(1) Number of pages 64.
(2) Date of repair 2.9.87.
(3) Initials of the Referencer

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W.D DEPARTMENT

~~643.~~

G.O. No. / B.P. No. 644-W. Press. / Mis.

Dated 16-3-1885 198

Not to be folded or roughly handled.

Archives —I 10,006-9 80

16th March 1885, No. 644 W., Public Works.

644/1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

Read—the following paper :—

Proceedings of the Government of India, Public Works Department (General), dated Fort William, 16th February 1885, Circular No. 2, Public Works.

Printing of Selections from the Records of the Government of India, Public Works Department, and establishment of a Library in the Government of India Secretariat, Calcutta.

Resolution—

The attention of the Government of India has lately been directed to the fact that there exist, among the records of the Government of India in the Secretariat of the Public Works Department, a considerable number of reports, of different descriptions, which are both interesting and valuable as purely professional descriptions of engineering works projected or accomplished. The papers which contain these records are, in most cases, practically quite out of the reach of the engineers of the department generally, who are, indeed, often not aware of their existence.

2. It is the intention of the Government of India to publish in future, from time to time, selections from the proceedings of the Government of India in the Public Works Department, mainly with the view of giving publicity to matters of general engineering interest. These selections will be, as a rule, taken from matters which come before the Government of India in the future, but to some extent the more important records of the past will be gradually reprinted. These selections will be made from letters, from reports and specifications of new projects, from progress reports, from special reports of accidents and failures, from completion reports, and from other sources. It must necessarily be that these selections will often contain matter of little general interest, but which, from the mere fact that it is embodied in the selected paper, must necessarily be published with it. It will also unavoidably occur that the selections published, from time to time, concerning any one great work will be, to some extent, disjointed and incomplete. For instance, it is intended to publish papers connected with the earlier history of the Madras harbour, some connected with its partial destruction, the opinion of the Madras engineers on its reconstruction, the report of the Consulting Engineer to the Government of India, and the opinions of the engineers consulted in England on the same subject: portions of several of these papers will refer to others which will not be published, and, to some extent, portions of the published papers could only be rendered entirely comprehensible if the entire correspondence connected with the subject were made public. This, of course, cannot always be; but the papers published will, it is thought, be of great value to any engineer who may have to consider a work of the same nature elsewhere.

3. These selections will, as far as practicable, be accompanied by the necessary descriptive drawings. In order that these may be readily reproduced, it is desirable that all drawings which accompany reports sent to the Government of India should comply with the conditions laid down in the set of instructions issued by the Surveyor-General, dated the 5th July 1884, which accompanies Government of India circular letter No. I of this date.

4. The Government of India is aware that the rules regarding completion reports which are laid down in Public Works Department Code chapter IX, sections 31, 32 and 33, are not, in all cases, strictly observed: more especially is this the case with reference to section 32, which requires that drawings of the works as completed should accompany the completion report. The Government of India is of opinion that it is desirable that these rules should receive more attention, and that the report which accompanies the drawings should give an account of the chief engineering features of the completed work. It is thought that such reports would be valuable; and that engineers would be more willing than they are now to supply them if those that were of sufficient importance were permanently recorded as selections from the proceedings of Government.

The Government of India desires that the officers responsible for these reports may be required to prepare them more regularly in future, and that Local Governments and Administrations will endeavour to enforce the rules. The Government of India will be glad to receive from Local Governments and Administrations copies of completion reports of important works specially for publication as selections. It must be remembered that it is not necessary that the drawings which accompany such reports should be elaborate and highly finished. Coarse tracings from the working drawings, if clearly drawn, would, when photozincographed on a reduced scale, look much better than the originals, and be all that is required.

5. The volumes of selections which will be thus formed should, in time, create a good professional library on Indian engineering. But the main object which the Government of India has in view would be but partially met unless the contents of this library were available to all engineers of the department. It has been pointed out to the Government of India that engineers in India are frequently put to much labor and thought to deal with an engineering difficulty in one province which has been already thoroughly thought out, and, perhaps, practically overcome, in another, and that, either through ignorance of the fact that the problem has been solved, or from inability to obtain the papers or reports on the subject, the work has to be done all over again.

6. It is therefore decided that the selections from the proceedings of Government should be made easily accessible, on loan, to any engineer who may desire to consult them. With this object, the Government of India will establish a library in the Government of India Secretariat at Calcutta, which will be open to all engineers at the presidency town, and from which any engineer under the Local Governments and Administrations marginally noted will be able to obtain, by direct application to the librarian, any of the selections which he may desire to consult. Detailed rules for the conduct of the library will be framed and published hereafter.

Bengal.
N. W. P. and Oudh.
Punjab.
Central Povinces.
British Burma.
Assam.
Beluchistan.
Coorg.
Hyderabad.
Central India.
Rajputana.
Inspector-General of Military Works.
Director-General of Railways.
Accountant-General, Public Works Department.
Also all officers in the Consulting Engineer's Department.

7. It is suggested that similar libraries might be established at Madras and Bombay. To these the Government of India would be willing to send any selections of its own proceedings which the Local Governments might desire to receive.

8. In order that the proposed library may be the more complete, the Government of India will place in it the collection of professional books which are now in the Secretariat, and, if the project is found to be one which is appreciated by the engineers of the Public Works Department, will add to the present collection. A catalogue will be circulated from time to time.

9. It is thought that it may not infrequently occur that engineers leaving the country would be willing to give books from their private libraries as donations to the public ones.

10. As it will take time to prepare the selections of the proceedings of the Government of India which it may be decided to publish, the library will necessarily be very incomplete for some time to come. The first catalogue of the books which are available will be issued shortly.

2

Order—

Ordered that a copy of this resolution be forwarded to the Local Governments and Administrations marginally noted, for information and guidance, with the request that all members of the engineer establishment may be informed that copies of the library catalogue will be sent to all Chief, Superintending and Executive Engineers by the librarian of the Government of India.

The Governments of Bengal, the North-Western Provinces and Oudh, and the Punjab, in the Public Works Department.
The Chief Commissioners of the Central Provinces, British Burma, Assam, and Coorg.
The Resident at Hyderabad.
The Agents to the Governor-General for Central India, Rajputana, and Beluchistan.
The Accountant-General, Public Works Department.
The Inspector-General of Military Works.
The Director-General of Railways.
The Consulting Engineers to the Government of India for Guaranteed Railways, Calcutta, Lahore, and Lucknow.
The Superintendent of Works, Simla Imperial Circle.

