

Public Works
Marine (1899) Department.

G.O., No. 923 W

✓ DATED 28 March '99

[Despatch Abstract.]

Taken Office at Madakasira, Ananta
per district.

Revised Estimate of Rs 42,633
for Constructing a first class —
Sanctioned, with remarks.

BACK PAPERS.

FURTHER PAPERS.

BUILDINGS AND ROADS.
CIVIL WORKS.

Government {1899} of Madras.
PUBLIC WORKS.

Recd.

Regd.

} 1899.

Enclosures

Spare copies

G.O., No. 923 W., 28th March 1899.

MARCH.

Taluk Office at Madakasira, Anantapur District

Revised estimate of Rs. 42,633 for constructing a first-class —, sanctioned, with remarks.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From Lieut.-Col. W. L. C. BADDELEY, R.E., Superintending Engineer, III Circle, to the Chief Engineer, Public Works Department, dated Bellary, 17th January 1899, No. 270 W.

I have the honour to submit herewith, for favour of sanction of Government, a revised estimate, amounting to Rs. 42,633, for constructing the New Taluk Cutcherry at Madakasira in Anantapur district.

2. The original estimates for Rs. 31,883 and Rs. 1,910 for this work were based on the standard design approved of in G.O., No. 3023 W., dated 11th November 1891, and sanctioned in G.O., No. 1197 W., dated 3rd May 1893, and G.O., No. 2175 W., dated 24th August 1893, respectively.

3. The excess over the original estimate is Rs. 8,840, and is fully explained in the comparative statement item by item.

4. The work is almost completed according to the revised design approved of in G.O., No. 2393 W. of 19th September 1893.

Note by the Chief Engineer, Public Works Department.

Original estimates for Rs. 31,883 and Rs. 1,910 for the Taluk Cutcherry, Madakasira, Anantapur district, based on the standard design approved in G.O., No. 3023 W., dated 11th November 1891, were sanctioned in G.O., No. 1197 W., dated 3rd May 1893, and G.O., No. 2175 W., dated 24th August 1893, respectively. The revised estimate now submitted amounts to Rs. 42,633, or 26.16 per cent. in excess of the original estimate, and the causes of excess, as shown in the comparative statement accompanying the revised estimate, occur under the following main heads:—

	Rs.
(a) Increase in rates	2,470
(b) Increase in quantity	2,582
(c) Change of materials	2,597
(d) Deviation during construction	3,135
(e) Unforeseen items	2,772
(f) Increase in contingencies and supervision	707
Total	14,213
Deduct savings	5,373
Net excess	8,840

2. The increase due to (a) is shown below:—

Sub-heads.	Rate in original estimate.	Rate in revised estimate.	Remarks.
(1) Foundation C. R. stone in mortar, second sort	Rs. A. P. 13 10 0	Rs. A. P. 14 0 0	Increase due to tender rate.
(2) Cuddapah slabs for cornice in cement	30 0 0	35 0 0	Do.
(3) Terracing, complete	29 8 0	30 8 0	Do.
(4) Teakwood, wrought and put up	4 8 0	5 0 0	Do.
(5) Do. panel doors	1 9 0	each.	Agreement made with contractor.
(6) Do. venetian windows	per sq. ft. 2 1 0	do.	Do.
(7) Painting	per sq. ft. 3 0 0	4 0 0	Three coats given instead of two coats.
(8) Teakwood punkahs	per R. ft. 1 8 0	40 0 0	Lump sum as actually executed.

The excesses on the first four items were due to the tendered rate being higher than the estimated rate; on items 5, 6 and 7 to the contractors being unable to supply doors and windows at the estimated rate per square foot, and punkahs at the estimated rate per running, and because he agreed only to a lump sum for each article; and on item 7 to an additional cost of painting. The increased rates were necessary, as shown by the data submitted, and can be passed.

Item (b).—The increase in quantity is mainly due to increased depth of foundation found necessary during construction, and to the sloping nature of the ground. The necessity of this increase might have been foreseen to some extent had a sufficient number of trial pits been sunk prior to the preparation of the estimate.

