(1) Number of pages 42
(2) Date of repair 15-10-87
(3) Initials of the Referencer [illegible]

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W. DEPARTMENT

G.O. No./B.P. No: 1552-W
Press./Mis.

Dated 3-7-1885 ~~198~~.

[illegible]

Not to be folded or roughly handled

Archives 1--10,006 1 -80.

3rd July 1885, No. 1552 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following papers :—

From M. C. FURNELL, Esq., M.D., F.R.C.S., Surgeon-General with the Government of Madras, to the Secretary to Government, Public Works Department, dated Fort St. George, 16th April 1885, No. 222.

I have the honor to submit, for the sanction of Government, the accompanying plan and estimate (for Rs. 1,334) for alterations to the quarters of the apothecary attached to the lunatic asylum, Waltair, and for reconstructing the guard-room of the female cottage in that institution.

From Lieutenant-Colonel P. MONTGOMERIE, R.E., Superintending Engineer, I Circle, to the Chief Engineer, Public Works Department, dated Waltair, 4th June 1885, No. C/77.

With reference to your memorandum, No. 66 E., dated 1st May 1885, I have the honor to submit copies of letters marginally noted, from the Executive Engineer, Vizagapatam division, furnishing the information called for.

No. 285, dated 20th May 1885.
„ 320, „ 30th „ „

2. The repairs and alterations for which sanction is now applied for have been rendered necessary by the same causes which necessitated the repair and alterations of the other buildings of the lunatic asylum at Waltair, and may be attributed principally to the use of sál-wood, which, even if thoroughly seasoned and protected, does not appear to withstand the atmospheric conditions on the sea coast, being very liable to dry-rot, and very speedily succumbs to the ravages of white-ants.

3. As regards the rubble masonry in mortar with which the walls are constructed being used by white-ants in their passage to the roof, I can only imagine this to be possible by the disintegration of some of the stones with which the walls are built, as explained by Mr. Harris; but I would not, on this account, forbid the use of carefully built rubble masonry with well selected stone.

Enclosures.

From T. D. HARRIS, Esq., Executive Engineer, Vizagapatam Division, to the Superintending Engineer, I Circle, dated Waltair, 20th May 1885, No. 285.

Referring to your endorsement, No. C/21, dated 12th May 1885, on the Chief Engineer's memorandum, No. 66 E., dated 1st idem, I have the honor to inform you that the lunatic asylum buildings at Waltair were commenced in the year 1868 and completed on the 31st March 1871.

2. It is not owing to errors in design or in construction that the alterations to the two buildings under reference have been rendered necessary ; but their terraced roofs were put upon sál-wood joists which have been greatly destroyed by white-ants in their setting in the walls ; and dry-rot has also set in in them, in consequence of which the terrace has fallen off in the angles. Further, terraced roofs are not at all suited to the Northern Circars, and this I have noticed from my experience in the Ganjam, Kuttack, and Vizagapatam districts ; and in sál-wood it is difficult to distinguish the well seasoned timber from the unseasoned ; it is absolutely unsuited to

terraced roofs. I have had to change all the terraced roofs of the jail buildings at Berhampore, in Ganjam, and the church there also, and also the jail buildings at Vizagapatam, as well as the lunatic asylum in the latter. I may inform you that the buildings under reference were very carefully executed in every detail; but experience has shown, as I have stated, that terraced roofs are not suited to such buildings for various reasons; and also that the superstructure walls of these buildings are built of roughstone in chunam, and this I consider a great mistake, as they eventually disintegrate and leave serious cracks, which endanger the safety of the buildings. I have altogether stopped the construction of roughstone in superstructure in any building in this district.

From the same officer, dated Waltair, 29th May 1885, No. 320.

Referring to your No. C/50, dated 23rd May 1885, I have the honor to inform you that the estimates for the lunatic asylum buildings at Waltair were prepared by Captain (now Colonel) J. Beatty, R.E.

2. The work was executed by—

(1) Sergeant (now Sub-Conductor) J. Cormac, now temporary Assistant Engineer.
(2) P. W. Subbiah Naidu, now Sub-Engineer, 3rd grade, under the orders of Captain (now Colonel) J. Beatty, R.E.

3. The Superintending Engineers in charge were—

(1) Late Captain J. G. Ryves, R.E., up to about May 1869.
(2) Colonel (now Major-General) J. F. Fischer, R.E.

ORDER—dated 3rd July 1885, No. 1552 W., Public Works.

The Right Honorable the Governor in Council cannot regard it as in any way satisfactory that buildings which were completed in 1871 should now require to be almost entirely reconstructed; and the explanation furnished by the Superintending Engineer shows that the outlay for which sanction is now applied has been rendered necessary by errors both in the original design and in construction.

