

(1) Number of pages.....

(2) Date of repair.....

(3) Initials of the Referencer.....

MADRAS RECORD OFFICE

Government of Madras

Public Works

DEPARTMENT

G.O. No.	1618	Press
B.P. No.		Mis.
300 303		
Dated	20-6-	1893.

Not to be folded or roughly handled

Read the following papers:—

No. 300. Read the following Proceedings of the Madras Government in the Educational Department, dated 3rd May 1873, No. 148.

From E. B. POWELL, Esq., M.A., C.S.I., Director of Public Instruction, to the Hon. W. HUDLESTON, Chief Secretary to Government, Fort St. George, dated Madras, 28th April 1873, No. 905.

IN G. O. No. 384 of the 13th December 1870, sanction was given to a building grant of Rupees 4,316-13-0 on behalf of a school-house proposed to be erected by the Trustees of Patcheappah Moodelliar's Charities for their Anglo-Vernacular School in that town.

2. On the 16th October last, not having heard anything further about the erection of the school-house, I wrote to the Trustees, asking when they would be in a position to claim the grant, and pointing out the conditions they had to fulfil before receiving the money—one being the presentation of a certificate that the work had been completed in accordance with the plan and estimate approved by Government, and that the building was fairly worth twice the sum contributed by Government.

3. In a letter dated the 15th October, but not received till the 22nd idem, the Trustees applied for payment of the grant, but omitted to present the prescribed certificate; the omission was pointed out to them, and payment declined pending the submission of the certificate.

4. It now appears, from the accompanying letter from the Secretary to the Trustees, No. 98 of the 21st instant, and the enclosed copy of correspondence, that the Assistant Engineer of Chingleput declines to give a certificate in favour of the building. The Trustees, however, request that the Engineer's objections may be set aside and the grant issued.

5. With regard to the site of the building, the Engineer's objection cannot be taken as affording ground for the non-payment of the grant, since the site was accepted by this department. On this point I beg to submit a letter to myself from the Secretary to Patcheappah Moodelliar's Charities, No. 661 of the 29th November 1870, which will show that the site was chosen with much care.

6. The case is different, however, in regard to the faulty construction of the building noticed by the Engineer. I am inclined to think a deduction should be made from the grant sanctioned; and I suggest that Mr. Lowry, or some other officer of the Public Works Department, should be instructed to visit the school-house and form a careful estimate of its real value. I consider that only a moiety of the value (as distinguished from the cost of the building) should be paid to the Trustees of Patcheappah Moodelliar's Charities.

From N. SASHACHELLA CHETTY, Secretary to the Trustees of Patcheappah Moodelliar's Charities, to E. B. POWELL, Esq., M.A., C.S.I., Director of Public Instruction, dated Madras, 29th November 1870, No. 661

I AM directed by the Trustees to acknowledge the receipt of your letter, dated 24th November 1870, No. 1,961, and to inform you that the site for the Conjeveram School has been selected with great care. Four of the Trustees went there themselves, and after inspecting several spots fixed upon the present one as the most central in the large town, in order to enable boys easily to attend the school from different parts of it. Both Patcheappah's and the Mission Schools are very closely established in Perea Conjeveram to the inconvenience of the boys living in Chinna Conjeveram, but the proposed site is between the two parts of the town.

*Proceedings of the Madras Government, Public Works Department,
20th June 1873*

2. The extent of the land is about $11\frac{1}{2}$ grounds, or nearly half a cawny. As it is no sufficient play-ground will be left after the erection of the school-house. The Trustees need not dwell on the disadvantages of a school-house without a compound attached to it for purposes of ventilation and play.

3. Patcheappah's School, when built on the proposed site, will be much further removed from the Mission School than it is at present, and any other site will not be central for the several parts of the large town.

4. The Trustees have had considerable difficulty in selecting the site. They have had to go to the place themselves twice, and to settle the price as cheap as possible after considerable difficulty and bargain.

5. The purchase of the ground has been finally settled and documents executed. Any proposal to alter the site will entail considerable sacrifice on the funds and loss of much time. The school is at present kept in an old building quite unsuited for its purposes, and the Trustees trust that, after this explanation, you will procure sanction for the grant, so that they may commence the operation in January next.

From N. SASHACHELLA CHETTY, Secretary to the Trustees of Patcheappah Moodelliar's Charities, to E. B. POWELL, Esq., M.A., C.S.I., Director of Public Instruction, dated Madras, 21st April 1873, No. 98.