Item (c).—The change in material is mainly due to the substitution of stone for brickwork in parapet, and to Mangalore tiles for flat and pan tiles. The latter change was unavoidable, as no good local tiles could be made, and the former was advisable. Until the most suitable materials have been ascertained by the Rates Committee, such changes must occur from time to time, as better information regarding local resources is obtained. Other less important changes were pointing for plastering, and galvanized iron wire fencing for barbed wire fencing.

Item (d).—The deviations during construction are due to gothic and segmental archwork in main building being reduced from 1½' brick to 1 foot ashlar arching; to addition of cutstone caps to pillars, and filling basement with sand; and to substitution of iron-grated doors, with frames and iron fastenings, for batten doors and windows. Sanction for these deviations should have been applied for at the time.

Item (e).—is due to unforeseen items found necessary during construction to suit change of materials, &c., such as "string course over arches," and "under Cuddapah slab coping," "plinth course," "chisel draft" and "roughly dressed ashlar," "glass tiles," "tar pointing floor," "shed for materials," "clearing compound," "cutstone for hooks, pillar caps and coping." These unforeseen items generally followed on the changes above noted, but in some cases are due to omissions in the original estimate.

Item (f).—The increase under this head is a proportional one on the figures of the revised estimate and calls for no special remark.

3. It is observed that the number of estimates for buildings in the Bellary division needing to be revised is very considerable as compared to those submitted from the generality of districts in the Presidency, and this is doubtless due to the paucity of information on record regarding the resources of the district, to the inexperience of the local builders, and to the absence of skilled labour. The Superintending Engineer should take steps to ensure that adequate rates are entered in the district schedule, and should see that excesses from avoidable causes, such as has been noticed above, are not in future allowed to occur. It would be well in future to enter an item, in estimates for buildings, under unforeseen work.

8th March 1899.

(Signed) A. W. SMART, Colonel, R.E.,
Ag. Chief Engineer.

ORDER—No. 923 W., dated 28th March 1899.

The revised estimate, amounting to Rs. 42,633, for constructing a first-class taluk office at Madakasira, in the Anantapur district, is sanctioned in supersession of the estimates, aggregating Rs. 33,793, sanctioned in G.Os., Nos. 1197 W., dated 3rd May and 2175 W., dated 24th August 1893.

2. Attention is drawn to the Chief Engineer's note read above. The Government considers that such material changes as occur in this estimate, and the consequent increase in cost should, in future, be avoided as far as possible.

3. The expenditure on the work to end of 1897-98 was Rs. 33,095, and the grant for the current year is Rs. 3,370. The Superintending Engineer will apply for the unspent balance of the revised estimate in his statement of demands for incomplete works of the current official year.

4. The sanction accorded in paragraph 1 has been registered as Provincial No. 123 W. of 1898-99, and classified as Civil Buildings—Original Works.

(True Extract.)

Under Secretary to Government.

To the Superintending Engineer, III Circle,
with enclosures.
" Examiner, Public Works Accounts.
" Revenue Department.

Exd. Shaik Karim.

P.W. DEPARTMENT.

Read the following:—

T. No
B. No
CS. 4

From the S. E. III Circle, No. 270 W., dated 17 January.
Note by the Chief Engineer, P.W.D., d. 8 March 1899.

Circulated to

His Excellency the Governor. ORDER. No. 923 W. of 28.3.99

5P

The Secretary to Govt.,
Revenue Department,
for favour of Counterinitial

I have this. I consider that such
changes as are here introduced, and the
consequent increase of cost, — one thing

that should be avoided.

A.C. makes additions
I have put to pass A.H. 19.3.99
21.3.99
2. For orders whether the draft
order may issue as it is or whether
an addition should be made
thereto in the sense of the above
remarks.

changes as occur in the estimate & the consequent increase in cost, did be avoided as far as possible.

The revised estimate,
amounting to Rs. 42,633, for
constructing a first class taluk
office at Madakasira, in the Anantapur
District, is sanctioned, in
supersession of the estimates,
aggregating Rs. 33,793, sanctioned in G.Os. Nos. 1197 W., dated 3rd May and 2175 W., dated 24th August 1893.

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estimate in his statement of
demands for incomplete
works

works of the current official year.

1. The sanction accorded in para 1 has been registered as Provincial No 123 W of 1898-99, and classified as Civil Buildings, Original Works.

APW

2.2.99

Ans
8/3/99

May

W

Note. The estimate is dealt with in the Chief Engineer's note read above.

