M R.O. 1—77,006—8-6-37.

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(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 812 Press Mis.

237-243

Dated 12-3- 1866.

Not to be folded or roughly handled

No. 239. Read the following Endorsement of the Secretary to the Government of India, Public Works Department, dated Fort William, 23rd January 1866, No. 128 E

Read the following Despatch from the Right Honorable the Secretary of State for India, (Public Works,) to His Excellency the Right Honorable the Governor General of India in Council, dated India Office, London, 30th July 1864, No. 37.

1. I have had under consideration in Council your Excellency's Despatch, No. 30, of 14th April last, treating of "the present constitution and sources of supply of the Engineer branch of the Public Works Establishment, with special reference to the classes of officers of which it is composed."

2. My views on this subject coincide, to a great extent, with those set forth in the Resolution of your Government of 14th April last. I see no reason to doubt that, in the constitution of the Public Works Department, one general principle should, as nearly as possible, be adopted for all India, or that those arrangements which are best suited to one Presidency are likely, in most essential respects, to be best suited to all. I adopt, too, your conclusion that for the present the number of Military and Civil Engineers sent out from England should be determined with reference to the aggregate number of appointments open to such Engineers in the Public Works Department, and in the future distribution of those Engineers among the three Presidencies I have resolved to adopt the proportion suggested by your Excellency, viz. :—

To Government of India	. . ..	.	5
,, ,,	Madras		1
,, ,,	Bombay . . .		1

3. The operation of this rule can, however, only be gradual, and it is desirable to correct, more rapidly than would be possible by its means alone, the existing disparity in the proportions between the Civil and Military elements in the Public Works Establishments in different parts of India. I consider, therefore, that you should call upon the Governments of Madras and Bombay to place at the disposal of your Government, as soon as the transfer can be made without inconvenience to the public service, a small number of their Engineer Officers, and to receive in return a similar number of the Civil Engineers at present serving in the territories under your more immediate superintendence.

4. Referring to what is said in your despatch as to the probability of the Civil element becoming preponderant in the Public Works Department, I fully admit the importance of maintaining a due proportion of Military Officers. I am not prepared, however, at present to take any measures for augmenting the Indian Establishment of Royal Engineers, and I would, therefore, wish you to consider the advisability of affording greater facilities to Staff Corps Officers to enter the Department. If, as would appear from the 5th paragraph of your Despatch, such officers are at present deterred from offering themselves by the severity of the professional tests which must be passed previously to admission, it might perhaps be expedient to lower those tests, and to leave the officers admitted to complete their qualifications while engaged in active duty as Probationary Assistant Engineers.

Promotion in the Department would be the appropriate reward of increased technical proficiency, and any Staff Corps Officer who might find himself unable to establish the requisite title to promotion, would no doubt soon apply to be transferred to some other branch of the service in which he would have a better chance of success.

5. On the question of keeping up to their full complement of officers the seven battalions of Royal Engineers assigned to India, I shall place myself in communication with the proper Department of Her Majesty's Government.

6. I shall be glad to be furnished with your opinion as to the proper number of (Civil) Probationary Assistant Engineers to be sent out from this country in future. Of late years ten have been sent out to Bengal, and I wish to know how many will in future be required for each of the three Presidencies.

From the Government of India, Public Works Department, (Establishment,) to the Right Honorable the Secretary of State for India, dated Fort William, 14th November 1865, No. 149.

1. With reference to the despatches noted in the margin, we have the honor to report, for approval of Her Majesty's Government, the action taken by us in connection with the tests for admission into the Public Works Department through the Civil Engineering Colleges.

Public Works Despatch, No 30 of 11th April 1864.
Secretary of State's Despatch, No. 37 of 30th July 1864.
Ditto Military Despatch, No. 251 of 8th August 1864.

2. With reference to your Despatch No. 37 of the 30th July 1864, we caused the subject of the tests imposed on Candidates for entering the Engineer branch of the Public Works Department, through the Civil Engineering Colleges, to be reconsidered, in order to determine whether they could be at all relaxed with the view of admitting a larger number of Officers for the Staff Corps. It will be seen from our Resolution accompanying, that we have not thought it desirable that this should be done, but we thought it better, with the view of encouraging Officers of the army to qualify for employment in the Public Works Department, to sanction the award of Rupees 1,000 as a premium to those passing an examination such as will gain 2,000 marks according to the present College standard.