I AM desired by the Trustees of Patcheappah Moodelliar's Charities to forward to you copy of a communication received from Colonel F. J. Moberly, R.E., forwarding one from the Assistant Engineer in charge of the Chingleput Range, in which that Officer refuses to furnish the usual certificate applied for in the case of the school-building recently constructed at Conjeveram. It will be seen from the correspondence noted in

the margin that originally the plan and estimate were submitted for your approval and sanction. In the Proceedings of the Madras Government, Educational Department, dated 13th December 1870, No. 384, the above plan and estimate were sanctioned, and the work has been carried out accordingly. In conformity to your letter, dated 25th October 1872, No. 2,377, the District Engineer was applied to for a certificate. On an inspection of the building, the Assistant Engineer finds fault with its construction, although he admits that it has been erected in accordance with the plan and estimate approved of by you and sanctioned by Government.

2. It is now obviously too late to find fault with the construction. Besides, Mr. Lowry does not make sufficient allowance for the exceptionally heavy rains and floods which seem to have led him to form the unfavourable opinion he has expressed as to the badness of the site and the insufficiency of the height of the basement—points on which but for the extraordinary floods during which he visited the building he would most probably have formed a different opinion.

3. In these circumstances, the Trustees beg you will not object to dispense with the certificate and authorize payment of the grant already sanctioned by Government.

From R. J. LOWRY, Esq., Assistant Engineer, Chingleput Range, to Colonel F. J. MOBERLY, R.E., Superintending Engineer, 4th Division, dated Conjeveram, 30th November 1872.

RETURNING the documents, as per margin, which were received, together with your endorsement* on a copy of a letter to your address from the Trustees of Patcheappah Moodelliar's Charities, and in obedience to the instructions conveyed in said endorsement, I have the honour to state that having yesterday inspected the

Two letters, Nos. 2,309 and 2,377.
One Proceedings of Government.
One Plan.
One Estimate.
* No. 2,392, dated 5th November 1872.

*Proceedings of the Madras Government, Public Works Department,
20th June 1873.*

building lately erected in this town as a school-house by the above-mentioned Trustees, I regret to be unable to give the certificate asked for. The reasons which prevent me are as follow:—

1st.—The arches over the openings, marked F in the plan, are badly cracked, without an exception.

2nd.—The roof over all the rooms, marked I on plan, except the large one fronting the entrance (which is terraced), is sagged, as there is nothing to support it but two purlins $8'' \times 4''$ and a ridge pole 7×4 which rest on the gable wall and on the partition walls, as the case may be, and support the roof over a space $18' \times 16'$. A glance at the section through CD on plan will show that there is neither truss nor couple beam to withstand the thrust of the rafters on the walls. This, in my opinion, is the cause of the arches being cracked; the length ($16'$) over which the purlin is unsupported and has to sustain the weight of half the roof will account for the latter sagging, the size of this purlin to bear the burthen placed upon it should have been at least $12'' \times 8''$ instead of $8'' \times 4''$. But this plan of supporting the roof is altogether wrong, and in consequence the roof leaks, and the walls which are of mud and brick are damp in some places half way down to the floor.

3rd.—The site is a bad one, being low and much shut in by houses and trees; last night to get to it I had to wade my horse through about two feet of water; no doubt the rain has in the last few days been heavier than usual, and there is much water coming into the low parts of the town from Puthari which is breached, but there is much of the town untouched by the floods, any portion of which for this reason and its being better ventilated would have made a better location for this building.

4th.—In such a situation the basement which is only $2\frac{1}{2}$ feet above the water that has just levelled the compound wall is much too low; this, it is true, was only constructed of mud, but the fact shows how matters stand in this respect.

5th.—I consider the depth of the foundations insufficient, the masonry being only 3 feet below the surface, which in a light friable soil like that on which the school is built is not enough. I consider there should be at least $18''$ concrete under the brickwork with $12''$ more breadth in such a soil.

2. I am further of opinion that it is a mistake to construct a large and otherwise expensive building like this of brick-in-mud, and if my memory serves me rightly Government has ordered sometime since that no building constructed for or on their behalf should be built of brick-in-mud, but, as I have only the current records with me, I cannot quote the Government Order. The saving that accrues from substituting mud for lime mortar is but small, and other things being equal pukka work is incomparably better.

3. The building is built according to the plan and estimate. The design for the purpose for which the building is intended is good, and I am sorry I cannot conscientiously give the Trustees a certificate to enable them to obtain the Government grant-in-aid.

