

Public Works (1898) Department.

G.O., No. 262 W

✓ DATED 11 October '98

12/18/98

[Despatch Abstract.]
Taluk office with on houses at Negapalaia

Estimate of Rs 45,400 for
the construction of a new
sanctuary with well, for incense
when funds are available.

110/5

2/13

do p/w

Government {1898} of Madras.
PUBLIC WORKS.

Spare copies

OCTOBER.

Estimate of Rs. 45,400 for the construction of a new —, sanctioned, with remark,
for execution when funds are available.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From Colonel A. W. SMART, R.E., Superintending Engineer, V Circle, to the Collector of Tanjore, dated Chepāk, 24th June 1898, No. 223 M.

With reference to G.O., No. 1649 W., dated 16th June 1897, also item No. 39, Part II, Class B works of the Provincial Civil Works budget final issue for the year 1898-99, circulated with G.O., No. 1161 W., dated 11th May 1898, I have the honour to forward, for your approval and transmission to Government for sanction, through the Secretary to the Board of Revenue (Land Revenue), the enclosed site plan and estimate, amounting to Rs. 44,900, for constructing a new taluk office with out-houses at Negapatam.

The estimate has been prepared in accordance with the revised type design (terraced roofing) circulated with G.O., No. 2393 W., dated 19th September 1893.

Endorsement by the Collector of Tanjore, dated 23rd Aug. 1898, No. 3741/Rev.

Submitted to Government, Public Works Department, with reference to its order No. 1649 W., dated 16th June 1897.

Note by the Chief Engineer, Public Works Department.

The estimate is recommended for sanction with the following remarks :—

(1) The breadth of asphalt for damp course should be limited to the breadth of the walls, viz., $1\frac{1}{2}$ feet.

(2) The slope of the roof should be got by fixing wooden battens to the tops of girders. The battens should be secured to the top flange of girders with iron clips, and the joists spiked to the battens.

(3) *Steel girders.*—In clerks' room No. 1, the section should be $12" \times 6"$ weighing 54 lb. per foot run, instead of $15" \times 5"$ weighing 42 lb. per foot run allowed in estimate.

In accountant's room the section should be $10" \times 5"$ weighing 35 lb. per foot run, instead of $12" \times 5"$, 32 lb. per foot run.

In record-room the section should be $15" \times 5"$ weighing 42 lb. per foot run, instead of $13" \times 5"$, 40 lb. per foot run.

(4) It is not clear why so high a rate as Rs. 11 per cwt. is allowed for girders at Negapatam—a seaport. Such girders can be obtained in Madras, delivered at site of works, for Rs. 7 to Rs. 8 per cwt., if obtained through Messrs. Massey & Co. The Superintending Engineer should explain the cause of so high a rate being allowed in the estimate.

(5) No woodwork should be allowed in record-room, i.e.: the joists should be of solid steel, the racks of iron, the doors and windows iron-barred, with wooden shutters to the latter, if necessary, opening outwards.

(Signed) W. B. DEWINTON,
Chief Engineer.

28th September 1898.

ORDER—No. 2626 W., dated 11th October 1898.

The estimate, amounting to Rs. 45,400, for the construction of a new taluk office with out-houses, at Negapatam, is sanctioned for execution when funds are available.

2. Attention is drawn to the Chief Engineer's note read above.

3. This sanction has been registered as Provincial No. 72 W. of 1898-99, and classified as Civil Buildings—Original Works.

(True Extract.)

Under Secretary to Government.

To the Superintending Engineer, V Circle,
with enclosures.

" Examiner, Public Works Accounts.
" Revenue Department.

Exd. T. K. Narayana Aiyangar.

(1) The Hon. Mr. A. T. Anderson, J.C.S.
(2) H. & the Engineer.

Papers to be read in Proceedings:—

Again G.O., dated

189 , No.

Again G.O., dated

189 , No.

Current No. 7141

of 1898, dated 23rd August 1898, from The Collector of Tanjore

" " " 189 " " Sept 1898, " The Chief Engr. P.W.D.
" " " 189 " " " "

vide separate note below

To

The Secy to Govt. Revenue Dept
for favour of c.

ORDER.

NB: 2626 W 2/11/10/98

The estimate amounting to Rs 45,400, for the construction of a new taluk office with out-houses at Regapatam, is sanctioned for execution when funds are available.

