[E.
———]

500—1-8-05.

Educational (1906) Department.

ORDINARY MS.

G.O., No. 213

(18)

DATED 20-3-06

PRINTED
with
G.O. 354, d/21-5-6 100

INDEXED.

C

[Despatch Abstract.]

Wesleyan Mission College, Rayapettah Returning to the plan and estimate for the extensions to the buildings of the — ~~to the D.P.I.~~ for revision in accordance with the note of the Chief Engineer & resubmission to Government.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O	No.	Department.	Date.
Ec 686/06							

[E.]
1,500—12-12-

EDUCATIONAL DEPARTMENT.

2

CURRENT FILE.

CONTENTS.

From	Number.	Date.	Pages.
[case 1996]			
D.P.I.	7666	15-11-05	1 – 31
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[PWD case 2657] The Consulting Architect	4949	5-3-06	33 - 34
Chief Engineer's note.		14-3-06	35 – 36

[P. T. O. FOR PUT UP PAPERS.

PAPERS PUT UP WITH CURRENT No.

Papers of the department to which the current belongs.

Number.	Date.	Original (=O) or spare copy (=S. C.).	Remarks. (In this column such of the papers as have been removed for copying, printing, &c., should be marked with a cross.)	Initials of Referencer with date in token of return to Reference department.

Papers of other departments.

Department.	Number.	Date.	Original (=O) or spare copy (=S. C.).	Despatcher to note the return of the papers to the departments concerned.

Stock Form No. 135
3,700—25-6-05.

E.D. CURRENT No. 1996.

EDUCATIONAL DEPARTMENT.

3

Received LOCAL & MUNICIPAL SECRETARIAT. 16 NOV 1905 190 , Registered 16. 11- 1905.

28

Subject.

Recommending that a third grant of Rs. 9,766/- be sanctioned towards the cost of extending the building occupied by the Wesleyan Mission College, Rayapet, Madras.

Royapettah

ENCLOSURES.
No. 2
Spare copies

Ref on Cur No. 7666/05

Station Madras, *Dated the* 15 November 1905

From (Name) The Hon'ble Mr. A.G. Bourne, D.Sc., F.R.S.,

(Designation) Director of Public Instruction

To The Secretary to the Government of Madras,
Educational Department.

Sir,

I have the honour to submit the enclosed plan with estimate amounting to Rs. 29,299/- for extending the buildings occupied by the Wesley College Royapettah Madras and to recommend that, under Rule 118 of the Grant-in-Aid Code, a third grant of Rs. 9,766/- may be sanctioned.

page 34 of the Code.

2. The accommodation provided is insufficient for the present strength. Two classes are now held in a temporary thatched shed and several classes have to be taken together in the large hall. The proposed additional accommodation is necessary if the strength of the institution is to continue at its present figure, viz., 661.

3. The items of work which it is now proposed to carry out are the

(1) addition of a second storey to the southern side.

2 Construction of a room over the entrance to the quadrangle.

3. Addition of verandahs to the existing class rooms on the ground floor on the east, south, and west side of the present building and also to the proposed upper storey.

This will give an extra floor space of 4250 ft. It is proposed to locate the College classes in the new upstairs rooms.

4 During the last official year the expenditure on account of this institution amounted to Rs. 20,098 - 7 - 5 against a receipt of Rs. 16,041 - 1 - 9 including the sum of Rs. 3,600/ which was paid as salary grant from provincial funds.

5. Out of the allotment for building grants in the current year's budget estimate payment of Rs. 8,053/- has been authorized up to date.

I have the honour to be,

Sir,

Your most obedient servant,

E W Middlemast

For Director of Public Instruction.

B.1. 14-12-05

Memo No. 6878 C d/9-12-05 P.W.D

4

The accompanying plan and estimate for extending the buildings occupied by the Wesleyan Mission College, Royapettah, are forwarded to the Consg. Archt: to Govt with the request that he will be good enough to inspect and report whether the foundations and walls of the existing building are capable of carrying an upper storey. The nature of the surface soil and sub soil should also be stated.