No. 126.

COPY forwarded for information. The enclosures, as per margin, are returned herewith as requested.

1 Plan.
1 Estimate.
2 letters (in original), Nos. 2,309 and 2,377.
1 Proceedings of Government.

MADRAS,
14th December 1872.

(Signed) F. J. MOBERLY, Colonel, R.E.,
District Engineer, Chingleput.

THE Governor in Council concurs in opinion with the Director of Public Instruction that the objection to the site must be waived, but that the building should be valued with reference to the alleged faulty construction, and the grant.

*Proceedings of the Madras Government, Public Works Department,
20th June 1873.*

in-aid adjusted accordingly. The necessary orders will be issued in the Department of Public Works.

(True Extract.)

(Signed) J. STURROCK,
*Acting Under Secretary,
for Chief Secretary.*

No. 301. Memorandum from the Director of Public Instruction, to the Secretary to Government, Public Works Department, dated Madras, 28th May 1873, No. 1,152.

THE undersigned has the honour to forward the plan and estimate called for in Colonel Walker's memorandum No. 196 of the 20th instant.

(Signed) E. B. POWELL,
Director of Public Instruction.

No. 302. Memorandum by the Chief Engineer, Department Public Works.

I HAVE carefully looked into this matter with reference to the plan and estimate sanctioned in G. O. No. 384 of 13th December 1870, Educational Department, and the Range Officer's report recorded with No. 148 of 3rd May 1873, and I am of opinion that it is not primarily a question of faulty construction, but of faulty design. I find that of the seven walls pierced with large archways, 8 feet wide and 10 feet high, all are built of brick-in-mud, and four out of the seven are only 15 inches thick; 18 inches, which is the thickness of the other three, being little enough for brick-in-mud walls 12 feet high at the sides and 18 in the middle and pierced with large openings.

2. Another fault of design is pointed out in the second of Mr. Lowry's objections, viz., the insufficient scantling of the ridge-poles and purlins with bearings of 16 feet, one of the former and two of the latter supporting the roof of a room 18 feet wide. But the plan of roof is not necessarily objectionable, provided the rafters are carefully notched into the ridge-poles and purlins, there should be no thrust on the outer walls, and the bad cracks in the arched openings are sufficiently accounted for by the arches of brick-in-chunam springing from brick-in-mud abutments. If there were any thrust in this instance it would be shown, and should now be looked for, at the junctions of the main and side walls. At the same time the use of trusses between the cross walls would have obviated the present fatal objections to the scantlings of the ridge-poles and purlins.

3. I am of opinion, therefore, that the Range Officer should have given a certificate that the school was constructed in conformity with the sanctioned plan and estimate, accompanying it with his objections to these latter, which appear to have been adopted by the Director of Public Instruction without previous reference to any professional authority. And looking upon the present state of the building, as reported by Mr. Lowry, to be dangerous, I am further of opinion that the Inspecting Engineer should be instructed to proceed to Conjeveram and report what alterations should be carried out. It would appear to me that all the sloping roof will have to be taken off and put on again with intermediate trusses, the four

*Proceedings of the Madras Government, Public Works Department,
20th June 1873.*

thin walls at the same time being rebuilt of brick-in-chunam; and I would suggest brick-in-chunam arches and abutments being inserted within the existing archways of the other three walls.

OOTACAMUND,
4th June 1873. (Signed) G. W. WALKER, Colonel, R.E.,
Chief Engineer, D.P.W.

No. 303. ORDER THEREON, 20th June 1873, No. 1,618.

CIVIL WORKS, No. 20.

UNDER the circumstances represented in the Chief Engineer's memorandum, His Excellency the Governor in Council requests that the immediate attention of the Inspecting Engineer for Buildings may be given to the subject of the Conjeveram School-house, and that he will cause to be prepared an estimate for the necessary alterations, one-half the cost of which the Government will be prepared to defray in addition to the sum of Rupees 4,346-13-0, to which they are already pledged.

2. The Director of Public Instruction will be requested in the Educational Department to notify that no Government grants will hereafter be allotted for school buildings, the plans and estimates of which shall not have been passed by the Inspecting Engineer for Buildings before they are submitted for sanction.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Inspecting Engineer for Buildings.
" Educational Department.
" District Engineer, Chingleput.
" Officiating Controller of Public Works Accounts.

Exd. E. C. Shunker.

N^o 1152

OFFICE OF THE DIRECTOR OF
PUBLIC INSTRUCTION,
MADRAS, 28th May 1873.