APW

2.2.99.

May

Ans
8/3/99

2
17/4/99
Mr S. E. III Circle, with
enclos.
in Examiners, P.W. Accounts
in Revenue Dept.

28

P.W.D

Note by the Chief Engineer.

Original estimates for Rs 31,883 and Rs 1910 for the Salug Butchery, Madakkaira, Anantapur district, based on the standard design approved in G.O. No 3023 W, d/11th November, 1891, were sanctioned in G.O. No 1197 W, d/3rd May, 1893, and G.O. No 2175 W, d/24th August 1894, respectively.

The revised estimate now submitted amounts to Rs 42,633, or 26.16 per cent in excess of the Original Estimate and the Causes of Excess, as shown in the Comparative statement accompanying the revised estimate, occur under the following main heads:

(a) Increase in rates	Rs 2,470
(b) Increase in quantity	Rs 2,582
(c) ^{Change} of materials	Rs 2597
(d) Deviations during Construction	Rs 3135
(e) Unforeseen items	Rs 2772
(f) Increase in Contingencies & Supervision	Rs 707
Total	Rs 14,213

Deduct ~~due to~~ Savings Rs 5373

Net excess Rs 8840

2. The increase due to (a) is shown below. —

sub-heads

Sub heads	Rate in original estimate	Rate in revised estimate	Remarks
Foundations C.R. Stone in Mortar 2 nd Sort	13-10-0	14-0-0	Increase due to tender rate
Guddapah slabs for Cornice in cement	30-0-0	35-0-0	do
Terracing Complete	29-8-0	30-8-0	do
Teakwood brought and put up	4-8-0	5-0-0	do
Do Panel doors	1-9-0 per sq ft	Each	Agreement made with the Contractor
Do Mullion Windows (Teakwood)	2-1-0 per sq ft	Each	do
Painting	3-0-0	4-0-0	3 Coats given instead of 2 Coats
Teakwood punkahs	1-8-0 per sq ft	40 Rs	Lump sum as actually executed

The excesses on the first 4 items were due to the tendered rate being higher than the estimated rate; on items 5, 6 and 7 to the Contractor's being unable to supply doors and windows at the estimated rate per square foot; & punkahs at the estimated rate per running, and because agreeing only to a lump sum for each article; and on item 7 to an additional coat of painting. The increased rates were necessary, as shown by the data submitted, and can be passed.

Item (6) The increase in quantity is mainly due to increased depths of foundation found necessary during construction, and the sloping nature of the ground. The necessity of this increase might

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might have been foreseen to some extent had a sufficient number of trial pits been sunk prior to the preparation of the estimate.

Item (8) The change in material is mainly due to the substitution of stone for brickwork in parapet, and to Mangalore tiles for flat and pan tiles. The latter change was unavoidable, as no good local tiles could be made and the former was advisable.

Until the most suitable material have been ascertained by the Rate Committee, such changes must occur from time to time, as better information regarding local resources is obtained. Other less important changes were pointing for plastering and galvanized iron wire fencing for barbed wire fencing.

Item (d). The deviations during construction are due to Gothic and Segmental arch work in main building being reduced from $1\frac{1}{2}'$ brick to 1 foot ashlar arching, ^{to addition of} cut-stone caps to pillars, ^{to substitution of} filling base-ment with sand, and iron grates doors, with frames and iron fastenings.

For steelings for batter doors and
y^a ^{for} windows. Sanction for these
L^{ts} ^{for} deviations should have been
a^l applied for at the time.

Item (8) is due to unforeseen items found necessary during Construction to suit change of materials etc. such as "string course over arches", and "under Buddafah Slab coping", "plinth course", "chisel draft" and "roughly dressed ashlar"; "glass tiles", "tar pointing floor", "shed for materials" "clearing compound" "cut stone for hooks, pillar caps and coping". These unforeseen items generally followed on the changes above noted, but in some cases are due to omissions in the original estimate.

Item H The increase under this head is a proportional one, on the figures of the revised estimate and calls for no special remarks.