Also that a copy be forwarded to the Governments of Madras and Bombay, with the request that it may be stated whether similar libraries to that proposed for Calcutta can be advantageously established in those provinces.

ORDER—dated 16th March 1885, No. 643 W., Public Works.

His Excellency the Governor in Council recognises the value of the scheme proposed in the above resolution, which will be circulated to officers of the Public Works Department for information and guidance.

2. Particular attention is called to paragraph 3 in respect to drawings intended to illustrate reports. The instructions by the Surveyor-General, therein referred to, will be separately communicated.

3. The rules * regarding completion reports, referred to in paragraph 4, should be attended to in future as far as practicable, and Superintending Engineers are now invited to send in completion reports of important works which they may consider adapted for separate publication as selections. Should reports of the kind have been already submitted, such references should be given as will enable them to be traced.

4. His Excellency the Governor in Council would be glad to see a library formed at Madras, similar to that proposed for Calcutta. It is, however, anticipated that there will be difficulty and delay in compiling the necessary selections, as the services of a special officer, which are needed to carry on the work effectively, are not at present available. The matter will, however, be kept in view, and the existing collection of books arranged with a view of separating and cataloguing engineering works of value.

5. On receipt of the catalogues of the Calcutta library, the selections required by the Madras Government will be indicated.

(Here enter No. 644 W., dated 16th March 1885.)

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chief Engineer for Irrigation.
" Consulting Engineer for Railways.
To Superintending Engineers.
To the Superintendent of Works, Tank Maintenance Scheme.
" Consulting Architect to Government.
" Examiner, Public Works Accounts.
" Engineers-in-Chief, State Railways.

ENDORSEMENT—dated 16th March 1885, No. 644 W., Public Works.

Copy of the above forwarded to the Government of India.

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

Exd. E. Fernandez.
Spare Copies

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* *Vide* paragraphs 1561 to 1568 of the Madras Public Works Code.

GENERAL.
ESTABLISHMENT.

Govt. of (1885) Madra

PUBLIC WORKS.

Dated March, 16th.

Recd. *Encl.*

G.O., 16th March 1885, No. 644

MARCH.

Library

Forwarding copy of orders on the subje
of the formation of a — in the Pub
Works Secretariat at Madras.

SURVEY OF INDIA OFFICES,
Calcutta, 5th July 1884.

The great value of Photozincography for reproducing accurate facsimiles of manuscript maps, plans, and drawings of all kinds has long been recognised, by officials in all Departments of the Empire, but as the requirements of the process are not generally known, the following revised rules are republished for general information:—

Sd. G. C. DEPRÉE, *Colonel, S.C.,*
Surveyor General of India.

INSTRUCTIONS FOR THE PREPARATION OF DRAWINGS FOR REPRODUCTION BY PHOTOZINCOGRAPHY.

1. The drawings should be made on white smooth-surfaced paper, fresh tracing cloth, or, best of all, fine Bristol board. When practicable, the drawing should remain stretched on the drawing board, and in any case should be kept as clean as possible, and free from pencil marks, creases, and wrinkles. Little defects which may scarcely be noticed on the original frequently attain undue prominence in the photograph.

2. The best ink to use is Indian ink; it should be freshly and evenly rubbed down, and be sufficiently thick to give a good full black line. A little yellow pigment such as gamboge, or preferably, burnt sienna, is sometimes added, or the ink may be rubbed down in a very weak solution of bichromate of potash. In adding yellow to the ink care must be taken to use some substance which will not spread beyond the lines, especially when drawing on tracing cloth.

3. The lines should be firmly and clearly drawn, not too fine or too close together. Even the finest lines must be quite black. Light effects must be produced by making the lines thinner, and increasing their distance apart, and not by the use of pale ink. In removing pencil marks after the drawing has been inked in, great care must be taken not to destroy the blackness and firmness of the lines by too much rubbing; otherwise they will appear quite rotten and broken when reproduced. The pencilled outline should be drawn in very lightly so as to avoid the necessity for cleaning up after inking as far as possible. Should any cleaning up be necessary, nothing should be used but bread crumb; any form of Indian rubber or eraser being most injurious.