3. In your Military despatch of the 8th August 1864, the difficulty of obtaining Royal Engineer Soldiers was commented on. It was believed that it arose from the nature of the examination required previous to entrance to the College. From our Proceedings you will observe that, theoretical geometry which had come to be included in the entrance tests, has now been dispensed with. In future, only the amount of practical geometry laid down in the Public Works Code, will be required from Candidates for admission to the College.

4. We have also, with the view of admitting more freely into the Department a proportion of men possessing merely practical qualifications, granted the Local Governments the power of appointing men thoroughly trained in some practical branch of work, to any grade in the Upper Subordinate Establishment, without requiring from them any previous examination. Such appointments we have limited to one-fourth of the total strength of the Upper Subordinate Establishment sanctioned.

Proceedings of the Madras Government, Public Works Department,
12*th March* 1866

5. The measures referred to in the last two paragraphs will indirectly facilitate the entrance of Engineer and other Soldiers into the Public Works Department; but we have further under consideration, in the Military Department, measures more directly relating to the supply of Subordinates to the Public Works Department from the Army.

6. We shall also address you further on the subject of the annual supply of Royal Engineer Officers and Civil Engineers, for the Engineer Branch of the Public Works Department. The present despatch is intended to embrace only that part of the subject which is connected with the tests applied at the Civil Engineering College at Roorkee, and for entrance into the Public Works Department generally in this country.

Document to accompany.

Public Works Department Proceedings (Establishment) September 1865, Part A, Nos. 43-52

From the Government of India, Public Works Department, (Establishment,) to the Right Honorable the Secretary of State for India, dated Fort William, 6th January 1866, No. 5.

1. Referring to the 6th paragraph of your Despatch No. 37 of 30th July 1864, and in continuation of our Despatch No. 149, dated 14th November last, we have now to report our views as to the number of Civil Engineers who should for the future, be sent out to India annually.

2. This question, however, cannot be dealt with without entering into the entire question of the supply of Engineers, Civil and Military, to the Public Works Department. You have approved of our proposal to maintain the existing proportion of Military to Civil Officers; and we have already reported that, after careful consideration, we have been unable to recommend that the scale of qualification for entrance into the Public Works Department as Engineers should be lowered in order to admit of more Staff Corps Officers taking service in the Department. We hope the measures we reported in our Despatch last quoted above may have the effect of preventing the number of Staff Corps Officers who enter the Department from falling off rapidly. But we cannot hope to obtain any very large supply of Officers from this source. Still less can we hope for any immediate assistance in the present difficulty of obtaining junior Military Officers to serve as Engineers.

3. The present proportion of Military to Civil in the Engineer Establishment of the Public Works Department, is 11 to 8. As the proportion of Civil Engineers in the Department has of late rapidly increased, while the supply of Military Officers has been reduced, the state of the Establishment is now characterised by a preponderance of Military Officers in the higher grades, and of Civil Engineers in the lower grades. This is a state of things which is very inconvenient, and we should be sorry to see any further progress in this direction. We hope, therefore, that you will be able to ensure our having Military Officers to recruit the Department in, at least, the proportion 11 Military to 8 Civil.

4. The whole number of Engineers, Civil and Military, now on the Establishment throughout India, is 581. The per-centage of casualties from all causes is

between 6 and 7 per cent. But so great has been the difficulty of keeping up the numbers in the Department, that we should wish, for the next two or three years at least, to obtain our supply of young Engineers at the rate of 7 per cent. This will lead to an annual demand of 41 ; and taking the proportions as 11 to 8, there would be 24 Military and 17 Civil Engineers to be supplied annually.

5. Of this number we reckon that we might obtain in India about 13 Engineers annually :—that is, from the Staff Corps possibly about 4 Officers, and from the Civil Engineering Colleges, including Natives of India as well as Europeans, possibly 9 young Civil Engineers annually. There will thus remain to be supplied every year from England 20 young Officers of Royal Engineers, and 8 young Civil Engineers.

