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Government of Madras.

Public works **DEPARTMENT.**

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Read the following papers —

No 186. MINUTE BY HIS EXCELLENCY THE PRESIDENT.

My opinion seems to be chiefly required on two points discussed in the papers now before Government, and which are intimately connected with each other. on the constitution of the Department of Public Works, and on the agency by which the minor irrigation works of this Presidency should be maintained.

II. The amount annually granted from Imperial and Local Funds for Public Works in this Presidency is no doubt insufficient for all the wants of the country, but this deficiency is one over which the Government can exercise little direct influence. The appropriations are proportioned to the resources and exigencies of the Imperial Government and to the means of local taxation at our disposal The Imperial revenue is beyond our control, the local revenue is susceptible of development, but it is necessarily restricted in its application It is, therefore, of the last importance that the funds which we possess should be administered and applied with the greatest economy and efficiency, and that they should be supplemented by unpaid agency, where that can be obtained without injustice or oppression.

III. The application of the funds belonging to the Public Works Department is, in my mind, undoubtedly defective, and defective on account of the character and constitution of the department The deficiencies of the department are owing to two causes, partly to the incapacity of officers, chiefly to the manner in which their authority and duties are distributed and exercised.

IV. There will of course always be some element of incapacity in every State establishment, and we cannot hope to see it eliminated in India. The superior officers of the Department of Public Works are supplied by the Royal Engineers, the Military Staff Corps of the Presidency, and the Engineering profession in England; but the second class need scarcely be considered here. The Royal Engineers receive the highest education which can be afforded by a Government institution at home. They are subjected to the severest tests. The candidates from the Civil Engineering profession are passed through a competitive examination which is said, at present, not to be of a very stringent character, owing to the limited number of aspirants for this employment in India Both classes of officers come to this country at an early age, with little practical experience, and are thrown at once into the exercise of most trying and multifarious duties, deprived of many means of self-improvement, and exposed to the hardships of a dangerous and debilitating climate There is no division of labour The Indian Engineer must do everything at once, and everything for himself. It is not wonderful that he cannot do everything well. It is wonderful that he does so much successfully. I see little prospect of any improvement in the character and qualifications of our Engineers by any thing that we can devise or do. Some advocate the exclusive employment of Civil Engineers freely selected or educated in a College at home. We should probably gain nothing in professional attainments, and lose something in authority with the people and in responsibility to the State. We have had many Civil Engineers already. They are in no way superior to Military Engineers. If Civil Engineers, whether independently

instructed, or instructed by the State, are to come out here as members of a State establishment, they must come out young, that is, inexperienced and immature They must be formed for Indian duty in India as they are now, as the Military Engineers are now. We shall obtain better Civil Engineers and better Military Engineers gradually, as the preparatory standard rises and the preparatory method improves in England, but we shall gain nothing, in my humble judgment, by the exclusive use of one class. On the whole, I think, the Military Engineer will be the best for the complete circle of State employment in India, but the mixture is a good one. It embodies the principles of comparison and emulation The two classes ought, however, to be put on a better footing of equality than exists at present

V. It is not then by improving the quality of the Engineer Officer that we can increase the efficiency of the Department here, it is by employing him more judiciously.

The defects in the organization of the Public Works Department in the Provinces have been justly noticed in the Report of the majority of the Commission They consist (1) in the want of supervision; (2) in the complete divorce of the Engineering Agency from the Revenue Agency and interest in the country.

VI. The Presidency is divided into eight Divisions, each of which is placed under a Superintending Engineer. These Districts are subdivided into eighty-eight Ranges, administered by Executive Engineers of very different degrees of ability and Professional position. The correspondence of the Department, in my mind, teems with proofs that the duties of superintendence are most imperfectly performed. The Superintending Engineer cannot possibly find time to traverse the vast area committed to his superior charge, loaded as he is with a great amount of office work as well as with the design of projects and improvements of an important character The result is that many works are practically uninspected. The fact is manifested in frequent failures and corresponding waste. I would ask the Members of Government to re-call to their memories the current shortcomings of the Department in the last few years. I have a lively recollection of bridges falling in from insufficient waterway, bad foundations, or bad construction; of reservoirs bursting on account of bad materials or defective plans; of roads neglected or ill-repaired; of Civil and Military buildings promptly found defective on account of bad tiles, unseasoned timber, or imperfect constructive knowledge; of pipes that leak; of drains that stagnate; of insufficient estimates; of unsanctioned undertakings. Every form of misfortune and error has been lamented and reprobated in the Proceedings of Government. It is true that good work is the rule and bad work the exception; that the Department is, on the whole, conducted with prudence and ability; that it is not the only Department in which mistakes occur, and that it is the Department in which mistakes are most patent and conspicuous. It is equally true that similar and worse examples might be adduced from the canal works and railway works conducted by private agency here and elsewhere. Yet I cannot doubt that the proportion of errors and failures to which I have adverted might be considerably reduced; I cannot believe that it is inseparable from every system of organization. We are plainly warranted in endeavouring to ameliorate the system which now exists.

VII. The Divisions of the Superintending Engineers are, however, not only too large; not only do they offer insuperable material impediments to the duties of inspection, they are also most arbitrary in their character. They do not respond to any natural or traditional circumscription in the country. They do not associate the Engineer offices closely with any distinctive circle of public administration, or with any functionary equally concerned in public improvement. The Superintending Engineer labours apart. He does not act in harmony with any one. He has to do with two or three Collectors, to whom he is often half a stranger and sometimes almost an adversary. The estrangement between the Revenue and Public Works services is unfortunately notorious, but I did not expect to see hostility avowed in a formal and public document with the asperity which characterizes the separate Report signed by Major Mullins and Major Shaw-Stewart I attribute the antagonism which prevails between the two departments mainly to the relations in which they have been placed by the present constitution of the Department of Public Works

VIII. To correct the double mischief of impracticable duty and alienated feeling, I think the only efficient remedy has been suggested by the majority of the Commission. the abolition of the divisions with their Superintending Engineers, and the restoration of the order of District Engineers, not subject to Collectors, but united with them. This would make inspection possible and even efficient; it would harmonize the position and action of the chief local agent in the Public Works Department with the chief local Revenue authority; it would identify both in the same sphere of public duty, backed by a decided course on the part of Government, it would put an end to recriminations and resentments. My opinion may not be deemed of the same value as the opinion of those who possess professional knowledge, and who have been longer acquainted with the interests of the country; but I desire to submit it in the most emphatic manner. No alteration of the constitution of the Public Works Department will in this Presidency be materially and morally effective without the restoration of District Engineers, and I must add that this course is doubly necessary at the present moment, with a view to the contemplated development of road works and building works under the Bills for local taxation now before the Legislative Council

IX Having thus given my cordial assent to the capital proposal of the majority of the Commission, I regret that I cannot meet their views in regard to the position which they have assigned to the Head of the Public Works Department in his relations to Government. The majority suggest that the Secretary for the Public Works Department should be abolished; that the business of the Secretariat should be amalgamated with the Revenue Secretariat; and that the Revenue Secretary should be the channel of Public Works business to Government, but that he should be aided by a professional Under-Secretary The Head of the professional Department would be termed, as formerly, Chief Engineer, and he would be appointed to deliberate and act in connection with the Board of Revenue as an ex-officio member of that body in so far as Public Works business is concerned.

X. In my humble judgment there are serious objections to this course, which may briefly be enumerated as follows:—

(1) The project is unjust to Government. The Government has a right to direct, constant, and personal intercourse with the highest and most competent

authority in the matter of Public Works. This interest is daily obtaining a higher position in the general interest of the State If the Public Works Department was merely a vehicle for improving tanks and irrigation channels and making district roads, its Chief might properly be an *adlatus* to a Board of Revenue officers. But the department is already engaged, or will shortly be engaged, in the expenditure of public revenue on undertakings of the most arduous, diversified, and costly character, many of which are only indirectly connected with revenue interests. The field that lies before us is immense if the work of the department in the next generation is to bear any proportion to the designs of the present one. Whole rivers like the Rooshkoolia, the Toongabuddra, the Cauvery, the Perryaur, the Tambrapoorny, regarded as single instruments of irrigation, have to be gauged, stored, and distributed over vast extents of country lying in different Provinces, Presidencies, and even States, on comprehensive views of public utility. Marine works will be undertaken involving the construction of quays, break-waters, and sea-defences Sanitary drainage and the water-supply of towns will become an important sphere of engineering duty. Civil buildings for a great variety of objects will be erected in connection with the multifarious requisitions of modern municipal, public, and social life. Inland fortifications will be carried out for the protection of the chief military stations, arsenals, magazines, factories, and railway centres, which are all now absolutely defenceless. Railways will be executed and worked by direct State agency. With some of these fields of enterprise the Board of Revenue have nothing to do, on none of them could the Board definitively decide. The Revenue Secretary in such matters could only be a channel, and his Under-Secretary would either be the mouth-piece, or the critic of the Chief Engineer. In the first case he would be superfluous, in the second pernicious. The Government would, in fact, never be contented with an imperfect, indirect, scriptory intercourse with the Head of the Public Works Department in such important concerns. The Chief Engineer would constantly be called into the Council room, where he would appear in very anomalous relations to the Revenue Secretary and the professional Under-Secretary. I would rather have him there in his proper place, giving Government the benefit of his full, prompt, constant, and responsible advice.