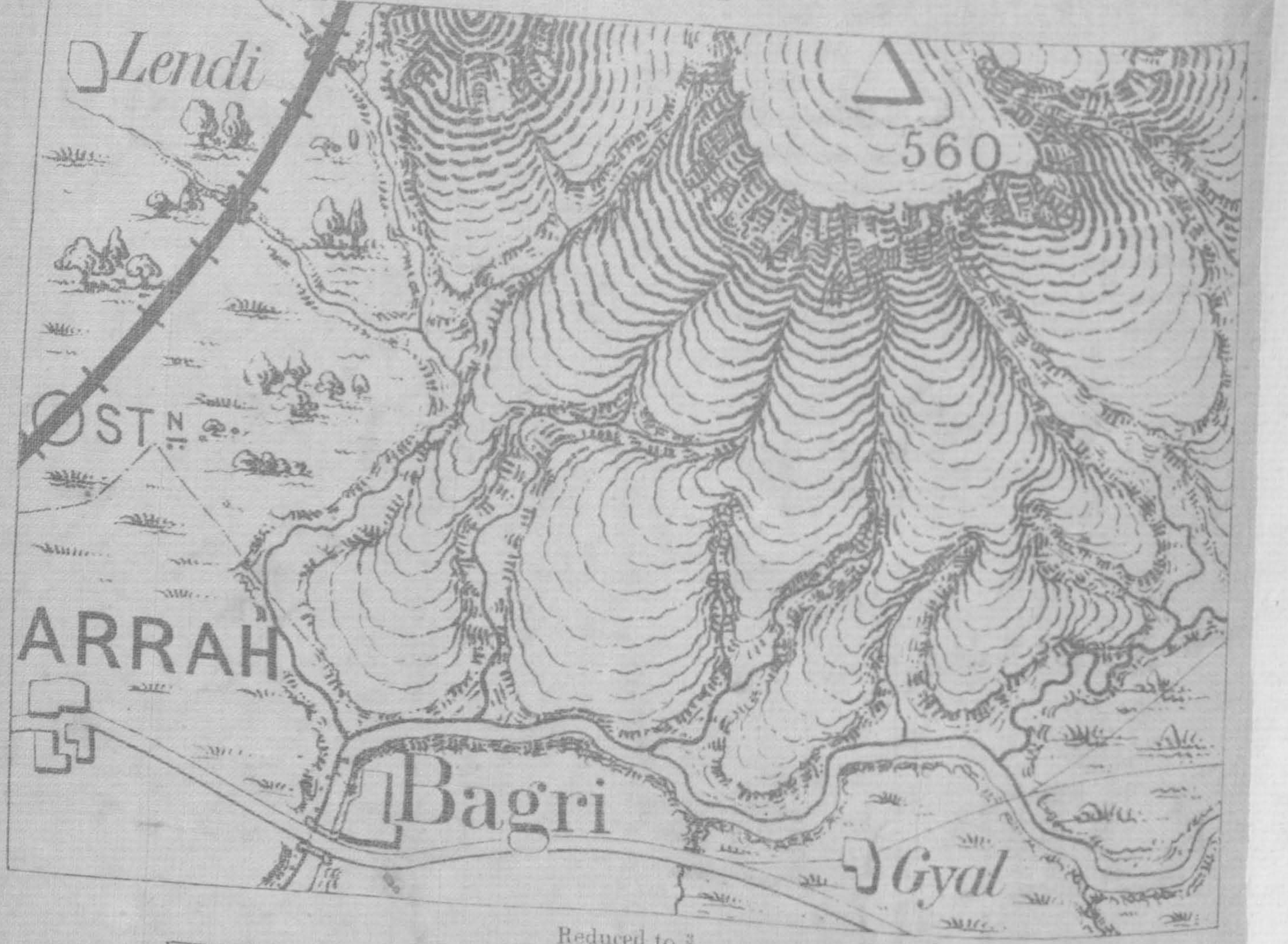
4. Cross-hatching and shading should be open, and in firm clear lines, not too close together or confused by fine lines. Intensity of shade should be shown by an increase in the thickness of the lines rather than by their being placed close together. It must be borne in mind that throughout the process there is a tendency for the lines to thicken, so that if they are too close they are liable to block up in the printing, and the work will appear heavy and unsightly. This rule also applies to hill shading, the darker portions of which should be drawn in thick distinct lines, but not crossed and recrossed with fine lines.

5. In drawing maps, it is better to leave river courses, coast lines, lakes, ponds, or tanks, blank, and not filled in with fine lines. They may be indicated on the original by a pale wash of blue without detriment to their reproduction.

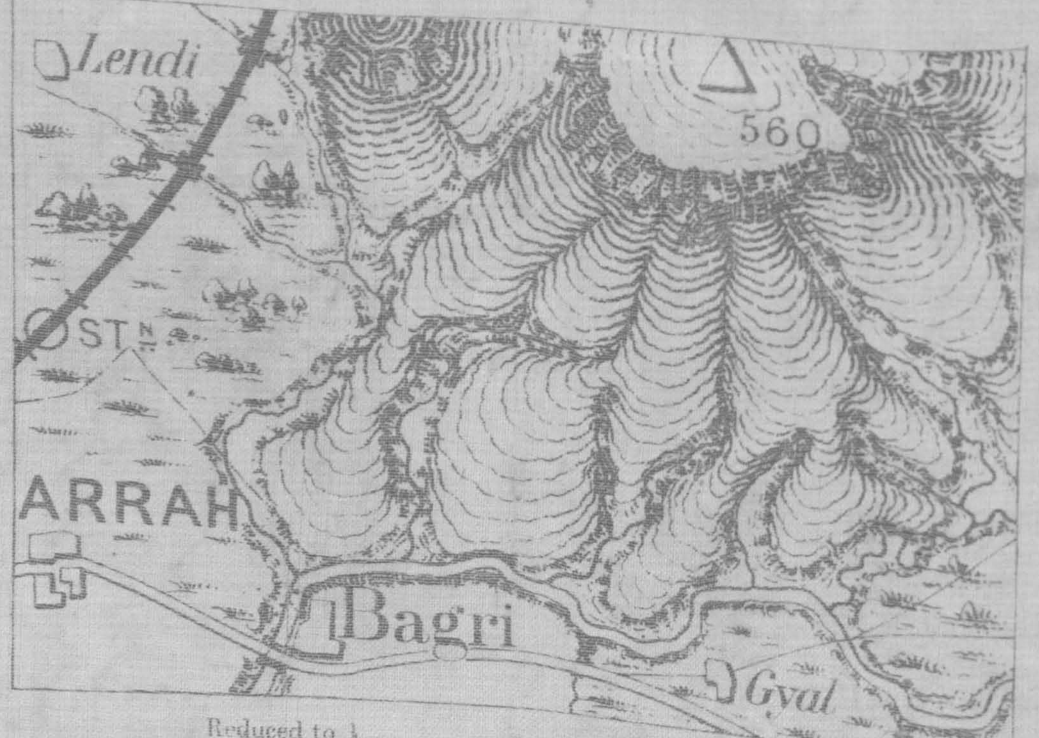
6. Similarly in mechanical or architectural drawings, ruled tints and shades are better left blank on the original, or shown by light tints of blue, violet, or aniline red. Engraved tints in lines or dots can be transferred on the stone or zinc afterwards, and will have a much neater effect than tint lines reproduced directly from the original.

7. Washes of any colour, except pale blue, violet, aniline red, or other colours which will not reproduce, are absolutely inadmissible in drawing for reproduction by photozincography. If necessary, outlines may be drawn in some pigment which will reproduce black, such as strong red, brown, yellow, orange, or green. Details required to be shown in the original, but not in the copy, may be drawn in pale cobalt blue, aniline violet, or magenta. Spots, stains, and details not required to be reproduced, can be painted out with Chinese white.

