Archives I -10,006—16-8 77.

(1) Number of pages 104
(2) Date of repair feb 87
(3) Initials of the Referencer

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

PUBLIC WORKS DEPARTMENT

G.O. No.
B.P. No. 1697-W Press. ~~Mis.~~

Dated 9. 7. 1881 ~~197~~ .

Not to be folded or roughly handled

1697
1

PUBLIC WORKS DEPARTMENT.

General
Establishment.

No. 1,697 W.

No. 9.

FROM

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

SIR,—I am desired, in reply to your letter, No. 681 G., dated 5th May 1881, having reference to the normal strength of establishment for the Public Works Department in this Presidency, to state that the Government very thankfully accept the scale and the general arrangement into six Superintending Engineers' Circles as suggested by the Government of India, though as regards the former some additions have recently shown themselves to be necessary, and as regards the latter, local circumstances require slight modifications which will be immediately explained.

[illegible]

2. There is now, I am to observe, no further discussion as to the appointment of Superintendents of Works for—

(1) Vizagapatam and Ganjam Divisions,
(2) the Godávari Delta, do.
(3) the Kistna Delta, do.
(4) the Buckingham Canal,
(5) the Presidency including Bangalore;

but one officer of this class will still remain, viz., the Consulting Architect assented to under paragraph 3 of your letter, No. 1,918 G., dated 4th November 1880.

[illegible]

3. It is also a matter of question with this Government whether the important station of Bangalore should not again be formed into a separate division, in case the new Army Organization Scheme be carried into effect, as it would then in all probability become Army Head-quarters for the Presidency. For the present, however, no immediate change seems necessary.

4. With reference to the additions required to the scale as originally sent up, I am in the first place to note that (1) the Madras Irrigation Company's Canal (soon about to be taken over) and the Sungum Project sanctioned by the Government of India in their letter, No. 188 I., dated 6th May 1881, in Nellore (the arrangements for prosecuting which have already been commenced by appointing the officers and several of the subordinates, &c.,) must be included.

[illegible]

5. To these requirements must further be added two officers in the grades of Executive Engineers omitted by a clerical error in the "Distribution Statement" which accompanied my letter, No. 2,277 W., dated 1st October 1880, where it will be observed that under the head "Supernumeraries" calculated at 10 per cent. only *one* officer has by oversight been shown in the grades of Executive Engineer instead of *three*.

6. The additions to the scale will therefore stand as under :—

—	Executive Engineers.	Assistant Engineers.	Upper Subordinates.
For the Madras Irrigation and Canal Company, see Government of India letter, No. 207 I., dated 13th May 1881.	1	2	6
For the Sungum Project sanctioned by the Government of India letter, No. 188 I., dated 6th May 1881.	1	2	6
To rectify error in the previous Distribution Statement ...	2	...	...
Total ...	4	4	12

7. If the four additional Executive Engineers be distributed in the strength of one to each of the sanctioned grades and the Assistant Engineers be divided equally between the 1st grade and the 2nd and 3rd grades combined, the modified normal establishment would then stand as follows (paragraphs 5 and 6 of your letter under reply) :—

Chef Engineers.	
1st Class ...	1
2nd " ...	1
3rd " ...	1
	3
Superintending Engineers.	
1st Class ...	2
2nd " ...	2
3rd " ...	2
	6
Executive Engineers.	
1st Grade ...	10
2nd " ...	11
3rd " ...	11
4th " ...	4
	36
Assistant Engineers.	
1st Grade ...	26
2nd and 3rd Grades ...	21
	47
Upper Subordinates of all grades ...	185

8. The attached Distribution Appendix **A** shows the circles and divisions, and Appendix **B** the cost in prescribed form, both in substitution of those originally submitted for sanction.

9. As regards **A**, the distribution, it will be observed, differs somewhat from that suggested by the Government of India, though No. I Circle is the same as that given in paragraph 3 of your letter. No. II Circle will now consist of the two Kistna Divisions, the Sungum Project and Nellore instead of the Buckingham Canal, which latter will much better fit into No. V Circle.

10. The Nellore Division wit[illegible] Sungum Project will be a sufficient addition to the Kistna Delta works, and s[illegible] he completion estimates for the latter be sanctioned as may be early looked f[illegible] e Superintending Engineer will have quite as much if not more than he can sati[illegible] rily administer.

11. All the other circles have [illegible] made out strictly with reference to the actual works in progress and propos[illegible], so as at once to give each Superintending

---

1692
2

Engineer ample employment and the best centre from which to supervise the operations of that portion of the department under his charge.

12. To three of these circles have also been assigned such of the new project divisions as fall naturally within their respective limits; the 4th of these, Division (D), being, however, reserved specially for personal supervision by the Chief Engineer for Irrigation for reasons subsequently to be explained.

13. Turning to Appendix **B** it will be noted that the total annual charge for establishment is raised from 16·13 (the total present charge) to 20·64 lakhs; but as the outlay on both Protective and Productive works increases annually till the total expenditure by the department more than doubles what it is at present (a little over 50 lakhs), the high percentage now apparent will disappear in course of time.

This means that more outlay will not need more estab!

14. It being the intention of Government to initiate the redistribution of charges, &c., under the new scale from the 1st August, the total outlay on establishment for the current year would generally stand as follows :—

	At per Annum. LAKHS.	LAKHS.
To four months, April to July (both inclusive) 1881, as per Part iii, Budget of Provincial Services for 1881-82 ...	16·13	5·38
To eight months from 1st August 1881 as per Appendix **B** ...	20·64	13·79
Total for Current Official Year ...	...	19·17

15. This amount cannot however be worked up to as it will take time to fill all vacancies in the Engineer and Subordinate grades.

There are moreover several modifications to be introduced later on when it is more accurately known how the vacancies in the Gradation List are to be filled up, and when instructions have been received as to the incidence of the charges affecting the Imperial and Provincial Budgets.

16. In regard to the latter point, your letter (paragraph 7) lays down that 2½ lakhs will be contributed during the current year from the general grant for "Protective" Public Works; and again in paragraph 10 an intimation is understood to be conveyed that the Government of India would not be indisposed to consider the advisability of debiting a portion of the charge for Irrigation Establishment against the revenue of the works on which they are engaged.

17. The subject of the latter proposal has already been submitted for the consideration of His Excellency the Governor-General in Council in G.O. of 12th April 1881, Nos. 269 and 270 I., and on receipt of a reply it will be possible to deal with the mode of distributing the charges among the different budgets.

18. With reference, however, to the contribution from Imperial of the 2½ lakhs, I am to state that this Government propose to appropriate at once Rs. 75,000 for pushing on as a "Protective" work the Potinghy Ghat in Vizagapatam (to be adverted to further on), setting free a corresponding amount which is most urgently needed for the execution of a number of buildings, &c., which, as will be seen from Part B of the Provincial Budget for the current year, cannot otherwise be met for years to come, and to reserve the remaining Rs. 1,75,000 as a contribution towards the general establishment charges of the current year.

19. I am now to advert to the subject-matter of paragraph 11 of your letter under reply, and, in so doing, to submit for approval the Gradation List Appendix **C** containing the promotions which it is intended to give effect to from the 1st August, as being the date from which it is desired by this Government to constitute, as far as may be possible, the new divisions and circles of superintendence, and for which all the requisite arrangements are being made.

20. In reference to your remark that it would lead to inordinately rapid promotion to fill up the vacancies in the higher grades altogether from the lower grades of the present Madras staff, it may at once be stated that, owing to the number of Royal Engineers in the higher grades who went to England on the special furlough on the occasion of the late reductions, and who will shortly return to duty (Lieutenant-Colonel Burton, R.E., has been telegraphed for to take up the Presidency Division,

and will be here by 1st August), as also to other causes unnecessary to detail, there will practically be no promotions to speak of till the 3rd-grade Executive Engineer is reached, and only nine vacancies in the combined 2nd and 3rd grades Assistant Engineers to make up.

21. Among the Chief Engineers there is no promotion, while in the three classes of Superintending Engineers the first promotion is that of Colonel W. Chrystie from third to second class. This officer will not only have nearly twenty-six years' service in the department on the 1st August, but has frequently, during several years past, acted as Superintending Engineer, 2nd Grade, in both Mysore and Madras. The second promotion is that of Mr. Rundall from 1st-grade Executive Engineer to 3rd-class Superintending Engineer. He has likewise twenty-six years' service in the department, and has for some time acted, with great credit to himself, as Superintending Engineer.

22. These are both excellent officers of great experience, and could not possibly with any considerations of justice be superseded by an officer introduced from another province.

23. It is also especially to be observed with reference to this that the insertion of a fresh officer in any of the classes of Superintending Engineer would cause an excess of one in the number of 1st-grade Executive Engineers. This latter is now full and there will be no promotions.

24. In the 2nd grade, owing to the late introduction of Major A. T. Fraser from the Mysore Department, and the return of Major S. C. Clarke from the Railway Department under the Government of India, there is only one promotion from the 3rd grade—Captain D. McNeil Campbell, a very promising officer with twelve-and-a-quarter years' service in the department.

25. Among the Executive Engineers, 3rd Grade, on the new scale there will be one officer reinstated, Mr. R. W. Norris, and five promotions from the 4th grade, viz., Messrs. Peters, Hughes, Larminie, Bell, and Captain Smart, R.E., all of whom have service in the department ranging from fourteen to over ten years.

26. Mr. Norris' case is peculiar. His name was included in the late reductions, and after retirement he accepted employment as Local Fund Engineer, North Arcot; but as he is a specially trained Irrigation Officer whose services would be very valuable, this Government have considered it desirable to reinstate him, and he has been directed to report himself for duty on 1st August. It is not considered desirable in the interests of the public service that any other of the officers previously reduced should now be reinstated.

27. The list shows two promotions from 1st-grade Assistant Engineer to 4th-grade Executive, viz., Mr. Grimes (an old officer who commenced as a military subordinate) and Lieutenant C. B. Henderson, R.E., who has more than eight years' service in the department.

28. In addition to these four officers who would complete the scale, it has been thought desirable to enter the name of Mr. Wilks as temporary Executive Engineer.

[illegible]

29. This officer is now second on the staff of the Madras Irrigation and Canal Company, and although, as previously reported (*vide* letter No. 202 I., dated 18th March 1881), it would be inexpedient to place him in the position of a Superintendent of Works for the canal on the work being taken over from the Company, it is thought that, owing to his local knowledge and experience as an Engineer, he may very possibly be quite capable of remaining in charge as Executive Engineer under the immediate direction of the Superintending Engineer of the Circle. In any case, I am to say, this Government is prepared to make the experiment, and as the best means of doing so would wish Mr. Wilks, during his term of probation (a year), to be borne on the strength of the department in the manner now proposed, should he be willing to accept the position.

30. If he subsequently gives satisfaction, his permanent grading will not occasion any serious difficulty, as in all probability before the time comes one or more vacancies in the higher grades will almost certainly occur.

31. Proceeding to the Assistant Engineers, it will be observed that there are eleven promotions from 2nd to 1st grade, the junior, Mr. W. Jopp, having very nearly four years' service in the department on 1st August. As the senior, Lieutenant O. V. Boddy, has a little over eight years' service, it is believed that these limits correspond very closely to the lengths of service in this grade, which it is the desire of the Government of India to secure for future working.

32. It was the original intention of this Government to promote into this grade, on precisely the same honorary footing as military subordinates, Sub-Engineers S. Ottmann and J. W. Ellis, whose cases were submitted specially (see margin) for the consideration of the Government of India, and even now the Government were prepared, failing this arrangement, to bring them permanently on the strength of the Engineer Establishment; but their promotion having lately been definitely barred by the orders contained in your letter, No. 797 G., dated 10th June 1881, their names have been removed from the list. I am, however, to submit that this Government still entertains a strong conviction that it would be both advantageous to the public service to promote these very deserving subordinates, and in every way politic to do so, especially at this juncture, when their advancement can be effected with much less hardship to others than would at any other time be possible.

This department letter, No. 1,134 W., dated 2nd May 1881.

33. I am therefore to solicit further consideration on this point, and to state that, if the Government of India sees fit to grant the concession, their names might be introduced immediately below that of Mr. H. E. G. Evans.

34. At the bottom of the list there are nine vacancies in the combined 2nd and 3rd grades of Assistant Engineers, and as it is unlikely that officers in these grades would care to be transferred from other provinces, this Government desires to be given complete freedom of selection within, of course, Code rules.

35. Should any Royal or Cooper's Hill Engineers, however, desire to enter, they could at once be posted according to length of service. Otherwise the Honorable the Governor in Council would be disposed to select one or two of the most promising youths who have of late years passed out of the Civil Engineering College, Madras, with certificates as Assistant Engineers, and fill up the remaining vacancies as opportunity offers.

36. In concluding this part of the subject, I am in the *first* place to observe that a comparison of the respective lengths of service of the officers in the Madras Department with those in other provinces more immediately under the Government of India as shown by the published classified lists, has established so clearly the fact that, the former have in all grades been hitherto unduly retarded in promotion, that the Honorable the Governor in Council would strongly deprecate the introduction, (certainly in any of the grades above Assistant Engineers) of officers from other provinces; and in the *second*, that a very early acceptance of the Gradation List by the Government of India as now sent up is so desirable (with a view to the promotions being gazetted by the 1st August) that, I am to solicit the favor of sanction to the same being telegraphed as soon as possible after receipt of the present communication.

37. In reference to the desire expressed, paragraph 13 of the letter under reply, that room should be found among the Upper Subordinates for those of this class who were originally transferred from Madras to Mysore, I am to state that this has already been done, and the three who could alone be spared from Mysore (see margin) have already joined this department.

Conductor FitzGibbon, Sub-Engineer, 2nd Grade.
Sergeant Heinig, Sub-Engineer, 3rd Grade.
Conductor Keenan, do. do.

38. I am now to invite attention to the four Divisions which it is proposed, in accordance with the original programme, to constitute with the object of preparing such projects as mainly fall within the class of *Protective* works, to be executed from the Imperial grant under this head.

39. As a convenience the information called for regarding this subject (paragraph 8 of your letter) giving the list of projects under preparation, and those which it is proposed to prepare during 1882-83, is shown in the Appendix **D**, regarding which the following general observations will, it is hoped, suffice.