(2.) The arrangement which would be unjust to Government would also be unjust to the Head of the Department of Public Works and to the profession to which he belongs. The Head of the Department may properly claim to have free, open, spontaneous communication with Government. He may justly demur to have his views strained through the medium of an uninformed officer of another department, and of a subordinate officer from his own. His position would be a galling one to himself and to his class. The Royal Engineers, among whom there is a strong *esprit de corps*, and the Civil Engineers, who are sufficiently sensitive, would alike feel themselves reduced to the position of subordinates and accessories, with a place in the ante-room instead of the Council room. This would not promote a good spirit or good work. They would do their duty, but they would not do it heartily, and existing jealousies would rather be aggravated than assuaged.

(3.) The transaction of business would not fail to be impeded. The Chief Engineer is to minute to the Members of the Board. They would all minute. They might all minute in different senses, and their minutes might last for months. A great mass of conflicting opinion would be accumulated. It would be sent to

Proceedings of the Madras Government, Public Works Department,
12th September 1871.

the Revenue Secretary, who would send it to his professional Under-Secretary, who would have his opinion too. But the Revenue Secretary might have a different opinion, for, if the Board can differ with the Chief Engineer, the Revenue Secretary could differ with his Under-Secretary. The whole series of minutes and opinions piled one on another would work their tardy way to the Council at last. The Members of Council would probably also minute, but eventually send for the Chief Engineer and take a decision with his advice, which, I humbly think, they might do at first, reserving to themselves the power, of course, of referring specific points, affecting revenue and agriculture, to the Board, if such points were presented. I need scarcely say that the time of the Revenue Board and of the Revenue Secretary would be seriously burdened, if, in addition to their proper duties, they had all the Public Works business thrown upon their hands, and these departments which cannot move very fast, at any rate would move slower than ever If any member of the Public Works Department should be associated with the Revenue Board it ought surely to be the Chief Engineer for Irrigation, not the Head of the Department, but I would not tie up either of them in such an unwelcome yoke.

(4.) Another objection to this part of the scheme of the majority is that it would raise great opposition in authoritative quarters The proposal to re-establish District Engineers, however expedient, will not be very acceptable If we propose the abolition of the Secretariat in the Public Works Department, we might create an insurmountable obstacle which would frustrate the whole project It seems unlikely that the other Presidencies will dispense with their Secretaries in the Public Works Department, or that the Government of India, which has a decided propensity to assimilate, would place Madras in an exceptional position in so prominent a feature of administration It is never wise to ask for much when it is difficult to get anything, but here we should not only be asking for much but for something which many might naturally consider impolitic and ill-timed.

(5.) Finally, it appears to me that it would be undesirable to make the Department of Public Works a dependency of the Board of Revenue, because it might prove to be a transitory connection. There is no Board of Revenue in Bombay or in the Punjaub, and it appears probable that the Bengal Board will be reduced to the smallest possible dimensions. In my limited experience I have derived the impression that the Madras Revenue Board introduces an element of delay and perplexity in the transaction of public business, though I recognize the great merits of individual members of the Board and the services which they have rendered in dealing with special questions of revenue administration It seems probable to me that the Board of Revenue may hereafter be absorbed by the Revenue Secretariat to Government, which would be strengthened and re-modelled so as to perform the same functions with greater energy and expedition. This is not the place to discuss the question at large, but the contingency of the consolidation of the Board with the Secretariat would cause me to hesitate in investing the former body with novel and expansive functions

XI The report of the majority, while advocating the restoration of the office of Chief Engineer as the professional Head of the Public Works Department, proposes to strengthen the department by the addition of two superior Inspecting Officers who would be at the disposal of Government, and the Chief Engineer for

special inspections and projects. It appears to me that these officers are not requisite, and that we possess already in the constitution of the department the means of performing the same duty.

The business of the department falls naturally into four classes, business connected with Irrigation, with Communications, with Civil Buildings, with Military Buildings. For the design and occasional inspection of Irrigation works of the higher character we possess already the Joint-Secretary for Irrigation. He is the Chief Engineer for Irrigation I would consolidate the duties of the Consulting Engineer for the Madras Irrigation and Navigation Company with his office.

The present Consulting Engineer for Railways would become the Chief Engineer for Railways and Communications. He would be employed in the superior direction and inspection of State Railway works, as well as in the inspection and control of independent lines, he might also be employed in the inspection of Imperial lines of road, railway feeders, and salt-water canals if such was necessary. The Government Architect might undertake the occasional inspection of civil buildings The Secretary to Government for the Public Works Department might himself assume the inspection of military constructions, which will probably be confined in this Presidency to a few capital and accessible places, such as Madras, Bangalore, Bellary, and Cannanore. In this way no new office of the first class would be created. For ordinary purposes the District Engineers would be the Superintendents and Inspectors, in extraordinary cases the duty of superior inspection and consultation would be exercised by the officers abovementioned.

XII. It has been contended that, under the present system, which I propose to continue, the Head of the Public Works Department loses his professional character, that he ceases to be Chief Engineer, and becomes a mere Secretary to Government, so that nothing is gained by having an Engineer Officer in that position. I think that this result is more apparent than real. The present Secretary for the Department actually exercises a superior and definitive judgment on projects and works which he communicates to Government, though his opinions are more exclusively embodied in drafts for Government orders than is perhaps desirable. It would, however, be easy for Government to require the Secretary to embody his views and reasons on independent memorandums. I have already stated that he might be occasionally employed on inspecting duty. It is true that there is no absolute necessity that the Head of the Public Works Department should be an Engineer Officer or a professional man at all. The business of the Department might be transacted with Government by a civilian, who had no other duty, with a Chief Engineer below him. Such arrangements exist in countries where Parliamentary duties render it difficult to employ professional men as Heads of departments; but as there is no such embarrassment here, and as Military agency is largely employed in the Executive and Superintending branches of the Department, it appears to me most convenient that the Head of the Department should be a professional man and a Royal Engineer. It remains with Government to see that he does not merge his authority as an Engineer too much in his duties as a Secretary.

XIII. In the suggestions contained in the report of the majority for the re-organization of the subordinate ranks in the Department of Public Works, I heartily concur.

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The class of Maistries, which it is desired to restore, would be of course exclusively composed of Natives, that is, of Hindoos, Mussulmans, and Christians of Native birth. In the grade of Overseers it might perhaps be too sweeping a change to exclude Europeans and East Indians altogether, but I would confine them to one-fourth of the whole number employed It is believed that they may be usefully occupied at head stations or works of considerable importance.

Two-thirds of the appointments in the rank of Supervisor and Sub-Engineer should eventually be reserved for Natives of the country, and they should be admitted directly to those grades in exceptional cases and in virtue of University degrees.

I agree with the majority of the Commission in regarding the more extensive employment of Natives in the Department of Public Works as a matter of high importance.

XIV. The institution of pensions or bursaries in the Civil Engineering College, for the exclusive benefit of a numerous class of European Students drawn from the ranks of the Army, was a measure of questionable expediency. The plan originated in a laudable desire to provide an avenue of advancement for meritorious Soldiers, and to secure for the Public Works Department disciplined, hardy, honest, and energetic subordinates. But the project was one-sided, and in some respects unreflecting. The claims of the Native community and the Native Army were left out of sight, nor was sufficient consideration bestowed on the peculiar position thus created for Europeans of the lower classes. The report has correctly indicated the disadvantages attached to this establishment. The Government cannot afford to give to European Subordinates salaries which can render their existence in the Provinces independent and respectable. Poverty, isolation, and temptation have had and will have in many instances their deteriorating effects. Nor will sober and honest Europeans in this condition often acquire the knowledge of languages and the conduct which are requisite to render them acceptable and influential with the people of the country, especially in remote places. I would maintain the thirty bursaries now appointed in the Engineering College, and I would not exclude Europeans from these benefactions of Government, but I would restrict the number of Europeans to ten, and I would direct the Principal of the College to present a project under which the remaining twenty would be filled by East Indians and Natives, a portion of whom should be drawn from the Madras Sappers.

XV. The present condition of the irrigation works of the Madras Presidency, when compared with their condition in past times, has been the subject of much discussion It is not my purpose to enter upon a detailed examination of the question in which exact evidence is wanting. My own impression is that the higher order of irrigation works, such as weirs, large irrigation channels from rivers, and the greater tanks connected with rivers and furnished with masonry works have never been, since the country became known to Europeans, in as good order as at the present time.

