

Public Works (1898) Department.

G.O., No.

388

DATED

16 February 1898

[Despatch Abstract.]

Draftsmen: <sup>with remarks.</sup> Sanctioning the employment of a —, special class, in the Office of the Chief Engineer, P.W.D., for six months.

# BACK PAPERS.

| G.O. | No.    | Department. | Date. | G.O. | No. | Department. | Date. |
|------|--------|-------------|-------|------|-----|-------------|-------|
| 435C | 24.198 |             |       |      |     |             |       |
| 347  | 2.198  |             |       |      |     |             |       |
|      | 176    |             |       |      |     |             |       |

## FURTHER PAPERS.

| G.O. | No. | Department. | Date. | G.O. | No. | Department. | Date. |
|------|-----|-------------|-------|------|-----|-------------|-------|
|      |     |             |       |      |     |             |       |
|      |     |             |       |      |     |             |       |
|      |     |             |       |      |     |             |       |

[ 500-14-10-97. ]

DEPARTMENT.

Papers to be read in proceedings:—

Again G.O., dated 189 , No.

Again G.O., dated 189 , No.

Current No. of 189 , dated , from

" " " 189 , " " "

" " " 189 , " " "

note by the Chief Engr. Nov. 2 4.2.98.

ORDER.

This is the Govt  
in Council sanction the  
employment of a drafts-  
man, special class, pay  
Rs 100-130 per mensem  
in the office of the Chief  
Engineer P.W.D. for a  
six months, at the  
end of which period  
the question of further  
continuing the appointment  
will be considered.

2. This sanction has  
been registered as P.W.D.  
no 88 W of 1897-98, &  
Classified as 2.1.10.1998.

W  
D

T. H.  
B. C. K. J. S.  
Engr. General

11.2.98

C. No. ....

HIS EXCELLENCY THE GOVERNOR.

THE HONBLE SIR HENRY BLISS, K.C.I.E.

THE HONBLE MR. GROSE, C.I.E.

SUBJECT.

Technical Section of the Chief

Engineer's office.

FOR ORDERS.

With reference to His Excellency's remarks on my note for orders of 4th February 1898 I beg to invite attention to that part of the note now marked with blue pencil on pages 3 to 6. I regret that the fact of the adoption of the Government of India Code having increased the responsibility of the Chief Engineer with regard to estimates escaped my memory when speaking to His Excellency.

There is certainly ample room for improvement in the preparation and submission of estimates by Superintending Engineers, but no amount of care and accuracy on their part can remove the responsibility of the Chief Engineer under the Government of India Code, so that close scrutiny of all estimates will have to continue.

*Issue to go  
had  
14.2.98*

*CH*

*SNOW  
15/2/98  
DW*

*H. B. ...  
11.2.98  
W.*



P. W. DEPARTMENT.

C. No. ....

HIS EXCELLENCY THE GOVERNOR. ✓  
THE HON'BLE SIR HENRY BLISS, K.C.I.E.  
THE HON'BLE MR. GROSE, C.I.E.

SUBJECT. Technical Section  
of the Chief Engineer's Office.

FOR ORDERS.

In submitting a  
Statement proposing an  
increase in the strength  
of the Technical Section  
of the Chief Engineer's Office,  
the undersigned has the  
honour to submit a brief  
history of the work and  
establishment of that branch.

Prior to 1883, the  
Technical Section consisted  
of one head draftsman  
on Rs 120, and two 1<sup>st</sup> class  
draftsmen on Rs 50-70 per  
month.

In January 1883,  
a Superintendent on Rs 200-250  
was appointed, the previous  
establishment.  
organization having been  
found insufficient; the

2  
head draftsman on Rs 120,  
was <sup>transferred</sup> ~~absent~~, while the  
two 1<sup>st</sup> class draftsmen re-  
mained. The establishment  
then was, —

1 Supt. on Rs 200-250 per annum

2 First class draftsmen on Rs 50-70 —

In September 1885

one of the draftsmen died,  
& as it was considered that  
there was not work enough  
for 3 men, his place was  
not filled up  
~~absent~~. The remaining  
draftsman was subsequently  
promoted to the special class,  
& the establ. then was, —

1 Supt. on Rs 200-250 per annum

1 Draftsman special class on Rs 80-100 —

Early in 1895, a  
tracer on Rs 30 per annum  
was added to the branch,  
on the abolition of the  
Lithographic Dept. of the  
Chief Engineer's Office (which  
is referred to later on)

This man gave no assistance  
in the checking of estimates,  
but was employed in  
copying plans when necessary,

3  
and in tracing sketches  
etc on transfer paper,  
which <sup>to be</sup> sent to the  
Survey Dept. to be  
lithographed in Prov.  
of Govt. or Administration  
reports.