40. Of the four divisions to be formed, one will be exclusively for *Roads and Buildings*, and the rest *Irrigation*, thus :—

Superintending Engineer's Circle.	Designation.	Branch of Department.	Class.	Names of Projects.
First Circle ...	A. Project Division.	Roads and Buildings.	(Imperial) Protective.	(*a*) Ganjam-Gopálpur Canal. (*b*) Road from Sa[illegible]r *viâ* Potinghy Ghat to Jagdalpore. (*c*) Buckingham Canal from end of Commamur Canal north to Merkanum south. (*d*) Do. south of Merkanum.
Fourth Circle ...	B. Project Division.	Irrigation ...	(Imperial) Protective.	(*e*) Baroor Tank. (*f*) Marandahully. (*g*) Vaniar.
Third Circle ...	C. Project Division.	Irrigation ...	(Imperial) Protective.	(*h*) Hindupur Reservoir. (*i*) Roddam do.
Immediately under Chief Engineer for Irrigation.	D. Project Division.	Irrigation ...	(Imperial) Productive and Protective.	(*j*) Complete revised project for Godávari Delta. (*k*) Completion project for the Kistna Delta. (*l*) Perryaur Project. (*m*) Pugalur do.

N.B.—(*c*) and particularly (*d*) will, when the time comes for completing the estimates, be transferred to the Superintending Engineer, Fifth Circle.

41. As regards (A) Division there can be no question, I am to observe, first that the works included in it are each and all of a strictly "*Protective*" character; and, second, that however urgently required, no sums which would allow of their making any adequate progress, can be assigned from unaided Provincial Funds, either during the current or in future years.

42. Allusion has already been made to the Potinghy Ghat (paragraph 18) and its extension westwards through Jeypore towards Bustar and the Central Provinces. The want of a trunk road through all this tract, hitherto inaccessible to carts which nevertheless could, if opened out, supply the littoral districts with cheap grain in famine, is acknowledged to be a pressing necessity in a protective sense, and stands much on a par with the proposed railway from Bimlipatam *viâ* Vizianagrum and Raigurh to Raepore. Both will open up vast tracts of country for the supply of cheap grain to the coast, and cannot fail to prove of the highest value for purposes of administration, as also, in all probability, for the encouragement of emigration in the manner advocated by the Finance Minister. It may here be observed parenthetically that no better employment could probably be found for the staff of Railway Engineers which, as stated in paragraph 11, the Government of India will very shortly have thrown on its hands without employ, than by utilizing these officers in preparing the estimate for the line of railway here adverted to (see also the correspondence noted in the margin).

Letter to the Government of India, No. 564 W., dated 21st February 1881.

Letter to the Government of India, No. 564 W., dated 21st February 1881.
Do. No. 150 R., dated 15th February 1881.

43. To allow of the works which are in progress on the Potinghy Ghât being pushed on during the current official year, Rs. 75,000 will now, as before observed, be

---

1697/4

transferred from "Provincial," which cannot afford the amount to "Imperial Protective," the remainder of the 2½ lakhs being taken as a grant for establishment required for investigating the projects specified.

44. As regards the Buckingham Canal and the future extension of the work south of Merkanum, its character as a famine work has been too clearly demonstrated during the last calamity to need any remark here.

45. The works in (B) and (C) Project Divisions also call for no remark, as they strictly come within the classification of "*Protective*".

46. Regarding those included under the (D) Division it may be safely affirmed that they may be classed as Protective in addition to being Productive, the two last on the list belonging more particularly to the former class. It is needless to observe that, however remunerative the Godávari and Kistna Delta Works have proved, the chief incentive under which they were commenced was the necessity, which presented itself to the Government of the day, to do all that lay in its power to counteract the evils of frequently recurring famines in these tracts.

47. Until the Protective works projects (with the exception of that for the Potinghy Ghat, which is ready and under execution) have been sanctioned by proper authority it would be out of place to name any specific sum in excess of the 2½ lakhs granted for the current official year from Imperial; but the Honorable the Governor in Council desires to take this opportunity of pressing on the attention of the Government of India the necessity for making assignments in future years, not merely in direct proportion to the contributions of this Presidency towards the Imperial Exchequer, but also in compensation for the long years of neglect under which it has most undeservedly been compelled to suffer, owing to the undue outlay conceded to other more favored provinces.

48. This subject has been already submitted for the consideration of the Government of India in my letter, No. 337 W., dated 8th February 1881, and it will therefore suffice here to observe that this Government consider themselves fully justified in looking for an assignment for Protective works from Imperial of 15 lakhs (to include 2½ or 3 lakhs for establishment) in 1882-83 and an addition of 10 lakhs in each succeeding year till a maximum of 80 lakhs per annum has been attained, as the least that can be given with reference to the large proportion of net revenue (5½ millions sterling per annum) which Madras has been shown to contribute to Imperial income, and as affording some substantial means towards guarding the Presidency in future against the horrors of famine.

49. In general connection with the subject of the normal scale of establishment for this department, I am in conclusion to solicit the decision of the Government of India as to the agency by which the Local Fund Boards' projects are to be supervised so far as concerns the larger class of works for which the machinery at present possessed by them or by the Revenue Board (which deals with their budgets and ordinary assignments for establishment and works) is at present inadequate.

50. Adverting to the correspondence on this subject concluding with my letter, No. 1,034 W., dated 22nd April 1881, I am desired to say that this Government are prepared to accept the arrangement suggested in paragraph 5 of your letter, No. 1,639 G., dated 17th September 1880, by which, in return for a general contribution on the part of Local Fund Boards of Rs. 21,250 per annum, this department would undertake the duties in question without, however, making any personal allowance to the officers to whom such duties may be assigned. The agency now placed at the disposal of the department will admit of the duty being performed in a manner satisfactory alike to Government and the Local Fund Boards.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
9th July 1881.
Exd. A. F. Goodall.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1881) Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated July, 9th.

Issued

Recd. *Encl.*

G. O., 9th July 1881, No. 1,697 W.

JULY.
No. 9.

RELATIVE to the normal strength of establishment for the Public Works Department, Madras Presidency.

1692/5

No 1697 W. [illegible]
9/7/81 taken for
Reprint — S. P.
20/9/86

APPENDIX A.

Distribution Statement of Reorganized Department Public Works, Madras.

Superintending Engineers' Circles.	Executive Divisions.	Sub-Divisions.	ESTABLISHMENT.		
			Executive Engineers.	Assistant Engineers.	Upper Subordinates.
No. I ...	1. Ganjam	2	1	1	4
	2. Vizagapatam	2	1	1	4
	3. Eastern Godávari	3	1	2	7
	4. Western do.	2	1	3	7
	5. (A) Project Division ...	...	1	2	3
No. II ...	6. Eastern Kistna	3	1	3	6
	7. Western do.	2	1	2	7
	8. Nellore	2	1	1	7
	9. Sungum Project	2	1	2	6
No. III ...	10. Bellary	2	1	...	4
	11. Cuddapah	2	1	1	6
	12. Kurnool	1	1	1	4
	13. Madras Irrigation and Canal Company's Canal ...	2	1	2	6
	14. (C) Project Division ...	...	1	2	3
No. IV ...	15. West Coast	3	1	2	12
	16. Coimbatore	2	1	1	5
	17. Salem	...	1	...	5
	18. North Arcot	2	1	2	5
	19. (B) Project Division ...	...	1	1	4
No. V ...	20. South Arcot	1	1	1	5
	21. Chingleput	2	1	1	6
	22. Buckingham Canal ...	3	1	1	4
	23. Presidency and Bangalore	2	1	2	7
No. VI ...	24. Trichinopoly	2	1	1	8
	25. Tanjore	2	1	2	8
	26. Negapatam	2	1	2	7
	27. Madura	2	1	1	8
	28. Tinnevelly	2	1	2	7
Supt. of Works.	29. Consulting Architect ...	...	1	...	2
Chief Engr. for Irrigation.	30. (D) Project Division ...	...	1	...	...
	Secretariat	...	1	1	...
	Guaranteed Railways ...	...	2	...	*...
	Supernumeraries	...	3	4	18
	Totals ...	50	36	47	185

* Includes two for Workshops.

APPENDIX B.

Statement showing the proposed changes in the Establishment of the Public Works Department, Madras Presidency, under sanction accorded in letter from the Government of India. No. 681G, dated 5th May, 1881.

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
	ENGINEER ESTABLISHMENT.										
	Chief Engineers.										
1	Chief Engineer, 1st Class	2,500	1	Chief Engineer, 1st Class	2,500	0	0	0	0		
1	Chief Engineer, 2nd Class	2,000	1	Chief Engineer, 2nd Class	2,000	0	0	0	0		
2	Chief Engineers	4,500	2	Chief Engineers	4,500	0	0	0	0		
	Superintending Engineers.										
3	Superintending Engineers, 1st Class at 1,600	4,800	3	A Superintending Engineers, 1st Class at 1,600	4,800	0	0	0	0		A Includes the appointment of the Consulting Engineer for Guaranteed Railways, which is at present held by Colonel Shaw-Stewart, R. E., Chief Engineer, 3rd Class. The number (7) of Superintending Engineers suggested by the Government of India in letter No. 681 G., dated 5th May 1881, para 5, has been divided into the scale of 3, 2 and 2 with reference to para 66, Chap. I. Madras P. W. D. Code.
1	Superintending Engineer, 2nd Class	1,350	2	Superintending Engineers, 2nd Class at 1,350	2,700	1	1,350	0	0		
1	Superintending Engineer, 3rd Class	1,100	2	Superintending Engineers, 3rd Class at 1,100	2,200	1	1,100	0	0		
5	Superintending Engineers.	7,250	7	Superintending Engineers.	9,700	2	2,450	0	0		
	Executive Engineers.										
7	Executive Engineers, 1st Grade, at 950.	6,650	10	Executive Engineers, 1st Grade, at 950.	9,500	3	2,850	...	...		B Includes the two Deputy Consulting Engineers [illegible] In Government of India, letter No. 681, G., dated 5th May, 1881, quoted above, the scale proposed for Executive Engineers, is 9, 10, 10, 3,=32; to this has been added the four additional Executive Engineers, viz. For Madras Irrigation and Canal Company ... ... 1 ,, Sungum Project ... ... 1 Omission from the scale submitted by Madras Government, to Government of India, in not putting down the proper number of Executive Engineers. For 10 per cent. required to take the place of absentees, only 1 being given instead of 3 ... ... 2 Total... 4
8	Executive Engineers, 2nd Grade, at 800.	6,400	11	Executive Engineers, 2nd Grade, at 800.	8,800	3	2,400	...	...		
7	Executive Engineers, 3rd Grade, at 650.	4,550	11	Executive Engineers, 3rd Grade, at 650.	7,150	4	2,600	...	...		
4	Executive Engineers, 4th Grade, at 550.	2,200	4	Executive Engineers, 4th Grade, at 550.	2,200	...	...	...	...		
B 26	Executive Engineers.	19,800	B 36	Executive Engineers.	27,650	10	7,850	...	...		

1692/6

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
ASSISTANT ENGINEERS.											
20	Assistant Engineers, 1st Grade, at 450.	9,000	26	Assistant Engineers, 1st Grade, at 450.	11,700	6	2,700	...	...		To the scale of 24 and 19=43, suggested by the Government of India, in letter No. 681, G., quoted above, has been added 2 and 2=4, viz., For Madras Irrigation and Canal Company... ... 2 „ Sungum Project... ... ... 2 Total... 4 The 21 Assistant Engineers of the 2nd and 3rd Grades, now proposed, have been divided into 18, 2nd Grades, and 3, 3rd Grades.
16	Assistant Engineers, 2nd and 3rd Grades, at 350 and 250.	5,400	21	Assistant Engineers, 2nd and 3rd Grades.	7,050	5	1,650	...	...		
36	Assistant Engineers.	14,400	47	Assistant Engineers.	18,750	11	4,350	...	...		
69	Total Engineer Establishment.	45,950	92	Total Engineer Establishment.	60,600	23	14,650	...	...		
UPPER SUBORDINATE ESTABLISHMENT.											
SUB-ENGINEERS.											
5	Sub-Engineers, 1st Grade at Rs.400.	2,000	9	Sub-Engineers, 1st Grade at 400	3,600	4	1,600	...	...		
4	Do 2nd Grade at Rs.300.	1,200	9	Do 2nd Grade at 300	2,700	5	1,500	...	...		
9	Do 3rd Grade at Rs.250.	2,250	17	Do 3rd Grade at 250	4,250	8	2,000	...	...		
18	Sub-Engineers.	5,450	35	Sub-Engineers	10,550	17	5,100	...	...		
SUPERVISORS.											
14	Supervisors, 1st Grade at 200	2,800	22	Supervisors, 1st Grade at 200	4,400	8	1,600	...	...		The total number 185 of Upper Subordinates has been divided amongst the several grades in accordance with Code proportions, vide Government of India, P.W.D. Code, Chap. I, paras 51 to 54 as amended by S. O. No. 110 of 2nd February, 1881. See also Government of India Resolution No. 1789 G., dated 15th October, 1880.
22	Supervisors, 2nd Grade at Rs. 150	3,300	36	Do 2nd Grade at 150	5,400	14	2,100	...	...		
36	Supervisors	6,100	58	Supervisors	9,800	22	3,700	...	...		
OVERSEERS.											
32	Overseers, 1st Grade at 100	3,200	28	Overseers, 1st Grade at 100	2,800	...	...	4	400		The distribution into 1st, 2nd, and 3rd Grades of the 92 Overseers has been made as follows:— 1st Grade $\frac{3}{10}$ of total No. of Overseers ... 28 2nd do $\frac{3}{10}$ do do do ... 28 3rd do $\frac{4}{10}$ do do do or remainder... 36 Total... 92
32	Do 2nd Grade at Rs.80	2,560	28	Do 2nd Grade at Rs.80	2,240	...	...	4	320		
42	Do 3rd Grade at Rs.60	2,520	36	Do 3rd Grade at Rs.60	2,160	...	...	6	360		
06	Overseers	8,280	92	Overseers	7,200	...	...	14	1,080		
0	Total Upper Subordinate Establishment	19,830	185	Total Upper Subordinate Establishment	27,550	39	8,800	14	1,080	Net increase Rs.7720	