2 Attention is drawn to the Chief Engineer's note read above.

3 This sanction has been registered as Provincial No 72W of 1898-99, and classified as Civil buildings, Original Works.

APK 26-9-98
Cm 26-9-98
W 26-9-98
8/10/98

P.K.S.
Note.

The estimate has been reviewed in the accompanying technical note, and the note by the Chief Engineer read above.

2. The Collector's estimate has been reviewed and approved by the Secy to Govt. Revenue Dept.
APK 26-9-98
Cm 26-9-98
W 26-9-98
8/10/98

T.K.B.
10/10/98

The S.E. I with Secy to Govt. Revenue Dept.
P.W. Dept.
[P.W. 4.
500-17-6-98.]

R.D. 28-9-98 H. Secy (1) 5-10-98 R.D. 28-9-98 H. Secy (1) 5-10-98

note by E.W.

revised for
the estimate is sanctioned with
the following remarks:-

1. The breadth of biphall for
a ramp course should be limited
to the breadth of the walls, viz $1\frac{1}{2}$
2. The slope of the roof should
be got by fixing wooden battens
to the tops of girders - The battens
should be secured to the ^{the} change
of girders with iron clips, &
the joints spiked to the battens.
3. Steel Girders - See Clerk's Room
no 1. The section should be $12" \times 6"$
weighing 54 lbs per foot run,
instead of $15" \times 5"$ weighing 42 lbs
per foot run allowed in Estimate
See Accountants' Room ^{the section should be} $10" \times 5"$
35 lbs per foot run, instead of $12" \times 5"$
32 lbs per foot run, and in
the Record Room ^{the section should be} $15" \times 5"$ 42 lbs
per foot run, instead of $12" \times 5"$
40 lbs per foot run.

4. The rate per girders should be
reduced from $\text{Rs } 11$ to $\text{Rs } 8$ per
cwt which is considered suffi-
cient.

5. No woodwork should be
allowed in Record Room,
the posts should be of solid
steel, the Racks of wire, the
doors & windows in ^{the} Record Room
with wooden shutters to the
either if necessary, opening
inwards

4. It is not clear why so high
a rate as $\text{Rs } 11$ per cwt is
allowed for girders at Mysapa-
tan - a seaport. Such girders
can be obtained in Madras,
delivered at rate of $\text{Rs } 8$ per cwt,
for the $\text{Rs } 7$ per cwt, if obtained
from Messrs Messing & Co. The
Sd explained this cause of so
high a rate being allowed in
the estimate

20-9-98
A.R.

23rd Nov 1900
 No 2370
 9-10-1900
 J. H. Singh
 S. H. R. Singh
 Submitted to Government
 Public Works Department
 10-10-1900

Sh

Submitted to
 Government

CC
 10-10-26

AKR

Rev Dept

To the Under Secretary

The construction
 of a new taluk office on
 the standard design was
 sanctioned in G.O. 27838
 2-6-97, and an estimate
 therefor amounting to Rs 45,400
 is proposed to be sanctioned
 in the P. W. draft order
 below which has been
 received for counterinitials.

There appears to be no
 objection to the draft order
 being counterinitialled in
 the R.D.

Sery

Rs
 45400

8/10/1008

Rs
 3-10-98

Public Works Department.

Current No. 7141Letter No. 3741Dated 23rd August 1898From the Acting Collector of Tanjore

TECHNICAL NOTE.

Name of Work Constructing a new
Tahsil Office at NagapattanamAmount of Estimate, Rs. 45,400.

PARTICULARS OF ESTIMATE.

Main Building	Rs 36,762
Record Racks	1,209
Dismanling & re-building latrine	1,400
Subsidiary Buildings	733
" Cook House	684
Dismanling Police Station	1,000
Conveyance of doors &c to site	500
Contingencies at 2 1/2 %	1,023
Petty Supervision at 5 %	2,089
Land Compensation	"

Total Rupees ... 45,400.

PARTICULARS OF CONSTRUCTION.