The superior science, the more extended dominion, and the sustained action of the English during a long period of unbroken peace have given a correctness, solidity, and expansion to the higher class of works which they could never have attained under Native authority. But it is certainly probable that causes have been

at work which have produced a deterioration of the minor works, especially of those which are not connected with permanent and reliable sources of water supply. The increased value of labour, the declining authority of the land-owners or land-holders, the comparative independence of the working classes, the constitution of the Public Works Department, accepting weighty responsibilities with insufficient means, and the complete separation of that department from the Revenue agencies of the country, have no doubt concurred in producing that relaxation in the current repair of village works of which there is manifest evidence in many places. I admit that this deterioration is not so great as the superficial observation of a stranger might lead him to suppose. Far more of the minor irrigation works of the country were mistaken in their original design, or have become unprofitable from natural causes, or have been superseded by other works than is generally believed Yet with every justifiable deduction on these grounds, there is plainly an amount of work unperformed which the Government are bound to rectify. Even if the condition of the minor irrigation works was as good as it ever was before, which I do not believe, their condition is susceptible of improvement, and the improvement should be effected.

XVI. To reduce the irrigation works of the Presidency to good order it is necessary to obtain an accurate classification of them, and then to procure a competent and appropriate agency for the maintenance of the minor sort.

Should the grade of District Engineers be restored, I would suggest that the first duty of the District Engineer should be in connection with the Collector, to divide the existing irrigation works of the district into three categories:—

(1.) Imperial Works.
(2.) Local Works
(3.) Useless Works

The maintenance of works designed as Imperial would continue to be effected, as at present, by the officers of the Public Works Department and paid labour.

The local works would be maintained by the same officers and unpaid labour.

The useless works would be abandoned, and the tank or channel bed with the irrigable area would be given up to the cultivators at once and for ever at an appropriate dry assessment, or relapse into the condition of Government waste.

XVII. The traditions of the country, the usage of Native States, and the practice of Zemindars on their own properties, alike attest that the duty of maintaining the minor irrigation works in good order is incumbent on the holders of Government land. If the obligation did not exist it should be created, both in the interest of the cultivator and of the Government It is impossible for the Government to carry out repairs of this nature, in which the cultivator is still more deeply concerned than the State, by departmental agency and paid labour over so vast an estate as that which is constituted by the ryotwary tenancies of this country. The occupiers of land alone can do it effectually under Government impulse and authority. The works are either farm works or village works. In the case of the former the obligation should lie on the holder of the puttah, in the case of the latter on the village officers representing the commune. It stands to reason that in placing works in the category of local works, and thus subjecting them to customary labour, the Revenue Authorities and the Government would act with great

circumspection and tenderness for the rights and condition of the people, but the decision having been once taken, the obligation should be absolute and complete, the labour rendered should be altogether gratuitous, and the duty should be enforced by summary legal process

XVIII. It is the universal opinion that the obligations of customary labour should be revived, but a great difference of opinion exists as to the manner of directing, inspecting, and supplementing this form of labour; some contending for the Collector and the Tahsildar, some for the District Engineer and the Taluq Overseer.

XIX The majority of the Commission appear to me to steer a middle way. They would not subordinate the execution of the customary labour-works to the Collector with a special Executive establishment, but neither would they make the ryots subject to the Public Works Officer in the performance of this obligatory work. They favour some arrangement by which the work would be made incumbent on the land-holder, who would receive some form of indemnity if, on inspection, it was found to be well done, either in the shape of remission of assessment or direct money-payment. The duty of verification or inspection would be exercised by the Revenue and Public Works Officers in conjunction

The views of the majority are not very decidedly stated, but as far as I can judge I do not think that they could be adopted with advantage. The system proposed does not sufficiently provide for that sustained attention and pressure on the part of superior authority, which would be necessary to compel the punctual performance of an irksome duty from which the people have been in a great measure emancipated I would give the duty of superintending and enforcing customary labour to one department or to the other plainly, to the Tahsildar or to the Overseer. On the whole I lean to the Overseer. The preponderance of argument is, in my humble judgment, in favour of the Department of Public Works.

XX. Time has wrought a great change in the subordinate Revenue agencies of this Presidency The taluqs have been expanded by consolidation. The Tahsildar has more education, a higher sense of duty, he has more work at the desk and in the Court, but he has less local connection and, perhaps, less knowledge of the rural people and of country matters, he is a better Magistrate, but not so good a general manager. He has no longer the crowd of miscellaneous agents that were formerly at his command All has become more accurate, more under rule, less pliable, less arbitrary. If the care of the minor irrigation works was now restored to the Tahsildars there must be more Tahsildars and more agents under their orders. A subordinate agency would inevitably grow up an agency dealing with Public Works in the same area, if not for the same objects, as the agency belonging to the Department of Public Works There would be conflict and waste of power, and the efficiency of the Tahsildar might suffer in reference to one branch of his duties, while he might be only half competent for the other.

XXI. The Department of Public Works, on the other hand, if strengthened by the restoration of District Engineers, by the introduction of a greater number of Native Subordinates, and by the re-establishment of the class of Maistries on a liberal scale, would appear to be competent for the charge of the minor irrigation works, for the direction of customary labour, and for its enforcement in case of negligence by the prosecution of the offenders. The Revenue agency in the performance

of this duty might be more agreeable to the people, but the other appears to me best calculated to attain the end desired; and I can only hope that, under a lower constitution of the department, it would be supported by the co-operation of the Collector and his subordinates

XXII. The obligation and the sphere of customary labour being defined, and the directing agency determined, the question arises whether the Government should be empowered to commute the obligation to render customary labour into a money-payment in the interest of the cultivator. For the present the Government ought not to manifest any desire to substitute a cess for a labour claim. Such a course would provoke suspicion. There can be no mistake about an obligation to work If the work is rendered, it is seen and the benefit is felt. It can be imposed at times when it causes little hardship. But an obligation to pay is generally obnoxious; when the work is done the result is not obviously proportioned to the exaction, and it may be feared that the paid work would sometimes not be done, or it would be done too late. I do think, however, that, with the progress of society, a commutation of customary labour for money-payment may in some parts of the country become desirable, and I consider that the Act should empower Government, on the representation of the Collector of the district, to substitute an irrigation cess for unpaid labour.

XXIII. Having thus briefly stated my opinions with reference to the main points brought under the consideration of the Commission, the constitution of the Public Works Department, and the agencies by which the minor irrigation works of the Presidency should be repaired and superintended, I append a plan of the Public Works Establishments, prepared in harmony with these views, which would involve an annual expenditure of Rupees 22,52,037, involving an excess of Rupees 2,91,267 over the present aggregate cost of the Public Works Establishment of the Presidency, which, including the petty establishment attached to the Local Funds, amounts to Rupees 19,59,370. The excess is to be regretted, but I do not doubt that it would be gradually repaid by the better quality of the work performed, and by a steady improvement of revenue from minor irrigation works

It is true that an exact and definitive scheme of establishments can only be framed in conformity with the wants which experience may disclose, but I do not see that any material deviation from such a plan as that which I have ventured to suggest need occur, except with reference to the number of Maistries entertained in connection with the minor irrigation works

XXIV. The Commission have strongly affirmed the expediency of retaining a percentage of receipts from irrigation as a first charge on revenue, for the purpose of effecting repairs and minor improvements on irrigation works not maintained by customary labour or provided for otherwise This percentage, which would never reach the Imperial exchequer, is fixed at eight per cent. on the gross revenue, and I understand the Commission to mean that the full amount retained in each district is to be spent in each district. I entirely concur in the principle that a repair fund should be struck off the gross revenue, and retained in the hands of the local Government; and I consider that eight per cent is a reasonable amount to reserve for the purpose indicated on the whole net revenue of the Presidency, but I would deal with the amount as a single fund, to be apportioned and applied according to the exigencies of the year and the wants of each district equitably considered. I would not tie the Government down to any rule of expenditure applicable to all places alike. In some districts the irrigation works are now in a worse condition than in others, and in some the per-centage of revenue requisite for current repairs will always be greater than in others owing to natural causes, while occasionally there will be catastrophes in particular districts, like that of last year in Tinnevelly, when the District Repair Fund would not be sufficient for a pressing need. It appears to me that the general Repair Fund should be at the absolute disposal of Government, which would, however, make as equal a distribution to the several districts as possible.

XXV. It does not seem desirable to extend the obligation of customary labour, or the authority of the Revenue officers to the maintenance of village or district roads. The former measure would be an innovation on popular custom, and inconsistent with the levy and application of the road cess; the latter would involve the institution of double establishments, and burden the Revenue officers with duties which could be efficiently performed by the Department of Public Works should the office of District Engineer be restored.

MADRAS, (Signed) NAPIER.
10th June 1870.

No 187. MINUTE BY THE HONOURABLE A. J. ARBUTHNOT.