6. The distribution of these to the three Presidencies, we think, may be carried out according to the following Table, but we have asked the Governments of Madras and Bombay to inform you separately, whether they agree in our estimate as regards their own requirements :—

Annual Supply.	Govt of India.	Madras.	Bombay.	Total.
From England.				
Young Officers of Royal Engineers	15	2	3	20
Young Civil Engineers	5	1	2	8
In India.				
Officers joining the Staff Corps	2	1	1	4
Students from Civil Engineering Colleges	7	1	1	9
Total	29	5	7	41

7. We shall consider further, in the Military Department, the sufficiency of the present scale of Establishment of Royal Engineers for India, in view to meeting permanently the wants of the Public Works Department. But we have considered it necessary to address you at once in the Public Works Department on the present paucity of young Officers of the Royal Engineers, from which, especially at present, with so much Military work in hand, great inconvenience results. We trust, therefore, that in addition to sending out 8 Civil Engineers annually, you will be able to make immediate arrangements for sending out 20 young Officers of the Royal Engineers to India every year for the next three years, and we shall be able after that time to report to you as to the sufficiency or excess of that scale of supply to meet future requirements.

Copy, with copy of Secretary of State's Despatch under reply, forwarded to the Government of Madras with reference to paragraph 6 alone.

(Signed) C. H. DICKENS, Lieut.-Colonel, R. A,
Secretary to the Government of India.

No. 240. Minute by His Excellency the President.
(Here enter 23rd February 1866)

No. 241. Minute by the Honorable T. PYCROFT.
(Here enter 23rd February 1866.)

No. 242. Minute by the Honorable H. D. PHILLIPS.
(Here enter 23rd February 1866)

No. 243. ORDER THEREON, 12th March 1866, No. 812.

ESTABLISHMENT, No. 18.

Resolved that the Minutes above recorded be forwarded to the Secretary of State and to the Government of India, and that the following letter be despatched :—

(Here enter No. 813, dated 10th March 1866.)

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

Ed. S. T. Augustin.

MINUTE BY THE HONORABLE THE PRESIDENT.

1. The basis upon which these calculations are founded is essentially unsound.

2. The Corps of Engineers is referred to as being able, under existing circumstances, to furnish a certain number of Officers to do duty in the Department of Public Works, but no allusion is made to its normal condition as a part of the Military force of the country, and as bearing some definite numerical relation to the strength of the other branches of the Army.

3. No attention has been paid to the fact that the casualties, which require to be filled up from England, take place mostly among the senior Officers of the Madras Engineers, and that in a short time it will be necessary to send out Officers of rank from England to fill up these vacancies, which Officers, having no knowledge of the language of the country, and being too old to acquire it during the short period of their service in India, will not be qualified to hold appointments in the Public Works Department.

4. No allusion has been made to the fact, that the young Officers, who now join the Corps, do so under the distinct understanding that service in India forms but a portion of their tour of foreign service, and that they will be relieved after a certain number of years.

5. No allusion has been made to the fact, that any Officer of Engineers sent out from England is not under any obligation to learn the language of the country.

6. The whole of the recommendations and calculations are made to suit a state of things which is rapidly passing away.

7. I cannot, therefore, but think that it would be better, in every way, to call the attention of the Government of India to the anomalous position now occupied by the Officers of the Corps of Royal Engineers, than to attempt by flimsy expedients, such as those proposed, to prolong a state of things which is working most injuriously to the Department of Public Works, and to the Corps of Royal Engineers.

23rd February 1866. (Signed) W. T. DENISON.

Exd. S. T. Augustin.

MINUTE BY THE HONORABLE H. D. PHILLIPS.

It will suffice, I think, to advise the Secretary of State by direct communication on the points to which the Supreme Government have now drawn our immediate attention. This advice, in the form directed, will be tantamount to submitting an indent for men to fill up vacancies, and will be quite irrespective of any improvement that may be in contemplation with reference to the correspondence that has passed, in regard to the anomalous position taken in the Public Works Department by Officers of the Royal Engineers.

23rd February 1866.

(Signed) H. D. PHILLIPS.

Exd. S. T. Augustin.

MINUTE BY THE HONORABLE H. D. PHILLIPS.