P.K.S
8.12.05

(B.O)

Reminded 15/7/06

To
The C.A. to Govt
with plan & estimate
to be returned.

DESPATCHED
-9 DEC 1905

8/12/05
D.E.W.

4 8

Stock Form No. 141
10,000—16-11-05.

PUBLIC WORKS DEPARTMENT.

5

CURRENT No. 2657

ENCLOSURES. Plans No. 1
Others No. 1
Total 2

SPARE COPIES.

Received .... 190 .
Registered .... 190 .
Passed on by Registering Clerk 5-3-06
" " U. R Clerk ... 8-3-06
" " Referencer ... 11-3-06
" " Record Superintendent.
" " Drafting Officer ...

SECRETARIAT PUBLIC WORKS DEPARTMENT, 5 MAR 1906

Subject.

Recommending the construction of an upper storey over the existing building occupied by the Wesleyan Mission College, with certain remarks.

No. 4949

Station Chepauk, *Dated the* 5th March 1906

From (Name) G.S.T. Harris Esq.,

(Designation) Consulting Architect to Government.

To ~~*The Chief Engineer*~~ / *The Secretary* *to the Government of Madras,*
Public Works Department.

Sir,

Page 3 ref

With reference to your Memorandum No. 6878-C, dated 9th December 1905, regarding the construction of an upper storey over the existing building occupied by the Wesleyan Mission College, I have the honor to state that I have inspected the building which is of puckah masonry with a 5 feet foundation. The old building was constructed in 1885 and the mortar has set fairly well in the joints. The surface soil is made-earth and the sub soil consists of clay

mixed

~~34~~ 5

~~of clay~~ mixed with sand. I recommend the construction of an upper storey with the following suggestions:-

(1) The cracked walls of the room marked I in the report accompanying the estimate ~~must~~ should be dismantled ~~up~~ down to the doors and strong masonry arches constructed over the openings.

(2) The existing terrace being more than one foot thick may be reduced to about 7 or 8 inches for floors.

(3) Rolled steel girders should be substituted for the existing teak wood beams which are sagging and by calculation found weak.

I have the honor to be,
Sir,
Your most obedient servant,
Geo. David
Consulting Architect to Government.

---

6 35 5P

6 Note by ~~E. W.~~ the Chief Engineer. P.W.D.

The Estimate for extending the Wesleyan Mission College at Royapettah, Madras, is returned with the following remarks:

✓ The pillars of the new Verandahs should be made half a brick longer to reduce the pressure at base level.

The scantlings of the roof timbers should be altered as follows.

Ground Floor.

Stair Case ~~room~~
Joists —— from 3½" × 8½" to 4" × 8½"
Landing - do —— " - 3" × 5" to 3" × 7"
Verandah joists —— 3" × 5" to 3" × 5¼"

Upper Storey

Central Room
C. rafters —— from 3" × 4" to 2½" × 4½"
Valley - do —— " - 3" × 6" to 4" × 6"
Verandahs
Bressummers —— " - 6" × 6" to 6" × 7¾"
Side and end rooms
C. rafters —— " - 3" × 4" to 2½" × 4½"

The Consulting Architect, who inspected the

~~36~~ 7

building, recommends the construction of the upper storey, with the following suggestions:- Viz

1 The cracked walls of the room marked I, in the ~~report~~ plan accompanying the estimate, should be dismantled down to the door level, and strong masonry arches constructed over the openings.

2. The existing terrace, being more than 1 foot thick, ~~may~~ should be reduced to about 7 or 8 inches, for floors

3. Rolled steel girders should be substituted for the existing teak beams, which are sagging, and by calculation found weak. The steel girders should be 18" x 7" x 75 lbs per foot.

A revised estimate should be prepared with reference to the alterations recommended above.

L.E.
14.3.06

14.3.06

14.3.06.
E.W.

EDUCATIONAL DEPARTMENT

NOTES.