HAVING been a member of the Commission whose Report is now under consideration, and having drafted a great part of the Report, I need not detain the papers for the purpose of adding any detailed remarks to those which have been recorded by His Excellency the Governor and Mr. Sim. I adhere generally to the recommendations made in the Report. I still consider the organization thereon sketched out to be that best adapted to provide for the efficient execution and superintendence of our Public Works, and to ensure the important object of effective co-operation between the Revenue and Public Works Departments. I regard the re-establishment of the District Engineer system as a point of vital necessity, and I should deprecate any modification of that system by uniting in any case separate districts under one Engineer; and I attach great importance to providing the Department with a recognized Head, distinct from the Government Secretariat, and carrying on his duties in close and frequent communication with the Board

2 I do not, however, consider it expedient that this last mentioned purpose should be effected by practically sacrificing the appointment of Chief Engineer for Irrigation, or Superintendent of Irrigation, as the Commission propose to designate that officer Much of the work which has been so efficiently performed by Major Mullins, while holding the office in question, could not have been done by him if he had not been free to move about the country, and, as far as I can judge, for many years to come there will be ample scope for the employment of one of our best Engineers on work of this character; but if the Irrigation Engineer, by whatever designation he may be called, is to be made the Head of the Department, it will scarcely be possible for him to leave the central office without serious detriment to the regular work of the department.

3. I would, therefore, adopt the proposals which have been made by the Commission, with reference to the head quarter's staff of the Department, in their

entirety, substituting a Chief Engineer for the Engineer Secretary to Government, retaining the Chief Engineer for Irrigation under the designation of Superintendent of Irrigation, and transferring the Secretariat of the Public Works Department to the Secretary who performs the Revenue business, giving him at the same time the aid of a junior Engineer Officer as an Under Secretary.

4. I agree with His Excellency the Governor that, for the sake of economy, it will be necessary to dispense with any Inspecting Engineers, except the Superintendent of Irrigation. The Civil Architect may perhaps be utilized in connexion with the inspection of civil buildings. The roads, I fear, must be left entirely to the District Engineers, for the Consulting Engineer for Railways has quite enough of his own work to occupy his time.

5. The scale of Public Works Establishments proposed by Lord Napier, appended to his Minute, amounting to upwards of twenty-two lakhs and a half, and exceeding the present establishment by nearly two lakhs and a half, is very costly, although it provides for no Inspecting Engineers and leaves two districts without a separate District Engineer Whether it is susceptible of reduction, and if so, to what extent, I cannot say, but I cannot help thinking that a sufficiently effective establishment might be provided for at a smaller cost. It seems probable that some reduction may be made in the number of Assistant Engineers, Sub Engineers, and Supervisors, and also in the cost of office establishments. Colonel Carpendale might be instructed to go into the details, and to suggest any reductions that may appear feasible, both in the number of officers and subordinates and in the scale of salaries and allowances.

6. I have nothing to add to the remarks and recommendations made in the Report on the subject of the maintenance of minor works.

(Signed) A. J. ARBUTHNOT.

19*th May* 1871.

No. 188. MINUTE BY THE HONOURABLE J. D. SIM.

I HAVE very carefully considered the Report of the Commissioners, and the voluminous evidence taken by them on the different subjects of their inquiry. The recommendations of the Commissioners are based on a compromise, which, however, did not avail to secure unanimity.

2. On the important question of the future organization of the Department of Public Works, the recommendations of the Commissioners are (1) to appoint a District Engineer to each District; (2) to divide each District into Executive Ranges, each in charge of an Assistant or other subordinate; (3) to abolish the grade of Superintending Engineer and vest the control of the Department in a Chief Engineer, who is to be ex-officio a Member of the Board of Revenue, and to have the assistance of a special officer as Superintendent of Irrigation, of two Inspecting Engineers and professional Secretary; and (4), lastly, to re unite the offices of Secretary to Government in the Revenue and Public Works Departments in the person of the former with an Engineer Under Secretary. The Commissioners have not prepared a detailed scheme of the establishment required, but state their belief that an annual allotment of nineteen lacs will suffice for the purpose.

3. His Lordship concurs in the recommendations to revert to the old system of District Engineers, and to abolish the grade of Superintending Engineer. His

Lordship would convert the Consulting Engineer for Railways, the Chief Engineer for Irrigation, and the Civil Architect, into Chief Engineer for Communications, Irrigation and Civil Buildings, leaving the control of the Military Buildings to the Chief Engineer and Secretary to Government. In the Secretariat His Lordship would make no change.

4. I concur with His Lordship as regards both the abolition of Superintending Engineers and the revival of the office of District Engineer. Experience has shown that the ranges of Superintending Engineers are far too large to admit of their exercising any effectual control or supervision. It is sufficient, in proof, to notice the recent wholesale malversations in one of the ranges in the Tinnevelly District, and the lately reported misconduct of a Range Officer in Madura. Another great and serious disadvantage of the system is the isolation from other departments which it engenders, as noticed by His Excellency.

5. I, while concurring with His Lordship in advocating the abolition of the office of Superintending Engineer, I cannot agree in the proposal to dispense with all superior Inspecting Agency. It seems to me essential that the Government should have the means of knowing how the District Engineers are performing the duties entrusted to them, and I cannot think the occasional visits of the proposed Chief Engineers would adequately answer the purpose. The duties of these officers necessarily keep them much at head quarters near the Government, and certainly, as regards irrigation and communications throughout the Presidency, it would be impossible for the Consulting Engineer for Railways and the Chief Engineer for Irrigation (who was also Joint Secretary to Government) to do the work of Inspecting Officers over such an immense area. In my scheme I proposed five Inspecting Engineers, the Commissioners recommend two. Assuming that these officers are restricted to the duty of inspecting works of importance only, and aiding the District Engineers with their advice, it is not unlikely that three may suffice, but even then each would have a range about the size of England, without its facilities for speedy locomotion.

6. On the other hand, the policy of reverting to the former system of giving each district an Engineer, I readily admit, is in support of His Lordship's arguments. It is in my judgment a necessary condition of good administration, without it whatever other changes may be made efficiency will not be secured. The preponderance of opinion in favour of this system is remarkable. I originally proposed to unite Trichinopoly with Tanjore, and the Neilgherries with Coimbatore. His Lordship proposes to unite Ganjam with Vizagapatam, and Canara with Malabar. On further consideration I depreciate putting from the principle. The economy will be small, while four large and important districts will be deprived of the advantages of the system. It must be remembered that since the Commission reported, the new Local Funds Act has come into existence, and a great increase of work will be thrown on the Public Works Department. The Hills, which in fact are only a taluq, with no works of magnitude going on, might be united with Coimbatore, but every other district should, I think, have its Engineer, the variations in responsibility and labour being met by differences of salaries of the incumbents. The District Engineer will not be an Executive Officer, but I think it very necessary that he should be the Auditing Officer of his circle, the requisite assistance being afforded to him for the purpose.

D

The present system of leaving the audit to a central office in Madras is practically the Secretary so far as expenditure on works is concerned. As a matter of fact no misappropriation of public funds, such as has occurred in Tinnevelly for instance, is or can be detected by the office, and for all purposes of check it might as well be located in London If I am not mistaken, the accounts of the range of the Tinnevelly District, in which the recent frauds were committed on such an extensive scale, were considered well kept. The central office should compile the accounts of the Presidency and audit salaries and other similar charges, the audit of expenditure on works being entrusted to the District Engineer, who has the local knowledge without which auditing becomes a mere arithmetical process

7. As regards the general control of the Department and its relation to the Revenue Department, I must confess that I see no reason to change the views expressed in my Minute of 1869, which forms an appendix to the Report.

8 One of the most prominent defects of the present system is, in my judgment, the want of a "Head" In every other Department it has been found essential to vest the supreme executive control in some body or person, and I cannot understand why the Department of Public Works should alone be made an exception. The Police has its Inspector-General, the Revenue Department has its Board, the Medical Department has its Inspector General, every Department in short save that of Public Works—with an extensive agency engaged in executive duties of all descriptions and expending large sums of money—has a departmental Head to manage and control its operations and agency. The plan of uniting executive functions with the duties of a Secretary to Government has not answered in this Presidency, and, I feel sure, can never be made to answer. The late Secretary to Government was not even gazetted as Chief Engineer, the duties of the latter office devolved on the eight Superintending Engineers, so that anything like consistency of action or unity of control has been lost. One advantage certainly attended this arrangement : the Secretary to Government became a more effective Secretary, because he was personally irresponsible and unhampered by any acts of his own in a different capacity. It is hard to understand why such different functions should be united in the same individual, or how it could be expected that their union could be productive of satisfactory results As Secretary he is merely a ministerial officer, whose duty it is to bring subjects before the Government for their decision, and to aid the Government with his professional ability and experience ; he has no authority of his own, and no responsibility attaches to him on account of the decision of Government. As Chief Engineer he is an executive, vested with large powers, and responsible for his exercise of them to the Government. The projects which he proposes, the work which he accomplishes, his successes and his failures, it is his duty to report to himself as Secretary to Government, and as such Secretary to take the orders of the Government and communicate them to himself and carry them out as Chief Engineer. His acts as Chief Engineer may be approved by the Government, and the Secretary then approves of his own conduct as Chief Engineer ; or they may be disapproved, and the Secretary then has to censure himself. An energetic Chief Engineer, fearless of responsibility, may often place himself and his Government in an embarrassing position towards each other, while a timid or