Prior to about  
1892 or 1893, i.e. before  
the Govt. of India P.W.  
Code was adopted in  
this Presidency, there  
were never any orders  
in the Technical P.W.,  
which was able easily  
to cope with the work  
required of it. The  
office orders laid down  
for the guidance of  
the Section directed  
that the Chief Engineer's  
office had nothing to  
do with the arithmetical  
details of estimates  
or errors in calculation,  
the latter being held

responsible for such  
matters, & that the  
Technical Section should  
see only that designs  
were suitable to the  
purpose required, that  
scantlings of timber were  
sufficient, & not examine  
that the quality of work  
provided was appropriate  
to the class of building,  
& that rates were  
reasonable.

The old Madras  
Code gave Supt. Engineers  
power to deal finally  
with the engineering units  
of works costing up to  
Rs. 10,000. In the case  
of such estimates, the  
abstract only, with a  
report, (and no plans)  
was submitted to the  
Chief Engineer. Detailed  
check was therefore  
required only in the case  
of estimates costing over

Rs. 10,000, while a separate  
estimate below Rs. 2,500,  
no vote by the Technical  
branch at all was required.

The Govt. of India  
Code does not recognize  
any such limit of  
final responsibility on  
the part of Supt. Engineers,  
and since the adoption  
of that Code in Madras,  
all estimates, however  
small, which require  
the sanction of Govt.  
in this office  
are scrutinized in detail.  
Para 10, Chap. III, Vol II,  
makes the Chief Engineer  
responsible that all  
projects submitted by  
him to Govt. are prepared  
in a complete and  
proper form.

Supt. Engineers  
have powers of sanction  
up to Rs. 2,500, but a  
great many estimates

below that amount find  
their way to the Chief  
Engineer's office through  
other departments of the  
Secretariat, and the  
practice now is that  
every estimate, however  
small, which passes through  
this office, is scrutinized  
in every particular - //

Experience has  
shown how necessary  
such close scrutiny  
is, but it has exor-  
minably increased the  
work of the Technical  
branch, while the  
number of estimates  
received in the office  
has also greatly in-  
creased - from 226  
in 1894, the total  
number received in  
1897 rose to 434.  
A single estimate often  
takes three or four

days or <sup>over</sup> a week to check  
with close application.  
The establishment is now  
quite unable to keep  
the work <sup>up to date</sup> ~~current~~,  
and arrears are  
constantly increasing.  
Estimates have sometimes  
to lie by for months  
before they can be  
taken up, newer &  
more urgent estimates  
having to take place  
<sup>and less important</sup>  
claims of older ones.  
Last year two upper  
subordinates were  
temporarily posted to  
the Chief <sup>Engineer's</sup> office  
to clear off the arrears,  
but on their returning  
to district work, the  
arrears began again  
to accumulate.

The undersigned  
on joining this office  
was at once struck

with the inadequacy  
of the establishment  
allowed for the carrying  
of plans and estimates,  
& after further experi-  
ence is convinced that  
the work cannot be  
done efficiently unless  
the staff is strengthened.

The office of  
the Chief Engineer for  
Navigation, with an  
average number of  
estimates of about  
238 per annum, has  
a technical estab-  
lishment of 9 permanent  
and 2 temporary draft-  
men, costing Rs 640  
per annum, while  
the Chief Engineer's office  
has 3 men, at an  
average cost of Rs 362  
per annum, ~~which~~ <sup>and</sup> the  
average number of  
estimates received is

+ This is because the estimate  
received in his office form  
only a portion of the work  
to be done therein. There are  
numerous maps of navigation  
systems, of railway affecting  
harbours to be made. Charts  
of rivers to be prepared, &  
diagrams of river floods

about 325 per annum and  
is steadily increasing -  
Before submitting  
this matter for orders,  
the undersigned called  
the Chief Engineer for Navigation  
if one or two of his  
draftsmen could not  
be transferred to this  
office, but he has  
shown conclusively that  
his establishment is  
fully employed, & is  
hardly able to cope  
with the work as it  
is.