3. It is observed that the number of estimates for buildings in the Bellamy Division needing to be re-vised is very Considerable as compared to those Submitted from the generality of districts

in the Presidency, And this is doubtless due to the paucity of information or record regarding the resources of the district, And to the inexperience of the local builders, And to the absence of skilled labour. The Superintendent Engineer should take steps to ensure that adequate rates are entered in the district Schedule, And should see that excesses from avoidable causes, such as has been noticed above, are not in future allowed to occur. It would be well in future to enter an item, in estimates for Buildings, under unforeseen work.

AK
1-2-99

873199
 E. W.

P.T.O.

Current No. 539

Letter No. 270 W

Dated 17th January 1899

From the Sups Engineer II Circle

NOTE BY TECHNICAL SECTION.

Name of work. Revised Estimate for

Constructing a Talag Cut Channel
at Madakara. Talag
Talag District. Rs 42,633.

Not by S.W.

Original Estimate for Rs 31,883 and
the Talag Cut Channel, Madakara, Talag
District, based on
the standard design approved

in G.O. No 3023 W, dated 11th
Nov 1891, was sanctioned in
G.O. No 1197 W, dated 3rd May, 1897,
+ G.O. No 2175 W, dated 24th April,
1893, respectively (Flag #1).

The revised Estimate now submitted,
amounts to Rs 42,633 or 26% per cent in excess of the Original
Rs 31,883, in excess of the Original

Estimate, and the causes of
excess, as shown in the Compa-
rative Statement accompanying
the revised Estimate, runs under
the following main heads:-

- (a) Increase in rates. Rs 2470
- (b) Increase in quantity. Rs 2582
- (c) Change of materials. Rs 2597
- (d) Deviation during construction. Rs 3135
- (e) Unforeseen items. Rs 2722
- (f) Increase in Contingencies. Rs 707

Total Rs 14,213

Revised Estimate Rs 5373
Net Excess. Rs 8,840

H.P.
Make fair copy of S.W. Note,
+ a draft C.O. sanctioning
revised estimate
APK
28.2.99.

M. Berlie.
In remark within. Enter
fuller explanation. Don't
write in the half margin, as
this note can be worked up
into a draft S.W. note
APK
28.2.99.

attended to - see within
APK
28.2.99

C.S.
Please get the note
fair copied.
DW
He
Done
CMB
3/2/99

Excess. viz Rs 8840 is
due to causes
which do not interfere with
the design of the building
or of its accommodation. No
remark is therefore called
for in the Rev. Dept. and there
appears to be no objection
to the draft order being
accepted.

See
13/3/99 Yes
S.P.
14/5/99

APK
16.3.98
RS
11-3-99
DDW no

The increase due to (a) with ~~latter~~ is shown below:-

No.	Sub. Heads.	Rate in Orig. Est.	Rate in Revised Estimate	Remarks
17	C.R. Stone in Mortar 2 nd sort	13.10.0	14.0.0	Increase due to Tender rate
18	Adaph Slabs for cornice in front	30.0.0	35.0.0	do
	arranging complete	29.8.0	30.8.0	do
	ashwood wrought & put up	4.8.0	5.0.0	do
18	" Panel doors	1.9.0 each		Agreement made with Contractor
19	" Venetian Windows	2.1.0 each		do
	Painting	3.0.0	4.0.0	3 coats given instead of 2 coats
	Leakwood punkahs	1.8.0	40/-	Leakwood given as actually executed

From the above table it will be apparent that the increase in rate in almost each case, though slight, is due in most cases to excess in tender rates & in a few, to extra work being required as in Painting, & it being found more convenient to allow a rate for each article as in the case of doors & windows & a lump sum as for punkahs. The District Schedule should, it is thought, be revised in accordance with the latest data available.

Item (b). The increase in quantity is due to increased depth of foundation found necessary during construction, & the sloping nature of the ground. This increase might have been anticipated to some extent had a sufficient number of trial pits been sunk prior to construction. The preparation of the estimate.

Item (c). The change in material

Mr. Berlie
The items marked with asterisk (*) are unintelligible, & do not show what was original & revised rate

- (1) original rate Rs 4.8.0 per cub foot
Revised rate Rs 5.0.0 — do —
vide page 5 of comparison Statement.
- (2) orig. rate 1.9.0 per sq. foot
Revised rate Rs 55.8.10 each
vide page 5 of comparison Statement.
- (3). Original Est. Rs 1.8.0 per R² foot
Revised Est. lump sum Rs 40
vide page 9 of comparison Statement.