... Chief Engineer may divest himself of all responsibility by unreservedly ... drawing the Government into everything The duties of the two offices are ... wholly incompatible, and the result of their union must be, as here it has been, ... worse than failure in the extreme I feel satisfied that, if the Department is to succeed, it must take another standing in the same relation to it as the Board of Revenue and the Collectors, or the Inspector General of Police to the Police Force. I shall hereafter propose to convert the Chief Engineer of Irrigation into the Secretary of the Department, and give him ex officio a seat in the Board of Revenue, ... with the best arrangement. It will place at his command the valuable ... information which the Board possess, and will go far towards securing ... the cordial co-operation of both departments But whether this plan be adopted, or the Chief Engineer be constituted a separate independent officer, I am confident that the department absolutely requires an officer at its head whose duties will be restricted to its direction and control—the office of Secretary to Government being separately provided for. The Commission propose that the Department of the Works in the Secretariat shall be entrusted to the Revenue Secretary with the aid of Engineer Assistant I made a similar proposal in my Minute. My plan has the objection of placing the Department under the Chief Engineer as its Head, the necessity of giving the Government a professional adviser as Secretary is conceded. The Chief Engineer ought to be the ablest officer of the Department, and, on professional points, it is obviously right that the Government should rely, not on the advice of an irresponsible Secretary To constitute the Secretary the professional adviser of the Government is, in fact, to supersede the Head of the Department, and to make their Secretary not the servant of Government, but ... Chief Engineer, or at least colleague, for, as the Government rarely possesses ... professional knowledge, it cannot well help being led by its Secretary just as ... Courts of Law are necessarily led by their legal or medical adviser. It is a ... mistake for Government to assume executive functions, and where a Government ... rules of several individuals, the exercise of such functions is practically ... impossible A Government cannot be its own Engineer any more than its own ... lawyer I admit, however, that much may be said on the other side in favour of a ... Chief Engineer, associated with the Board of Revenue, I should not be ... disposed to press my point As regards the relation of the District Engineer towards the Collector, I see no reason to change the views expressed in my Minute of 1869. Experience has shown that in this Presidency the most successful course is to ... vest the chief authority in the Collector and Magistrate, who is regarded by the people as their representative of the Government, and possesses the largest amount of influence with them The Police now stand in the same relation to the Magistrate at which I propose to assign to the Engineer, and that Department, ... as at present organized, is undoubtedly a success The degree of subordination ... which I propose to assign to the Engineer is no more than is necessary simply to keep ... the Executive Head of the district in his proper position, and it has nothing derogatory in ... it. In professional matters the Engineer will not be under the orders of the Collector ... any more than the Superintendent of Police now is; his subordination is no more ... than must be, if, following the teachings of experience, we maintain one chief admin-

istrative officer in each district. There is nothing novel or anomalous in this arrangement; we see in municipalities and private companies the professional the Secretary thus subordinated, in all but professional work, to the unprofessional ... this arrangement will naturally enough be unpalatable at first, but I am sure it will be found the best for the public interests. As regards special works, such as those enumerated by His Lordship, no difficulty need be experienced as they can always be entrusted to special officers. The great bulk of the expenditure will, however, be on less difficult works, so that the argument hardly affects my proposal. An additional reason for placing the District Engineer in the relation I propose to the Collector is, I think, to be found in the largely increased funds which will be available from the operation of the new Local Fund Act, which funds will be subject to the control of the Local Boards, of which the Collector will be the President. In respect to works executed from this source the District Engineer will necessarily occupy a position of subordination to the Collector and the Board.

9. There is one point bearing very materially on the efficiency of the Department, which the Commission have not noticed. I mean the effect which the new system of regarding Indian duty as a seven years' tour of service, and permitting exchange between Engineer Officers in India and elsewhere must have in the interests of the country. Under the old system the Indian Battalion of the Engineer Corps served exclusively in India during the whole period of their service; entering on their duties while young, they acquired knowledge of the languages and familiarity with the feelings and usages of the people, and looked on the country as their home during their official career, and the experience and local knowledge gained year by year was preserved to the country. The new system will work a great change, officers will often enter the Indian service at an age when the acquisition of languages is difficult. The short duration of their tour of service will prevent the same interest being felt in the country and its people, and the experience gained will be constantly lost. Of the superior attainments and, if I may so express it, the greater "value" professionally and socially of the Officers of the Corps of Royal Engineers, there cannot be doubt or question; but, unless the evil I have mentioned can be remedied by some change in the Regulations, it will sooner or later be necessary to consider whether it is consistent with the interests of the country to maintain the corps at a strength disproportioned to its military requirements, unless its members can be advantageously utilized in civil duties.

10. I see reason now to apprehend considerable difficulty in carrying the suggestions of the Commission in regard to "Kudi Marammut." Times have changed since the system of compulsory gratuitous labour existed, and, on general principles, it seems to me very questionable policy to attempt to revive a custom which has so long ceased to exist.

11. On the other points discussed in the Report, I agree with the Commissioners.

13*th May* 1871.

(Signed) J. D. SIM.

No. 1[illegible] ORDER ... ION, 12th September 1871, No. 2,318.-

ESTABLISHMENT, No. 25.

Ordered that the foregoing Minute be recorded.

(Here enter No. 2,319, dated 12th September 1871.)

(True Extract.)

(Signed) A. D. C. SCOTT, Capt., R. E.,
Under Secretary to Government.

[illegible] W. H. Franck

PUBLIC WORKS DEPARTMENT.

OOTACAMUND, *12th September* 1871.

No. 120

No 2,312.

To

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

ESTABLISHMENT, No. 26.

SIR,—I am directed to submit the Report of the Commissioners appointed to inquire into the working and re organization of the Department of Public Works, together with the Minutes of His Excellency the Governor and the Civil Members of Council; and before describing in detail the organization which this Government have decided on recommending, I am to briefly notice the more prominent objections to the existing system and the local circumstances which prevent the adoption of an organization exactly in accordance with those principles which it is known have the approval of the Government of India for other parts of the country.

2 The Government of India are aware that the existing organization corresponds in a great measure with the departmental arrangement in the rest of India, that is, that this Presidency, aggregating nineteen Collectorates, is divided into eight districts, each under charge of a Superintending Engineer. The division consists, on an average, of two Collectorates, but in some cases there are three Collectorates in a division, and each Collectorate is subdivided into from three to seven executive charges, locally termed ranges. Each range is in charge of an Executive or Assistant Engineer or of an Upper Subordinate, that is a Sub-Engineer or a Surveyor; the Officers holding the most responsible charges, and therefore in most cases of less experience, either from extent or the nature of the works in progress, and all Range Officers of whatever class have the same powers and responsibilities in their respective ranges, and are alike directly accountable to the Superintending Engineer as regards the designing and execution of works, and to the Controller in respect to the accounts which are forwarded to that Officer without the intervention of the Superintending Engineer or any other Departmental Officer. By this arrangement it was intended that the control of the accounts should be with the Account Office, and that of the works with the Superintending Engineer.

3. Owing, however, to the very great area comprised in the divisions over which the Superintending Engineers have charge, it has been found practically impossible to exercise all parts of their divisions as frequently as is necessary to secure a proper supervision of the works in progress, and as a natural consequence, being unable to visit all, they have practically been in the habit of giving their chief attention to those ranges in which the most important works are being carried on and the largest expenditure incurred, while those very ranges, being in charge of the Officers of the Engineer establishment, are in some respects those in which there was least need for general supervision. Recent disclosures, more-

over, in Tinnevelly, where one of the most experienced of the Sub-Engineers has been discovered to have been engaged in an extensive system of defrauding the Government by collusion with contractors, and has been convicted in the Sessions Court of fraud and sentenced to five years' imprisonment, has strengthened the conviction which for some time past has been entertained by this Government and by the most experienced officers, both of the Public Works Department and of the Revenue Department in this Presidency, that some change in the organization, by which the Executive Agent will be brought under close departmental supervision, is absolutely necessary.

4. In drawing up a scheme intended to supply this want, His Excellency in Council would have been glad, for the sake of a general conformity, if it could have been managed that the proposed establishment should have comprised the several grades of Superintending Engineers, Executive Engineers, and Assistants, but there is such a remarkable preponderance of evidence in favour of a District Engineer for each Collectorate being the local head of the department, and this Government are so unanimous in the opinion that no other organization is suited for the requirements of this Presidency, that they have arrived at the conclusion that it is expedient to omit the grade of Superintending Engineer, and to place at the head of the Public Works Department in each Collectorate a District Engineer, who is to carry on his duties in close concert with the Administrative Head of the District, and on professional subjects is to correspond direct with the Chief Engineer and Secretary to Government in the Department of Public Works. The plan of having the local Head of the Department in each district an Executive Engineer who should be subordinate to Superintending Engineers of Divisions, as at present, has been suggested, but there is the one fatal objection to it, that the Superintending Engineer would be virtually the Head of the Department in the provinces, and while in proximity to the Collector of one of the districts comprised in his division would be rarely, or never, seen by the others, which is one great source of existing complaint on the part of the Revenue authorities. With these preliminary remarks I am to describe the scheme which this Government, under all the circumstances of the case, consider the one best calculated to remedy the existing defects as follows:—

I.—That the Head of the Department shall continue to be Secretary to Government, but that he shall also be Chief Engineer and shall, in that capacity, be responsible for the designs which he submits to Government for sanction, while the duty of seeing that the works are properly executed will rest with the District Engineer. It will be imperative on the Chief Engineer, in laying projects before the Government, to express his own views and opinions on the merits or demerits of each.