Formerly a litho-  
graphic establishment -  
costing Rs 965 per annum  
(and quite distinct from  
the Technical branch)  
was attached to the  
Chief Engineer's office for  
the production of  
standard designs &  
for lithographic printing  
required by all Departments  
of Govt. as the head

Survey office absorbed much of the work done by the P.W. Lithographic Dept., the latter was gradually reduced, - at first to Rs 425 per annum in January 1899, and to about Rs 300 per annum in July 1890 - In December 1894, it was finally abolished, a cross on Rs 30 per annum only, as already stated, having been transferred to the Technical branch. It seems a great pity that <sup>the</sup> opportunity was not taken of these reductions to appropriate some of the money towards strengthening the Technical branch, but the savings were credited to Govt.

it is in every way desirable to make - sending <sup>men</sup> closer, if possible than it now is, but to do this, and to keep work current, it is absolutely necessary that the Technical branch should be effectually strengthened. There would be no use in adding another low paid draughtsman to the staff - what is wanted is an intelligent man, who while being under the general supervision of the Supt., would be able to work independently, & submit his notes direct to the Deputy Chief Engineer - the new man, therefore, to be of great service

10  
 In this important  
 office, should be  
 of the first special  
 class, on a salary of  
 Rs 100-130 per mensem.

This post has been  
 entered according in  
 the accompanying pro-  
 position statement, to  
 which the undersigned  
 strongly urges that  
 sanction be given.

SMW  
 4.2.98

The additional staff asked for may be  
 sanctioned for six months. At the  
 close of that time, Mr. De Winter  
 should report (1) whether the engines are  
 worked off, and (2) whether Sup<sup>r</sup> Engineers  
 are more efficiently fulfilling their  
 duties with respect to estimates.

A.H.  
 7.2.98

N.E. 4-2-98 R10/2/98.

\* Note. There are two  
 special classes, -  
 (1) on Rs 80-100 per mensem &  
 (2) on Rs 100-130 - " -

I spoke to Mr. De Winter about this  
 today, asking him if it was not  
 reasonable to expect that Superintending  
 Engineers should read in their estimates  
 properly checked prepared and checked.  
 He admitted that Superintending Engineers  
 should and ought to read in their estimates

complete and accurate in all details  
 of computation. But, he added that they  
 had not fulfilled their duty in this  
 respect, but that it was found necessary to  
 check these estimates in the technical  
 branch of the Head Office. He added that  
 he hoped a recent circular he had issued  
 would result in some improvement. For  
 the moment, there was great stress  
 in the Head Office with which it is  
 impossible to cope, without additional  
 staff. Under these circumstances,  
 the

1. All proposals for changes in the scales of permanent establishments must be accompanied by a statement in Part I of this form when the changes relate to the engineer or upper subordinate establishments and in other cases by a statement in Part II of this form.
2. The column headed "present scale" should invariably show the existing sanctioned scale (not the strength of the establishment as it actually stands at the time), and should be verified by the Examiner before the statements are forwarded to the sanctioning authority.

Tabular Statement to accompany proposals  
 for changes in establishments.

Part II.

Statement of proposition for

| ORDER SANCTION-<br>ING PRESENT<br>ESTABLISHMENT. |       | Office to which the proposition<br>refers. | Present scale.    |              |          |                 |          | Total cost.           |
|--------------------------------------------------|-------|--------------------------------------------|-------------------|--------------|----------|-----------------|----------|-----------------------|
| Govt. of<br><br>P. W. D.                         |       |                                            | No.               | Designation. | Pay.     |                 |          |                       |
| No.                                              | Date. |                                            |                   |              | Minimum. | Incre-<br>ment. | Maximum. | Average<br>or fixed.* |
|                                                  |       |                                            |                   |              |          |                 |          |                       |
|                                                  |       |                                            |                   |              |          |                 |          |                       |
|                                                  |       |                                            |                   | Rs.          | Rs.      | Rs.             | Rs.      |                       |
|                                                  |       | <u>Technical Branch</u>                    |                   |              |          |                 |          |                       |
|                                                  |       | 1                                          | Draftsman special | 200          | 10       | 250             | 237½     | 362½                  |
|                                                  |       | 1                                          | Do do             | 80           | 4        | 100             | 95       |                       |
|                                                  |       | 1                                          | Draftsman         | 30           |          | 30              | 30       |                       |
|                                                  |       |                                            |                   |              |          |                 |          |                       |
|                                                  |       | TOTAL ..                                   |                   |              |          |                 |          |                       |

C. No. ....

HIS EXCELLENCY THE GOVERNOR.

SUBJECT.

THE HON'BLE SIR HENRY BLISS, K.C.I.E.

THE HON'BLE MR. GROSE, C.I.E.

FOR ORDERS.

With respect to L.S. remarks  
in my note in order of  
L.S. 2.50 I beg to invite  
attention to that part of  
the note now marked  
with blue pencil in lines  
3 to 6. I repeat that the  
lack of the adoption of the  
Govt. of India Code having  
increased the responsibility  
of the Ch. Secy with regard  
to estimates escaped my  
memory when speaking to  
L.S.

There is certainly ample  
room for improvement in  
the preparation & submission  
of estimates by L.S. but  
no amount of care &  
accuracy in their last case

remove the responsibility of  
the C.R. under the S. of  
I Code, to that class  
scouting of all estimates  
will here to continue.

W. H. L.  
11.280

Fair