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
SURVEYORS RANKING AS UPPER SUBORDINATES.											
...	...	...	4	Surveyors at 200	800	4	800	..	...		These Surveyors have been provided for the four Project Divisions which are to be formed for the preparation of projects for Famine Relief Works, &c. Vide para 7 of Government of India letter, No. 681 G., dated 5th May, 1881. Amounts noted as pay include Travelling Allowances.
...	...	...	4	Do do 150	600	4	600	...	...		
...	...	...	4	Do do 100	400	4	400	...	...		
...	...	...	4	Do do 80	320	4	320	...	...		
...	Surveyors	...	16	Surveyors	2,120	16	2,120	...	...		
160	Grand Total Upper Subordinates	19,830	201	Grand Total Upper Subordinates	29,670	55	10,920	14	1,080		
LOWER SUBORDINATE ESTABLISHMENT.											
5	Sub-Overseers, 1st Grade at 60	300	5	Sub-Overseers, 1st Grade at 60	300						The numbers and amounts entered in column "Present Scale" represent the Establishment of the Trichinopoly, Kurnool and Vizagapatam District at the close of last official year 1880-81. Since then the Local Fund works and establishment of the Vizagapatam District have been tranferred to Local Fund Boards. The numbers 5 and 14 shown in column "Proposed Scale" represent the actual existing Lower Subordinate Establishment in Trichinopoly and Kurnool Districts.
...	Sub-Overseers, 2nd Grade	...	...	Sub-Overseers, 2nd Grade	...						
15	Sub-Overseers, Third Grade at Rs.20.	300	14	Sub-Overseers, Third Grade at Rs.20.	280			1	20		
20	Total Lower Subordinate Establishment.	600	19	Total Lower Subordinate Establishment.	580			1	20		
PETTY ESTABLISHMENT.											
STORE-KEEPERS.											
4	Storekeepers @ 30	120	4	Storekeepers at 30	120						The numbers entered in the column "Present Scale" are those for which provision was made in the Provincial Budget for 1881-82, (G. O. No. 1204 W. dated 20th May 1880.) To these numbers have been added 5 additional Storekeepers for the 5 new Divisions, the grading of each being given with reference to the classification of the new Divisions.
6	Do. @ 25	150	7	do at 25	175	1	25				
7	Do. @ 20	140	8	do at 20	160	1	20				
3	Do. @ 15	45	6	do at 15	90	3	45				
20		455	25		545	5	90				
MEDICAL ESTABLISHMENT.											
1	Assistant Apothecary.	62½	1	Assistant Apothecary.	62½						The amounts entered in columns "Present" and "Proposed Scale" represent contributions by the Public Works Department for the pay of the Medical Establishment at Bezwada, Dowlaishvaram and Vizagapatam. Vide G. O.s No. 1346 W, 1382 W., 1935 W, dated 8th and 14th June 1880 and 12th August 1880.
4	Hospital Assistants with Jeypore Allowance for one at Rs.25 per mensem. 1 at 60=60 1 at 40=40 2 at 25=50 Jeypore Allowance. } Rs.25.	175	4	Hospital Assistants with Jeypore Allowance for one at Rs.25 per mensem. 1 at 60=60 1 at 40=40 2 at 25=50 Jeypore Allowance. } Rs.25.	175						
11	Lascars, Toties, Cook, &c., of the Medical Establishment. 1 at 7 = 7 3 at 6 =18 1 at 4 = 4 1 at 3½= 3½ 4 at 2½=10 1 at 2 = 2	44½	11	Lascars, Toties, Cook, &c., of the Medical Establishment. 1 at 7 = 7 3 at 6 =18 1 at 4 = 4 1 at 3½= 3½ 4 at 2½=10 1 at 2 = 2	44½						
1	Gumastah.	5	1	Gumastah.	5	...					
17		287	17		287	...					

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
1	Maistry.	40	1	Maistry.	40	...	...	...	...		For the Cuddapah Division, specially sanctioned by G.O. No. 1882 W. dated, 7th August 1880.
410	Lascars at 6.	2,460	495	Lascars at 6.	2,970	85	510	...	...		The number (495) entered in the column 'Proposed Scale' has been arrived at as follows:— 6 Superintending Engineers' Offices at 4 each ... ... 24 24 Divisions at 3 each ... ... 72 1 Consulting Architect ... ... 2 50 Sub-Divisions at 3 each ... ... 150 182 Detached Officers, viz. 6 Asst. Engineers, 84 Sub-Engineers and Supervisors, and 92 Overseers, at 1 each ... 182 Buckingham Canal Division—Vide G. O., No. 1081, dated 25th April 1881 ... ... 5 P. W. Stores ... ... 12 Examiner's Office ... ... 3 Total. 450 Add 10 per cent for Contingencies ... ... 45 Total. 495
448	Total Petty Establishment.	3,242	588	Total Petty Establishment.	3,842	90	600	...	...		

OFFICE ESTABLISHMENT.

For Chief Engineer and Secretary to Government, P. W. Department.

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
1	Chief Assistan.	600	1	Chief Assistant.	600						
1	Second Assistant.t	300	1	Second Assistant.	300						
1	Clerk I Class 3rd Grade.	225	1	Clerk I Class 3rd Grade.	225						
2	Clerks II Class, 2nd Grade at 140.	280	2	Clerk II Class, 2nd Grade at 140.	280						
1	Clerk II Class, 3rd Grade.	110	1	Clerk II Class, 3rd Grade.	110						
5	Clerks III Class 2nd Grade at 70.	350	5	Clerks III Class 2nd Grade at 70.	350						
3	Clerks III Class 3rd Grade at 55.	165	3	Clerks III Class, 3rd Grade at 55.	165						
1	Clerk IV Class, 1st Grade.	45	1	Clerk IV Class 1st Grade.	45						
2	Clerk IV Class, 2nd Grade at 35.	70	2	Clerks IV Class, 2nd Grade at 35.	70						
1	Clerk IV Class, 3rd Grade.	25	1	Clerk IV Class, 3rd Grade.	25						
18		2,170	18		2,170						
2	Draughtsmen, 1st Class at 60.	120	2	Draughtsmen, 1st Class at 60.	120						
1	Draughtsmen, 2nd Class	42½	1	Draughtsmen 2nd Class	42½						
3		162½	3		162½	...	...	...	...		
2	Muchis at 13 and 14...	27	2	Muchis at 13 and 14...	27						
2	Head Messengers at 9 and 12.	21	2	Head Messengers at 9 and 12.	21						
7	Messengers 3 at 7 and 4 at 8.	53	7	Messengers 3 at 7 and 4 at 8.	53						
11		101	11		101	...	...	...	...		
32	Total P. W. Secretariat Office Establishment.	2433½	32	Total Public Works Secretariat Office Establishment.	2433½		...	...	...		

Lithographic Establishment.

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
1	Superintendent ...	250	1	Superintendent ..	250						
1	Head Draughtsman ...	120	1	Head Draughtsman ...	120						
1	Second do ...	100	1	Second do ...	100						
1	Third do ...	80	1	Third do ...	80						
1	Fourth do ...	60	1	Fourth do ...	60						
1	5th do ...	40	1	5th do ...	40						
1	6th do ...	30	1	6th do ...	30						
1	7th do ...	25	1	7th do ...	25						
1	8th do ...	20	1	8th do ..	20						
1	9th do ..	15	1	9th do ...	15						
1	10th do ...	10	1	10th do ...	10						
1	Tracer & Recordkeeper	25	1	Tracer & Recordkeeper	25						
1	Tracer and Muchi ...	16	1	Tracer and Muchi ...	16						
1	Head Printer ...	20	1	Head Printer ...	20						
1	2nd do ...	12	1	2nd do ...	12						
1	3rd do ...	12	1	3rd do ...	12						
2	Pressmen at 9 ...	18	2	Pressmen at 9 ...	18						
6	do at 8 ...	48	6	do at 8 ...	48						
2	do at 7 ...	14	2	do at 7 ...	14						
2	do at 5 ...	10	2	do at 5 ...	10						
28	Total Lithographic Establishment.	925	28	Total Lithographic Establishment.	925	...	...	...	...		

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
				FOR CHIEF ENGINEER AND JOINT SECRETARY TO GOVERNMENT. (IRRIGATION BRANCH)							
1	Clerk I Class, 3rd Grade.	225	1	Clerk I Class, 3rd Grade.	225						
1	Do. II do. 2nd do...	140	1	Do. II do. 2nd do...	140						
1	Do. II do. 3rd do...	110	1	Do. II do. 3rd do...	110						
1	Do. III do. 1st do...	90	1	Do. III do. 1st do...	90						
1	Do. III do. 2nd do...	70	1	Do. III do. 2nd do...	70						
1	Do. III do. 3rd do...	55	1	Do. III do. 3rd do...	55						
2	Do. IV do. 1st Grade at 45	90	2	Do. IV do. 1st Grade at 45	90						
3	Do. IV do. 2nd Grade at 35	105	3	Do. IV do. 2nd Grade at 35	105						
1	Do. IV do. 3rd do...	25	1	Do. IV do. 3rd do...	25						
12		910	12		910						
1	Draughtsman 1st Class	60	1	Draughtsman 1st Class.	60						
2	Do. 2nd do. at 42-8-0	85	2	Do. 2nd do at 42-8 0	85						
3		145	3		145						
2	Draughtsmen 3rd Class at 25	50	2	Draughtsmen 3rd Class at 25	50						
5		195	5		195						
1	Reference Picker ...	10	1	Reference Picker ...	10						
1	Muchi ...	10	1	Muchi ...	10						
1	Head Messenger ...	8	1	Head Messenger ...	8						
2	Messengers at 7 ...	14	2	Messenger at 7 ...	14						
2	Do. at 6 ...	12	2	Do. at 6 ...	12						
3	Lascars at 7 ...	21	3	Lascars at 7 ..	21						
10		75	10		75						
27	Total Office Establishment for Chief Engineer for Irrigation.	1180	27	Total Office Establishment for Chief Engineer for Irrigation.	1180						

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
				FOR SUPERINTENDING ENGINEERS.							
1	Clerk II Class 3rd Grade	110	1	Clerk II Class 3rd Grade	110						The one additional Clerk IV Class, 3rd Grade, provided for in current year's (1881-82) Budget for each Superintending Engineer's Office has been added in the column "Proposed Scale," and allowed for the three additional Superintending Engineers' Offices also.
1	Do III do 2nd do...	70	1	Do III do 2nd do...	70						
1	Do IV do 1st do...	45	1	Do IV do 1st do...	45						
1	Do IV do 2nd do...	35	1	Do IV do 2nd do...	35						
1	Do IV do 3rd do...	25	2	Do IV do 3rd do ..	50	1	25				
1	Draughtsman 1st Class.	60	1	Draughtsman 1st Class.	60						
1	Do 2nd do ..	42½	1	Do 2nd do ...	42½						
1	Messenger at 8 ...	8	1	Messenger at 8 ...	8						
3	Do at 6 ...	18	3	Do at 6 ...	18						
11		413½	12		438½	1	25				
22	Add similar establishment for two more Superintending Engineers	827	24	Add similar establishment for two more Superintending Engineers	877	2	50				
			36	Add similar establishment for 3 additional Superintending Engineers' Offices	1,315½	36	1,315½				
33	Total Office Establishment of Superintending Engineers	1,240½	72	Total Office Establishment of Superintending Engineers	2,631	39	1,390½				
				FOR PRESIDENCY DIVISION.							
1	Clerk III Class 2nd Grade	70	1	Clerk III Class, 2nd Grade	70	...	...				The numbers and amounts shown in column "Present Scale" represent the scale for a 1st Class Division as laid down in Appendix C, No.5, to G.O. No.3674, W, dated 18th September 1878. To these have been added the additional establishment provided in the Provincial Budget, for the current year 1881-82, and the totals thus obtained have been shown in the column "Proposed Scale."
1	Clerk IV Class 1st Grade	45	1	Clerk IV Class 1st Grade	45	...	...				
1	Do IV do 2nd do...	35	2	Do IV do 2nd Grade at 35	70	1	35				
1	Do IV do 3rd do...	25	3	Do IV do 3rd Grade at 25	75	2	50				
	Do V do 1st do...	...	2	Do V do 1st Grade at 17½	35	2	35				
1	Draughtsman 1st Class.	60	1	Draughtsman 1st Class.	60	...	...				
	Do 2nd do ...	...	1	Do 2nd do ...	42½	1	42½				
1	Do 3rd do ...	25	3	Do 3rd Class at 25	75	2	50				
1	Messenger at 7 ...	7	1	Messenger at 7 ...	7	...	...				
1	Do at 6 ...	6	1	Do at 6 ...	6	...	...				
8	Total Office Establishment ~~Superintendent of Works,~~ Presidency Divn	273	16	Total Office Establishment ~~Superintendent for Works,~~ Presidency Divn	485½	8	212½				