OFFICIAL MEMORANDUM.

The undersigned has the
honor to forward the Plan and
Estimate called for in Colonel
Walker's Memo N^o 196 of the 20th in-
stant.

J. H. W.
Director of Public Instruction

To
Respecting Government,
Public Works Department.

N^o 33

Memorandum by the
Chief Engineer, D. P. Kr.

I have carefully looked into this matter with reference to the Plan and Estimate sanctioned in G. O. No. 384 of 13th December 1870 (Educational Department) and the Review Officer's Report recorded with No. 148 of 3rd May 1873; and I am of opinion that it is not primarily a question of faulty construction but of faulty design. I find that of the 4 walls pierced with large archways 8 feet wide and 10 feet high, all are built of Brick in mud, and 2 out of the 4 are only 15 inches thick; 18 inches, which is the thickness of the other 2, being little enough for Brick in mud walls 12 feet high.

P. M. 1873
J. H. 3178.
1873.
From
The Director of Public Instruction,

Dated 29th May 1873.
Received 30th May 1873.

Enclosure 2.

Forwarded by Mr. H. H.
to Mr. H. H. H. H. H.
and Mr. H. H. H. H. H.

Ch 304

to Mr. H. H. H. H. H.

and to Mr. H. H. H. H. H.

at the sides and 18 in the middle and pierced with large openings.

Another fault of design is pointed out in the case of Mr. George's objection, viz the insufficient scantling of the Ridge-poles and Purlins with bearings of 16 feet, one of the former and two of the latter supporting the roof of room 18 feet wide. But the plan of roof is not necessarily objectionable; provided the Rafters are carefully notched into the Ridge-poles and Purlins, there should be no thrust on the outer walls; and the had cracks in the arched openings are sufficiently accounted for by the arches of Brick in masonry springing from Brick in sand abutments. If there were any thrust in this instance it would be shown, and should now be looked for, at the junctions of the main " " "

115
At the same time the use of Trusses between the cross walls would have obviated the present fatal objections to the scantling of the Ridge-poles and Purlins.

I am of opinion therefore, that the Range Officer should have given a Certificate that the school was constructed in conformity with the sanctioned Plan and Estimate, accompanying it with his objections to these latter; which appear to have been adopted by the Director of Public Instruction without previous reference to any professional authority. And looking upon the present state of the building, as reported by Mr. Lawry, the dangerous, I am further of opinion that the Inspecting Engineer should be instructed to proceed to Conjeeveram & report

what alterations should be carried
out. It would appear to me that
all the sloping roof will have to be
taken off and put on again with
intermediate trusses; the four thin
walls at the same time being
rebuilt of brick in *Chunam*.
And I would suggest brick in
Chunam arches and abutments
being inserted within the existing
archways of the other three walls.

M. Mulik Shetty Esq.
Chief Engineer
20.4.73

Cotacamund
4th June 1873

16/8 - P. W. D.
P. W. of the Madras Fort
Read the following:-

Pro. in the Educational Dept (H.R. No 148 of 3 May 73)
From the Director of Pub. Works (H.R. No 1152 of 28-10-73)
Memo. by Chief Eng. Mad (H.R. of 4 June 73)

Under the cir-
cumstances represented
in the Chief Engineer's
Memo. His Excellency
the Governor in Council
requests that the im-
mediate attention
of the Inspecting En-
gineer for Buildings
may be given to the
subject of the Conje-
veram School House
and that he will

M

in case to be prepared
an Estimate for the
a necessary alterations,
b. one half the cost of
in which the Government
n will be prepared to
re defray in addition
to the sum of Rspees
C. 4,346-13-0, to which
b. they are already pledged.
a. The Director of Pub.
lic Instruction will
be requested in the
Public Department
to notify that no
Government Grants
will hereafter be al-
located for School Buildings,
the Plans and Estimates
of which shall not
have been passed

by the Inspecting
Engineers for Buildings
before they are sub-
mitted for sanction.
G.M.W.

46

I Engr for Buildings with 2 Enes ✓
Educational Dept ✓
Sd. Chundabhai ✓
Controller ✓
Disps 27/6/73

Ms 3178 + 2932

RECORDS OF THE

PUBLIC WORKS

Accounting Books
for Buildings

20 June 1818

300 (2) 303

Carpenter's School
Lanc. Present
on papers relating
to the building con-
struction of the School
House.

Ms 3178 + 2932