2. The Government observe that the Superintending Engineer does not endorse the opinion expressed by the Executive Engineer in his wholesale condemnation of rubble masonry in mortar; and they are forced to the conclusion that the material employed in the construction of the condemned walls must have been selected without the exercise of proper care or judgment.

3. The Government are not prepared to accept without question the sweeping condemnation of sál timber which finds expression in these papers. They observe that the opinion on this point stated by the Superintending Engineer is at variance with what has hitherto been accepted as the result of experience of the timber in question. The matter is of great importance, especially to the northern districts of this presidency; and as it is one which should not be allowed to remain in doubt, the Chief Engineer will make further inquiry, and report the result.

4. With these remarks, the estimates, amounting to Rs. 1,334, for alterations to the apothecary's quarters, and for reconstructing the guard-room of the cottage for females in the lunatic asylum at Waltair, in the Vizagapatam district, are sanctioned.

5. This sanction has been registered as Provincial, No. 76 W. of 1885-86, and classified as Civil Buildings, Original Works.

(True Extract.)

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

To the Superintending Engineer, I Circle, with four enclosures.
„ Examiner, Public Works Accounts.
„ Public Department.
„ Chief Engineer, Public Works Department.

Exd. E. Fernandez.

Spare Copies

552/2

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1885} Madras.

PUBLIC WORKS.

Dated July, 3rd.

Recd. *Encl.*

G.O., 3rd July 1885, No. 1552 W.

JULY.

Lunatic Asylum at Waltair

Estimates for alterations to the apothecary's quarters, and for reconstructing the guard-room of the cottage for females in the —, sanctioned.

---

fore these estimates are
sed 1), the S.E. should
mit information on
llowing points: —
1. dates on which the
tion buildings were
constructed.
). Whether the repairs
now estimated
have been rendered
necessary by errors
in design, or in
construction.
3)- Who is responsible
for such errors.

M.
30-4-85

C No 5151

1552/15

W.

I think that, subject
approval, the

C.A.W. C no 5151 1552/14

When circulating
this paper, please
remove these drafts
— which can be
dealt with on return
of the paper from
circulation.

JM
25-6-85

P.45.57/6

C No 5151

1552/15

H.W.

I think that, subject to your approval, the estimate for effecting alterations and improvements to the Lunatic Asylum at Waltair may now be sanctioned. Its disposal is altogether beside the question still awaiting decision — the exact and definite value of 'sál' as a timber to be used in engineering.

B.H.
19/6/85

O. 3-7-85.

[illegible]

1552/16

Cno 5151

To W.

For orders with advertence to your remarks attached to No 66 E of 1.5.85.

Cu
12.6.85

To D.W.

It seems to me that the draft on Surgeon General's letter of 16.4.85 should be modified with advertence to letter from S.E. dated 4.6.85.

The E E states that the alterations have not been rendered necessary by "errors in design or in construction" — & he goes on to prove that that statement is altogether incorrect, showing that errors both in design & in construction were committed.

W. Harris statement with

22.6.85 3.7.85

respect to the use of Terraced roofs in the Northern Circars should be fully explained.

But the important point seems to me the sweeping condemnation of Sal timber, which is quite opposed to every opinion I have hitherto seen on the subject. Sal is procurable in large quantities in the Northern provinces of the Presidency, & I am not disposed to accept without question this sweeping condemnation of it.

The matter is one of great importance, & I think a reference should be made to the Forest Dept. — also to the Govts. of Bengal & of the Central Provinces. S. E. I Circle should also be called on to obtain the results of experience in the Ganjam Division, & in other parts of his Circle.

The papers may go back to the T. Branch for further consideration & disposal.

JJ 15.6.85

W

1552/17

Please see remarks by Forest Dept., against Sal, at page 12, Appendix 7, to Standard Specifications — These are very different to Mr Harris' statements.

Perhaps some allusion to this may be made in your note on the file to Govt.

Noted JJ

Cr
15.6.85

16.6.85

respect to the use of Terra
roofs in the Northern Circ
should be fully explain

But the important p
seems to me the succe

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the Central Provin
S.E. I Circle should
be called on to obtain
results of experience in
the Ganjam Division, a
other parts of this Circl

The papers may go b
to the T. Branch for fu
consideration & disposa

15.6

W.

1552
18

In regard of the question of the durability of Sal wood raised in these papers & your notes thereon, I have roughed out the accompanying three draft references to Chief Engrs, Punjab, & Central Provinces, Forest Dept., & S.L.E. — for your consideration. —

Having gone through such books of reference as I could obtain, I find that this wood is generally supposed to resist well the attacks of white-ants, but that it is difficult to season — or rather, takes a long time to season, but the information available on the subject is not very definite.