II.—That a Consulting Engineer for Irrigation shall be substituted for the present Chief Engineer and Joint Secretary to Government. It seems to His Excellency in Council an anomaly to have two Chief Engineers at the head of a department which, from the peculiar circumstances of the Madras Presidency, can have no divided existence. There is a practical inconvenience in the arrangement in having a Joint Secretary. By making the Chief Irrigation Officer Consulting Engineer for Irrigation, the Government will retain all the advantage that it may have in his careful examination of projects and his close personal supervision of their execution by frequent tours of inspection, while he will still be available for personal consultation in the Council Chamber in connection with the Head of the Department when desirable.

III.—That the grade of Superintending Engineer shall be abolished, and that in lieu thereof a District Engineer shall be appointed to each Collectorate. The re-appointment of District Engineers will involve a recurrence to the system which existed prior to the reorganization of 1863, a system which, in the opinion of His Excellency in Council, never had a fair trial, and which, so far as it related solely to the District Engineers themselves, was found to work well. This system, it is believed, will be modified according to the experience that has since been gained, in the only plan that, taking all the circumstances of this Presidency into consideration, will enable the working of the department to be efficiently controlled. The re-appointment of District Engineers will bring the local Head of the Department into constant and intimate communion with the Revenue Officers of the district as well, it is cordially hoped, promote that co-operation between the two departments which is necessary to the interests of a district. The want of this harmonious action between the officers of the two departments is a defect in the present system, of which the Government have the strongest sense, and which it is impossible to remedy without circumscribing their respective duties to the same territorial limits, and thus identifying them with the same interests and imposing on them the habits of incessant personal intercourse and consultation. The control over the habits of incessant personal intercourse and consultation. The control over the local officers will also provide a more effective control over the Ranging Officers, especially over those of the inferior grade, who, while having a responsible and to a certain extent, an independent charge, should certainly not be left without professional advice and supervision than it is possible for a Superintending Engineer in charge of two or more Collectorates to afford. The District Engineer, it is intended, shall take the place of the present Superintending Engineer, and he will exercise the same powers as they now do. Possessing a more limited charge, as he will, in the majority of districts, by an Assistant District Engineer, and restricted to the duties of superintendence, this officer will be enabled to secure a degree of personal attention and supervision that has never been before attainable.

IV.—That there shall be one Deputy Chief Engineer and Under Secretary to Government in place of the Under Secretary lately added to the Government Office. This officer is not intended to have any separate office establishment or charge. He will be associated with the Chief Engineer and Secretary in the Department, taking a share of the general business, but will be chiefly employed in assisting the Head of the Department in examining plans and estimates submitted by the District Engineers. As twenty-one officers of the latter class will take the place of the existing eight Superintending Engineers and will be subject to no supervision or control, it would manifestly be impracticable for a single head, burdened with other duties, to apply to such a mass of designs the minute and searching scrutiny and analysis which the Government would otherwise have a right to expect and which alone could save them from unprofitable expenditure. Occasions will also probably occur when it may not be expedient to undertake a regular code for the local inspection of important building works, whether already in progress under the authority of the District Engineers, and for this purpose the Government ought to have at their disposal an independent

officer of standing fitted to inspire confidence and respect. The Deputy Chief Engineer and Under Secretary to Government would, in the performance of such functions, occupy a position analogous to that which would be held by the Consulting Engineer for Irrigation in his appropriate sphere of duty.

V.—That in lieu of the existing Executive and Assistant Engineers a number of Assistant District Engineers shall be appointed, forty-seven in all, exclusive of twelve Probationary Assistant Engineers. Of those forty-seven, twenty six are intended to be employed in charge of the more important ranges; fourteen will be for general duty as Assistants to the District Engineers, being one for each Collectorate, on sitting those as per margin, for which no general Assistant has been provided: while seven Assistants will be retained for special duty. The duties of the twenty six Assistants in charge of ranges do not need description. They are the same as those now discharged by Executive Engineers in other parts of India. The fourteen for general duty are intended to be employed as Assistants to the District Engineer, either in supervision of a distinct portion of the District, such as the Sub Collectorate, or generally throughout the district, at the District Engineer's discretion. They will have no office establishment beyond what is necessary to aid them in preparing reports on ordinary projects, and it is not intended that they shall have anything to do with the preparation of accounts. They will be employed in inspecting and reporting on works in progress and on works proposed; in aiding the subordinates in charge of ranges by their advice; in preparing plans and estimates of works of a superior class, and in examining those prepared by subordinates. It will be a very important part of their duty to exercise as close a supervision as is practicable over expenditure by a careful examination of station books and vouchers in the course of their frequent tours, and when an opportunity offers it will be incumbent on them to verify the monthly measurements of work done on contractors' certificates and to sign completion certificates granted under similar circumstances.

Ganjam.	Trichinopoly.
Vizagapatam	South Canara.
Kurnool.	

VI.—That the existing system of ranges as executive charges shall be continued, each under charge of a member of the Engineer Establishment or of an Upper Subordinate, the appointment of a first class Overseer being allowable when such an arrangement becomes indispensable. The Government, though not insensible to the disadvantages attached to these nominations, trust that selected officers of the class referred to, when entertained on the higher salary of Rupees 100, supplied with commensurate travelling allowances, and subjected to the closer supervision of the District Engineer or his Assistant, may be found available for the efficient performance of the higher duties exceptionally entrusted to them.

VII.—That the Upper Subordinates shall be increased in number to make up for the loss of the officers now in executive charge of ranges, who will be employed as District Engineers and Assistants on general duty, and that these Upper Subordinates shall all be styled "Sub-Engineers," and be divided into four grades.

VIII.—That an Establishment of Overseers shall be maintained, divided into three grades and distributed to the several districts in the proportion of one Overseer to each taluq. These officers will not however be, of necessity, individually attached to each taluq, but will be available for allocation at the discretion of the District Engineer where their services may be most needed.

IX.—That a lower class of Overseers, to be called "Maistries," shall be entertained, whose sphere of duty shall be very limited, often consisting of one work only. In number they will amount to 440, and they will go far towards meeting the want long felt and specially indicated in the Commissioners' Report of an adequate establishment at the disposal of the Public Works Department for maintaining in repair the numerous small works disseminated over the country. It must not, however, be concealed that so scattered and so numerous are these works that even this large numerical increase will be insufficient unless the willing aid and careful co-operation of the Revenue Department is afforded. This result, it is confidently hoped, will be attained by the more intimate connection between the two departments which the District Engineer system is calculated to re-establish. The class of Maistries will afford special employment to the Natives of the country. They will take the place of the existing petty establishments, and by having a permanent situation and a definite prospect before them, it is expected that a superior class of lower subordinates will be attracted to the department. In cases in which their previous education has been such as to enable them to meet departmental requirements in examinations there will be nothing to prevent them from rising to the higher grade of Overseer. The admission of persons not Natives of India into this class will be absolutely prohibited.

To sum up, the establishment proposed by this Government consists of—

I—1	Chief Engineer and Secretary to Government.
II—1	Deputy Chief Engineer, graded as first-class District Engineer.
III—1	Consulting Engineer for Irrigation, to be graded as Chief Engineer, second class.
IV.—13	District Engineers for 13 Collectorates, divided into four grades.
V—2	District Engineers, 5th grade, for Bangalore and Neilgherry Hills.
VI.—1	Consulting Architect.
VII.—1	Executive Engineer for the Presidency.
VIII—47	Assistant Engineers as detailed in paragraph 4, clause V. above, in three grades.
IX.—12	Probationary Assistant Engineers.
X.—62	Sub Engineers in four grades.
XI.—187	Overseers in three grades.
XII.—440	Maistries in three grades.
XIII—2	Mechanical Engineers.

I, and II, III, IV. demand few explanations in addition to those already afforded. The salaries of the District Engineers have been fixed by a joint consideration of responsibility in regard to area and expenditure and of the legitimate claims of officers of such rank and standing when compared with the emoluments which officers in a similar position might expect in other parts of India. The office establishment of each district has been framed solely with regard to the quantity of office work in each. In other words, the District Engineer's salary is

from force of circumstances somewhat a personal one, while his office establishment is exclusively a local one The salaries fixed are—

	Rs.
1st Class	1,500
2nd do.	1,350
3rd do.	1,100
4th do.	900

The first being less than the present salary of a Superintending Engineer of the 1st grade, the second and third corresponding to the salaries of Superintending Engineers of those grades, and the fourth being less than the salary of a first-class Executive Engineer.