Surface soil Soft Earth 2'6" deep
 Sub-soil Hard Earth 2' deep
Small & stiff sand 1'6" deep.
 Foundations Concrete Brick Jelly in Chumam
4' wide x 2' deep. Brick work. Stock Bricks
in Chumam, in 2 footings 2'9" x 1'6". Brick
work 2' broad and 1'6" deep - 5 ft depth
in all.
 Basement Brick work (Stock bricks in Chumam)
2 ft wide and 2 ft deep.
 Walls Brickwork, stock bricks in Chumam
to heights indicated in plan & elev.
Flat and Circular Arch work
of Stock brick in Chumam

Mr Beebe
 Estimate can be sanctioned.
 Please draft brief note for
 alterations specified by me
 within, viz different sections
 for pickers for Clerk's room
 & Accountants' room, lower-
 ing of rate for steel pickers
 to Rs 2 per cwt, asphalt
 course, & manner in which
 slope of terracing should be
 obtained.

ACK

22.8.98.

12/24
23.9.98.

x I don't like much jelly for
 foundations - but I believe there
 is no alternative at

Nagapattanam L.H.S.
 20/9/98

Plastering or Pointing Exterior and Interior
English Portland Cement $\frac{1}{2}$ " thick
in proportion of 1 cement to 2 Sand.

Flooring Verandahs, Passages, Wards &c of
Cuddalore Slabs on 4" concrete pointed with
Asphalt. Rooms 6" square foot tiles on 6"
concrete set in Portland Cement.

Roofing Terraced.

Doors and Windows. Doors. Teakwood panel
battens &c. Windows. Teakwood - Ven-
etian, glazed top, batten with iron bands.
Roof timbers Teakwood painted with
3 coats Silicate white paint.

Scantlings As per Type Design.

Rates Data supplied in principal
items, others as per Schedule.

The plinth area of the main building is
10,854 square feet, and the cost per square
foot will be Rs. 3-6-2.

The plans and estimates have been countersigned
by the Ag Collector.

REMARKS.

This Estimate was called for in G.O.
No 1649 W dated 16th June 1897, also
item 1039 part II Class B works
of the Provincial Civil Works Budget
final issue for the year 1898-99
circulated with G.O. No 1161 W dated
11th May 1898. The building is to be
in accordance with the provided
Type design "Terraced Roofing" cir-
culated with G.O. No 2393 W dated
19th Sept 1893 & the Latimer and
Cook room of the Type that accompa-
nied G.O. No 1014 W dated April
1874. The record books are to be
made in the same pattern as those
with G.O. No 802 W of 19th March
1891.

Rs 31 per square for foot tiles
on 6" concrete set in cement
Rs 45 per square for Cuddalore
slab flooring at Hyderabad
The tiled flooring for rooms
may therefore be priced.

Yes

No woodwork to be allowed
in Record Room - vide
under latif issued at
1891.

The proposed building will be
built on the north side of the
subordinate Judge's Court, its
front facing South - vide site plan.
The following deviations in
construction have been made
from the Type Design -

1. Cut stone work. Cut stone wall
plates 9" x 4" are provided over
the walls of all rooms and
Verandahs to carry joints instead
of wooden plates.

2. Rolled steel Girders. are
provided instead of wooden beams.
The calculations are shown
on a separate sheet attached.

The slope of the roof, $\frac{1}{2}$ " to 1 foot,
should be got by fixing battens
to top of girders to which the
joists should be fixed. (pinned)

3. Woodwork. Herring-boning between
ends of joists in the Court and
other rooms have been provided.

4. Perforated Zinc sheeting to
be nailed on the frames between
joists.

5. Wrought iron clamps to be for
fixing joists to piers. These
may be utilized for fixing
wooden battens to piers for
the slope. The usual way is to
make the sloped battens secure
to top flange of girder with
iron clips, and to spike the
joists to the battens.

6. Flashing. The Court Room

are to be floored with 6" square
pressed tiles, manufactured in
Govt. brick field, Madras, on
6" concrete set in and point-
ed with Portland Cement,
and the verandahs, passages,
Court Yard &c with Cudda-
hah Slabs on 4" concrete, point-
ed with Asphalt.

Asphalt damp course is
provided under all walls
2 ft wide and $\frac{1}{2}$ inch thick;
it would be better to limit
the breadth of the asphalt to
the thickness of the wall. $\frac{1}{2}$ ft.
it would be easier to lay,
& there would be no chance of
the edges, 3" on each side, mel-
ting during hot weather.