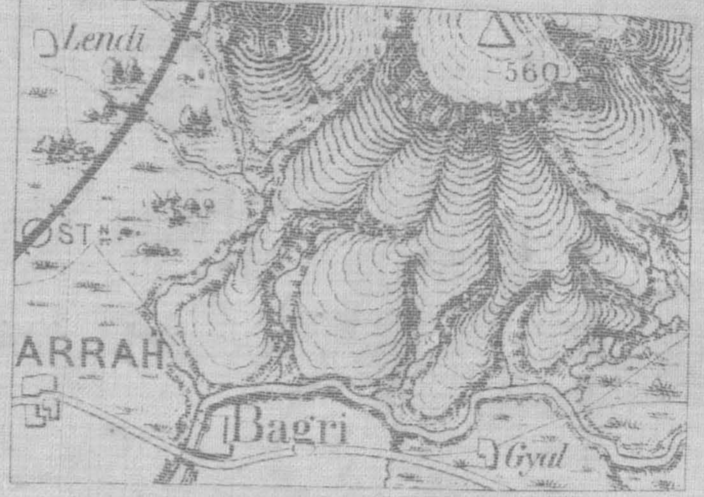
ORIGINAL



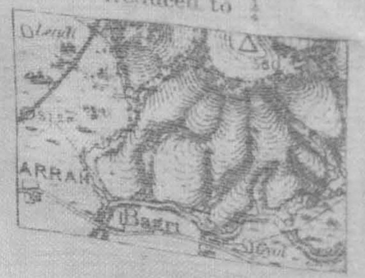
Reduced to ¾



Reduced to ½



Reduced to ¼



8. Whenever possible, the original drawing should be on a larger scale than the reproduced copy. Defects in drawing are lessened by reduction, and the result generally is finer and sharper than a reproduction to scale would be.

9. In preparing drawings for reduction, care must be taken that the lines, lettering, and detail are drawn of sufficient thickness and size relatively to the scale of reduction, so that they may be clear and distinct, and in proper proportion together when reduced, and not be so small as to be either quite lost or illegible. Thus, if it be required to reduce a drawing to one-fourth the scale of the original, every line must be drawn four times as thick, and the writing and details four times as large as required in the reduced copy. Sufficient space must also be left between lines of shading or cross-hatching to prevent their blocking up and running together in transferring and printing. Practically, it is sufficient to draw the original from about one and a-half to twice as large as the copy to secure all the advantages of reduction, and the originals will also serve for reproduction if necessary. The annexed specimens will serve as a guide to the thickness of lines required on drawing for reduction to ¼, ¾, & ½, and reproduction to scale.

10. It will save confusion and mistakes if the scale on drawings intended for reduction is shown in terms of a single unit of measurement as a scale of inches, feet, miles, &c., and not as relative to any second unit, as inches to a foot, mile, &c. On drawings intended only for reproduction to same scale, it is immaterial how the scale is shown.

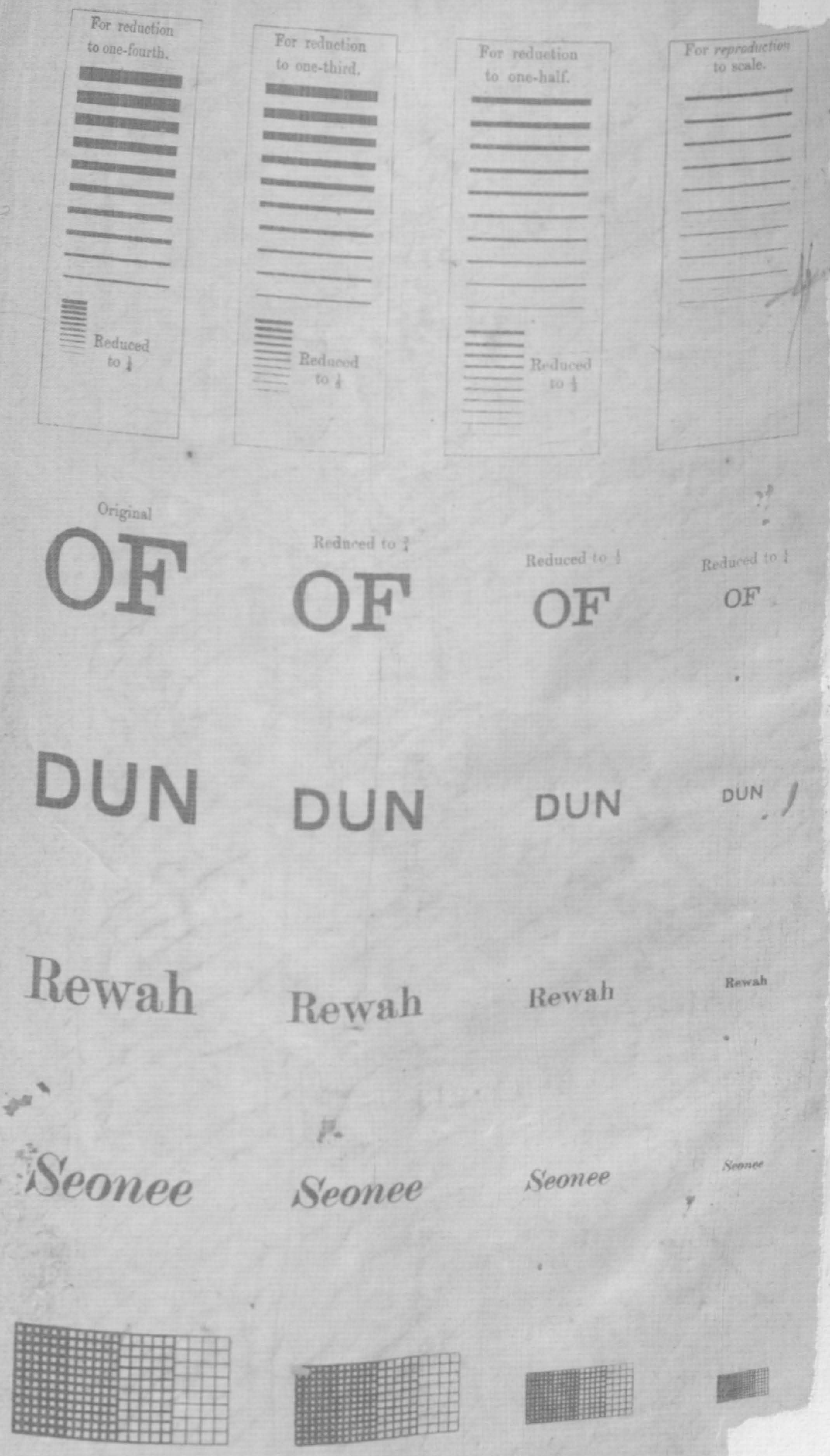
11. Drawings or tracings intended for reproduction should not be folded, but kept flat or rolled. Folding causes creases which give shadows on the negative in reproduction, and these may obscure and spoil other details. It is a good plan to pass a creased drawing through a copper-plate or lithographic press before copying.