It will suffice, I think, to advise the Secretary of State by direct communication on the points to which the Supreme Government have now drawn our immediate attention. This advice, in the form directed, will be tantamount to submitting an indent for men to fill up vacancies, and will be quite irrespective of any improvement that may be in contemplation with reference to the correspondence that has passed, in regard to the anomalous position taken in the Public Works Department by Officers of the Royal Engineers.

(Signed) H. D. PHILLIPS.

23rd February 1866.

Exd. S. T. Augustin.

PUBLIC WORKS DEPARTMENT.
FORT SAINT GEORGE,
12th March 1866.

No. 813.

No. 244.
To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

ESTABLISHMENT, No. 19.

SIR,

With reference to your Endorsement No. 128 E, dated 23rd January 1866, I am directed to forward herewith the Minutes which have been recorded by His Excellency the Governor and the Members of Council on the number of Engineers, both Military and Civil, who should be sent out in future to this Presidency annually, and to request attention to the opinions which the President has expressed as to the anomalous position now occupied by the Officers of the Corps of Royal Engineers employed in this country, and the difficulties which he anticipates will be experienced in furnishing any number of those Officers to do duty in the Department Public Works in India.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

Remarks

The basis upon which these calculations are founded is essentially unsound. The Corps of Engrs is referred to as being able under existing circumstances to furnish a certain number of Officers to do duty in the Dept of Work, but no allusion is made to its normal condition as a part of the Military force of the Country, and as bearing some definite numerical relation to the strength of other branches of the Army. No attention has been paid to the fact that the casualties which require to be filled up from England take place mostly among the Junior Officers of the Madras Engrs. and that in a short time it would be necessary to send out Officers of Rank from England to fill up these vacancies, which Officers having no knowledge of the language of the Country and being too old to acquire it during their first period of Native Service in India will not be qualified to

with appointments in the D Works[ps] -

No allusion has been made to the fact that the young officers who now join the Corps do so under the distinct understanding that service in India forms no part in any term of foreign service, and that they will be relieved after a certain number years. No allusion has been made to the fact that an officer of Engineers destined from England is not under any obligation to learn the language of the country. The whole of the recommendations and calculations are made to suit a state of things which is rapidly passing away. I cannot therefore but think that it would be better in every way to call the attention of the Gov[t] of India to the anomalous position now occupied by the officers of the Corps of Royal Engineers. than to attempt by flimsy

Expedients such as those proposed to prolong a state of things which is working injuriously to the Dep[t] of public works and to the Corps of Royal Engineers

W Denison

H E the President thinks any change of this kind for the consideration but that no alteration upon the present system should be made until the Secretary of State of the matter of Engineers has time to consult at least the Govt and our Army Engineers. Should I find myself suggested in the Secretary's Memo

23/2/66. JP

I shall suppose Mr Smith,
to address the Sec: of State by
direct- com:n, on the points
to which the Sup: Cod: have
now drawn our immediate
attention - Her advice, in
the form directed, will be
sufficient to submit to
an indent for men to fill
up vacancies, & will be liable
to correction of any improvement
that may be intervening between
with reference to the correspondence
that has passed, in regard to the
anomalous position taken on the P.W.
Dep:t by Officers of the Royal Engineers -

WM

No 1866 Desp.
Pro. of Govt. &c. for March
No 8416

Minute by His Excellency
the President

Minute by the Honorable
F. Peacock

Minute by the Honorable
H. D. Phillips.

Rec'd 23d Febry. } 1864.
Read 1st March }

Observing
that the attention
of the Govt. of India
should be called
to the anomalous
position of the
Corps of Royal
Engineers —

No 812-12th March 1864.

A-240.9 242

PUBLIC WORKS.

No. 37 of 1864.

FROM

HIS EXCELLENCY THE RIGHT HON'BLE
THE GOVERNOR GENERAL OF INDIA IN COUNCIL.

INDIA OFFICE;
London, 30*th July*, 1864.

SIR,

Para. 1. I have had under consideration in Council your Excellency's Despatch, No. 30, of 11th April last, treating of "the present constitution and sources of supply of the Engineer Branch of the Public Works Establishment, with special reference to the classes of officers of which it is composed."