The timber work in the buildings at Lunatic Asylum may have been obtained from trees not full-grown or scientifically felled. It may not have been fully seasoned & may not have been well painted or oiled; & the leaky condition of the roofs & hot moist climate would, all combined, afford most favorable conditions to the setting in of either wet or dry-rot.

As regards white-ants I am inclined to think that where they swarm very few timbers indeed will be found impervious to their attacks. The joists were up for some ten or eleven years — there were white-ants in the walls — no protection — & rot had set in & affected the material — consequently it is not surprising that white-ants helped on the destruction.

As regards the rubble walls, it is to be inferred that the stone used was badly selected. It decayed & thereby afforded easy passage to the white-ants up to the roofs.

The Estimate for alterations &c, may I think be passed.

I am not sure in what way you

No. 5 V.E.

1552
10

ERINTENDING ENGINEER

wish to have the draft order on Surgeon General's letter of 16.4.85 modified, unless it be to add a clause to the effect that "the suitability of such works for the roofs of such buildings in the Vizagapatam District, brought to notice by the S.E. in his Report on the Estimate, will be further enquired into by the Chief Engineer".

In the correspondence I observe that terraced roofs have also been pronounced unsuitable for the district, their failure necessarily followed on the failure of the joists supporting them, & possibly bad mortar had something to do with it. In very wet climates it is no doubt very difficult to make terraced roofs perfectly water-tight — but there is nothing to show that if the roofs at Waltair had been soundly & carefully constructed they would have leaked as they did. If the rainfall there is exceptionally heavy, then & then only could they be declared unsuitable.

CS
22.6.85

C. 22.6.85 – 2.3.7.85

NO. 5 V.E.

1552
10

FROM,

THE SUPERINTENDING ENGINEER
FIRST CIRCLE.

TO,

THE Secretary to the Surgeon General
with the Government of Madras

Dowlaishweram, 7th April 1885.

[illegible]
Estimate
Plan
Specification
Report

OFFICE OF SURGEON GENERAL
14
WITH GOVT. OF MADRAS

SIR,

I have the honor to submit herewith a plan and estimate, amounting to Rs 1334 for alterations to Apothecary's Quarters and for reconstructing the guard room of the female cottage of Lunatic Asylum at Waltair, Vizagapatam District and to request that you will be good enough to obtain the Sanction of Government to the same if approved.

2. The Vizagapatam Division officer who submitted the above estimate says that it has been prepared at the request of the Superintendent of the Lunatic Asylum.

I have the honor to be
Sir
Your most obedt Servt

W. Matthews Asst. Engr.
for Superintending Engineer
First Circle

3k

No. 1931
1885
May

M.C. 5
14.5.85

Sanction
Cd.
21. 4. 85

C. 28.4.85

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Public Works Department, 1885-86.

Current No. (4) 3448 1852/1

Letter No. 222

Dated the 13th April 85

From the Surgeon-General with the Govt. of Madras.

NOTE OF REMARKS.

The accompanying plan and estimate are for effecting alterations in the quarters of the Apothecary of this institution, and for re-constructing the guard room of the female cottage of the Lunatic Asylum at Waltair, Vizagapatam district. – The estimate amounts to Rs. 1,334. –

Apothecary's quarters Rs. 1,074
Guard-room — Rs. 260.

2. It is intended to remove the present terraced roof of the Apothecary's quarters and to replace it by a tiled roof on trusses – "Sankey's mixture"

[illegible] ed as a

preventive against the
attacks of white ants. –
The scantlings of the roof
timbers, which are to be
all teak, are not in exact
accordance with the Stand
and Specifications' but,
subject to approval, may
be accepted.

3 The guard-room is to be
10 ft square, inside measure
-ment. The foundation
is to be of concrete and
rough stone in mortar.
The superstructure is to be
of brick in mortar. The
roof is to be a lean-to tiled

21st April /85

Public Works Department.

1552/12

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the

Read the following

From the Surgeon General with the Govt. of Madras. H. E. No: 222 d/16th April 1885.

The estimates amounting to Rs. 1,334, for alterations ~~required for~~ to the Apothecary's quarters, and for reconstructing ~~of~~ the guard room of the ~~female~~ cottage for females in ~~attached to~~ the Lunatic Asylum at Waltair, in the Vizagapatam District, ~~is~~ are sanctioned.