8. Instead of Chumam plastering
interior, and pointing exterior
as per type design & Estimate
at a cost of Rs 970, it is
proposed to plaster both
interior and exterior of walls
with English Portland Cement
 $\frac{1}{2}$ " thick at a cost of Rs
2,716. Negapatam being
a sea port town this ex-
penditure is justifiable, but
the desirability of having
Cement plaster 3 ft above
basement level, & the inside
adequate pattern

The breadth of asphalt should
be the same as thickness
of wall, viz $1\frac{1}{2}$

This necessary to near the
sea, & is economical in the
end

This will not do, as
the plaster above the 3'
level would want re-
pairs. The
fact that the cement
plaster makes a much
darker wall is not, by
comparison, of importance.

Difficult to estimate
in detail. May be
passed.

This doubtless has
been calculated.

The P.A. Dept of Lighthouse
Dept & others report
that it is cheaper to
let woodwork made
up at Madras and
railed to the labour
in Madras being very
cheap.

and Chumam plastering above
that level might be considered
the interior will be better
lighted. This arrangement
Cement walls may be white-
washed, but this will not
stand & presents a very
untidy appearance after a
time.

Sum of sums have been allowed
for the following:-

1. Dismantling and re-building
Cattle Pound at the next site - Rs 1,400
 2. Dismantling the Police Station
Lock-up & Old Jail & its office Rs 1,000
 3. Packing chaps, Railway fare,
loading & unloading doors, Win-
dows, iron works & roofing
Timbers &c from P.W. Workshops
Madras to site of work - Rs 500
- Wals Rs 2,900

Unless it is intended to price the
P.W. Workshops Madras work,
there is no reason why all
the woodwork should not be
made up at Negapatam
where there are large timber
yards and where, it is believed,
the S.S. Railway workshops
are supplied with all
their wood.

Public Latrine. Asphalt flooring
and damp course has been
added.

Cook Room. Asphalt damp course to walls has been added.

Rails. Data has been provided for some of the principal items but the difference between Estimate Rates & Schedule rates for the under mentioned items require explanation.

- Block Bricks in Chimney. Foundation & basement. Est rate W2 21-15-0
- Schedule rate W2 16-10-0
- 2. Flat Aschwork. Est rate W2 24-15-0. Schedule rate W2 21-20-0.
- 3. Circular Aschwork. Est rate W2 25-7-0. Schedule rate R2 21-10-0.
- 4. Cornice work. Est rate 4 W2 Schedule rate R2 3-
- 5. Rolled Steel Girders. Est rate 11 R2 a lot. It is only 8 W2 to Madras & Nagapattinam is a sea 11-7-11.

22.9.98.

Data rates can be passed

Schedule rates unless

These are all fair rates, & can be passed. The schedule rates, judging from Lampore anchoring & other brickworkings done south, are clearly too low.

The rate of 11 Rs per cwt, or 11 x 20 = 220 Rs a ton is enormous. Messrs V Co will supply pickers for Rs 140 a ton, & the rate of Rs 8 per cwt is enough. For the Victoria Hotel Messrs is supplying to C.A. steel pickers for Rs 6.12-0 per cwt (Rs 125 per ton), resulting in a saving of Rs 1600 on the estimated rate of Rs 180 per ton, if obtained from the Sec of H.A.

A.R.
23.9.98

Calculation sheet for Girders

Court Rooms

Terace. $18 \times 8.33 \times 90 = 13,495$
 Live Load. $18 \times 8.33 \times 80 = 11,995$
 Joints $13 \times 8.33 \times \frac{1}{4} + \frac{5}{12} \times 45 = 508$
 11.6 Tons

$W = L + W$
 $= 18 + 11.6 = 29.6$
 In Domain, Long 40's Hand-work page 24 plate 64 - a Girder 13" x 5" in section 40 lbs per foot run is required. The same is provided in Estimate.

Clerk's Room. 101

Terace. $18 \times 10 \frac{3}{4} \times 90 = 16,807$
 Live Load. $18 \times 10 \frac{3}{4} \times 80 = 14,940$
 Joints. $13 \times 10 \frac{3}{4} \times \frac{1}{4} + \frac{1}{2} \times 45 = 759$
 15 Tons

$W = L + W$
 $= 18 + 15 = 33$

On page 24, plate 65, a section of 12" x 6 54 lbs per foot run is sufficient. Section provided in Estimate 15" x 5" 42 lbs to the foot.