12. When type is used for lettering drawings for reproduction, care should be taken to get a fine, clear, black impression by the use of good clean type, the best black printing ink, and a hard bed for the drawing to rest upon. In drawings for reduction the type should not have the hair lines too fine. The paper should be indented as little as possible by the type, otherwise the hollows cause shadows which thicken out the letters when reproduced. It is advisable, if possible, to pass typed drawings through a lithographic or copper-plate press before they are copied.

13. Typing is often done on little slips of paper cut out and pasted in position on the drawing. This saves the denting of the drawing paper; but unless the typed slips are of very thin paper, shadow lines will be thrown round the edges of the slip, and require touching out on the negative. Special care must be taken to keep the slips of paper clean and free from paste marks.

14. It must be borne in mind throughout that photography will only produce a *facsimile*, and that, as a rule, the original will not be in any way improved upon. Rough, coarsely-drawn work will not appear like fine engraving, or bad writing like letter-press or copper-plate, and therefore, in making drawings for publication, care must be taken to give them the requisite degree of neatness and finish before they are copied, so that the result may be fit for immediate issue, and not require alteration and touching up, which cause delay and expense, besides deteriorating the work before it is printed.

The essence of these rules may be given in a few words:—WHITE SMOOTH PAPER—BLACK INK—FIRM, OPEN DRAWING. Success in the after processes depends entirely upon the perfection of the original drawing and its capability of giving a negative with clear, transparent lines on a perfectly opaque ground; and this cannot be done unless these essentials are carefully observed.


For reduction to one-fourth.
Reduced to ¼
For reduction to one-third.
Reduced to ⅓
For reduction to one-half.
Reduced to ½
For reproduction to scale.
Original
Reduced to ¾
Reduced to ½
Reduced to ¼
OF
DUN
Rewah
Seonee

[For Heads of Departments.]

Circular No. 1 Public Works.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

GENERAL.

To

The Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab, in the Public Works Department.

The Chief Commissioners of the Central Provinces, British Burma, Assam and Coorg.

The Resident at Hyderabad.

The Agents to the Governor General for Central India, Rajputana and Biluchistan.

The Accountant General, Public Works Department.

The Inspector General of Military Works.

The Director General of Railways.

The Consulting Engineers to the Government of India for Guaranteed Railways, Calcutta, Lahore and Lucknow.

The Superintendent of Works, Simla Imperial Circle.

Fort William, February 16, 1885.

Sir,

I am directed to request that in future, as far as may be possible, all drawings, submitted to the Government of India in this Department, may be prepared in accordance with the accompanying instructions issued by the Surveyor General.

2. It is desirable that, as a rule, the drawings should be on tracing cloth, and not on paper. Drawings have frequently to be printed by the heliographic process in this Office, and have to be traced before that process can be applied. But the chief object, which the Government of India has in view, is to ensure that drawings of important works will be received in such a condition that they can be satisfactorily reproduced by photo-zincography.

3. A set of tracings is least likely to be damaged in transit, or in use, if the ends of the set are placed between two semi-cylindrical pieces of wood, 2" or 3" in diameter, and rolled on the completed cylinder; the two pieces being screwed together to hold the tracings in place.

I have the honor to be,
Sir,
Your most obedient Servant,
A. B. SAMPSON,
Under Secy. to the Govt. of India.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

GENERAL.

To

Circular No. I Public Works.

Dated February 16, 1885.

Received

Orders regarding submission of drawings to the Government of India.

No. 650, P. W. D. Press—17-2-85—922.

D. W.

I regard Mr. Buckley's proposal to form a professional library which shall be available to all Engrs. of the Dept. as an excellent one. It will supply a want which is much felt down here, as we have nothing of the sort at present. Some two years ago, when making notes on hydraulic formulae, I went through the list of works on "Hydraulics" in the D. S. and Secretariat libraries, and, finding nothing but books of the ~~[illegible]~~ mustiest and most antiquated description proposed (vide Office note of 6.1.83 to S. E.) that measures should be taken to form and keep up a professional library.

2. Regarding the ways and means of obtaining a library such as that proposed

by Mr Buckley, with reports and descriptions of Engineering works projected or accomplished. we have little material as yet for forming it, but a beginning can be made, and I will, if required, make out a list of what the P.W. can supply.

3. In the Sangam Anicut works, Mr. Mutch is keeping up a history of the construction of the works, and if this plan is generally followed by other Officers, we shall have in time some information of value. Such reports were ordered in G.O. No 21 which I put up, but hitherto little or nothing has been done in the matter as Officers have really not the time.

4. The records of this Office afford material for the compilation of information of ~~inter~~ interest and value

regarding Irrigation. In 1883, I had in view the preparation of an Irrigation Manual of the Presidency, district by district, giving complete particulars of the Irrigation systems. I made a beginning by preparing an Irrigation note on the Madura and Coimbatore Districts, the latter of which I now put up. I believe such a manual would be of great use. At present Officers and Subordinates have little to guide them on taking up their duties in a District, and a work such as I have indicated would be of great service to them.

5. With regard to works other than those of Irrigation, I may add that, when writing the articles for the Manual of Administration, I referred

to various important buildings, the Madras Harbour, the Upper Godavery Navigation &c. The references to such works were necessarily exceedingly brief, as the articles were of a general nature and required to be condensed as much as possible. What I have read ~~of the~~ however, of the records of the W. Office, enables me to say that there exists also in your Office some valuable information regarding the works of the General Branch, which surely requires compilation.

6. The rules requiring drawings to accompany completion reports have been, more or less, a dead letter in this Presidency. Under G.O.'s 9805 of 30 Nov. 1883 and 2643 of 10 March

1884, drawings of important works are now under execution, but much delay and difficulty is being experienced in their preparation, owing to the almost entire absence of any trustworthy information regarding the works as executed. Before going on leave, I hope however to ~~have~~ arrange matters in this respect.