Present Scale.			Proposed Scale.			Increase.		Decrease.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
For Godavari Eastern and Kistna Eastern Divisions.											
1	Clerk, III Class, 2nd Grade	70	1	Clerk, III Class. 2nd Grade	70	...	...	...	...		The above remark applies equally to this Establishment.
1	Do. IV do. 1st do.	45	1	Do. IV do. 1st do.	45	...	...	...	...		
1	Do. IV do. 2nd do.	35	1	Do. IV do. 2nd do.	35	...	...	...	...		
1	Do. IV do. 3rd do.	25	3	Do IV do 3rd do at 25	75	2	50	...	...		
1	Draughtsman, 1st Class	60	1	Draughtsman, 1st Class	60	...	...	...	...		
1	Do. 3rd do.	25	1	Do. 3rd do.	25	...	...	...	...		
1	Messenger, at 7	7	1	Messenger at 7.	7	...	...	...	...		
1	Do. at 6	6	1	Do. at 6.	6	...	...	...	...		
8		273	10		323	2	50	...	...		
8	Add similar Establishment for one more office.	273	10		323	2	50	...	...		
16	Total Office Establishment Godavari Eastern and Kistna Eastern Divisions.	546	20		646	4	100	...	...		
For 7 *1st Class Divisions.											
1	Clerk, III Class, 2nd Grade.	70	1	Clerk, III Class, 2nd Grade.	70	...	...	...	...		The foregoing remark applies equally to this Establishment. To the existing number (6) excluding Godavari Eastern and Kistna Eastern, of 1st Class Executive Divisions, has been added the "Madras Irrigation and Canal" Division, which has also been ranked as 1st Class. * 1. Godavari Western. 2. Kistna Western. 3. Madras Irrigation and Canal. 4. South Arcot. 5. Buckingham Canal. 6. Tanjore. 7. Tinnevelly.
1	Do. IV do. 1st do.	45	1	Do. IV do. 1st do.	45	...	...	...	...		
1	Do. IV do. 2nd do.	35	1	Do. IV do. 2nd do.	35	...	...	...	...		
1	Do. IV do. 3rd do.	25	2	Do. IV do. 3rd do. at 25.	50	1	25	...	...		
1	Draughtsman, 1st Class	60	1	Draughtsman, 1st Class	60	...	...	...	...		
1	Do. 3rd do.	25	1	Do. 3rd Class.	25	...	...	...	...		
1	Messenger at 7.	7	1	Messenger at 7.	7	...	...	...	...		
1	Do. at 6.	6	1	Do. at 6.	6	...	...	...	...		
8		273	9		298	1	25	...	...		
40	Add similar Establishment for five more 1st Class Divisions.	1365	45	Add similar Establishment for five more 1st Class Divisions.	1490	5	125	...	...		
			9	Add similar Establishment for one additional office (Madras Irrigation & Canal.)	298	9	298	...	...		
48	Total Office Establishment 6, 1st Class Divisions ...	1638	63	Total Office Establishment for 7, 1st Class Divisions.	2086	15	448				
For 9, 2nd Class Divisions.*											
1	Clerk, III Class, 2nd Grade.	70	1	Clerk, III Class, 2nd Grade.	70						The Establishment for 2nd Class Executive Divisions remains in accordance with the scale laid down in Appendix C. No. 6, to G. O. No. 3674 W. dated 18th September 1878, no additional Establishment having been provided in current year's Budget. To the existing number (8) of 2nd Class Divisions, has been added the "Sungum Project Division," which has also been ranked as 2nd Class. *1. Nellore, 2. Cuddapah, 3. West Coast, 4. Coimbatore, 5. North Arcot, 6. Chingleput, 7. Trichinopoly, 8. Negapatam, 9. Sungum Project Division.
1	Clerk, IV Class, 2nd Grade.	35	1	Clerk IV Class, 2nd Grade.	35						
2	Clerks, IV Class, 3rd Grade at 25.	50	2	Clerks, IV Class, 3rd Grade at 25.	50						
1	Draughtsman 1st Class	60	1	Draughtsman, 1st Class	60						
1	Do 3rd Class.	25	1	Do. 3rd Class	25						
1	Messenger at 7 ...	7	1	Messenger at 7 ...	7						
1	Do at 6 ...	6	1	Do at 6 ...	6						
8		253	8		253						
56	Add similar Establishment for 7 more 2nd Class Divisions.	1,771	56	Add similar Establishment for 7 more 2nd Class Divisions.	1,771						
			8	Add similar Establishment for one 2nd Class additional division (Sungum Project Division.)	253	8	253				
64	Total Office Establishment for 8 2nd Class Divisions.	2,024	72	Total Office Establishment for 9 2nd Class Divisions.	2,277	8	253	...	...		
For 5, 3rd Class Divisions.*											
1	Clerk, III Class, 3rd Grade.	55	1	Clerk, III Class, 3rd Grade.	55						The Establishment for the 3rd Class Divisions also remains in accordance with the scale laid down in Appendix C, No. 7 to G. O. No. 3674 W., dated 18th September 1878. To the existing number (2) of 3rd Class Divisions have been added the following three new Divisions, which have been ranked as 3rd Class :— Ganjam Bellary Madura * 1. Ganjam. 2. Vizagapatam. 3. Bellary. 4. Salem. 5. Madura,
1	Clerk, IV Class, 2nd Grade.	35	1	Clerk, IV Class, 2nd Grade.	35						
2	Clerk IV Class, 3rd Grade at 25.	50	2	Clerks, IV Class 3rd Grade at 25.	50						
1	Draughtsman 2nd Class	42½	1	Draughtsma 2ndClass	42½						
1	Do 3rd Class.	25	1	Do 3rd Class.	25						
1	Messenger at 7.	7	1	Messenger at 7	7						
1	Do 6.	6	1	Do 6	6						
8		220½	8		220½						
8	Add similar Establishment for one more 3rd Class Office.	220½	8	Add similar Establishment for one more 3rd Class Office.	220½						
			24	Add similar Establishment for 3 additional 3rd Class Division Officers	661½	24	661½				
16	Total Office Establishment for 2, 3rd Class Divisions.	441	40	Total Office, Establishment for 5, 3rd Class Divisions.	1,102½	24	661½	...	...		

169/10

PRESENT SCALE.			PROPOSED SCALE.			INCREASE.		DECREASE.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
						FOR THE CONSULTING ARCHITECT.					
1	Clerk, IV. Class, First Grade.	45	1	Clerk, IV. Class, First Grade.	45						
1	Draughtsman & Estimator	145	1	Draughtsman & Estimator	145						
1	Draughtsman 2nd Class	42½	1	Draughtsman 2nd Class	42½						
1	Do. 3rd do.	25	1	Do 3rd do.	25						
1	Messenger at 7.	7	1	Messenger at 7.	7						
1	Do. at 6.	6	1	Do. at 6.	6						
6	Total Office Establishment of Consulting Architect.	270½	6	Total Office Establishment of Consulting Architect.	270½						
						FOR PUBLIC WORKS STORES.					
1	Clerk, II Class, Second Grade.	140	1	Clerk, II Class, Second Grade	140						
1	Do. III do.	70	1	Do. III do.	70						
1	Do. IV do.	35	1	Do. IV do.	35						
1	Do IV 3rd do.	25	1	Do. IV 3rd do.	25						
1	Messenger	8	1	Messenger.	8						
2	Do. at 7	14	2	Do at 7	14						
2	Do. at 6½	13	2	Do at 6½	13						
9	Total Office Establishment, P. W. Stores.	305	9	Total Office Establishment, P. W. Stores.	305						
						OFFICE ESTABLISHMENT FOR 2 SUPERINTENDENTS OF WORKS (GODAVARI AND KISTNA.)					
1	Clerk, III Class, 2nd Grade.	70		Nil.							The offices close under the new arrangements and therefore no provision for it has been made.
1	Clerk, IV Class, 1st Grade.	45									
1	Clerk, IV Class, 2nd Grade.	35									
1	Clerk, IV Class, 3rd Grade.	25									
1	Draughtsman, 1st Class	60									
1	Draughtsman, 3rd Class	25									
1	Messenger at 7	7									
1	Messenger at 6.	6									
8		273*									
8	Add similar Establishment for one more Superintendent of Works office.	273									
6		546						16	546		

PRESENT SCALE.			PROPOSED SCALE.			INCREASE.		DECREASE.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
						FOR THE FOUR NEW PROJECT DIVISIONS.					
	Nil.		2	Draughtsmen, 1st Class at 60.	120	2	120				
			2	Draughtsmen, 2nd Class at 42½.	85	2	85				
			1	Clerk, IV Class, 2nd Grade.	35	1	35				
			1	Clerk, V Class, 1st Grade.	17½	1	17½				
			1	Messenger at 7.	7	1	7				
			1	Messenger at 6.	6	1	6				
			8	Total for each office.	270½	8	270½				
			24	Add similar Establishments for 3 more such offices.	811½	24	811½				
			32	Total Office Establishment, Project Divisions.	1,082	32	1,082				
						FOR 50 SUB-DIVISIONAL OFFICES.					
1	Clerk, IV Class, 3rd Grade	25	1	Clerk, IV Class, 3rd Grade	25						To the existing number (40) of Sub-Divisions have been added the 10 additional Sub-Divisions as follows:— For Sungum Project... ... ... 2 „ Madras Irrigation and Canal ... ... 2 „ Ganjam ... ... 2 „ Bellary ... ... 2 „ Madura ... ... 2 Total...10 And Office Establishment provided for each in accordance with the scale given in Appendix C. No. 10 to G. O. No. 3674 W. dated 18th September 1878.
1	Messenger	6	1	Messenger	6						
2	Total for one Office	31	2	Total for one Office	31						
78	Add similar Establishment for 39 more Sub-Division Offices	1,209	78	Add similar Establishment for 39 more Sub-Division Offices	1,209						
			20	Add similar Establishment for 10 additional Offices	310	20	310				
80	Total Sub-Divisional Office Establishment	1,240	100	Total Sub-Divisional Office Establishment	1,550	20	310				
						FOR 88 DETACHED OFFICERS,					
1	Clerk Apprentice, 1st Grade, now called 5th Class, 1st Grade	17½	1	Clerk, IV Class, 3rd Grade	25		7½				
39	Add similar Establishment for 39 more detached Officers (Upper Subordinates above the grade of Overseer)	682½	39	Add similar Establishment for 39 more detached Officers	975		292½				

PRESENT SCALE.			PROPOSED SCALE.			INCREASE.		DECREASE.		Grounds of proposition.	Remarks.
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.		
FOR 88 DETACHED OFFICERS—(Continued.)											
			48	Add similar Establishment for 48 additional detached Officers, viz: Officers and Upper Subordinates above the rank of Overseer who are not in charge of Sub-Divisions	1,200	48	1,200				
40	Total Office Establishment, detached Officers	700	88	Total Office Establishment, detached Officers	2,200	48	1,500				
FOR 92 OVERSEERS.											
Nil.			1	Clerk, IV Class, 1st Grade.	17½	1	17½				A provision of one Clerk, V Class, 1st Grade, has been made for each Overseer.
			91	Add similar Establishment for 91 more Overseers.	1592½	91	1592½				
			92	Total Office Establishment for Overseers	1610	92	1610				
OFFICE [TOLL] ESTABLISHMENT, BUCKINGHAM CANAL.											
72	Clerks, &c.	761	72	Clerks, &c.	761						
ABSTRACT OF OFFICE ESTABLISHMENT.											
32	Chief Engineer and Secretary to Govt., P. W. Department.	2,433½	32	Chief Engineer and Secretary to Govt., P. W. Department.	2,433½						
28	Lithographic Establishment.	925	28	Lithographic Establishment.	925						
27	Chief Engineer for Irrigation.	1,180	27	Chief Engineer for Irrigation.	1,180						
33	Superintending Engineer's Offices,	1,240½	72	Superintending Engineer's Offices.	2,631	39	1,390½				
8	Superintendent of Works, Presidency.	273	16	Presidency Division.	485½	8	212½				
6	Godavari and Kistna Eastern Divisions.	546	20	Godavari and Kistna Eastern Divisions.	646	4	100				
48	Six 1st Class Executive Divisions	1,638	63	Seven 1st Class Executive Divisions	2,086	15	448				
64	Eight 2nd Class Executive Divisions	2,024	72	Nine 2nd Class Executive Divisions	2,277	8	253				
16	Two 3rd Class Executive Divisions	441	40	Five 3rd Class Executive Divisions	1,102½	24	661½				
6	Consulting Architect's Office	270½	6	Consulting Architect's Office	270½	...	...				
9	Public Works Stores	305	9	Public Works Stores	305	...	...				
16	Office Establishment, Superintendent of Works, Godavari and Kistna	546	...		...	...	...	16	546		
..	...	...	32	Office Establishment, Project Divisions	1,082	32	1,082				
80	Sub-Divisional Offices	1,240	100	Sub-Divisional Offices	1,550	20	310				
40	Office Establishment, Detached Officers	700	88	Office Establishment Detached Officers	2,200	48	1,500				
...	...	...	92	Office Establishment, for Overseers	1,610	92	1,610				
72	Office (Toll) Establishment Buckingham Canal	761	72	Office (Toll) Establishment Buckingham Canal	761	...	...				
495	Total Office Establishment.	14,523½	769	Total Office Establishment	21,545	290	7,567½	16	546		
IRRIGATION ESTABLISHMENTS.											
	Water Regulation Navigation River Conservancy	7,528 2,462 260		Water Regulation Navigation River Conservancy	7,528 2,462 260						
	Total Irrigation Establishment	10,250		Total Irrigation Establishment	10,250						
ABSTRACT OF EXECUTIVE BRANCH.											
69	Engineer Establishment	45,950	92	Engineer Establishment	60,600	23	14,650				
160	Upper Subordinate ...	19,880	201	Upper Subordinate ...	29,670	55	10,920	14	1,080		
20	Lower do ...	600	19	Lower do ...	580			1	20		
448	Petty Establishment...	3,242	538	Petty Establishment...	3,842	90	600				
495	Office do ...	14,523½	769	Office do ...	21,545	290	7,567½	16	546		
	Irrigation do ..	10,250		Irrigation do ...	10,250						
	Total Executive Branch	94,395½		Total Executive Branch	126,487		33,737½		1,646		

1697
12

ACCOUNTS BRANCH.

EXAMINERS.

PRESENT SCALE.			PROPOSED SCALE.			INCREASE.		DECREASE.			
Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.	Grounds of proposition	Remarks.
1	Examiner 3rd Class ...	1,100	1	Examiner 3rd Class ...	1,100						
1	Deputy Examiner 1st Grade.	550	2	Deputy Examiners 1st Grade at 550.	1,100	1	550				
1	Assistant Examiner 2nd Grade.	250	1	Assistant Examiner 2nd Grade.	250						
3	Total Examiner Establishment.	1,900	4	Total Examiner Establishment.	2,450	1	550				

The number of officers at present attached to this Presidency has been taken as the "Present Scale," to which has been added, one to Deputy Examiner, 1st Grade, and the totals thus arrived at have been shown as the "Proposed Scale." The provision of the extra Deputy Examiner has been made in view to the more frequent inspection of the Executive Engineer's Officers, considered to be absolutely essential with the introduction of the new forms of account, and also in view to the proposed large increase to the operations of the Department.

ACCOUNTANTS.

Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.	Grounds of proposition
1	Accountant 1st Grade	400	1	Accountant 1st Grade	400					
3	Accountants 2nd Grade at 295	885	3	Accountants 2nd Grade at 295	885					
4	Accountants 3rd Grade at 200	800	6	Accountants 3rd Grade at 200	1,200	2	400			
10	Accountants 4th Grade at 115	1,150	15	Accountants 4th Grade at 115	1,725	5	575			
34	Accountants 5th Grade at 57½	1,955	31	Accountants 5th Grade at 57½	1,782½			3	172½	
52	Total Accountant Establishment	5,190	56	Total Accountant Establishment	5,992½	7	975	3	172½	Net Increase Rs.802½

The numbers entered in column "Proposed Scale" have been arrived at thus—

For 25 Executive Divisions ...	25	Accountants
For Central Office, one Accountant for every 3 Divisions, and one for any fraction $\frac{25}{3}$ or	9	Do
Extra	1	Do
Total ...	35	

and this total has been distributed with reference to P.W.D. Code, Chap. I, Para 77, as follows:—

1st and 2nd Grades $\frac{35}{8}$ 4 (omitting fraction less than half)

2nd Grade to be always more than 1st Grade, *i.e.*,

1st Grade	= 1 at 400	=	400
2nd Grade	= 3 at 295	=	885
3rd Grade $\frac{25}{4}$	= 9 at 200	=	1800
4th Grade (remainder)	=22 at 115	=	2,530

(adding 1 for fraction more than half)

Total...35 Costing Rs.5,615

Recasting the above to bring in the 5th Grade Accountants the Establishment will be—

1st Grade	1 at 400	=	400
2nd Do	3 at 295	=	885
3rd Do	6 at 200	=	1200
4th Do	13 at 115	=	1,495
5th Do	29 at 57½	=	1,667½
52 Costing			*5,647½

* The small excess difference of Rs.32½ is due to the redistribution.

Add one Accountant each for *Presidency* and Dowlaishwaram Workshops, one for Madras Harbour Works and one for Central Office =4 *i.e.* 2, 4th Grades at 115=230
2, 5th do at 57½=115

Total...56 Costing 5,992½

OFFICE ESTABLISHMENT.

Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.	Grounds of proposition
1	Clerk II Class 2nd Grade	140	1	Clerk II Class 2nd Grade	140					
1	Do III do 1st do...	90	1	Do III do 1st do...	90					
1	Do III do 2nd Grade at 70	70	3	Do III do 2nd Grade at 70 at 55/-	210	2	140			
3	Clerk III do 3rd do...	165	5	Clerk III do 3rd do...	275	2	110			
5	Do IV do 1st Grade at 45	225	6	Do IV do 1st Grade at 45	270	1	45			
6	Clerk IV do 2nd Grade at 35	210	6	Clerk IV do 2nd Grade at 35	210					
10	Clerk IV do 3rd Grade at 25	250	11	Clerk IV do 3rd Grade at 25	275	1	25			
3	Clerk V do 1st Grade at 17½	52½	3	Clerk V do 1st Grade at 17½	52½					
30	Total Clerks ...	1202½	36	Total Clerks ...	1,522½	6	320			
	Menial Servants ...	102½	1	Moochi at 10 ...	10					
			1	Do at 8 ...	8					
			1	Head Messenger ...	10					
			1	Head Messenger	8					
			4	Messengers at 7	28					
			6	Do. at 6	36					
			2	Rollers at 5	10					
			16		110	0	7½			
	Total Office Establishment.	1,305	52	Total Office Establishment.	1,632½		327½			

To the present number of Clerks have been added four Clerks (2, III Class, 2nd Grade at 70 each, and 2, III Class 3rd Grade at 55 each) on account of the four Project Divisions for which no Accountants have been provided.

A small addition of two Clerks (1, IV Class, 1st Grade at 45, and 1, IV Class, 3rd Grade at 25) has also been made to the existing establishment on account of the increase in number from 20 to 25 of Executive Divisions, which necessarily will entail an increase in the clerical work of the Central Office.

ABSTRACT OF ACCOUNTS BRANCH.

Number.	Designation.	Amount of Pay.	Number.	Designation.	Amount of Pay.	Number.	Amount of Pay.	Number.	Amount of Pay.
3	Examiners	1,900	4	Examiners	2,450	1	550		...
52	Accountants	5,190	56	Accountants	5,992½	7	975	3	172½
	Office Establishment	1,305	52	Office Establishment	1,632½		327½		...
	Total Accounts Branch	8,395		Total Accounts Branch	10,075		1,852½		172½

ABSTRACT.

Executive Branch	1,26,487		
Accounts Branch	10,075		
Grand Total...	1,36,562	per mensem or per annum ...Rs.	16,38,744
ADD.—Approximate amount on account of Military pay and allowances of Military Officers, per mensem ...Rs.		8,000	
Approximate amount on account of Military pay and allowances of Military Subordinates, per mensem...		,, 1,500 or per annum ...Rs.	1,14,000
		,, 9,500	
Sub-Divisional Allowance for 15 Upper Subordinates at 30...		,, 450 or per annum ...Rs.	5,400
Local allowances, approximate, Upper Godavari allowance per mensem...	50		
Wynaad allowance per mensem ...	200		
Potinghy Ghat or Jeypore allowance per mensem	600		
	850		...Rs. 10,200
Charge allowance for Fifth Grade Accountants recommended in letter No, 241 W. dated 19th March 1881, from the Examiner P. W. Accountant to the Local Government ... ...Rs.		400	...Rs. 4,800
Do do Presidency allowance, & Presidency house rent, Executive Branch ... ...Rs.		1,200	
Accounts Branch ... ... ,,		1,650	
		2,850	...Rs. 34,200
Total Permanent Establishment salaries...Rs.			18,07,344
Travelling allowance Executive Branch* ... ...Rs.		$16,666\frac{2}{3}$	
Accounts Branch ... ... ,,		400	
		,, $17,066\frac{2}{3}$	... ,, 2,04,800
Contingencies.— Executive Branch ... ,,		4,000	
Accounts Branch ... ... ,,		400	
		... ,, 4,400	... ,, 52,800
Total Permanent Establishment.... ,,			20,64,944

EXECUTIVE BRANCH.

		Per mensem. Rs.	Per annum. Rs.
Temporary Establishment.	Irrigation Survey	1,250	15,000
	Special Revenue Investigation Establishment... ...	1,000	12,000
	Temporary Executive Branch ...	$2,083\frac{1}{2}$	25,000
		$4,333\frac{1}{2}$	52,000
	ACCOUNTS BRANCH.		
	Temporary Establishment for the preparation of Capital & Revenue Accounts of Irrigation works.	800	9,600
		$5,133\frac{1}{3}$	61,600

...Rs. 61,600

Grand Total Establishment... ,, 21,26,5

*Per mensem to give in round numbers 2,00,000 for the year.

Grand Total Establishments ... Rs. 21,26,544

EXECUTIVE BRANCH.

DEDUCT.

	Per mensem. Rs.	Per annum.	
Pay and allowances of Consulting Engineer and two Deputy Consulting Engineers for Railways chargeable to Imperial ...	4,023	48,276	
Moiety of pay and allowance of Superintendent P. W. Stores and Workshops chargeable to Workshops	335	4,020	
Pay of two Upper Subordinates chargeable to Workshops ...	400	4,800	
ACCOUNTS BRANCH.			
Pay and allowances of four Accountants chargeagble to P. W. workshops (Dowlaishvaram and Presidency) and Madras Harbour Works	445	5,340	62,436
Net Total Establishment Permanent and Temporary including Travelling allowances and contingencies			20,64,108

1097/15

APPENDIX C.

Gradation List as proposed under the new organization with effect from 1st August, 1881.

NAME.	DATE OF FIRST APPOINTMENT TO THE DEPARTMENT.	PRESENT PERMANENT GRADING IN THE DEPARTMENT OF THOSE OFFICERS WHO ARE TO BE PROMOTED.
CHIEF ENGINEER, 1ST CLASS, (1.)		
Col. R. H. Sankey C.B. R. E.	May 1850	
CHIEF ENGINEER, 2ND CLASS. (1.)		
Col. J. Mullins, R. E.	February 1852	
CHIEF ENGINEER, 3RD CLASS, (1.)		
Col. J. H. M. Shaw-Stewart, R.E., (A.I.C.E.)	January 1854	
SUPERINTENDING ENGINEERS, 1ST CLASS, (2.)		
Lieut.-Col. J. Beatty, R. E.	March 1855	
,, J. O. Hasted, R. E.	January 1856	
SUPERINTENDING ENGINEERS, 2ND CLASS, (2.)		
Lieut.-Col. H. L. Prendergast, R. E.	November 1857	
Lieut.-Col. W. Chrystie, R. E.	October 1855	Superintending Engr., 3rd Class
SUPERINTENDING ENGINEERS, 3RD CLASS, (2.)		
Major H. R. Mead, R. E.	January 1858	
Mr. J. W. Rundall, M.I.C.E.	August 1855	Executive Engineer, 1st Grade
EXECUTIVE ENGINEERS, 1ST GRADE, (9+1=10.)		
Major C. J. Smith, R. E.	January 1858	
Mr. R. F. Chisholm, F.R.I.B.A.	February 1859	
Lieut.-Col. J. N. Hunter, R. E.	March 1855	
Major H. Smalley, R. E.	July 1859	
,, P. Montgomerie, R. E.	November 1860	
Lieut.-Col. W. H. Burton, R. E.	May 1858	
Major H. M. Vibart, R. E.	September, 1861	
,, J. Pennycuick, R. E.	April 1862	
Lieut.-Col. Ross Thomson, R. E.	August 1863	
Major J. L. L. Morant, R. E.	January 1864	
EXECUTIVE ENGINEERS, 2ND GRADE, (10+1=11.)		
Mr. G. T. Walch, M.I.C.E.	February 1866	
Major A. T. Fraser, R. E.	March 1860	
,, S. C. Clarke, R. E.	October 1862	
Capt. R. R. E. Drake-Brockman, R. E.	November 1864	
,, W. H. Coaker, R. E.	April 1866	
Mr. T. D. Harris.	August 1855	
Capt. A. C. Smith, R. E.	September 1864	
,, A. Awdry, R. E., A.I.C.E.	January 1868	
Mr. K. F. Nordmann.	June 1862	
,, E. H. Pringle.	January 1868	
Capt. D. McNeil Campbell, R. E.	April 1869	Executive Engineer, 3rd Grade
EXECUTIVE ENGINEERS, 3RD GRADE, (10+1=11.)		
Mr. J. Hannan.	July 1866	Reappointment
Mr. R. W. Norris.	July 1867	
Captain R. F. Morris, R. E.	March 1864	
Mr. G. D. Wybrow.	July 1867	
,, J. W. Martin.	December 1867	
,, J. D. Grant, A.I.C.E.	July 1868	

NAME.	DATE OF FIRST APPOINTMENT TO THE DEPARTMENT.	PRESENT PERMANENT GRADING IN THE DEPARTMENT OF THOSE OFFICERS WHO ARE TO BE PROMOTED.
EXECUTIVE ENGINEERS, 3RD GRADE,—*(Continued.)*		
Mr. C. J. Peters.	July 1867	Executive Engineer, 4th Grade
,, *W. Hughes, B.A.*	July 1868	Do
,, *J. G. Larminie*	March 1869	Do
,, *J. M. Bell.*	December 1867	Do
Captain A. W. Smart, R. E.	March 1871	Do
EXECUTIVE ENGINEERS, 4TH GRADE, (3+1=4.)		
Captain C. C. Rawson, R. E.	June 1871	
Captain A. R. F. Dorward, R. E.	August 1871	
Mr. J. Grimes.	June 1861	Assistant Engineer, 1st Grade
Lieutenant G. B. Henderson, R. E.	April 1873	Do
Mr. Wilks.	...	Temporary Probationary Appointment
ASSISTANT ENGINEERS, 1ST GRADE, (24+2=26.)		
Lieutenant O. V. Boddy, R. E.	April 1873	
,, L. Langley, R. E.	April 1873	
,, F. G. Romilly, R. E.	April 1873	
Captain W. Jackson.	September 1872	Counted as an Upper Subordinate
Mr. C. H. T. Norfor.	August 1870	
Lieutenant R. E. Hamilton, R. E.	June 1875	Dy. Cong. Engr. for Railways
,, W. L. C. Baddeley, R. E.	July 1875	
Mr. W. B. De Winton.	October 1874	
Lieutenant S. C. Plummer.	January 1855	Counted as an Upper Subordinate
Mr. C. Vincent.	October 1874	
,, A. H. Garrett.	October 1874	
,, J. P. Davidson.	October 1874	
,, J. C. Johnson.	February 1873	
,, H. S. Taylor.	October 1875	
,, A. S. Russell.	October 1875	
,, C. M. Smith.	October 1875	
S. Subroya Chariur, B.C.E.	May 1865	
Mr. W. C. De Morgan.	October 1874	Assistant Engineer, 2nd Grade
,, *W. L. Bird.*	October 1875	Do
,, *J. E. Paul.*	October 1875	Do
,, *G. P. Carless.*	February 1876	Do
,, *J. Trail.*	October 1874	Do
,, *C. H. B. Burlton.*	October 1875	Do
,, *H. E. G. Evans.*	October 1875	Do
,, *G. . Ussher.*	October 1877	Do
,, *G. E. Manson.*	October 1877	Do
,, *A. A. G. Mulet.*	October 1877	Do
,, *W. Jopp.*	October 1877	Do
ASSISTANT ENGINEERS, 2ND AND 3RD GRADES, (19+2=21.)		
Mr. B. H. Young,	October 1877	
,, G. B. Lambert.	October 1877	
,, H. H. O'Connell.	September 1878	
,, A. R. Boyle.	October 1880	
,, A. M. Hayes.	October 1880	
,, F. J. Wilson.	October 1880	
,, F. B. Hanson.	October 1880	
,, A. M. Foord.	September 1879	
,, R. H. Dorman.	October 1880	
,, H. E. Clerk.	October 1880	
,, S. D. Pears.	October 1880	
N. Ruthnasubapathy Pillay, B.C.E.	April 1874	
S. Gopalakrishna Iyengar, B.C.E.	September 1880	
Lieutenant D. Falvey.	July 1870	Counted as an Upper Subordinate

N. B.—Those officers shown in italics will receive promotion.

APPENDIX D.

Protective Works Projects now in hand or proposed, para 8 Government of India Letter, No. 681 G, dated 5th May, 1881.