2. This sanction has been registered as Provincial No: W of 1885-86, and classified as Civil Buildings, Original Works.

CS.
27.4.85

To
The Supdg. Engr. I Circle with 4 enclos.
" Examiner P. W. Accounts
" Public Department
(The Chief Secretary for favor of counter-initials)

W/27/4

CM

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1552
3

OFFICE OF SURGEON-GENERAL
WITH THE GOVERNMENT OF MADRAS,
Fort St. George, 16th April 1885.

No. 222

From M. C. Furnell Esqr. M.D., F.R.C.S.
~~The~~ SURGEON-GENERAL WITH THE
GOVERNMENT OF MADRAS,
FORT ST. GEORGE,

To

THE ~~CHIEF~~ SECRETARY TO GOVERNMENT,
Public Works DEPARTMENT,

SIR,

I have the honor to submit for the sanction of Government, the accompanying Plan and Estimate for alterations to the quarters of the apothecary attached to the Lunatic Asylum Waltair, and for re-constructing the Guard Room of the Female cottage in that institution

for Rs 1334
(one thousand
three hundred and
thirty four)

I have the honor to be,
Sir
Your most obedt. Servant,

M. C. Furnell.
Surgeon General
with the Govt. of Madras.

G.O. No 977 W. of 31-3-83
" " 1162 W. " 18-4-83
" " 1576 W. " 29-6-83
" " 3621 W. " 15-12-83.

Public Works (1885) DEPARTMENT.

(4)

From

THE SURGEON-GENERAL WITH THE
GOVERNMENT OF MADRAS,
Fort St. George.

No.

Dated } April 1885.
Recd. }

No.

SUBJECT.

Submits plans and Estimate for certain alterations to quarters in the Lunatic Asylum Waltair.

No 3621W of 15-12-83 G/file
17-4-85

B.25-6-85

No $\frac{C}{77}$

Superintending Engineer's Office 1st Circl
Camp Waltair 4th June 1885

1552/5

From
The Superintending Engineer
First Circle

To
The Chief Engineer
P. W. Department
Madras

Sir,

With reference to your memo No 66 E dated 1st May 1885, I have the honor to submit Copies of letters marginally noted from the Executive Engineer Vizagapatam Division furnishing the information called for.

No 285 dated 20th May 1885
" 320 dated 30th May 1885

2 The repairs and alterations for which Sanction is now applied for have been rendered necessary by the same Causes which necessitated the repair and alterations of the other buildings of the Lunatic Asylum at Waltair and may be attributed principally to the use of Teak wood, which even if thoroughly seasoned and protected, does not appear to withstand the atmospheric Conditions on the Sea Coast, being very liable to dry rot. and very speedil

succumbs to the ravages of white ants.

3. As regards the rubble masonry in mortar with which the walls are Constructed being used by white ants in their passage to the roof, I, can only imagine this to be possible by the disintegration of some of the Stones with which the walls are built as explained by Mr Harris; But I would not on this account forbid the use of Carefully built rubble masonry with well selected stone.

I have the honor to be

Sir

Your most obedt. Servt.

E Montgomerie. Lieut Col R.E.

Superintending Engineer

First Circle

(9) [illegible]

From

The Superintending Engineer
First Circle

To

The Chief Engineer
P.W. Dep^t.
Madras

Dated 4^th } June 1885.
Desp^d 4^th }

No $\frac{C}{77}$.

No. 1552 W. a/3-7-85

Lunatic Asylum
Buildings Waltair

Forwards Copies of Vizag: Div^n officers letters with Certain information regarding the ——

G.O. No 977 W. 31.3.83.
" " 1162 W. 18.4.83.
" " 1824 W. 29.6.83.
" " 3621 W. 18.12.83 Copy
No 668. 1.5.85.

D.W. 51/6 R. 22.6.85 R. 3.7.85
O. 11.6.84. [illegible]

No. 285. Vizagapatam Division Office
Waltair 20^th May 1885

From
The Executive Engineer
Vizagapatam Division

1552

To
The Superintending Engineer
First Circle

Sir,

Referring to your endorsement No $\frac{C}{21}$ dated 12^th May 1885, on the Chief Engineer's Memo No. 66/C dated 1^st idem, I have the honor to inform you, that the Lunatic Asylum buildings at Waltair were Commenced in the year 1868 and Completed on the 31^st March 1871.

