used as a glue, and gungly oil applied very sparingly to the tools, to work the asphalt to a smooth surface.

Brushing with milled lead or zinc sheeting, to be laid in gables, and junctions of roof of wood roofer, and turks to be properly soldered, watertight at the joints, & nailed down with copper or galvanized nails, to plankings, rafters, or reefs, free joints holes and other defects to be of inches, with under the tiles. Where the roof abuts the spiral, a gutter sheeting 12 feet broad will be scarcely fastened to a 2 inch plank, so as to go right under the tiles. About an inch above the gutter, ornamental flashing will be placed in a thrustled groove in the masonry, and turned down with the gutter. 7 lbs. to the square job of milled lead should be used, if procurable.

The trusses will be wrought, and put up, perfectly round, according to the revised design - there will be 18 feet trusses for the bow house - chinks - and

Record, ~~rooms~~, or two for each room and two
15 feet ~~crosses~~ for the main walls.

Copper rod 1 inch diameter
inserted at the top, will rise from the turret
to 2 feet above it, thro the final strongly
riveted to the turret, and connected to a
copper band 2 1/2" wide, and 24 B. W. gauge,
thru the copper band will be firmly riveted
at the joints, and fitted to the wood work of
the turret and masonry of the spiral; and
run down one of the sides, to 2 feet below the
surface of the ground; where it will be
connected with the centre of a double iron
chain, 2 inch dia, buried in a trench
extending to 3 feet in depth, filled with wood
ashes 6 inches deep, and covered over, and will
be covered with earth: the ends of the chain will
be 8 feet from the basement, and will be laid
thus.



From the apex to the chain, the greatest care
will be taken to see that the joints overlap, and
the connections are firm, close, smooth, and
complete.

Scaffolding will be erected, maintained,
and dismantled, for the erection of all walls,
roofs, arches, &c. &c. and will consist of
white and thin bamboo, and scaffolding
poles, and poles, strongly fastened
together with iron ropes.

37 1/4
On completion of the whole of the work,
the holes, and excavations to be filled in,
and covered, and the ground thoroughly drained
of rock soil, inches, rubbish, machinery, plank,
materials, &c., and impediments of every
kind, which may have accumulated during
the progress of the work, to have the site clear-
all useless; and rejected materials, to be
sold off by Public auction, after approval, and
the proceeds credited to the work. Stains of
white wash, or lime to be removed from
wood, and iron work. Window glasses to be
cleaned with whiting. All door and window
fastenings, and moveable fixtures to be
oiled, and rendered thoroughly efficient.

The whole of the work to be declined
over in a sound, neat, clean, and work-
manlike condition; with a correct fixture
list for the whole of the rooms, and out-
buildings.

The building, ^{having} been decided to be
erected on Private land, compensation to the extent
of Rs. 10 35 will most probably have to be paid.

This estimate includes, all
accommodation, and work that is required, and this
confidently expected that no supplementary work will
hereafter be required.

J. C. Mest

Executive Agent

J. C. Mest Major R.E. C. J. Mestley
District Engineer Salem Collector of Salem

Salem District
Cojsecr. Stange
Kistnagherry Taluk

No 72 of 1874/75
Specification Report
to accompany Estimate
and Plans for erecting
a First Class
Catcherry at
Kistnagherry, or
Dowlatabail.

P W 7538/75
G-0-294-2-275
Amount of Estimate
Rupees 28,200-

Public Works Department
Proceedings of the head and
Read the following:-

From the District Engineer } (H. E. No. 164 of 1st Dec 74)
Salem

The estimate for a
Salug Catcherry at
Kistnagherry amounting
to Rs 27,720 is sanctioned.
Provision will be
made for the work,
if practicable in the
budget for 1875-76.

Ames

Ames

To the D. E. Salem ✓
Controller with Ab. Estimate ✓
Judicial Dept ✓
Recd: 3/4/75.

7538

GOVT. of 1875: Madras
PUBLIC WORKS.

The Dist. Engineer
Salem

1000
No. 5
C. O. D. No. 6, 1875, No. 294

1000
No. 6, 1875, No. 294

Feeling Cutcherry at
Trichingherry Salem Dist.

Estimate amounting
to Rs. 27,720 for the
Cutcherry sanctioned,
provision to be made
for the work if practicable
in the Budget for 1875/76.