Name of Project.	Division and Circle.	Brief Explanation of each.	Probable amount of Estimate.	Forecast of provision to be made in the Budgets of the Current and following years.		
				1881-82.	1882-83.	1883-84.
			Lakhs.	*Lakhs.*	*Lakhs.*	*Lakhs.*
(*a.*) Ganjam, Gopaulpore, tidal Canal.	A Project Division 1st Circle.	During the last famine a tidal canal 9 miles in length, was completed from Ramba at south end of the Chilka Lake to Ganjam, thus with the system of Canals to the North connecting the latter place with Cuttack, Midnapur, &c. It is now absolutely essential that this Canal should be extended southwards about 12 miles to the port of Gopaulpore, the most important emporium of the district, thus securing the means of distributing food grains in case of famine and of creating for ordinary seasons a highly promissing artery of trade. A detailed estimate for a high level fresh water canal, amounting to Rs.1,72,000 was framed some years since, but late information appearing to show that a tidal canal will be preferable, arrangements are being made for completing the estimate, which should be ready for submission in six or eight months.	2·10	Nil.	Nil.	1·00
(*b.*) Road from Salur in the Vizagapatam Division, *via Potinghy Ghaut* to Koraputt and Jugdulpore in Bustar.	Do.	The primary link in this, the first cart road leading from the littoral of Vizagapatam to, and through the country above the ghauts in Jeypore and Bustar, as yet attempted to be made, is the "Potinghy Ghaut," on which such small sums (altogether inadequate however for securing proper progress) have hitherto been spent from Provincial funds as could be spared. While grain has been at famine prices in the low country, it has always been cheap above the ghauts, where the rainfall seems to be abundant and certain, and where land is apparently to be obtained for emigrants, the country being but sparsely populated. Of the revised estimate amounting to 3·40 Lakhs for the Potinghy Ghaut now under examination (which will, if necessary, be forwarded to the Government of India) about one-third has already been spent, and it is thought that probably nine lakhs more would be needed to take the line 70 miles on to Jugdulpore (new Bustar). No estimate has been framed for this latter portion, but with the new establishment, one should be ready a year hence in time for entry in the Budget of 1883-84. ... ... N. B.—Other roads suitable for cart traffic, *e.g.*, for linking Koraputt with Raigurh and others leading towards Sumbalpore north-east and through Kalahandy north-west will be certainly required in course of time as protective works, but need not be further adverted to here.	10·50	0·75	1·00	2·00
(*c.*) Buckingham Canal.	At present Buckingham Canal Division. 1st Circle.	From the early part of the century, a tidal canal connecting the backwaters of the east coast north of Madras was considered feasible and partially carried out. The scheme was more fully developed in the late famine by so far completing the works as to				

Protective Works Projects now in hand or proposed, para 8, Government of India Letter, No. 681G, dated 5th May, 1881.
—(*Continued*)

Name of Project.	Division and Circle.	Brief Explanation of each.	Probable amount of Estimate.	Forecast of provision to be made in the Budgets of the Current and following years.		
				1881-82.	1882-83.	18838-4.
			Lakhs	*Lakhs*	*Lakhs*	*Lakhs*
	—	make a tidal communication now known as the "Buckingham Canal," extending nearly 200 miles north, and about 50 South of Madras. The total outlay from the commencement to date has been nearly 37·4 lakhs, of which 27·1 lakhs may be considered normal. The completion estimates now far advanced amount to about 29 lakhs, so that the normal outlay will, for the finished work be approximately, 56 lakhs. For the distribution of food grain during famine a safe interior line of coastal communication will be invaluable, while for ordinary trade purposes, its importance is daily on the increase. Already boats from Coconada come laden to Madras 400 miles, and it can hardly be doubted that eventually the whole line of coast will be similarly connected. A work of this character is wholly beyond the unaided Provincial resources, and as it is essentially "Protective" in its character, it is here included. The estimates should be ready for submission six months hence.	56·00	* Nil.	5·00	5·00
(*d.*) **Buckingham Canal South of Markanum.**		The extension southward of the above canal through the French territory (18 miles) and as far as Point Calimere has been regarded not merely as desirable for completing a much needed link in the coast communications, but as holding in readiness a work which is considered to be extremely well suited for execution during famine. The details of a considerable portion of the estimate were worked out some years ago, but its entire revision will be needed to allow of its being sanctioned by the Government of India. At the presentmoment, however, there is no very pressing necessity for the work, the time named for its submission may be for the Budget of 1884-85.	30·00	Nil.	Nil.	Nil.
(*e.*) **Baroor Tank.**	B Project Division. 2nd Circle.	This work was commenced for Relief in last Famine. The project provides for an anicut across the Pooniar river, supply channel to Sarur Taluq, enlargement of the tank irrigation channels and head sluices to existing channels. The increase of cultivation is expected to be 5,610 acres, and of revenue, 22,137 rupees. The work is considered valuable as a famine protective work. Plans and estimates have been prepared and submitted to the Government of India, but were returned for revision. They will probably be resubmitted by the end of official year.	3·10	Nil.	1·00	2·00
(*f.*) **Marandahully.**	Do.	Work was commenced for Famine Relief. The project provides for an anicut across Sumadakumara river, supply channel to Sungambasavan tank enlarging this and Jairy Talab, and channels from tanks. Provides for the storage of 667 millions of cubic feet of water. Increase of cultivation and revenue expected not yet known. It is understood that estimates are nearly ready for submission. This work is likely to be of value as a protective work.	3·90	Nil.	1·50	2·00
(*g.*) Vaniar.	Do.	Work was commenced for Famine Relief, but probably the project cannot be carried out so as to utilize all the work then done. The project provides for the formation of a reservoir by damming the valley of the Vaniar river. Increase of cultivation expected is 9,500 acres, and of revenue 33,250 rupees. Plans and estimates have yet to be drawn up, and further enquiry made regarding the returns. It is not certain that the work will prove productive though it may be valuable as a protective work. The estimates might be ready by the end of the official year. ...	8·50	Nil.	Nil.	Nil.
(*h.*) Hindupur.	C Do. 3rd Circle.	The project provides for constructing an anicut across the Penniar River for the supply of 11 tanks with head sluices and channels. The district of Bellary having very little irrigation, the work would be of value as a protective work. Plans and estimates were prepared many years ago, but the project will need complete revision. Existing cultivation is expected to be improved, and 356 acres of waste land cultivated. Increased revenue expected, 10,906 rupees. Estimates may be submitted by the end of official year.	2·00	Nil.	1·50	0·50
(*i.*) Roddam.	Project Division. 3rd Circle.	The project provides for an anicut across the Pennair to supply Roddam large tank, and would, like the work above, be useful as a protective work. Plans and estimates were prepared many years ago, but the project needs complete revision. Existing cultivation is expected to be improved, and 1,344 acres of waste land cultivated. Increased revenue expected 9,105 rupees. Estimates may be submitted by the end of the official year.	1·40	Nil.	Nil.	1·00
(*j.*) Complete revised project for the Godavari Delta Works.	D Do	The work to be done is the revision of certain of the estimates already sanctioned, the examination of estimates submitted, and framing one complete estimate. Beyond those already submitted, there will probably be estimates amounting to 24,00,000 rupees required. It is thought that under special arrangements now being made the estimates will be ready for submission in five or six months.... ...	60·00	Nil.	5·00	5·00
(*k.*) Complete revised project for the Kistna Delta Works.	Do	The same work has to be done as above. Estimates have been prepared and but little revision is expected to be necessary. Revenue returns have to be obtained. These estimates may be expected to be ready for submission by the end of the year or a little after	140·00	Nil.	5·00	5·00
(*l.*) Perryaur.	Do	The project provides for constructing a concrete dam of 170 feet in height and turning the water of the Perryaur river, which now runs into Travancore, into the Madura District. It will it is thought prove invaluable as a protective work. The net return expected from the work is 5,15,000 rupees per annum constituting it also a "Productive." The out-door surveying &c., has been done, and the project has only to be put into shape and may be submitted by the end of the year. ...	70·00	Nil.	1·00	5·00
(*m.*) Poogalur Channel.	Do	The project provides for improving an existing channel, and work was commenced for Famine Relief, 95,057 rupees having been spent on it. The existing irrigation is expected to be improved, and 5,100 acres additional land cultivated; the increase of revenue expected is 48,000 rupees. The estimates have				

---

* *N.B.*—No outlay is shown in 1881-82 against the Buckingham Canal above, as the funds for the current year are being found for "Provincial." At the same time it is much to be desired that a ortion if not the whole of the current years assignment may be charged against "Imperial Protective" so as to liberate Provincial Funds most urgently needed for other purposes.

Name of Project.	Division and Circle.	Brief Explanation of each.	Probable amount of Estimate.	Forecast of provision to be made in the Budgets of the Current and following years. 1881-82	1882-83	1883-84
			Lakhs.	*Lakhs.*	*Lakhs.*	*Lakhs.*
		been submitted and returned for revision, and may probably be ready by the end of the year.				
(n.) **Rooshkoolia.**	D Project Division. 3rd Circle.	The project provides for an anicut across the Korakory river in the Ganjam District, improving and constructing channels and embanking a natural lagoon in a part of the country where protective works are much needed. Provision is made for 64 miles of navigable canal and for two reservoirs. The area to be irrigated is 1,20,000 acres, and a return of 4 per cent. on the total outlay is expected. The plans and estimates have been prepared, and may be put into shape for submission without delay	3·70	Nil.	1·00	2·00
(o.) **Palar Anicut.**	Unassigned as yet.	The project is for improvements to existing channels under the anicut on the South side. Plans and estimates have been prepared, but not yet submitted, and information is needed as to cultivation and revenue expected.	26·00	Nil.	2·00	2·50
(p.) **Atur Anicut.**	Do.	This project provides for an anicut on the Guddebum in South Arcot District. The estimate has been submitted and returned for revision. Information regarding cultivation, &c., is as yet not available. The estimates might be completed in three or four months.	2·50	Nil.	Nil.	Nil.
(q.) **Lower Coleroon Anicut.**	Do.	This project provides for the improvement of existing irrigation under the Lower Coleroon Anicut in South Arcot; the subject has not yet been taken up, but it seems certain that great improvements can be made, and the cultivation extended. The estimates could be prepared within a year.	0·54	Nil.	Nil.	Nil.
(r.) **Bhawani Reservoir**	Do.	This is a project for forming a large reservoir on one of the tributaries of the Cavari river with a view to storing some portion of the flood waters which now runs to waste. Preliminary investigations have been made, and it is thought that by the construction of the reservoir, not only would the supply for the Tanjore Delta be thus improved, when occasionally deficient, but over 500,000 acres of additional direct irrigation be secured.	6·50	Nil.	Nil.	Nil.
			40·00	Nil.	Nil.	Nil.
		Totals ...	425·84	0·75	25·00	35·00

S.A.W.

The letter to India was despatched 11-7-81. Spare copies can now issue. 240 copies of Appendices B & D are being printed here. The same number of A will be required at Madras. C does not issue to the Dept. 5 copies only have therefore been struck off. I'll send the Appendices B. C & D. as soon as they are ready.

The G.O. on the Govt of India letter should be printed on emergency & sent up for [illegible] signature.

Send up please extra copies of the [illegible] ditto of G.O. when ready.

R.S. 12/7.

C.A.W.

Herewith for signature copy of letter to India in re. normal estimates, together with 5 spare copies for office use at Ooty.

We have struck off 50 copies of the paper, so that the same no. of copies of the appendices will be required, if you are printing them at Ooty.

The usual no. (25) of spare copies of the letter will be despatched to Simla as soon as we hear from you that the signed copy has gone ~~[illegible]~~ on.

the spare copies of the appendices might be sent at the same time if you will send them here –

I forward at the same time the Press Supt's explanation of the delay in furnishing a proof ~~of~~ of the letter – It was most unfortunate that the proof was not sent in in time for the post on Monday last. With the manuscript I sent a memo. to the Supt. with very strong injunctions as to the urgency of the paper, & the necessity for losing no time in furnishing a proof & transmission to Govt.

CA 1697/18
9/7/81.

W
Submitted for signature – with 2 spare copies for private use. On return of the signed copy I shall see it duly posted this evening.

R.S.
10-7-

CAW
Signed –
Please have dispatched by tomorrow mornings post

10

1697/18A

CAW

Call for explanation of delay please

6/7/81

SAW
Please explain delay. R.S. 6/7.

(m.) (o.) (p.) (q.) (r.)

CAW

1697/188

Should be sent
to Supt. of the Press
with strict in-
-junctions to have
the corrections made
and final copy
(2 or 3) sent here
by Saturday
evening's post so
as to reach on
~~the afternoon~~ of
Sunday

= Bear in mind
that entire copies will
probably be needed"

7/7/81

S.A.W.

There should be no difficulty in doing what W orders. The corrections in the Press should not take more than an hour.

This letter has to be numbered & dated. Send up one copy for signature which will be despatched to Simla direct from here. and a few extra copies for office use. The proper number of copies being forwarded as soon after as possible.

Advise me by return of post the number of ~~the~~ copies of the appendices which will be reqd. Keep a good stock of spare copies.

R.S.

1632/18c

Dy W.

The draft letter referred to herein was voluminous, & the delay in the Press does not appear great, considering that Sunday intervened.

As however W. wishes for an explanation, it is only the press that can give it –

No avoidable delay occurred in the Secretariat. The draft was sent to press immediately after the post was opened, & certain blank entries in the letter had been filled in. The proof came in too late on Monday to go by that evening's post, & it had to be despatched to [illegible] on Tuesday afternoon.

C.J.
8/7.

1682
18D

No. 657 N/s 8th July 1881

To,

The Supdt. Govt. Press.

The Secretary desires an explanation from the Govt. Press as to the delay in furnishing a proof of the letter to the Govt. of India on the subject of the future strength of the Engineer Establt. of the P.W. Dept. of this Presidency.

The manuscript, marked "Print emergent" was recd. from Ootacamund on Friday the 1st Instant, and sent to press early in the forenoon of that day. The proof was received here after office hours on Monday the 4th Instant, too late for that days mail.

Please furnish the

Explanation required

(Sd) C.C.K.
87

W.

1687
18 R

The number of Upper Subordinates for the Financial Statement has now been brought down to 183 + 2 for Workshops = 185 as per your Distribution Statement. The former number of 190 was obtained by adding 12 for Project Divisions to the 178 sanctioned by India but as the 178 is found to include the men required for Project Divisions the revised total with 10 % for Supernumeraries works out to 183.