His Excellency in Council feels that it may be contended that a Superintending Engineer's salary is in any case unduly high for a District Engineer whose sphere of duty will be territorially of much more limited extent. In reply to this objection I am to explain that the inability of the present Superintending Engineers to do justice to the existing extensive divisions is a capital motive for the change proposed, and, in reorganizing the department and still giving to the District Engineer as extensive a charge as one man is deemed capable of efficiently supervising, it would be unreasonable and impolitic to deprive the department of its incentives and rewards. The salaries proposed are, it is confidently believed, not excessive, if due regard be had to the nature of the duty to be performed, to the qualifications of the officers who would be appointed, to the salaries given in other branches of the public service, and to those awarded to the same branch in the other Presidencies. Indeed, under the rates now suggested, a considerable sum will for some years have to be disbursed to officers as personal allowances in compensation for the loss which they would incur if reduced to the regular emoluments appropriated to the new grades

V. The officers in special charge of Bangalore and the Nilgiris will be styled District Engineers, as they will hold an equivalent position. They will be in direct communication with the Secretary to Government and Chief Engineer as District Officers, and as Range Officers they will be in the same relation with the Controller.

VI. Does not require comment.

VII. The officer in charge of the Presidency Range is proposed to be styled Executive Engineer, as he will be subordinate to the District Engineer of Madras and Chingleput.

VIII. The Government would have been glad to have been able to provide two Assistants for general duty in each district for which one only is now estimated, and one for each of the five districts to which no Assistant has been appointed; for, under such an arrangement, they would have been in a position to require that *all* completion certificates should be granted by the District Engineer or his Assistant. Financial considerations, however, prohibit any suggestion for increased expenditure under this head.

IX. Does not require remark.

X. As the duties of a Sub-Engineer and a Supervisor in this Presidency are exactly similar, there is no advantage in designating them differently, and it is proposed to call them all Sub-Engineers.

XI. There is at present only one grade of Overseer This arrangement has been found to work very badly, inasmuch as the fixed salary of Rupees 60 is too low as a general rule, and there are no means of rewarding or encouraging deserving men who, not being qualified for the charge of a range, cannot be promoted to the rank of Supervisor. It is proposed to remedy this defect by having three grades on Rupees 60, 80, and 100, respectively.

XII. The necessity for Maistries is explained above.

XIII. There is at present only one Mechanical Engineer on the Madras Establishment, whose time is entirely occupied with the Gas Works in Fort St. George. The want of another has been at times sensibly felt. As recent instances in which this embarrassment has been experienced I am to mention the duty of reporting on the steam dredges at Negapatam and superintending their repair, and that of fitting up the iron bridge over the Iyaur in Trichinopoly.

5. The total cost of the proposed establishment is Rupees 21,74,865 against the sanction for the current year of Rupees 19,83,718, being an estimated excess of Rupees 1,91,147, an excess which appears to be quite unavoidable if a really efficient establishment capable of properly superintending expenditure and preventing fraud on an extensive scale is determined on. Considering that a greatly increased expenditure of Local Funds on Public Works may now be expected, and that a proportionate amount of establishment cost will be debitable to Loan Funds, it is confidently expected that even with the more costly establishment now proposed the net debit to Imperial and Provincial Funds will not be greater than in preceding years. Indeed, if the Governor General in Council requires it, this Government will engage that there shall be no excess of charge to the Imperial revenue. In connection with the subject of increased charges, I am further to draw a comparison between the cost of the establishment now proposed, Rupees 21,74,865, and that which existed prior to 1861, namely, Rupees 16,60,000, and to explain that the latter sum did not include the following items which are now provided in the Budget of this department:—

	Rs
Conservancy Establishment	90,000
Account Department, increase	50,000
Civil Engineering College	40,000
Temporary Establishment	44,000
Petty, in excess	30,000
Consulting Engineer for Irrigation	32,000
Consulting Architect	15,000
Official Postage	20,000
Total .	3,43,000
This added to ..	16,60,000
Makes .	20,03,000

Under this explanation it is apparent that the real increase in the cost of establishment now proposed above that which formerly embodied the institution of District Engineers is only 1,71,865, an excess caused by a very general improvement in salaries compared with the rates which prevailed in those days and which will ensure much greater efficiency in the work of the department. After a most

careful consideration of the question by this Government in every shape, His Excellency in Council feels bound to record that the only reduction which is considered to be possible in the estimate now submitted would be in connection with the number of ranges. The Government cannot, however, undertake to say to what extent this will be feasible, and can only promise that the measure shall receive the fullest and most careful consideration as soon as possible after the District Engineers have been appointed and have become acquainted with the wants of their respective charges.

6. Intimately connected with the question of establishment is that of travelling allowance, regarding which His Excellency in Council is desirous of drawing particular attention to paragraph 50 of the Commissioners' report. In the principles therein advocated the Government wholly concur, namely, that half the usual rate for each grade of District Engineer, Assistant Engineer, and Sub Engineer should be paid as a fixed charge dependent only on a certificate that a certain necessary equipment has been maintained, and that the other half be payable as a daily allowance whenever the Officer or Subordinate is absent from head quarters; no deductions would be made on account of halts when absent from head quarters, the departmental superior being responsible that the period of absence from head-quarters is properly employed in the performance of duty.

7. As regards enforced customary labour the Government have resolved to institute a careful inquiry in each district as to what work of this kind has been customary, in order to the further consideration of the expediency of hereafter enforcing the same by legislative enactment. This Government have fully considered the question of transferring the charge of minor irrigation repairs to the revenue authorities, and have definitively adopted the opinion that such a change would be inexpedient, and that it is preferable that the duty of effecting all such repairs should be vested in the present professional agency. His Excellency in Council is however very favourably inclined to the suggestion in paragraph 14 of the Commissioners' report, to the effect that ordinary repairs should be entrusted for execution to villagers who are willing to undertake them on the estimates of the Public Works Officers in preference to contractors. With regard to the small tanks which it is really unprofitable to the State to maintain as irrigation works, this Government proposes to relinquish them as State property and to reduce the assessment to that of unirrigated land.

8. The Governor in Council, I am to state, regrets that so great a delay has occurred in forwarding the present plan for a reorganization of the Department of Public Works. It will not escape the Government of India that these suggestions have been evolved, with difficulty, from a mass of opinions in many respects conflicting, and that they represent rather a compromise between the divergent sentiments of the Members of Government than a complete concurrence. The majority of this Government would have regarded with favour a scheme of re-construction which would have united the Public Works Department even more closely with the existing Revenue establishment. They have only abandoned this project from the apprehension that, in claiming the application of principles to this Presidency radically different from those which are accepted elsewhere, they might lose the prompt realization of practical reforms which they deem imperfect but which are incontestably full of the highest promise.

9. The leading feature of the proposed scheme is the re-instatement of District Engineers, that is the identification of the local officers of the Revenue and Public Works Departments in the prosecution of public duty, and the creation of supervising agency capable of correcting error, controlling extravagance, and preventing fraud. To this provision all the Members of Government have from the first assiduously adhered as the indispensable means by which alone the shortcomings and abuses can be remedied, of which the Government is so often the impotent but helpless witness. In the absence of the measure here recommended, I am to state, the Government cannot regard the future without the gravest apprehension. In the existing state of things the Department of Public Works is very imperfectly adapted to fulfil the expectations of the Government and the country in maintaining existing works, in designing and superintending new works, in directing the resources of the State to the most profitable objects, and in preventing a lavish application or criminal misappropriation of those resources even when the objects are wisely chosen. But the incompetency of the department for its present duties will be placed in a more conspicuous light in connection with the expanded functions to which it will be called hereafter. The development of local taxation recently sanctioned by law will multiply road works and building works throughout the country, individually cheap and insignificant, but collectively of immense value and high importance. The design and construction of those works will be committed to the Department of Public Works. They are of a character which will require the exercise of incessant superintendence, and strict economy; they will be watched by local bodies with the greatest jealousy, and extravagant rates or defective results will produce a wide-spread and justifiable discontent. The Department of Public Works, which has been recently charged with the highest responsibilities to the State in connection with reproductive enterprises defrayed from Imperial loans, will now be put on its trial as a general agency in the service of the people. Should it fail to satisfy public expectation it is certain that claims for the introduction of independent local executive establishments will be numerous and loud; nor would it be easy to resist them. Under these impressions, I am to state this Government consider themselves justified in earnestly soliciting the assent of the Government of India to the scheme of reorganization now submitted, a scheme which as this Government believes embodies a prudent adaptation of existing institutions to the present wants, the local peculiarities, and the future requirements of the Presidency of Madras.