[-E/2.]
1,500—3-12-04

S.C.F. [Notes connected with G.O. No. 213 Edl. dy 20-3-06]

EDUCATIONAL DEPARTMENT.

7

C. No. 1996. From the D. P. I. No. 7666., dated 15-11-1905.

SUBJECT.

Building grant for extensions to the Wesleyan Mission College, Royapettah.

—

Submitted that the plan and estimate received from the Director may, in the first instance, be forwarded u.o. to the P.W.D. for scrutiny before the question of grant is considered. The plan and estimate ~~are not [illegible]~~ have not been countersigned by the Director, but the countersignature may be postponed till they are approved by the P.W.D.

Rn
18/11/05

R.N.
18.11.05

Secretary

Mharayan
20/11/5

M. Aletti
20.11.5

Yes
Moyfor
21 xi 05.

To the P.W.D. (u.o.)

SECRETARY TO GOVERNMENT,
22 NOV 1905
PUBLIC WORKS DEPARTMENT.

as

Desp
21/11/5

Series No. 790 D
21-11-05

P.W. u.o.R. 1334
22-11-05

DR

T

For scrutiny

P.K.S.
22.11.05

1

2

9

8

Public Works Department.

NOTE BY TECHNICAL SECTION.

Current No. W.R. 1334 from Educational Department Lr. O No 790 D of 21 Nov 1905

Name of Work Extending the Wesleyan Mission College at Royapettah, Madras.

Amount of Estimate, Rs. 29,299

PARTICULARS OF ESTIMATE.

Main Building	Rs.	27256
Subsidiary Buildings		
Lightning conductor	,,	
Land Compensation	,,	
Contingencies	,,	1362
Petty Supervision	,,	681
Total Rupees ...		29299

Draft print

L. 0213 / 20.3.06

PARTICULARS OF CONSTRUCTION.

Surface soil } not stated.

Sub-soil } Existing foundations are 5 ft deep.

Foundations 6 feet deep for new Verandahs and Stair Case rooms, of which the lowest foot will be sand filling, then 2 ft Concrete of brick jelly in Chunam and the remainder Country brick in Chunam.

I would use surki

DW. The abstract provides for Surki in found. base and Superstructure.

DC
14. 3. 06

Basement 2 ft high of Country brick in Chunam.
The basement will be plastered with 1/2" portland Cement.

Ditto

Walls— will be raised to the heights marked on the plan with Stock brick in Chunam. Arches over doors & windows and in Verandahs will be built with the same materials. The exterior will be relieved with Sholinghur and pink Sand Stone Arches and bands. Cut Stone provided for steps and under posts and trusses.

Roof Timbers — teak wood and iron trusses.

Roofing— Mangalore tiles over flat tiles with air spaces between for rooms and terrace for Verandahs.

Flooring— Stair Case room and Verandahs on ground floor — 2" Cuddapah Slabs, pointed with Cement, over 3" Concrete and for 1st floor brick on edge and 3" Concrete plastered with 1/2" portland Cement

Plastering - the inside with 2 coats white polished chunam.

Pointing— the outside with prepared mortar.

Doors and Windows— Teak wood as per estimate.

Painting ~~and wood oiling~~ - Doors, windows and roof timbers 3 coats Carsons paint.

Scantlings— Vide Calculations.

Rates - Vide remarks.

The plinth area of the main building is ____________ square feet, and the cost per square foot will be Rs. ....

The plans and estimates have not been counter-signed by the Director of Public Instruction ~~and~~ but they are approved in the Educational Department.

REMARKS:

The existing accommodation is insufficient; 2 classes are now held in a temporary thatch Shed and

---

W. Before the addition of an upper storey is approved the found^n. walls of the existing building should be inspected & reported on. E.E. Chingleput or C.A. to Govt. may be directed to do this —

8/1/05

9 several are taken together in the large hall.

It is proposed to remove the existing roof of the rooms A, C, D, F, G and I and relay them on the same level as the rooms B and H, vide Sketch in report, and over this large area to build an upper storey containing the following rooms, as shown on the plans submitted.