There is nothing now to prevent the Statement being completed and forwarded to the

Press this afternoon
Mr. Anthony is working
out the results.

R.S.
4/7

C A W

Very good
Please at once
make over to the
press

I cannot understand
why the Govt. Press at
Madras should not
have sent the
one proof of the
Coming letter — Better
wire about this

4/7/81

W.

— The Statement has been completed – and I am just taking it to the Press.

I have telegraphed regarding the letter to India. I gave very strict instructions as to the urgent printing – but the Govt. Press are invariably slow.

R.S.
4/7

CAW

Wire again please if no reply received by noon today

W. — Wired again 2:30 P.M. no reply having come

Wrote SAW. 28-6-81.

1697/19

CAW

Immediate arrangements should be made for having this letter to India put in type on Monday – By the time the "proof" is ready I hope to have Statement B from the Examiner & all missing figures & references can then be filled in –

(The pages should now be numbered)

(Appendix C) I retain till Thursday when I will fill in the particulars for all Asst. Engineers

Appendix D will I hope also be ready

28/6/81

The Hon'ble the Govern
1697
With draft for Approval

The accompanying
the fair draft of reply
to the G of I letter abou
the normal scale - th
or two references were
to be filled in as a
two attachments
Statements (B) and (

The first of these
tabular financial
which the Examiner
for some time past
framing was prob
already [illegible]
but it only affects the
to the extent of one
two or three figures
to be filled in -
last calculation of
normal Estab! was 18 3
Lakhs, and as w[illegible]
observed I have [illegible]
20 Lakhs in [illegible]

which ought to suffice
n the additions were
made

I have all the materials
ready for ~~statement~~
and only await a
figures from Madras
complete it — As it
the B will be printed
the the letter there will
no real delay

is of course of great
stance to get the
List sanctioned
to its authorisation
for 1st August
therefore anxious
the Hon.ble the Governor
pass the draft
as possible to
of the letter being
printed on emergency

o/c ~~despatched~~ without
delay to the S of S

Before binding the
press all missing refs
&c will be filled in
paragraphs numbered
&c.

1697/21 ~~[illegible]~~

27/6/81

As the Hon the Governor
is so well acquainted
with the previous correspondence
I only forward herewith
G of I letter & the former
Collector which was sent
the S of S

PUBLIC WORKS DEPARTMENT.

Post Copy of Service Message. 1597/22

FROM Madras TO Ootacamund

FROM Second Assistant TO Chief Assistant

9th July 1881.

Copies of Establishment letter to India despatched for Ooty today.

Second Assistant

To

The Chief Assistant

1697/23

APPENDIX A.

Distribution Statement of Reorganized Department Public Works, Madras.

Superintending Engineers' Circles.	Executive Divisions.	Sub-Divisions.	Establishment.		
			Executive Engineers.	Assistant Engineers.	Upper Subordinates.
No. I ...	1. Ganjam	2	1	1	4
	2. Vizagapatam	2	1	1	4
	3. Eastern Godávari	3	1	2	7
	4. Western do.	2	1	3	7
	5. (A) Project Division ...	...	1	2	8
No. II ...	6. Eastern Kistna	3	1	3	6
	7. Western do.	2	1	2	7
	8. Nellore	2	1	1	7
	9. Sungum Project	2	1	2	6
No. III ...	10. Bellary	2	1	...	4
	11. Cuddapah	2	1	1	6
	12. Kurnool	1	1	1	4
	13. Madras Irrigation and Canal Company's Canal ...	2	1	2	6
	14. (C) Project Division ...	...	1	2	3
No. IV ...	15. West Coast	3	1	2	12
	16. Coimbatore	2	1	1	5
	17. Salem	...	1	...	5
	18. North Arcot	2	1	2	5
	19. (B) Project Division ...	...	1	1	4
No. V ...	20. South Arcot	1	1	1	5
	21. Chingleput	2	1	1	6
	22. Buckingham Canal ...	3	1	1	4
	23. Presidency and Bangalore	2	1	2	7
No. VI ...	24. Trichinopoly	2	1	1	8
	25. Tanjore	2	1	2	8
	26. Negapatam	2	1	2	7
	27. Madura	2	1	1	8
	28. Tinnevelly	2	1	2	7
Supt. of Works.	29. Consulting Architect ...	...	1	...	2
Chief Engr. for Irrigation.	30. (D) Project Division ...	...	1	...	...
	Secretariat	...	1	1	...
	Guaranteed Railways ...	...	2	...	*...
	Supernumeraries	...	3	4	18
	Totals ...	50	36	47	185

* Includes two for Workshops.

No. 1697 W

Government of Madras.

PUBLIC WORKS DEPARTMENT. 1697/24

A

To

The Secretary to the
Government of India.

9th July 1881.

Sir,

1. I am desired in reply to your letter No. 681 G dated 5th May 1881 having reference to the normal strength of Establishment for the Public Works Department in this Presidency to state that the Government very thankfully accept the scale and the general arrangement into six Superintending Engineers Circles

I don't see "Nilgiris" in charge Ex. Engr's list

The Nilgiris are included in the West Coast Division & are thus duly accounted for.
13/7/81

as suggested by the Govt. of India, though as regards the former, some additions have recently shewn themselves to be neceſsary, and as regards the latter local circumstances require slight modifications which will be immediately explained.

2. There is now, I am to observe, no further discuſsion as to the appointment of Superintendents of Works for

(1). Vizagapatam & Ganjam Divisions
(2). the Godavari Delta. do
(3). the Kistna — do — do
(4). the Buckingham Canal
(5). the Presidency including Bangalore

but one officer of this claſs will still remain, viz, the Consulting Architect aſsented to under para 3 of your letter No. 1918 G dated 4th November 1880.

3. It is also matter of question

with this Government whether the important station of Bangalore should not again be formed into a separate Division, in case the new Army Organization Scheme be carried into effect, as it would then in all probability become Army Head Quarters for the Presidency. For the present, however, no immediate change seems neceſsary.

4. With reference to the additions required to the scale as originally sent up, I am, in the first place to note that (1) the Madras Irrigation Companys' Canal (soon about to be taken over) and the Sangam Project sanctioned by the Govt. of India in their letter No. 188 I of 6th May /81. in Nellore (the arrangements for prosecuting which have

already been commenced by appointing the officers and several of the subordinates &ca) must be included.

5. To these requirements must further be added two officers in the grades of Executive Engineers omitted by a clerical error in the "Distribution Statement" which accompanied my letter No. 2277 W dated 1st October 1880 where, it will be observed that under the head "Supernumeraries" calculated at 10 per cent only one officer has by oversight been shown in the grades of Executive Engineer instead of three.

6 The additions to the scale will therefore stand as under.

	Executive Engineers	Assistant Engineers	Upper Subordinates
For the M. I. & C Co. per Govt. of India letter No. 207 I.I. 16th May 1881.	1	2	6
For the Sungum project sanctioned by the Govt. of India letter No. 1883 of 6th May 1881.	1	2	6
To rectify error in the previous Distribution Statement	2		
Total	4	4	12

---

7 If the 4 additional Executive Engineers be distributed in the strength of one to each of the sanctioned grades and the Assistant Engineers be divided equally between the 1st grade and the 2nd and 3rd grades combined the modified normal Establishment would then stand as follows (paras 5 and 6 of your letter under reply)

		~~Total~~
Chief Engineers.		
1st Class	1	
2nd "	1	
3rd "	1	3
Superintending Engineers		
1st Class	2	
2nd "	2	
3rd "	2	6
Executive Engineers.		
1st Grade	10	
2nd "	11	
3rd "	11	
4th "	4	36
Assistant Engineers		
1st Grade	26	
2nd & 3rd	21	47
Upper Subordinates of all grades		185

8. The attached Distribution ~~Statement~~ Appendix A, shews the Circles and Divisions, and ~~Statement~~ Appendix B the cost in prescribed forms, both in substitution of those originally submitted for sanction.

Amended for the Examiner

9. As regards A, the distribution, it will be observed, differs somewhat from that suggested by the Government of India though No. I Circle is the same as that given in para 3 of your letter. No. II Circle will now consist of the two Kistna Divisions, the Sungum Project and Nellore instead of the Buckingham Canal, which latter will much better fit into No. V Circle.

10. The Nellore Division with the Sungum Project will be a sufficient addition to the Kistna Delta Works, and should the Completion Estimate for the latter be sanctioned as may be early looked for, the Superintending Engineer will have quite as much if not more than he can satisfactorily administer

11. All the other Circles have been made out strictly with reference to the actual works in progress and proposed, so as at once to give each Superintending Engineer ample employment, and the best centre from which to supervise that portion of the operations of the Department under his charge.

12. To three of these Circles had also been assigned such of the new Project Divisions as fall naturally within their respective limits; the 4th of these, Division (D), being however, reserved specially for personal supervision by

the Chief Engineer for Irrigation for reasons subsequently to be explained.

13. Turning to Appendix ~~Statement~~ B it will be noted that the total annual charge for Establishment is raised from 16·13 ~~[illegible]~~ (the total present charge) to 20·64 lakhs but as the outlay on both Protective and Productive works increases annually till the total Expenditure by the Department more than doubles what it is at present (a little over 50 lakhs) the high percentage now apparent will disappear in course of time.

14. It being the intention of Govt. to initiate the re-distribution of charges &c. under the new scale from the 1st August, the total outlay on Establishment for the current

Current Incumbrances

year would generally stand as follows:—

1697/28

	At per annum.	~~[illegible]~~
	Lakhs	Lakhs
4 months ~~May~~ April to July (both inclusive) 1881 as per Part III Budget of Provincial Service for 1881·82.	16·13 ~~[illegible]~~	5·38 ~~[illegible]~~
8 ~~[illegible]~~ months from 1st August 1881 as per Appendix ~~Statement~~ B	20·64 [illegible]	13·79 [illegible]
Total for Current off. year Rs		19·17 Lakhs

Current Est. Stated

15. This amount cannot however be worked up to as it will take time to fill all vacancies in the Engr. & Subordinate grades.

There are moreover several modifications to be introduced later on when it is more accurately known how the vacancies in the Gradation List are to be filled up, and when instructions have been received as to the incidence of the charges affecting the Imperial and Provincial Budgets.

16. In regard to the latter point your letter (para 7) lays down that 2½ lakhs will be contributed during

the current year from the general grant for "Protective Public Works;" and again in para 10 an intimation is understood to be conveyed that the Govt of India would not be indisposed to consider the advisability of debiting a portion of the charge for the Irrigation Establishment against the Revenue of the Works on which they are engaged.

17. The subject of the latter proposal has already been submitted for the consideration of His Excellency the Governor General in Council in G.O. of 12th April 1881 No 269 and 270 I and on receipt of a reply, it will be possible to deal with the mode of distributing the charges among the different Budgets.

18 With reference, however, to the contribution from Imperial of the 2½ lakhs, I am to state that this Government propose to appropriate at once ~~the~~ Rs 75,000 for pushing on as a "protective" work, the Sotinghy Ghaut in Vizagapatam (to be adverted to further on) setting free a corresponding amount which is most urgently needed for the execution of a number of buildings &c which as will be seen from Part B of the Provincial Budget for the current year cannot otherwise be met for years to come and to reserve the remaining 1,75,000 as a contribution towards the general Establishment charges of the current year.

19. I am now to advert to the subject matter of para 11 of your letter under reply,

and in so doing to submit for approval the Gradation List (~~marked~~ Appendix C containing the promotions which it is intended to give effect to from the 1st August, as being the date from which it is desired by this Government to constitute as far as may be possible the new Divisions & Circles of Superintendence, and for which all the requisite arrangements are being made.

20. In reference to your remark that it would lead to inordinately rapid promotion to fill up the vacancies in the higher grades altogether from the lower grades of the present Madras Staff, it may at once be stated that

owing to the number of Royal Engineers in the higher grades who went to England on the special furlo', on the occasion of the late reductions, and who will shortly return to duty — (Lieut: Col: Burton R.E. has been telegraphed for to take up the ~~position of Supt: to [illegible]~~, Presidency Division, and will be here by 1st August) as also to other causes unnecessary to detail, there will practically be no promotions to speak of till the 3rd grade Executive Engineer is reached, and only 9 vacancies in the combined 2nd & 3rd grades Assistant Engineers to make up.

21. Among the Chief Engineers there is no promotion while in the 3 classes of Superintending Engineers, the first promotion is that of Colonel W. Christie from 3rd to 2nd Class. This officer will not only have nearly 26 years service in the Department on the 1st August, but has frequently during several years past acted as Supg. Engineer 2nd grade in both Mysore and Madras. The second promotion is that of Mr. Rundall from 1st grade Executive Engineer to 3rd class Superintending Engineer. He has likewise 26 years service in the Dept. and has for some time

acted with great credit to himself as Superintending Engineer.

168/3

22. These are both Excellent officers of great Experience and could not possibly with any considerations of justice be superseded by ~~the int-~~ ~~-ertion of~~ introduced an Officer from another Province.

23. It is also especially to be observed with reference to this that the insertion of a fresh officer in any of the classes of Supg. Engineers would cause an Excess of one in the number of 1st grade Executive Engineers. This latter is now full and there will be no promotions.

24. In the 2nd grade owing to the late introduction of Major A. S. Fraser from

the Mysore Department, and the return of Major S.C. Clarke from the Railway Dept. under the Govt. of India there is only one promotion from the 5th grade – Capt. D. McNeill Campbell – a very promising officer with 12¼ years service in the Dept.

25. Among the Executive Engineers 3d grade on the new scale there will be one officer reinstated, Mr. R.W. Norris – and five promotions from the 4th grade viz: Messrs. Peters, Hughes, Larmine, Bell and Captn. Smart, R.E. all of whom have service in the Dept. ranging from 14 to over 10½ years.

26. Mr. Norris' case is peculiar. His name was included in the late reductions and after retirement he accepted employment as Local Fund Engineer North Arcot, but as he is a specially trained irrigation officer whose services would be very valuable, this Govt. have considered it desirable to reinstate him, and he has been directed to report himself for duty on 1st August. It is not considered desirable in the interests of the public service that any other of the officers previously reduced should now be reinstated.