Clerk's Room. 102

Terace $18 \times 8 \times 90 = 12,960$
 Live Load $18 \times 8 \times 80 = 11,520$
 Joints $13 \times 8 \times \frac{1}{4} + \frac{1}{2} \times 45 = 585$
 11 Tons

$W = L + W$
 $= 18 + 11 = 29$

On page 24 - plate 64 - a section 13" x 5" 40 lbs to the foot is required. The same is provided in Estimate.

Accountants Room

Terace $18 \times 6.33 \times 90 = 8,634.6$
 Live Load $18 \times 5.33 \times 80 = 7,675.2$
 Joints. $13 \times 5.33 \times 14 \times \frac{1}{3} + 45 = 260.0$
 7.4 Tons

$W = L + W$
 $= 18 + 7.4 = 25.4$

On page 25, plate 69, a section 10" x 5" 35 lbs per foot is sufficient. 12" x 5" - 32 lbs per foot run allowed in Estimate.

Substitute this section

Public Works (189) Department.

CURRENT No. 7141

Order

From The Acting Collector
of Tanjore

Dis. No. 3741 of 98
Rev

Dated 23rd August 1898

Received **DESPATCHED**
27 AUG. 1898

Enclosures 5 (1 plan)

Spare copies

SUBJECT.

Submitting plan and
estimate for constructing
a new Taluk office at
Kegapattam

For signature
A. R. S. 21-8-98
DW

o L S. 401

[P. W. 39
1,701-8-8-98]

Record Room.

area $16 \times 12 \times 90 =$ 17280
line load $16 \times 12 \times 80 =$ 15360
posts $12 \times 12 \times \frac{1}{4} \times \frac{5}{12} \times 45 =$ 945
the 33585 =
15 Tons

$w = L + W$
 $= 16 + 15 = 240$

on page 24, plate 61, a piece 15" x 5" +
42 lbs per foot run is sufficient
Section 13" x 5" 40 lbs per foot run
allowed in estimate.

Thin Guard & Nail Wards -

area $16 \times 7 \frac{1}{2} \times 90 =$ 10800
line load $16 \times 7 \frac{1}{2} \times 80 =$ 9600
posts $12 \times 7 \frac{1}{2} \times \frac{1}{4} \times \frac{5}{12} \times 45 =$ 422
the 20822 =
9.3 Tons

$w = L + W$
 $= 16 + 9.3 = 148.8$

on page 25, plate 66, a piece 12" x 5"
section weighing 32 lbs per foot run
is sufficient.
The same is allowed in estimate

N.B. It will be observed that
there are differences in section
between those here calculated
and those allowed in estimate
in Clerk's room 121, Accountants'
Room, & Record Room, though
not much.

10-7-98.

APR

27.9.98.

Handwritten signature
28.9.98

BACK PAPERS.

G.O.	No.	Department.	Date.
	31150	W.	19-7-97
	51210	"	30-11-97
	1649W	"	16-6-97
	2258-59W	"	5-8-96
	2840C	"	16-7-96
	214W	"	18-1-96
	2393W	"	19-9-93
	480W	"	1-3-95
	531W	"	16-2-88
	296W	"	24-1-88
	3093W	"	16-11-97

FURTHER PAPERS.

G.O.	No.	Department.	Date.

No. 223. m. Superintending Engineer's Office.
P. Circle, Madras.
Chepak. 24 June 1898
25

From Colonel A. W. Smart R. E.
Superintending Engineer
P. Circle

The Collector,
Tanjore

With reference to G. O. No. 1649.
W. dated 16th June 97. also item No. 39.
part II. Class B works of the Provincial
Civil Works Budget final issue for the
year 1898-99. Circulated with G. O. No.
1161. W. dated 11th May 1898. I have the
honour to forward for your approval
and transmission to Government for
Sanction through the Secretary to the Board
of Revenue (Land Revenue) the enclosed
Site plan and estimate amounting to
Rs 44,900 for Constructing a new Taluk
Office with out-houses at Negapatnam.
The estimate has been prepared in

in accordance with the revised type
design (terraced roofing) Circulated
with G. O. No 2393. W. dated 19th
September 1893.

I have to.
(A. A. W. Smart
Col. R. E.
Sup^g Engineer. E. Circle.

(True Copy)
No. 3741 of 98 Submitted to Government.
Inc. Public Works Department,
with reference to its order No 1649. W.
dated 16th June 97.

Tanjore Collectin }
Office } Inlupramanallu
23rd August 98 } Inlupramanallu
20875

Sm

W