1 Central room 41'-0" × 26'-9"
2 side rooms, each 38'-3 3/4" × 24'-3"
2 end — do — do — 26'-9" × 24'-3"

The existing building has no Verandah accommodation, hence it is proposed to construct a Verandah 8½ ft wide in front, rear and on sides. On the ground floor the Verandahs will be supported on piers and arches and on the

[illegible] on teak [illegible]

ade for dividing the Central
nd side rooms by teak
artitions for convenience
of classes

A Stone Stair Case,
with iron balusters is pro-
vided for getting up stairs.
It begins in the Central
passage with a single flight
8 ft wide and branches into
two at the 1st landing;
these latter being 4 ft wide
each

The following rates
are in excess of those in the
Schedule of Madras.

Plastering 2 coats
per 100 Sq feet — 2.8.0 – 2.4.0
Painting 3 coats
Carbons paint per Sqft — 2.12.0 – 2.10.0
Plastering with 1/2"
portland Cement — 6.8.0 – 6.0.0
Teakwood framed
partition per Sqft — 1.0.0 – 0.8.0
Levelling top of existing terrace
8.0 per 100 Sqft [illegible]

These rates may be allowed

Cement plaster thread lined. It is not known what work is to be done for the balance Rs 2.8.0

D.C.
7.12.08

Calculations are attached showing pressure on foundations &c.

1. For new Verandah wall
Pressure at base of Column or pillar : 3.26 tons per Sq ft - Stock brick in mortar
Pressure on Concrete in foundations = 1.15 tons per Sq ft.
Pressure on Soil in foundations = 1.25 tons ft per Sq ft.

2. Wall in rooms due to addition of a 2nd Storey
Pressure at base = 2.69 tons per Sq ft. Country brick in mortar.
Pressure on Concrete 1.31 tons per Sq ft.
Pressure on Soil in foundations = 1.41 tons per Sq ft.

The above may be considered safe.

This is rather high - it would be safer to reduce the pressure by making the pillars half a brick longer -

This verandah is to be an addition to the old building - the pressure at foundations should be made as low as possible otherwise there will be trouble with cracks - The connection of old & new work will require much care

I think the least that these people & others like them can do is to take the nature of soil before they ask opinions on foundations.
8/12/08

Calculations.

Ground floor

Stair Case room

Joists 18" centre to centre

Load = $12\frac{1}{2} \times 1\frac{1}{2} \times 150 = 2813$

yes $bd^3 = \frac{WL^2}{180} = \frac{2813 \times (12\frac{1}{2})^2}{180} = 2442$

Make Section $4'' \times 8\frac{1}{2}''$

In estimate $3\frac{1}{2}'' \times 8\frac{1}{2}''$

Landing joists

Load . $9\frac{5}{6} \times 1\frac{1}{2} \times 150 = 2213$

$bd^3 = \frac{WL^2}{180} = \frac{2213 \times (9\frac{5}{6})^2}{180} = 1118$

3"x7" will do Make Section $3'' \times 7\frac{1}{4}''$

In estimate $3'' \times 5''$

Back Verandah joists.

These are of varying span 4, 1½, 7 ft and 8 ft for a short length at ends. Calculations are made for 7 ft.

Load = $7 \times 1\frac{1}{2} \times 150 = 1575$

$bd^3 = \frac{WL^2}{180} = \frac{1575 \times 7^2}{180} = 429$

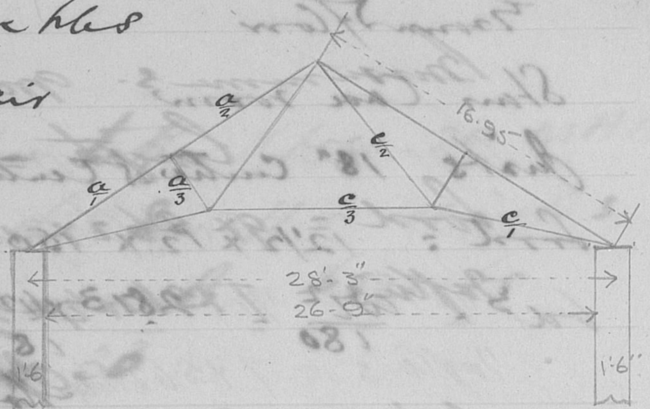
Make Section $3'' \times 5\frac{1}{4}''$