7. I would suggest that this note be sent to the CE for any remarks he may have to offer.

ASK
30.1.85

Mr. Buckley's proposal seems an excellent one, if it can be practically carried out. One difficulty I foresee in Madras is in securing the services of a competent man, both to make certain selections from Govt. records in the first instance, and afterwards to keep the library up to the time, by weeding out books, &c, that have become out of date, and securing the provision of fresh ones in their stead. Works on Engineering subjects rapidly grow old, and a professional library is too apt to stagnate, unless constantly attended to by a competent hand.

I do not mean to suggest that there are not competent men in Madras, – What I mean is that no one has leisure sufficient to enable him to do justice to a library such as is suggested by W. Buckley. That at least is my opinion, founded on experience gained from our R.E. Library.

4.2-83

W.

Kindly read the enclosed d/o note from Mr Huckley. I shall communicate to him any remarks you would wish to offer. My own idea is that an Observatory in Egypt and [illegible] would meet a long felt want. –
I shall show the paper & Mr Russell's remarks to Col: Hasted on his return. —

C.S.
4 · 2 · 85

–11–

I have made a few remarks –

4 · 2 · 85

E.I.

Please read the accompanying d/o letter from Mr Buckley, & let me have any remarks you may wish to offer on the subject — for communication to him.

I put up memoranda of E.W. & D.E.I. —

12

C.A.

6. 2. 85

D.E.W. No 20

The proposal is a very good one. I believe it has often been written. It would have been published selections, but no one has had leisure to take up the subject & I do not know what officer in the Presidency could do it, in addition to his ordinary duties. I think it would be a mistake to multiply our libraries here; the selections should go to one or all of the existing libraries here which could be strengthened thereby. If necessary, additional rules to facilitate the issue of the selections to up-country members could be framed.

Lon

7/2/85.

Pr. Cir. 1639

Recd 23.2.85

R-415 dated 4th Feby/85

A. 475 D. 24.2.85

Filed

GOVERNMENT OF INDIA.

Public Works Department,

Loudon Buildings, Govt. Place West.

Calcutta, Feb 16 1885.

135 | 2

My dear Sir,

I am much obliged to you for your letter enclosing the office notes on my library scheme. We have determined to carry the matter through here and I hope in time — it must take time — that we shall have a good library.

Yours sincerely

R. B. Buckley.

To W

Adverting to the required examination of the files of papers proposed to be transferred to the Commandant of Sappers & Miners, & to the other work of the same character now to be done, I think I cannot do better than nominate for the duty, Mr. G. Manis the present Librarian of the office.

He has had some experience in this kind of work, and will I think, give more satisfaction than any other Clerk available.

Besides the records of the late Commandant of

Engineers, and of the late Military Board, the P.W. Library will have to be rearranged, and Catalogued afresh, under an order which has just been drafted.

This special work will perhaps last six months, and if Mr. Munis is placed on it, his appointment must be filled by an additional hand.

Mr. Munis now draws Rs. 54. If a temporary appointment of Rs 60, say, be sanctioned, he might be allowed the increased pay, and the Clerk acting in his place - the sum (Rs 50) that will then be available

2.

Mr. Munis [illegible] is now on sick leave, but is expected back on the 19th Inst.

If these proposals are approved, I shall draw up some instructions in detail for Mr. M's guidance.

CS
13.3.85

To D.W.

The above has been drawn up under personal instructions from W.

CS

I agree with the proposals.

CJ
13.3.85

Yes. I should like to see the instructions when drawn up. W. M. will of course work under such control as D.W. may see fit to exercise.

WS
13.3.85

Memo of
Volumes of old records
recd. from C

17

1763 Dd/	30-9.84 -	38.
1871 D "	16-10-84 -	59.
1889 D "	20.10.84 -	42.
404 D-	16.2.85 -	117.
C. No: 2296.		120
		376

642 W. 16-3-85

To

C.W.

The accompanying is a list of all Books and Papers relating to Engineering Projects and other professional matters, and is submitted for selection of Works for the new Engineering Library which has to be formed under the orders contained in G.O. No 643. W of 16 March '85. (put up).

P.W. Administration Reports & Railway papers relating to Rates, Fares, traffic &c have been omitted.

2. I shall in the meantim label and put by the old

records in the detached building & destroy those volumes that you have ordered to be destroyed, and then begin making out a ~~list~~ catalogue of the Miscellaneous books that have been omitted in the list now submitted, in accordance with the instructions laid down in para 3 of C.A.W.'s note attached to G.O. 642.W d/ 16th March '85 (put up).

When the books for the Professional Library have been selected a Catalogue of them will be made and the remaining books added to the List of Miscellaneous Works.

The whole of the Books in the 2 Libraries will then have to be re-numbered and the Catalogue printed.

G.M.
8/9/85

Indian Engr. - Vol. 1 - No. 3 -
15th May /86

S.A.W.
I think this might lie over, take [illegible] see if any further notice is taken of it in next issue of the Indian Engineer

21/5/86

Librarian.

If any further notice appears in the I.E. about Mr. Dumphy's level don't fail to bring it to notice.

F.B.
31.5.6

records in the detached

been selected a catalogue

File.
297C. 22-1-86

Miscellaneous 90

Keep this over for C.A.O. who will be in office on the 15th Oct. It is not worth while troubling Col: Fraser on the subject but the whole question will have to be thoroughly explained to Capt. Campbell when he joins. Kindly have everything ready for C.A.O. so that he may know exactly how matters stand.

HB/30/9/13

records in the detached

DW

In submitting Mr Munnis' report I must point out that the sanction accorded in G.O. No. 642. W. of 16 March/85 will Expire at the ~~[illegible]~~ End of next week ~~[illegible]~~. Mr Munnis will then have to revert to his permanent appointment of Librarian and Mr James will go back to the office of Exr. of State Rys Accts. If Mr Munnis is relieved of general work in the Record Section he can go on with this work without interruption. his duties as Librarian being light.

FB.