2. It is not owing to errors in design, or in Construction that the alterations to the two buildings under reference have been rendered necessary, but their terraced roofs were put upon Salwood joists which have been greatly destroyed by whiteants in their setting in the walls, and dry rot has also set in in them, in Consequence of which the terrace has fallen off in the angles. Further, Terraced Roofs are not at

all suited to the northern Circars and this I have noticed from my experience in the Ganjam, Kuttack, and Vizagapatam Districts; and in Salwood it is difficult to distinguish the well seasoned timber from the unseasoned; it is absolutely unsuited to terrace roofs. I have had to change all the terraced roofs of the jail buildings at Berhampore in Ganjam and the Church there also and also the jail buildings at Vizagapatam as well as the Lunatic Asylum in the latter. I may inform you, that the buildings under reference were very carefully executed in every detail, but experience has shewn, as I have stated that terraced roofs are not suited to such buildings for various reasons, and also that the superstructure walls of these buildings are built of rough stone in Chunam and this I consider a great mistake, as they eventually disintegrate and leave serious Cracks, which endanger the safety of the buildings. I have altogether stopped the Construction of rough stone in superstructure in any building in this District.

(error in design

(error in construction

3/p/-

I have &c

(Sd) T. D. Harris
Executive Engineer
Vizagapatam Dn.

1552/8

(True Copy)

Lieutt. Col. R.E.
Superintending Engineer 1st Circle

R [illegible] 575/15

No. 320.

Vizagapatam Division Office
Waltair 30th May 1885.

3/2/5

From
The Executive Engineer
Vizagapatam Division

1552/9

To
The Superintending Engineer
First Circle
Dowlaishweram

Sir,

Referring to your No. C/50 dated 23rd May 1885, I have the honor to inform you that the Estimates for the Lunatic Asylum Buildings at Waltair were prepared by Captain (now Colonel) J Beatty R.E.

2. The work was executed by
1 Sergeant (now Sub Conductor) J. Cormac now Temporary Assistant Engineer.
2 P. W. Subbiah naidu now Sub Engineer 3rd Grade, under the orders of Captain (now Colonel) J. Beatty R.E.

3. The Superintending Engineers incharge were
1. Late Captain J. G. Ryves R.E. up

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16th 1885)
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rendered
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con-
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does
not endorse the opinion expressed
by the Executive Engineer in his

to about May 1869

2. Colonel (now Major General) J. F. Fischer R.E.

I have &c

(Sd) J. D. Harris
Executive Engineer
Vizagapatam Division

(True Copy)

[illegible]
Lieut Col R.E.
Superintending Engineer
First Circle

No 1552 W

B&R
Works

PUBLIC WORKS DEPARTMENT.

1552
19

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 3rd July/85

READ the following

Letter from the Surgeon General with the Govt of Madras	(H.E. No 222 d/ April 16th 1885)
do from the S.E. I Circle	(" " G/77 d/ June 4th ")

The Right Honourable the Governor in Council cannot regard it as in anyway satisfactory that buildings which were completed in 1871 should now require to be almost entirely reconstructed; and the explanation furnished by the Supdg Engineer shows that the outlay for which sanction is now applied has been rendered necessary by errors both in the original design and in construction.

2. The Government observe that the Supdg Engineer does not endorse the opinion expressed by the Executive Engineer in his

wholesale condemnation of rubble masonry in mortar; and they are forced to the conclusion that the material employed in the construction of the condemned walls must have been selected without the exercise of proper care & judgment.

3. The Govt. are not prepared to accept without question the sweeping condemnation of sal timber which finds expression in these papers. They observe that the opinion on this point stated by the Supply Engineer is at variance with what has hitherto been accepted as the result of experience of the timber in question. The matter is of great importance, especially to the northern districts of this Presidency; and as it is one which should not be allowed to remain in doubt, the Chief Engineer will make further inquiry, and report the result.

5. With these remarks, the estimates amounting to Rs 1,334/-

~~1882~~ 20

7

for alterations to the Apothecary's quarters, and for reconstructing the guard room of the cottage for females in the Lunatic Asylum at Waltair, in the Vizagapatam District, are sanctioned.

6. This sanction has been registered as Provincial Est. No. 76. W of 1885/86, and classified as Civil Buildings, Original Works.

W.S.
25.6.85

J.C.
11/7/85

F.W. 27/6

C.W.
3.7.85

To,
The S.E. I Circle, with 4 Enclosures.
" Examiner P.W. Accts
" Public Dept
" Chief Engr P.W. Dept
(To,
The Chief Secretary
for favour of countersignature)

Ex. Ed. S.

10252
21

[illegible]

5151

Govt. of 1885 Madras.

PUBLIC WORKS.

7/7/85

Read

Read

G.O. 3 July 1885, No. 5521

Lunatic Asylum at ~~[illegible]~~ Waltair

Estimates for alterations to the Apothecary's Quarters & for reconstructing the ward room of the [illegible] females in the ~~[illegible]~~ sanctioned

60/6