27. The list shows two promotions from 1st grade Assistant Engineer to 4th grade Executive viz: Mr. Grimes (an old officer who commenced as a Military Subordinate) and Lieut. C.B. Henderson, R.E. who has more than 8½ years service in the Department.

28. In addition to these four Officers who would complete

the scale it has been thought desirable to enter the name of Mr Wilks as temporary Executive Engineer.

29. This Officer is now second on the staff of the Madras Irrigation & Canal Company, and although, as previously reported (vide letter No 2025 d/ 15 March (81)) it would be inexpedient to place him in the position of a Supdt of Works for the Canal, on the work being taken over from the Company, it is thought that owing to his local knowledge and experience as an Engineer he may very possibly be quite capable of remaining in charge as Executive Engineer, under the immediate direction of the Supdg Engineer of the Circle. In any case, I am to say, the Government are prepared to make the experiment, and as the best means of doing so, would wish Mr Wilks, during his term of probation, (a year) to be borne on the strength of the Department in the manner now proposed, should he be willing to accept the position.

30. If he subsequently gives satisfaction his permanent grading will not occasion any serious difficulty, as in all probability before the time comes one or more vacancies in the higher grades will almost certainly occur.

31. Proceeding to the Assistant Engineers, it will be observed,

that there are 11 promotions from 2d to 1st grade, the junior Mr W. Toff having very nearly four years' service in the Department on 1st August. As the senior, Lieut. O.V. Boddy has a little over 8 years service it is believed that these limits correspond very closely to the lengths of service in this grade which it is the desire of the Government of India to secure for future working.

32. It was the original intention of this Government to promote into this grade on precisely the same honorary footing as Military Subordinates (Sub Engineers ~~Messrs~~ S. Ottmann & J.W. Ellis whose cases were submitted

X Mis dept. letter No 11346 of 2d May 1881.

X To be entered C. No 3572 not yet recorded for Madras (not yet recd from O.C.G.) 77

specially (see margin) for the consideration of the Government of India, and even now the Government were prepared, failing this arrangement, to bring them permanently on the strength of the Engineer Establishment, but their promotion having lately been definitely barred by the orders contained in your letter No 797 G of 10th June 1881, their names have been removed from the List. I am, however, to submit that this Government still entertains a strong conviction that it would be both advantageous to the public service to promote these very deserving Subordinates, and in every way politic to do so —

especially at this juncture when their advancement can be effected with much leſs hardship to others than would at any other time be poſsible.

33. I am therefore to solicit further consideration on this point and to state that, if the Govt. of India sees fit to grant the conceſsion, their names might be introduced immediately below that of Mr. H. E. G. Evans.

34. At the bottom of the List there ~~will be~~ are 9 vacancies in the combined 2nd & 3rd grades of Aſsistant Engineers, and as it is unlikely that officers in these grades would care to be transferred from Other Province

this Government desires to be given 3 complete freedom of selection, within of course, Code Rules.

35. Should any Royal or Coopers Hill Engineers however desire to enter, they could at once be posted according.

to length of services; otherwise the Hon'ble the Governor in Council would be disposed to select one or two of the most promising youths who have of late years passed out of the Civil Engineering College, Madras with certificates as Assistant Engineers, and fill up the remaining vacancies as opportunity offers.

36. In concluding this part of the subject I am in the *first* place to observe that a comparison of the respective lengths of service of the officers in the Madras Dept. with those in other Provinces more immediately under the Govt of India as shown by the published classified lists, has established so clearly the fact that the former have in all grades been hitherto unduly retarded in

in promotion, that the Hon'ble the Governor in Council would strongly deprecate the introduction (certainly in any of the grades above Assistant Engineers) of officers from other Provinces, and in the second that a very early acceptance of the Gradation List by the Govt of India as now sent up is so desirable (with a view to the promotions being gazetted by the 1st August) that I am to solicit the favor of sanction to the same being telegraphed as soon as possible after receipt of the present communication.

37. In reference to the desire expressed, para 13 of the letter under reply, that room should be found among the upper subordinates for those of this Class who were originally transferred from Madras to Mysore I am to state that this has already been done, and the three who could alone be spared from Mysore (see margin*) have already joined this Department.

* Condr. Fitz Gibbon
Sub Engr. 2nd grade
Sergt. Heinig
Sub Engr. 3rd grade
Condr. Keenan,
— Do —

38. I am now to invite attention to the 4 Divisions which it is proposed in accordance with the original programme to constitute with the object of preparing such projects as mainly fall within the class of Protective works, to be executed from the Imperial Grant under this head.

39. As a convenience the information called for regarding this subject (para 8 of your letter) giving the list of projects

under preparation, and those which it is proposed to prepare during 1882-83, is shown in the Appendix ~~marked~~ D regarding which the following general observations will, it is hoped, suffice.

40. Of the four Divisions to be formed one, will be exclusively for Roads and Buildings, and the rest Irrigation, thus

Superintending Engr's Circle	Designation	Branch of Dept	Class	Names of Project.
1st Circle	A. Project Division	Roads & Buildings	(Imperial) Protective	(a) Ganjam & Gopaulpore Canal (b) Road from Salur via Pottinghy Ghaut to Jagdalpore (c) Buckingham Canal from end of Commamur Canal North, to Marakanum (d) South Do - South of Merkanum.
4th Circle	B. Ditto	Irrigation	Ditto Ditto	(e) Baroor Tank (f) Marandahully (g) Vaniar
3rd Circle	C. Ditto	Ditto	Ditto Ditto	(h) Nundiapyer reservoir (i) Roddam ditto
Immediately under Chief Engr. for Irrign.	D. ditto	Ditto	Ditto Productive and Protective	(j) Complete, revised project for Godavari Delta (k) Completion project for the Kistna Delta (l) Periyaur project (m) Rugalur do

N.B. (c) & particularly (d) will, when the time comes for completing the Estimates, be transferred to the Supg. Engr. 5th Circle

Letter to the G. of I. No. 564W d/21.2.87.

41. As regards "A" Division there can be no question, I am to observe, 1st that the works included in it are each and all of a strictly "Protective" character, and 2nd that however urgently required no sums which would allow of their making any adequate progress, can be assigned from unaided Provincial funds, either during the current or in future years.

42. Allusion has already been made to the Pottinghy Ghaut (para 18.) and its extension westwards through Jeypore.

towards Bustah and the Central Provinces. The want of a trunk road through all the tract hitherto inaccessible to ports ~~tract~~, which nevertheless could if opened out supply the littoral Districts with cheap grain in famine, is acknowledged to be a pressing necessity in a Protective sense, and stands much on a par with the proposed Railway from Bimlipatam, via Vizianaggaram and Raigurh, to Raepore. Both will open up vast tracts of country for the supply of cheap grain to the Coast, and cannot fail to

Bustar ?

P16

19

prove of the highest value as for purposes of Administration, as also in all probability for the Encouragement of Emigration in the manner advocated by the Finance Minister. It may here be observed parenthetically that no better employment could probably be found for the staff of Railway Engineers which as stated in para 11, the Government of India will very shortly have thrown on its hands without ~~his~~ employment than by ~~for~~ utilizing these officers in preparing the Estimate for the line of Railway here adverted to (see also the correspondence noted in the margin^x)

x Letter to the Govt. of India No. 564 W of 21 Feby/81.
Do.— 150 R of 15 Feby/81.

43. To allow of the works which are in progress on the Pottinger Ghaut being pushed on during the current official year Rupees 75,000 will now, as before observed, be transferred from "Provincial" which cannot afford the amount to "Imperial Protective", the remainder of the 2½ lakhs being taken as a grant for Establishment required for investigating ~~two~~ the projects specified.

44. As regards the Buckingham Canal and the future extension of the work South of Marakanum, its character as a famine work has been ~~sufficiently~~ too clearly demonstrated during the last calamity to need any remark here.

45. The works in (B) & (C) Project Divisions also call for no remark as they strictly came within the classification of "Protective".

46. Regarding those included under the ~~so called~~ (D) Division it may be safely affirmed that they may be classed as Protective in addition to being Productive; the two last on the list belonging more

particulary to the farmer class. It is needless to observe that however remunerative the Godaveri and Kistna Delta works have proved, the chief incentive under which they were commenced was the necessity, which presented itself to the Govt. of the day, to do all that lay in its power to counteract the evils of frequently recurring famines in these tracts.

~~46~~ 47. Until the Protective works projects (with the exception of that for the Pottinghy Ghaut which is ready and under execution) have been sanctioned by proper authority it would be out of place to name any specific sum in excess of the 2½ lakhs granted for the current official year from Imperial; but the Honorable the Governor in Council desires to take this opportunity of pressing on the attention of the Govt. of India the necessity for making assignments in future years not merely in direct proportion to the contributions of this Presidency towards the Imperial Exchequer, but also in compensation for the long years of neglect under which it has most undeservedly been compelled to suffer owing to the undue outlay conceded to other more favored Provinces.

48. This subject has been already submitted for the consideration of the Govt. of India in my letter No. 337 I., dated 8th February 1881, and it will therefore suffice here to observe that this Govt. consider themselves fully justified in looking for an assignment for Protective works from Imperial of 15 lakhs (to include 2½ or 3 lakhs for -

Establishment) in 1882-83 and an addition of 10 lakhs in each succeeding year till a maximum of 80 lakhs per annum has been attained as the least that can be given with reference to the large proportion of net revenue (5½ millions sterling per annum) which Madras has been shown to contribute to Imperial income, and as affording some substantial means towards guarding the Presidency in future against the horrors of famine.

49. In general connection with the subject of the normal scale of Establishment for this Department, I am in conclusion to solicit the decision of the Govt. of India as to the agency by which the Local Fund Boards' projects are to be ~~budgets~~ ~~so called~~ ~~reviewed~~ supervised ~~in~~ so far as concerns the larger class of works ~~projects~~ for which the machinery at present possessed by them, or by the Revenue Board (which deals with their Budgets and ordinary assignments for

~~To~~	~~Govt. of India~~	~~No. 249 W~~	~~d/ 22d Feby/80.~~
~~From~~	~~Do -~~	~~Do - No. 734 G~~	~~d/ 19th March/80~~
~~To -~~	~~Do -~~	~~Do - 1095 B.W.~~	~~d/ 5th May/„~~
~~From~~	~~Do -~~	~~Do - 1281 G~~	~~d/ 21st June/„~~
~~To~~	~~Do -~~	~~Do - 1642 B.W.~~	~~13th July/„~~
~~From~~	~~Do -~~	~~Do 1531 G~~	~~d/ 20th Augt/80~~
~~To~~	~~Do -~~	~~Do - 2480 W~~	~~„ 21st Octr/„~~
~~From~~	~~Do -~~	~~Do - 220 G~~	~~„ 20th Decr/„~~
~~To -~~	~~Do -~~	~~Do - 164 W~~	~~„ 20th Jany/81~~
~~From~~	~~Do -~~	~~Do - 249 G,~~	~~21st Feby/81~~
~~To~~	~~- Do -~~	~~Do - 1034 W~~	~~„ 22d April 1881.~~

Establishment and works) is at present inadequate.

50. Adverting to the correspondence on this subject ~~marginally~~ ~~noted~~ concluding with my letter No. 1034 W dated 22d April 1881, I am desired to say that this Govt. are prepared to accept the arrangement suggested in para 5 of your letter No. 1639 W dated 17th September 1880, by which in return for a general contribution on the part of Local Fund Boards of Rs 21,250 per annum this Department

would undertake the duties in question without however making any personal allowance to the officers to whom such duties may be assigned - the agency now placed at the disposal of the department will admit of the duty being performed in a manner satisfactory alike to Govt. and the Local Fund Boards.

27/6/87

[illegible]

(A)

1687/44

(189) D2 Distribution statement of reorganized Deptt P. W. Madras

Superintending Engineers Circles	Executive Divisions	Sub divisions	Establishment			~~Remarks~~
			Executive Engineers	Assistant Engineers	Upper Subordinates	
No. I	1. Ganjam	2	1	1	4	
	2. Vizagapatam	2	1	1	4	
	3. Eastern Godavari	3	1	2	7	
	4. Western do	2	1	3	7	
	5(A) Project Division	"	1	2	3	
No. II	6. Eastern Kistna	3	1	3	6	
	7. Western do	2	1	2	7	
	8. Nellore	2	1	1	7/6	
	9. Sungum Project	2	1	2	6	
No. III	10. Bellary	2	1	"	4	
	11. Cuddapah	2 ~~3~~	1	1	6	
	12. Kurnool	1 ~~2~~	1	1	4	
	13. Madras Irrigation and Canal Company's Canals	2 ~~3~~	1	2	6	
	14(C) Project Division	"	1	2	3	
	15. West Coast	3	1	2	12	
	16. Coimbatore	3	1	1	5	
No. IV	17. Salem	X	1	"	5	
	18. North Arcot	2	1	2	5	
	19(B) Project Division	"	1	1	4	
No. V	20. South Arcot	1 ~~2~~	1	1	5	
	21. Chingleput	2	1	1	6	
	22. Buckingham Canal	3	1	1	4	
~~[illegible]~~	23. Presidency & Bangalore	2	1	2	7	
No. VI	24. Trichinopoly	2	1	1	8	
	25. Tanjore	2	1	2	8	
	26. Negapatam	2	1	2	7/8	
	27. Madura	2	1	1	8	
	28. Tinnevelly	2 ~~3~~	1	2	7	
Superintendent of Works	29. Consulting Architect	[illegible]	1	"	2	
Chief Engineer for Irrigation	30(D) Project Division	"	1	"	"	
	Secretariat	"	1	1	"	
	Guaranteed Railway	"	2	"	"	
	Supernumeraries	"	3	4	18	
	Totals	50	36	47	185	

A.

11/8/4-

17-4-91
10-9-2
10-1-94
27/11/00
23/11/01
24-[illegible]-09
7-6-11
8-8-12
23-11-21

Govt. of 1881 Madras.

PUBLIC WORKS.

To

Dated

Issued

Recd. Encl.

G. O., 9 July 1881, No. 1697W

Nos.

Relative to
~~the~~ the normal strength
establishment for the
of ~~the~~ ~~P.W. Dept~~ Public
Works ~~Establishment~~ Department
Madras Presidency