2. My views on this subject coincide to a great extent with those set forth in the Resolution of your Government of 14th April last. I see no reason to doubt that, in the constitution of the Public Works Department, one general principle should, as nearly as possible, be adopted for all India, or that those arrangements which are best suited to one Presidency are likely, in most essential respects, to be best suited to all. I adopt, too, your conclusion that for the present the number of Military and Civil Engineers sent out from England should be determined with reference to the aggregate number of appointments open to such Engineers in the Public Works Department, and in the future distribution of those Engineers among the three Presidencies I have resolved to adopt the proportion suggested by your Excellency, viz.:—

To Government of India	... ...	5
" "	Madras...	1
" "	Bombay	1

3. The operation of this rule can, however, only be gradual, and it is desirable to correct, more rapidly than would be possible by its means alone, the existing disparity in the proportions between the Civil and Military elements in the Public Works Establishments in different parts of India. I consider, therefore, that you should call upon the Governments of Madras and Bombay to place at the disposal of your Government, as soon as the transfer can be made without inconvenience to the public service, a small number of their Engineer Officers, and to receive in return a similar number of the Civil Engineers at present serving in the territories under your more immediate superintendence.

4. Referring to what is said in your despatch as to the probability of the Civil element becoming preponderant in the Public Works Department, I fully admit the importance of maintaining a due proportion of Military Officers. I am not prepared, however, at present to take any measures for augmenting the Indian Establishment of Royal Engineers, and I would, therefore, wish you to consider the advisability of affording greater facilities to Staff Corps Officers to enter the Department. If, as would appear from the 5th paragraph of your despatch, such officers are at present deterred from offering themselves by the severity of the professional tests which must be passed previously to admission, it might perhaps be expedient to lower those tests, and to leave the officers admitted to complete their qualifications while engaged in active duty as Probationary Assistant Engineers. Promotion in the Department would be the appropriate reward of increased technical proficiency, and any Staff Corps Officer who might find himself unable to establish the requisite title to promotion, would no doubt soon apply to be transferred to some other branch of the service in which he would have a better chance of success.

5. On the question of keeping up to their full complement of officers the seven battalions of Royal Engineers assigned to India, I shall place myself in communication with the proper Department of Her Majesty's Government.

6. I shall be glad to be furnished with your opinion as to the proper number of (Civil) Probationary Assistant Engineers to be sent out from this country in future. Of late years ten have been sent out to Bengal, and I wish to know how many will in future be required for each of the three Presidencies.

I have the honour to be,
SIR,
Your most obedient, humble Servant,
C. WOOD.

PUBLIC WORKS.

No. 149 of 1865.

To

THE RIGHT HON'BLE SIR CHARLES WOOD, BART., G. C. B.,
SECRETARY OF STATE FOR INDIA

PUBLIC WORKS DEPARTMENT,
Fort William, 14th November, 1865.

Establishment.

SIR,

With reference to the despatches noted in the margin, we have the honour to report, for approval of Her Majesty's Government, the action taken by us in connection with the tests for admission into the Public Works Department through the Civil Engineering Colleges.

Public Works despatch, No. 30 of 14th April 1864
Secretary of State's despatch No 37 of 30th July 1864
Ditto Military despatch No 251 of 8th August 1864.

2. With reference to your despatch No. 37 of the 30th July 1864, we caused the subject of the tests imposed on Candidates for entering the Engineer Branch of the Public Works Department, through the Civil Engineering Colleges, to be reconsidered, in order to determine whether they could be at all relaxed with the view of admitting a larger number of Officers for the Staff Corps. It will be seen from our Resolution accompanying, that we have not thought it desirable that this should be done, but we thought it better, with the view of encouraging Officers of the Army to qualify for employment in the Public Works Department, to sanction the award of Rs. 1,000 as a premium to those passing an examination such as will gain 2,000 marks according to the present College standard.

3. In your Military Despatch of the 8th August 1864, the difficulty of obtaining Royal Engineer Soldiers was commented on. It was believed that it arose from the nature of the examination required previous to entrance to the College. From our Proceedings you will observe that, theoretical geometry, which had come to be included in the entrance tests, has now been dispensed with. In future, only the amount of practical geometry laid down in the Public Works Code, will be required from Candidates for admission to the College.