The increase in the first 4 items were due to the tendered rate being higher than the estimated rate; on the two last items to the Contractor being unable to supply materials at the estimated rate per sq. ft. and per punkah at the estimated rate per running, & opening up to a lump sum for each article, & in item 3 to an additional cost of painting. The increased rate was necessary, & can be justified.

and to Mangalore tiles for flat & pan tiles. The latter change was unavoidable, as no ~~local~~ local tiles could be made, & the former was advisable. Until the most suitable materials have been ascertained by the Rate Committee, such changes must occur from time to time, as better information regarding local resources is obtained. Other less important changes were permitted.

These Sanctions for these deviations should have been applied for at the time

Many of these these unforeseen items generally followed on the changes above noted, but in some cases are due to omissions in the original estimate. Thus, the increase under this head is a proportional one on the figures of the revised estimate, & calls for no remark.

mainly due to the substitution of brickwork in parapet, for plastering, & galvanized iron wire fencing for barbed wire fencing, and Mangalore tiles for flat & pan tiles. Item (d) The deviations during construction are due to Gothic & segmental archwork in building being reduced from 1 1/2 brick to 1 foot ashlar arches, cut stone caps to pillars, fillament with sand, & iron plated doors with frames and iron fastenings for bottom door & windows.

Item (e) is due to improvements found necessary during construction to suit change of materials & such as "string course over arches" and "cut adaph slab coping", plinth course, "chisel draft" & "rough dressed ashlar", "glass tiles", "pointing floor", "shed for materials", "clearing compound", "cut stone for hooks, pillars caps & coping".

Item (f) Increase calculated on revised figures. Data is submitted in support of revised rates. The work is reported to be almost completed according to the revised design approved of in G.O. 2393 W of 1942. 10.7.44.

3. It is observed that the
number of ~~estimates~~ estimates for buildings
in the Bellary District
the revised is very considerably
re compared to the ^{submitted} ~~present~~ ^{from the}
probability of districts in the
for Prichina, and it is the is
doubtless due to the paucity of in-
formation or record regarding the
resources of the district, & to the
inexperience of the local builders, & to the
absence of skilled labour. The S.S.
did take steps to ensure that adequate
rates are entered in the district schedule,
and should in that respect from avoidable
causes, such as has been noticed above, are
not in future allowed to occur.
It would be well in future to enter an item
At it in the estimate for Buildings

Ans
17/3/99

24. 2. 99.
under impression work.

Ans

^{68th} Public (1899) Department.

CURRENT No. 539

Order

From The Suptg Engr
14/1/99

No. 2706.

Dated 14-1-99.

Received } 19-1-99
Registered

Enclosures

Spare copies

SUBJECT.

Tahy Catchery at
Madakasira.

Forward a revised estimate
for Construction to new—

1/ Jan sent
At K. 1.99.
D.S.

H.C.

BACK PAPERS.

G.O.	No.	Department.	Date.
S.O.	2393W	P.W.	19-9-91
"	2175W	"	24-8-93
"	1197W	"	3-5-93
"	4190C	"	17-9-92
"	4236C	"	23-9-92
S.O.	3023W	"	11-11-91

FURTHER PAPERS.

G.O.	No.	Department.	Date.

No. 2701

Superintending Engineer's Office,

3RD CIRCLE.

Bellary 17 January 1899.

FROM

Lt. Col. W. L. C. Baddeley R.E.

SUPERINTENDING ENGINEER,

IIIrd CIRCLE,

BELLARY.

To

THE

Chief Engineer
P.W. Department
Madras

Sir,

5 Enclosures.

1. Detailed Estimate. 25 sheets.
1. Comparative Statement.
1. Data sheet.

1. Original abstract Estimate.
1. Supplemental do - 5-4.

for work done

I have the honour to submit herewith for favour of Sanction of Government a revised Estimate amounting to Rs. 42,633 for constructing the new Taluk Cutcherry at Madakasira in Anantapur District.

2. The original Estimates for Rs. 31,883 and Rs. 1,910 for this work were based on the Standard design approved in G. O. No. 3023 W. dated 11 November

1891

From

The Superintending Engineer,
IIIrd Circle,
Bellary.

To

The.....

Dated

Received

} 189 .

Enclosures.

No.

Subject.

60