~~3"x5" will do~~ yes In estimate $3'' \times 5''$

Verandahs in front and sides.

yes These are 7 ft wide and joists $3'' \times 5\frac{1}{4}''$ are required.

Upper Storey. Central room.



Roofing. Mangalore tiles over flat tiles with air spaces. Rise = 1/3 span.

Weight = 42 lbs per sq ft.

Common rafters 1¾ ft apart c to c

Load = $8.42 \times 1\tfrac{3}{4} \times 42 = 619$

$bd^3 = \frac{WL^2}{180} = \frac{619\times(8.42)^2}{180} = 244$

Math section 3" × 4¼"

In estimate 3" × 4"

make 2½" × 4½"

Purlins. Greatest unsupported length = 9 ~~ft~~ feet

Load = $9 \times 8.42 \times 42 = 3183$

Rafters = $6 \times 8.42 \times \tfrac{1}{4} \times \tfrac{1}{3} \times 46 = \underline{194}$

Total lbs = 3377

$bd^3 = \frac{WL^2}{180} = \frac{3377\times 9^2}{180} = 1520$

Math section 5" × 6¾"

In estimate 5" × 7"

slit

Valley rafters may be made 4" × 6" against 3 × 6 in the estimate.

yes

Verandahs. Terrace roof.

Joists. Unsupported length = 7'-9"

Load = $7\tfrac{3}{4} \times 1\tfrac{1}{2} \times 120 = 1395$

$bd^3 = \frac{WL^2}{180} = 1395\times(7\tfrac{3}{4})^2 = 465$

Math section 3" × 5½"

In estimate 3" × 6"

slit

Bressummers. Greatest unsupported length = 9 feet.

Load = $9 \times 5.62 \times 120 = 6070$

Rafters = $7 \times 5.62 \times \tfrac{1}{4} \times \tfrac{11}{24} \times 46 = \underline{216}$

Total lbs 6286

$bd^3 = \frac{WL^2}{180} = \frac{6286\times 9^2}{180} = 2829$

Math section 6" × 7¾"

In estimate 6" × 6"

yes

For uniformity of construction it is proposed to use the same size of rafters and purlins for the side and end rooms.

Iron trusses. Size

Total weight of roof on one side.

Roofing — $9 \times 16.95 \times 42$ — 6407
Purlins — $1 \times 9 \times \tfrac{5}{12} \times \tfrac{2}{12} \times 46$ — 101
Rafters — $7 \times 16.95 \times \tfrac{1}{4} \times \tfrac{1}{3} \times 46$ — 455
Approx weight of truss (½) — — $\underline{400}$

Total lbs. 7363

Distributed as per M.H.B. page 121

Com of $A_1 = W \times 2.21 = 7363 \times 2.21 = 16272$
do — $A_2 = W \times 2 = 7363 \times 2 = 14726$
do $A_3 = W \times .45 = 7363 \times .45 = 3313$
Tension $C_1 = W \times 2 = 7363 \times 2 = 14726$
do $C_2 = W \times .94 = 7363 \times .94 = 692$
$363 \times .120 = 883$

Principal rafter

assume $h = 3.04$ then table 11 page 120 M.H.B.

$R = \frac{l}{h}$. then length $= 8.42$ ft or 101 inches

and greatest Compression $= A_1 = 16272$ lbs

then $R = \frac{101}{3.04} = \cancel{33}\ 33$

with this value of R: $C_1 = 6573$

and $S = \frac{16272}{6573} = 2.47$

From table 1 it will be seen that Twin $3\frac{1}{2} \times 3\frac{1}{2} \times \frac{3}{8}$ will do, but in the estimate a slightly ~~smaller~~ larger section $3 \times 3 \times \frac{1}{2}$ is taken and this may be allowed.