4. We have also, with the view of admitting more freely into the Department a proportion of men possessing merely practical qualifications, granted

the Local Governments the power of appointing men thoroughly trained in some practical branch of work, to any grade in the Upper Subordinate Establishment, without requiring from them any previous examination. Such appointments we have limited to one-fourth of the total strength of the Upper Subordinate Establishment sanctioned.

5. The measures referred to in the last two paragraphs will indirectly facilitate the entrance of Engineer and other Soldiers into the Public Works Department; but we have further under consideration, in the Military Department, measures more directly relating to the supply of Subordinates to the Public Works Department from the Army.

6. We shall also address you further on the subject of the annual supply of Royal Engineer Officers and Civil Engineers, for the Engineer Branch of the Public Works Department. The present despatch is intended to embrace only that part of the subject which is connected with the tests applied at the Civil Engineering College at Roorkee, and for entrance into the Public Works Department generally in this country.

We have the honour to be,

SIR,

Your most obedient and humble Servants,

JOHN LAWRENCE.
H. S. MAINE.
W. GREY.
G. N. TAYLOR.
W. N. MASSEY.
H. M. DURAND.

Document to accompany.
Public Works Department Proceedings (Establishment) September 1865, Part A, Nos. 43-52.

Copy.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

FORT WILLIAM.

PUBLIC WORKS.

No. 149, *dated* 14*th November*, 1865.

FROM

THE GOVERNMENT OF INDIA,

TO

THE RIGHT HON'BLE SIR CHARLES WOOD.
SECRETARY OF STATE FOR INDIA.

Reporting the action taken in connexion with the tests for admission into the Public Works Department through the Civil Engineering Colleges.

PUBLIC WORKS.

No. 5 OF 1866.

To

THE RIGHT HON'BLE SIR CHARLES WOOD, BART., G. C. B.,
SECRETARY OF STATE FOR INDIA

PUBLIC WORKS DEPARTMENT,
FORT WILLIAM, 6*th January*, 1866.

Establishment.

SIR,

Referring to the 6th para. of your Despatch No. 37 of 30th July 1864, and in continuation of our Despatch No. 149, dated 14th November last, we have now to report our views as to the number of Civil Engineers who should, for the future, be sent out to India annually.

2. This question, however, cannot be dealt with without entering into the entire question of the supply of Engineers, Civil and Military, to the Public Works Department. You have approved of our proposal to maintain the existing proportion of Military to Civil Officers; and we have already reported that, after careful consideration, we have been unable to recommend that the scale of qualification for entrance into the Public Works Department as Engineers should be lowered in order to admit of more Staff Corps Officers taking service in the Department. We hope the measures we reported in our Despatch last quoted above may have the effect of preventing the number of Staff Corps Officers who enter the Department from falling off rapidly. But we cannot hope to obtain any very large supply of Officers from this source. Still less can we hope for any immediate assistance in the present difficulty of obtaining junior Military Officers to serve as Engineers.

3. The present proportion of Military to Civil in the Engineer Establishment of the Public Works Department, is 11 to 8. As the proportion of Civil Engineers in the Department has of late rapidly increased, while the supply of Military Officers has been reduced, the state of the Establishment is now characterised by a preponderance of Military Officers in the higher grades, and of Civil Engineers in the lower grades. This is a state

of things which is very inconvenient, and we should be sorry to see any further progress in this direction. We hope, therefore, that you will be able to ensure our having Military Officers to recruit the Department in, at least, the proportion of 11 Military to 8 Civil.

4. The whole number of Engineers, Civil and Military, now on the Establishment throughout India, is 581. The percentage of casualties from all causes is between 6 and 7 per cent. But so great has been the difficulty of keeping up the numbers in the Department, that we should wish, for the next two or three years at least, to obtain our supply of young Engineers at the rate of 7 per cent. This will lead to an annual demand of 41; and taking the proportions as 11 to 8, there would be 24 Military and 17 Civil Engineers to be supplied annually.

5. Of this number we reckon that we might obtain in India about 13 Engineers annually:—that is, from the Staff Corps possibly about 4 Officers, and from the Civil Engineering Colleges, including Natives of India as well as Europeans, possibly 9 young Civil Engineers annually. There will thus remain to be supplied every year from England 20 young Officers of Royal Engineers, and 8 young Civil Engineers.