8/9/85.

been selected a Catalogue

records in the detached

Note of instructions for the Clerk on ſpecial duty

1. The old records in the Secretary's room belonging to the office of the late Commandant of Engineers are to be examined, and a brief note made of the contents of each bundle. The bundles ſhould be numbered consecutively to admit of their being identified. The note of contents ſhould be attached in the form of a docket to the bundle concerned; after which a complete "list of contents" ſhould be made out in the order of the consecutive numbers given to the bundles.

This "list of contents" will be ſubmitted to the Secretary for orders, prior to the transfer of the documents to the Commandant of Sappers and Miners at Bangalore

In sending the papers to Bangalore they should be accompanied by a copy of the "list of contents," the original being retained in this office for reference.

2. The volumes of Proceedings of the late Military Board and Chief Engineer should next be taken up. At the present date there are 376 of these books. Inquiry should be made in the Examiner's office as to whether there are any more. If so, they should be transferred to this office at once.

The books must first

be arranged in order of dates, and numbered consecutively the numbers being transferred to a Register which should show

(1) the period embraced by each volume and

(2) the "contents" of each document – a brief abstract in the form of the "table of contents" attached to the Volumes of Govt. Proceedings being drawn up.

This Register should be entitled "Table of Contents to Volumes of Proceedings of the Madras Military Board and of the Chief Engineer from the year ( ) to the year ( )" and may be printed for future guidance.

3. The Public Works Library should then be taken in

hand_ It is desired
to separate the Volumes
and Selections relating to
Engineering from those
on other subjects.

The Engineering Works
having been separated, a
rough list should be made
out, and submitted to Dy Sy,
who will decide which of
the books and selections
should be transferred to
the new Engineering Library.
Those selected should then
be renumbered and catalogued_
the existing catalogue being
taken as a guide

The remaining books
will then require to be
renumbered also, and
catalogued separately.

As there will be two
distinct series of numbers,
the Engineering works
should have the distinctive
letter E added after the
number, and the other
works the letter G, standing
for "general" series.

R. S.
Carr
14. 3. 85

B/

№ 642 W P. W. Dept.

95

Proceedings of the Madras Government,

Under date the 16th March 1885

Sanction is accorded to the entertainment, in the P. W. Secretariat, of a temporary clerk on Rs 60/- per mensem for a period of six months, for the purpose of arranging old records and the Secretariat library.

This sanction has been registered as Sprt. No 91 W of 1884/85, & classified as Establishment, Temporary.

Examiner P.W. Accts.

14.3.85

14.3.85

To
D.W.

C No: 1650 26

Please see "notes" attached to No: 475 D d/24.2.85 in which it is shown that very little can be done in Madras in respect to the proposed Library unless the work be assigned over to a special officer with leisure to carry it out.

R.S.
24.2.85

To W.

With reference to this Resolution of G. of I. I presume a reply may at once be sent to the effect that Madras Gov^t consider that a Library similar to that proposed for Calcutta may advantageously be established in this Presidency, but that difficulty & delay in compiling the necessary selections are anticipated, all officers on our staff being at present fully occupied on ordinary duties.

It strikes me a beginning might be made in this matter by selecting from the mass of books in the Secretariat Library works bearing purely on Engineering questions & matters of professional interest — weeding out & setting apart & cataloguing separately the numerous Volumes of Almanacs, Calendars, District Manuals, Revenue & administration Reports, &c.

We could then add such reports as that on the Periyar Project (with maps), Capt. [illegible]'s Report on Bangalore Water supply, & D.S. would assist in adding useful papers. Thus by degrees we could ~~introduce~~ establish a better Library of reference than we have now, & works of acknowledged utility, not available at present, could easily be added at small expense.

Cd.
10.3.85

.3.85

[For General Distribution.]

Circular No. 2 Public Works.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

GENERAL.

Fort William, February 16, 1885.

Printing of selections from the records of the Government of India, Public Works Department, and establishment of a library in the Government of India Secretariat, Calcutta.

Resolution.—The attention of the Government of India has lately been directed to the fact that there exist, among the records of the Government of India in the Secretariat of the Public Works Department, a considerable number of reports, of different descriptions, which are both interesting and valuable, as purely professional descriptions of engineering works projected or accomplished. The papers which contain these records are, in most cases, practically quite out of the reach of the Engineers of the Department generally, who are, indeed, often not aware of their existence.

2. It is the intention of the Government of India to publish, in future from time to time, selections from the Proceedings of the Government of India in the Public Works Department, mainly with the view of giving publicity to matters of general engineering interest. These selections will be, as a rule, taken from matters which come before the Government of India in the future, but to some extent the more important records of the past will be gradually reprinted. These selections will be made from letters, from reports and specifications of new projects, from progress reports, from special reports of accidents and failures, from completion reports, and from other sources. It must necessarily be that these selections will often contain matter of little general interest, but which, from the mere fact that it is embodied in the selected paper, must necessarily be published with it. It will also unavoidably occur that the selections published from time to time concerning any one great work will be, to some extent, disjointed and incomplete. For instance, it is intended to publish papers connected with the earlier history of the Madras Harbour, some connected with its partial destruction, the opinion of the Madras Engineers on its reconstruction, the report of the Consulting Engineer to the Government of India, and the opinions of the Engineers consulted in England on the same subject: portions of several of these papers will refer to others which will not be published, and, to some extent, portions of the published papers could only be rendered entirely comprehensible if the entire correspondence connected with the subject were made public. This, of course, cannot always be; but the papers published will, it is thought, be of great value to any Engineer who may have to consider a work of the same nature elsewhere.

3. These selections will, as far as practicable, be accompanied by the necessary descriptive drawings. In order that these may be readily reproduced, it is desirable that all drawings, which accompany reports sent to the Government of India, should comply with the conditions laid down in the set of instructions issued by the Surveyor General, dated the 5th July 1884, which accompanies Government of India Circular letter No. 1 of this date.

4. The Government of India is aware that the rules regarding completion reports which are laid down in Public Works Department Code, Chapter IX, sections 31, 32 and 33, are not, in all cases, strictly observed: more especially is this the case with reference to section 32, which requires that drawings of the works as completed should accompany the completion report. The Government of India is of opinion that it is desirable that these rules should receive more attention, and that the report which accompanies the drawings should give an account of the chief engineering features of the completed work. It is thought that such reports would be valuable; and that Engineers would be more willing, than they are now, to supply them, if those that were of sufficient importance, were permanently recorded as Selections from the Proceedings of Government.