Strut.

assume $h = 1.06$

Length of strut $= 2.82$ ft or 34 inches

Compression on Strut $= 3313$ lbs

then $R_1 = \frac{34}{1.06} = 32$

with this value of $R1$, $C_1 = 3787$

and $S = \frac{3313}{3787} = \cdot 87$

From table 1 it will be seen that L iron $2 \times 2 \times \frac{1}{4}$ will do, but in the estimate Twin $2\frac{1}{2} \times 2\frac{1}{2} \times \frac{3}{8}$ is provided –

Tie rod – C_1. tension $= 14726$ lbs

Formula IV $P = S \times t$

then $t = 11200$ lbs (table IV)

and $2r = \sqrt{\frac{4 \times 14726}{3\frac{1}{7} \times 11200}} = 1.30$

Make diameter $1\frac{3}{8}$"

[illegible]

Tie Rod C_2. tension $= 6921$ lbs

as above $2r = \sqrt{\frac{4 \times 6921}{3\frac{1}{7} \times 11200}} = 0.89$

Make diameter 15/16 with

In estimate $1\frac{1}{4}$" for large truss

do — 1" for small – do.

Tie Rod C_3 tension $= 8836$ lbs

$2r = \sqrt{\frac{4 \times 8836}{3\frac{1}{7} \times 11200}} = 1$

Make diameter 1"

In estimate $1\frac{1}{4}$" for large truss

do — 1" do small – do

Trusses as designed may be allowed –

8/12/05

W.C.

7.12.05

Pressure on foundations - Verandah wall marked ab on ground plan -

Terrace -	$9\times5.62\times120$	6070
Joists -	$7\times5.62\times\frac{1}{4}\times\frac{11}{24}\times46$	178
Bressummers -	$9\times\frac{1}{2}\times\frac{2}{3}\times46$	138
Plate	$9\times\frac{1}{2}\times\frac{1}{2}\times46$	110
Wall below -	$9\frac{3}{8}\times1\frac{1}{2}\times14\times120^{*}$	23625
Floor	$9\frac{3}{8}\times5\times150$	7028
Joists	$7\times\frac{1}{4}\times\frac{2}{12}\times5\times46$	245
	Total lbs.	37394
Deduct arch way	$7\frac{1}{8}\times1\frac{1}{2}\times10\times120$	12825
	Net lbs	24569

Area of pier - $2\frac{1}{4}\times1\frac{1}{2} = 3.37$ Sq. feet

Pressure on base of pier = $\frac{24569}{3.37\times2240}$

= 3.26 tons per Sq ft.

* 120 lbs per C ft for Stock brick in mortar.

*: 112 lbs per C ft for Country brick in mortar

2. Weight as above		24569
basement -	$2\frac{1}{4}\times1\text{-}10\frac{1}{2}\times2\times112^{*:}$	945
foundations	$2\frac{1}{4}\times2\frac{1}{4}\times1\times112$	567
"	$2\frac{1}{4}\times2\frac{5}{8}\times1\times112$	662
"	$2\frac{1}{4}\times3\times1\times112$	756
	Total lbs	27499

Area of Concrete - $2\frac{1}{4}\times4\frac{3}{4} = 10.68$ Sq ft

Pressure on Concrete = $\frac{27499}{10.68\times2240}$ =

1.15 tons per Sq ft.

3. Weight as above		27499
Concrete =	$2\frac{1}{4}\times4\frac{3}{4}\times2\times112$ lbs	2392
	Total lbs	29891

Area of Soil = 10.68 Sq feet. Pressure on Soil = $\frac{29891}{10.68\times2240}$ = 1.25 tons per Sq ft.

Pressure on room wall, marked a a on ground plan.