6. The distribution of these to the three Presidencies, we think, may be carried out according to the following Table, but we have asked the Governments of Madras and Bombay to inform you separately, whether they agree in our estimate as regards their own requirements:—

Annual Supply.	Govt. of India.	Madras	Bombay	Total.
From England.				
Young Officers of Royal Engineers	15	2	3	20
Young Civil Engineers	5	1	2	8
In India				
Officers joining the Staff Corps	2	1	1	4
Students from Civil Engineering Colleges	7	1	1	9
Total	29	5	7	41

7. We shall consider further, in the Military Department, the sufficiency of the present scale of Establishment of Royal Engineers for India, in view to meeting permanently the wants of the Public Works Department. But we have considered it necessary to address you at once in the Public

Works Department on the present paucity of young Officers of the Royal Engineers, from which, especially at present, with so much Military work in hand, great inconvenience results. We trust, therefore, that in addition to sending out 8 Civil Engineers annually, you will be able to make immediate arrangements for sending out 20 young Officers of the Royal Engineers to India every year for the next three years, and we shall be able after that time to report to you as to the sufficiency or excess of that scale of supply to meet future requirements.

We have the honour to be,

Sir,

Your most obedient and humble Servants,

JOHN LAWRENCE.
W. R. MANSFIELD.
H. S. MAINE.
W. GREY.
G. N. TAYLOR.
W. N. MASSEY.
H. M. DURAND.

15

A. 128. E.

Copy, with copy of Secretary of State's Despatch under reply, forwarded to the Government of Madras with reference to para 6 alone.

Fort William,
Public Works Dept,
The 23d Jany. 1866

W. Mansfield Lieut. Col. R.A.
Secretary to the Government of India.

Copy.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

FORT WILLIAM.

PUBLIC WORKS

No. 5, *dated* 6th *January*, 1866.

FROM

THE GOVERNMENT OF INDIA,

TO

THE RIGHT HON'BLE SIR CHARLES WOOD,
SECY. OF STATE FOR INDIA.

Communicates the views of the Government of India on the subject of recruiting the Engineer Establishment of the Public Works Department.

16

Circulated for instructions as to the nature of the communication to be made to the Secretary of State regarding the supply of young Officers for employment in the D. P. W., with reference to para 6 of the Despatch of the Government of India No 5 of 1866.

Colonel R.M.
Secy to Govt.

17th March 1865. No. 746
28 — " — " 851

A 239

His utterly impossible to give an opinion without further information from the Secy of W— we should have some data as to men wanted and requirements both Military & Civil before the opinion expressed in my Minute upon the Organization of the Engineers can be pronounced

[signature]

Re 21 Feby/66 D. 26
Sr 9th Feby/66 D. 13

D'W. 1866 / Dep'th
Govt of India / No. 181

From
The Secretary to the
Govt of India
P.W.D.

Dated 23 January 1866
Rec'd 5th Feby —
No. 128. C.

Communicating cer-
tain correspondence
with the Secretary of
State on the subject of
recruiting the Engineer
Establishment of the
Public Works Dep't.

No. 812-813-125 March/66

Memorandum

In this letter the Govern-
Proc. of Govt. ment of India request that this
In the Mily Dept. No. 66 to
8/13 February 1865. Government will, with reference
2 Telegram from Secretary to Govt of India in Military Dept— No. 1077 S/18 Feby 1865
3 Letter from Right Honble the Secy of State for India No. 225 3/31st October 1865.
to the correspondence marginally noted, explain to the Secretary of State, direct, their views as to the number of Engineers, both Military and Civil, who should, for the future, be sent out to this Presidency annually. The Government of India show that the whole number of Engineers employed in the Department of Public Works throughout India is 581, and that of these 336 are Military Officers and 245 Civilians. The proportion of Military men to Civilians is

The Establishment of the Department Public Works in this Presidency, as at present constituted, consists sixty four (64) appointments of the Engineer Grades, of which forty (40) are held by Officers of the Corps of Royal Engineers and twenty four (24) by Civilians and Officers of the Staff Corps. This proportion of Royal Engineers to other Officers is rather greater than the average throughout India, but, in the opinion of the undersigned, is not greater than ought to be maintained to sustain the Department in a state of efficiency so long as it continues on its present partly Military and partly Civil footing.