The Government of India desires that the Officers responsible for these reports may be required to prepare them more regularly in future, and that Local Governments and Administrations will endeavour to enforce the rules. The Government of India will be glad to receive from Local Governments and Administrations copies of completion reports of important works specially for publication as selections. It must be remembered that it is not necessary that the drawings, which accompany such reports, should be elaborate and highly finished. Coarse tracings from the working drawings, if clearly drawn, would, when photozincographed on a reduced scale, look much better than the originals, and be all that is required.

5. The volumes of selections which will be thus formed should, in time, create a good professional library on Indian engineering. But the main object which the Government of India has in view would be but partially met unless the contents of this library were available to all Engineers of the Department. It has been pointed out to the Government of India that Engineers in India are frequently put to much labor and thought to deal with an engineering difficulty, in one province, which has been already thoroughly thought out, and, perhaps, practically overcome, in another, and that, either through ignorance of the fact that the problem has been solved, or from inability to obtain the papers or reports on the subject, the work has to be done all over again.

6. It is therefore decided that the Selections from the Proceedings of Government should be made easily accessible, on loan, to any Engineer who may desire to consult them. With this object, the Government of India will establish a library in the Government of India Secretariat at Calcutta, which will be open to all Engineers at the Presidency Town, and from which any Engineer, under the Local Governments and Administrations marginally noted, will be able to obtain, by direct application to the Librarian, any of the selections which he may desire to consult. Detailed rules for the conduct of the library will be framed, and published hereafter.

Bengal.
N. W. P. and Oudh.
Punjab.
Central Provinces.
British Burma.
Assam.
Beluchistan.
Coorg.

Hyderabad.
Central India.
Rajputana.
Inspector General of Military Works.
Director General of Railways.
Accountant General, Public Works Department.

Also all Officers in the Consulting Engineers' Department.

7. It is suggested that similar libraries might be established at Madras and Bombay. To these the Government of India would be willing to send any selections of its own Proceedings which the Local Governments might desire to receive.

8. In order that the proposed library may be the more complete, the Government of India will place in it the collection of professional books which are now in the Secretariat, and if the project is found to be one which is appreciated by the Engineers of the Public Works Department, will add to the present collection. A catalogue will be circulated from time to time.

9. It is thought that it may not infrequently occur that Engineers leaving the country would be willing to give books from their private libraries as donations to the public ones.

10. As it will take time to prepare the Selections of the Proceedings of the Government of India which it may be decided to publish, the library will necessarily be very incomplete for some time to come. The first catalogue of the books which are available will be issued shortly.

ORDER.—Ordered, that a copy of this Resolution be forwarded to the Local Governments and Administrations marginally noted for information and guidance, with the request that all members of the Engineer Establishment may be informed that copies of the library catalogue will be sent to all Chief, Superintending and Executive Engineers by the Librarian of the Government of India.

The Governments of Bengal, the North-Western Provinces and Oudh, and the Punjab, in the Public Works Department.
The Chief Commissioners of the Central Provinces, British Burma, Assam, and Coorg.
The Resident at Hyderabad.
The Agents to the Governor General for Central India, Rajputana, and Biluchistan.
The Accountant General, Public Works Department.
The Inspector General of Military Works.
The Director General of Railways.
The Consulting Engineers to the Government of India for Guaranteed Railways, Calcutta, Lahore, and Lucknow.
The Superintendent of Works, Simla Imperial Circle.

Also, that a copy be forwarded to the Governments of Madras and Bombay, with the request that it may be stated whether similar libraries to that proposed for Calcutta can be advantageously established in those Provinces.

W. B. Sampson

Under Secy. to the Govt. of India.

To

The Secretary to the Government of Madras
Public Works Department

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

GENERAL.

No 970 Dd/20 1 83
" 264 Dd/10 3 84
[illegible]

To

Circular No. 2 Public Works.

Dated February 16, 1885.

Received 24.2.85

Proposal to establish a library in the Government of India Secretariat at Calcutta.

No. 649, P. W. D. Press—17-2-85—1,522.

Circ. 13/3/85

General
Contributions

No 643.W

P. W. Department

30

Proceedings of the Madras Government

Under date the 16th March/85

Read the following:—

From the Government of India (H.E. Circular No. 2 P.W. d/ February 16, 1885).

His Excellency the Governor in Council recognises the value of the scheme proposed in the above Resolution, which will be circulated to officers of the P. W. Department for information and guidance.

Particular attention is called to para 3, in respect to drawings intended to illustrate reports. The instructions by the Surveyor-General, therein referred to, will be separately communicated.

The * rules regarding completion reports, referred to in para 44, should be attended to in future as far as practicable, and Supdg. Engineers are now invited to send in completion reports of important works which they may consider adapted for separate publication as selections. Should reports of the kind have been already submitted, such references should be given as will enable them to be traced.

* Vide paras 1561 to 1568 of the Madras P.W. Code.

His Excellency the Governor in Council would be glad to see a library formed at Madras, similar to that proposed for Calcutta. It is however anticipated that there will be difficulty and delay in compiling the necessary selections, as the services of a special officer, which are needed to carry on the work effectively, are not at present available. The matter will, however, be kept in view, and the existing collection of books arranged with a view of separating and cataloguing engineering works of value.

On receipt of the catalogues of the Calcutta library, the selections required by the Madras Government will be —

indicated.

(A.E. No. 644-W d/16th March/85)

Copy of the above forwarded to the Govt. of India.

C.W.
13.3.85

M.S.
13.3.85

D
25/3

~~The Hon H. E. Sutton~~

16 MAR 85

Ah
18/3

C.E. for Irrigation ✓
C.E. for Railways ✓
Supdg Engineers ✓
Supdt. of Works T. M. Scheme
Cons. Architect to Govt. ✓
Ex. P.W. Accounts ✓
Engineers-in-Chief ✓
D. State Railways
25/3

R.B.
Circ: 13/3/85

39

1650

P.C.
857W. 30-3-86
1280W. 21-5-86

Gobt. of (1885) Madras.

PUBLIC WORKS.

Dated
Press 19-3-85

Recd. Regd.

G.O. [illegible] 1885 No. [illegible]

Library

[illegible]

19/
18

[illegible]