Roof	— $1 \times 18 \times 2 \times 42$ lbs	1512
Rafters	— $2 \times 18 \times \frac{1}{4} \times \frac{1}{3} \times 46$	138
Purlins	$1 \times 2 \times \frac{5}{12} \times \frac{7}{12} \times 46$	23
Weight of half truss	say	400
Wall	— $1 \times 2 \times 14 \times 1\frac{1}{2} \times 112^{+}$	4704
Floor	$1 \times 12 \times 9\frac{1}{2} \times 150$	17100
Beam	— $1 \times 12 \times 1 \times 1\frac{1}{2} \times 46$	828
Joists	— $8 \times 9\frac{1}{2} \times \frac{1}{4} \times \frac{1}{2} \times 46$	437
Verandah - roof	$2 \times 3\frac{1}{2} \times 120$	840
joists	$2 \times 3\frac{1}{2} \times \frac{1}{4} \times \frac{11}{24} \times 46$	39
Do — floor	— $2 \times 3\frac{1}{2} \times 150$	1050
joists	— $2 \times 3\frac{1}{2} \times \frac{1}{4} \times \frac{2}{12} \times 46$	49
Lower wall	$2 \times 1\frac{3}{4} \times 14 \times 112$ lbs	
	Total lbs —	27120

Area of base = $2 \times 2\frac{1}{4} = 4\frac{1}{2}$ Sq feet

Pressure on base = $\frac{27120}{4\frac{1}{2} \times 2240}$ =

2.69 tons per Sq ft.

2. Weight as above		27120
base	— $2 \times 2\frac{1}{4} \times 2 \times 112 \times$	1008
founds	— $2 \times 3 \times 3 \times 112 \times$	2016
	Total lbs	30144

Area of Concrete = $5\frac{1}{8} \times 2 = 10\frac{1}{4}$ Sq ft

Pressure on Concrete = $\frac{30144}{10\frac{1}{4} \times 2240}$ = 1.31 tons per Sq ft.

3. Weight as above		30144
Concrete	= $2 \times 5\frac{1}{8} \times 2 \times 112^{\times}$ lbs — bricks	2296
		32440

Area of Soil loaded = $10\frac{1}{4}$ Sq ft

Pressure on Soil = $\frac{32440}{10\frac{1}{4} \times 2240}$ = 1.41 tons per Sq ft.

D.C.
7.12.05

+ 112 lb per cft for Country brick in chunam.
112 lbs. do — Concrete.

D.W.

D.W.

If section of girders is approved estimate will be corrected. — Or may the estimate be returned for revision through Educational Dept.

D.C.
13.3.06

Proposed sections — with a 5 ton stress — approved. Est. should go back for revision with an E.W. note —
13.3.06

Calculations.

For girders instead of bagged beams.

Rooms marked A A.

Load	= $24 \times 8.83 \times 150$ =	31778
Joists	= $17 \times 8.83 \times \frac{1}{4} \times \frac{2}{12} \times 46$ =	1051
Wt of girder approx:	—	1800
	Total lbs	34629

Equivalent load for a limiting Stress of 5 tons per □" =

$\frac{34629 \times 3}{2240 \times 2}$ = 23.10 tons

∴ a girder, B.S.B. No 28 of Section 18"×7"×75 lbs is required —

If a limiting Stress of 7½ tons per □" is taken then a girder 15"×6"×59 lbs would do.

2. Rooms marked B.B.

Load	= $24 \times 9\frac{1}{2} \times 150$ —	32400
Joists	= $17 \times 9\frac{1}{2} \times \frac{1}{4} \times \frac{7}{12} \times 46$ —	1131
Wt. of girder — approx	—	1800
	Total lbs —	35331

Equivalent load for a limiting Stress of 5 tons per Sq in

= $\frac{35331 \times 3}{2240 \times 2}$ = 23.66 tons.

A girder No 28 as above is required.

If a limiting Stress of 7½ tons per □" is taken then a girder 15"×6"×59 lbs would do.