Besides

Secretariat ——— 2
Account Dept ——— 2
Superintending Engineers 8
Executive Engineers 26
Assistant Engineers 26
64

is therefore 11 to 8, and assuming that vacancies occur annually at the rate of 7 per 100, the Government of India make out that an annual reinforcement will be required of 41, of whom, at the ratio given above, 21 will be Military men and 17 Civilians.

2 Reckoning that 4 Officers and 9 young Civil Engineers can be obtained from the Staff Corps and the Civil Engineering College in India, it is shown that 20 Officers of Royal Engineers and 8 Civil Engineers will have to be sent out from England, and that of these five must be supplied to this Presidency, namely.

From the Staff Corps ——— 1
—"— "— Civil Engineering College 1
Engineer Officers from England 2
Civil Engineers from ——— Do ——— 1
Total 5

3 Besides the forty Officers of Engineers serving in the Department of Public Works there are five employed in other Civil stations and two with the Sappers and Miners, making the total number of Royal Engineer Officers employed in this Presidency 47 and the total number of Professional Appointments to be filled 71.

Railways — 2
Mint — 1
Comg Engrs & Staff Corps } — 1
Principal Civil Engg College } — 1
5

44 + 5 + 2 = 71

4. The actual number of Vacancies in this Presidency in each of the last six years were

1859/60. 60/61. 61/62. 62/63. 63/64. 64/65

9 — 5 — 6 — 5 — 8 — 3.

giving an average of about 7 per annum or fully 9 per cent on the strength of the Department. All, however, many of these Vacancies were caused by Officers returning to Regimental duty and to Engineer Officers

Officers seeking employment in other Presidencies, it will not be safe to take 7 per cent as the probable ratio of casualties in the Department for the future. This is the number assumed by the Government of India and given to this Presidency an annual assignment of five young Officers to keep up the establishment at its present strength.

5 The undersigned is, however, of opinion that instead of two qualified Officers being obtained from the Civil Engineering College and Staff Corps, as calculated upon by the Government of India, it will not any longer be possible to look to the latter of these as a source of supply at all

all, and that not more than one eligible Candidate should be reckoned upon from the Civil Engineering College and Upper Subordinate Establishments. This leaves four to be supplied from England, and in order to maintain the proportion of Royal Engineers to other Officers at about the present ratio, 47 to 24 or nearly 2 to 1, at least three of these young men will have to be selected from the Corps of Royal Engineers and despatched to India for service in this Presidency.

Colonel R.E.
Secretary to Govt
Pub Works Dept

Public Works Dept

No 812

22

Proceedings of the Madras Government

Under date the 12th March 1866

Read the following

From the Secretary to the
Govt of India P.W.D.

No 128 dated 23rd January 1866

Communicating certain correspondence with the Secretary of State on the subject of recruiting the Engineer Establishment of the Public Works Department.

Minute by H.E. the President

Do by the Honble J. Boroughs

Do by the Honble H.D. Phillips

Resolved that the Minutes above recorded be forwarded to the Secretary of State & to the Government of India, & that the following letter be despatched

M E No 813 dated 12th March 66

No 813

To
The Secretary to the
Government of India

Sir,

With reference to your Endorsement No 128 E dated 23rd January last, I am directed to forward herewith the Minutes

10

Recd 21st Delivered 1866 R. 26th

which have been recorded by
H. E. the Governor & the Members
of Council on the minutes of
the Engineers both Military
& Civil who should be sent
out in future to this Presidency
annually, & to request attention
to the opinions which the President
has expressed as to the anomalous
position now occupied by the
Officers of the Corps of Royal
Engineers employed in this country,
& the difficulties which he
anticipates will be experienced
in furnishing any number
of those Officers he do duty
in the D P W in India.—

114

Fort St George
12th March 66

Secy. 18th March with Copies
of Minutes by the President
& Members of Council

No. W 1866 Depte.

Rec.d of Govt. for March

Lr. dd 8/2/1866

Rec.d of H.C. Madras Govt.

Dd 12th March 1866

Officers of the Corps of Royal Engineers for duty in the Depte. of Public Works in India - Passing orders on certain Correspondence relative to the present Constitution and Sources of Supply of -

No 239 C 244

c. 5th March 1866 O.R. 8th