D.C.
13.3.06

LOCAL & MUNICIPAL SECRETARIAT 13 DEC 1905

PUBLIC WORKS 14 DEC 1905

Fur Dw.

Draft memo: to the C.A asking him to ^inspect and report whether the foundations and walls of the existing building are capable of carrying an upper storey and also to state the nature of the surface soil and sub soil is submitted for approval. After *issue the file may be sent to Educational for information.

P.K. Subba Aiyar
8.12.05

* Issued as memo No. 6878 C, d/ 9.12.05

To the Educational ^dept (U.O)

S.B. Murray
8/12/05

Educational Dept

P.W. U.O.D 1308
12.12.05
Returned from P.W.D on 13/12/05

Seen thanks
H Taylor
13.12.05

To the P.W.D (U.O)

desp 13/12/05

P.W. Dept

(C No. 2657) From the C.A letter No. 4949 d/ 5.3.06.

Educ no. 837 D
13-12-05

Fur W.

Submitted.

The C.A (consulting Architect) recommends the construction of an upper storey subject to certain conditions.

P.K. Subba Aiyar
12.3.06. (W.)

I think the new work may be approved, subject to C.A's suggestions & the remarks in the T. note –

S.B. Murray
12.3.06

16

1st 4

LOCAL & MUNICIPAL 16 MAR 1906 SECRETARIAT.

Yes the work may be approved as suggested — perhaps the best plan will be to return the estimate & plans to Educational with a note by C.E. unless they are to be formally sanctioned in D.P.W. — the D.P.I.'s countersignature has still to be obtained — if necessary the file may go back to Educational with above remark —

J. P. Davidson
13/3/06.

D.E.
13.3.06

W.

The file may be returned to Educational, with the accompanying note —

S. B. Murray
14.3.06

To the Educational dept. with note by Chief Engineer.

J. P. Davidson
14/3/06.

Educational Department.

The plan and estimate for extensions to the building of the Wesleyan Mission College, Royapettah, may now be returned to the D.P.I. with the request that he will call on the authorities of the College to have the estimate revised in accordance with the remarks of the Chief Engineer on pages 35 & 36 of Current & resubmitted to Govt. The draft placed below is submitted for approval.

N.L.R.

N.A.R.
17/3/6

P.H. Wesleyan
17/3/6

C. A. Souter
18-3-06.

[G.O. No. 213 Edl dt 20-3-06]

Recd

[E. / 12.]

1,008—11-6-05.

EDUCATIONAL DEPARTMENT.

READ AGA[illegible] G.O., No. ...., dated .... 190 .

" " " " ...., " .... 190 .

READ ALSO:—

C. No. 1996, From the D.P.I., No. 7666, dated 15-11-1905

P.W.D. " 2657, " " Consulting Architect to Govt., " 4949, " 5-3-1906.

" " ...., " " Chief Engineer's note, " ...., " 14-3-1906.

ORDER No. 2/3, dated 20-3-1906.

mis

Desp 18/3/6

The Chief Engineer's note read above will be communicated to the D.P.I. with the request that he will call on the authorities of the Wesleyan Mission College, Rayapetta, to have the estimate for extending the building occupied by the College revised in accordance therewith and resubmitted to Government. When resubmitting the plan and estimate the Director should countersign them in token of his approval.

NAG
17/3/6

17/3/6

18.3.06

To the D.P.I. with a copy of C.E.'s note & with plan & estimate D/ 14-3-06.

Despd 22/3/6

When given for copying——
*When copied*____
*When examined*____ } 190 .
*When signed*____

READ AGAIN G.O., No. , DATED
190 .

CURRENT No.

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT .. .. .. A A A A A A A

LETTER OF GOVERNMENT.

STATEMENT WITH DITTO.

PAPERS N[illegible] FILED UP, BEING MEANT FOR DESPATCH IN ORIGINAL.

N.B.—
A = Copy in full.
B = Not to be copied.
P = Copy abstract only.
Q = Copy heading only.