I have the honour to be,

Sir,

Your most obedient servant,

(Signed) J. CARPENDALE, Colonel, R.E.,

Secretary to Government.

Ed. E. C. Sladen.

Statement showing the proposed changes in the Establishment of the Public Works Department, Madras; to accompany Letter No. of September 1871.

No.	Present Scale Designation	Amount of Salary	Proposed Scale No.	Designation	Amount of Salary	Remarks by the Local Government	Orders of the Government of India on Columns 3 & 5	Remarks and Orders in the Public Department thereon
	Executive and Ingenuity Establishment.			Executive and Ingenuity Establishment.				
1	Manager		1	Superintending Engineer	800			
1	Head Clerk & Examiner		1	Personal Assistant	250			
1	Accountant		1	Head Clerk	150			
1	Writer		1	Accountant	100			
2	Copyists		2	Writers	75			
1	Caretaker		2	Copyists	50			
1	Draftsman		2	Draftsmen	75			
2	Peons		1	Peon	15			
1	Messenger		1	Durwan	10			
1	Sweeper	5						
	Total Establishment	670		Total Establishment	2,315			
	Other Establishment	4706		Other Establishment				
	Public Works & Buildings			Public Works & Buildings				
1	Manager		1	Superintending Engineer	800			
1	Head Clerk & Examiner		1	Personal Assistant	250			
2	Clerks		1	Head Clerk	150			
1	Accountant		1	Accountant	100			
1	Writer & Messenger		2	Writers	75			
1	Draftsman		1	Copyist	50			
			2	Draftsmen	75			
2	Peons		1	Peon	15			
1	Durwan		1	Durwan	10			
1	Sweeper		1	Sweeper	5			
	Total Establishment			Total Establishment				
	Other Establishment			Other Establishment				
	Roads & Buildings			Roads & Buildings				
1	Manager		1	Superintending Engineer	800			
1	Head Clerk & Examiner		1	Personal Assistant	250			
2	Clerks		2	Writers	75			
1	Accountant		1	Clerk	50			
1	Draftsman		2	Draftsmen	75			
			1	Peon	15			
			1	Durwan	10			
			1	Sweeper	5			
	Total Establishment			Total Establishment				
	Other Establishment			Other Establishment				
	Irrigation			Irrigation				
1	Manager		1	Superintending Engineer	800			
1	Head Clerk & Examiner		1	Personal Assistant	250			
2	Clerks		1	Head Clerk	150			
1	Accountant		1	Accountant	100			
1	Draftsman		2	Writers	75			
			1	Copyist	50			
			2	Draftsmen	75			
			1	Peon	15			
			1	Durwan	10			
			1	Sweeper	5			
	Total Establishment			Total Establishment				
	Other Establishment			Other Establishment				
	Buildings			Buildings				
1	Manager		1	Superintending Engineer	800			
1	Head Clerk & Examiner		1	Personal Assistant	250			
2	Clerks		1	Head Clerk	150			
1	Accountant		1	Accountant	100			
1	Draftsman		2	Writers	75			
			1	Copyist	50			
			2	Draftsmen	75			
			1	Peon	15			
			1	Durwan	10			
			1	Sweeper	5			
	Total Establishment			Total Establishment				
	Other Establishment			Other Establishment				

Statement 2.

Statement of the cost of the proposed Public Works Establishment of the Madras Presidency.

Items	Rate	Assistants	Overseers	Total under each head	Grand Total
	Ab	Rs	Rs	Rs	Rs
1 Chief Engineer & Secretary to Government		2500	30000		
1 Dy ~~Co~~ Co & under Co		1500	18000		
Secretarial Establishment		2533	30396		
Do Contingencies		50	600		
1 Consulting Engineer for Irrigation		2000	24000		
Office for Do		500	6000		
House Rent for Dy Chief Engineer & Consulting Engineer for Irrigation		120	1440		
Travelling Allowances for Consulting Engr		166⅔	2000		
				~~124500~~ 112450	
4 District Engineers 1st Grade		1500	6000	72000	
3 Do 2nd Do		1350	4050	48600	
5 Do 3rd Do		1100	5500	66000	
7 Do 4th Do		900	6300	75600	
2 Do for Bangalore & the Neilgherries		700	1400	16800	
1 Consulting Architect			1200	14400	
5 First class District Office Establishments		463	2315	27780	
6 Second Do Do		352	2112	25344	
8 Third Do Do		317	2536	30432	
2 Fourth Do as at present			560	6720	
Office Establishment for Cons. Architect			270	3240	
Office Rent, when required for Dist Engrs			400	4800	
Travelling Allowances for 20 District Engineers		125	2500	30000	
Carriage & Conveyance to Consulting Architect & Dist. Engineers Bangalore		50	100	1200	
Tolls for 20 Office Establishments		25	500	6000	
Office Contingencies for 22 Offices		20	440	6720	
House Rent for District Engr Overseers					
Dy Chargefield & for Consulting Architect		60	120	1440	
				435636	
Total for Direction				67272	
				568072.	

Items	Rate	Monthly	Annually	Total under each head	Grand Total
	Rs	Rs	Rs	Rs	Rs
Civil					
1 Executive Engineer for the Presidency		700	8400		
15 Assistant Distinct Engineers 1st Grade	600	9000	108000		
16 —— Do —— 2d ——	500	8000	96000		
16 —— Do —— 3d ——	400	6400	76800		
12 Probationary Assistt Engineers	250	3000	36000		
7 Sub Engineers 1st Grade	300	2100	25200		
13 —— Do —— 2d ——	250	3250	39000		
15 —— Do —— 3d ——	200	3000	36000		
27 —— Do —— 4th ——	150	4050	48600		
40 Overseers 1st	100	4000	48000		
60 —— Do —— 2d	80	4800	57600		
87 —— Do —— 3d	60	5220	62640		
90 Maistries 1st	35	3150	37800		
145 —— Do —— 2d	30	4350	52200		
205 —— Do —— 3d	25	5125	61500		
2 Mechanical Engineers		720	8640		
Office Establishments					
For 21 Officers to be employed on general & special duties	90	2580	34698		
For 12 Probationary Assistant Engineers	35	420	6240		
For 1 Exc: Engineer at the Presidency as at present		452	5424		
For 86 Rangers as at present		11230½	134766		
For 2 Sub Engineers for the Presidency	27	54	648		
For 167 Overseers, as at present	27	4509	54108		
Pay proper of Seconded Officers			6000		
Military Allowances of Subordinates			30000		
Presidency House Rent & Encouragement					
Engineer & Sub Subordinates	115		1380		
Special Allowance to the Wynaad Establishment			4000		
Travelling Allowances & Batta & Office Establishments			3[illegible]		
Contingencies, & Official postages					
undefined heads			2376		
Lithographic Establishment as at present	50		1116		
Contingent Allowance for ditto	30		360		
Store Establishment as at present			1044		
				1368084	
Temporary Survey Establishments			50000		
Civil Engineering College			40000		
Total for Construction					1458084
Accounts					
1 Controller		1350	16200		
1 Dy —— Do		550	6600		
Presidency House Rent		105	1260		
Travelling Allowances		166⅔	2000		
Office Establishment		3840	46080		
—— Do —— Contingencies		50	600		
Total Accounts					72740
Conservancy					
Establishments, as at present					96089
Grand Total					2174985

Abstract

	Rs
Direction	548072
Construction	1458084
Accounts	72740
Conservancy	96089
	2174985

For Contingency Establishments. Vide Rules Budget & Subsequent Sanctions

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Note - The Balance for Office Establishments Rs 3,82,800 provided under "Sanction" is intended to cover the travelling allowance of two of the members of each District Engineer's Office

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Establishment of Rs 231,020 provided for Executive Officers and Peons &c Office Establishments under "Sanction" -

Executive Officer Pay —	50	×	12	× 1	= 600
1st 2nd Superintendents —	120	×	12	× 31	= 44,640
Do — 3rd — —	100	×	12	× 18	= 21,600
Establishment Office Boys —	100	×	12	× 12	= 14,400
Sub Engrs 1st & 2nd Grades —	75	×	12	× 19	= 17,100
Do 1st Grade for the Boys —	30	×	12	× 1	= 360
Do 3rd & 4th Grades —	50	×	12	× 41	= 24,600
Do 4th Grade for the Boys —	30	×	12	× 1	= 360
Overseers & 2nd Grades —	40	×	12	× 83	= 39760
Balance for Office Establishments —					21,000
					231,020

Establishment of Rs 42,960 provided for Contingencies under "Sanctioned"

For 21 Office 2nd Boys & the employment and travelling allowance thereto —	Rs 2520
" 83 Peons, including the Orderly Peon —	14,440
" Office Furniture —	30,000
	42,960

Classification of Pilots, subservient to the Office Established under "Direction"

5 - First Class	6 - Second Class	8 - Third Class	2 - Fourth Class
Godavery	Samarcotty	Nellore Creek	Nellapatam
Pedrah	Cuddalore	Salem	
Tanjore	Nellore	Tuticorin	Bengalore
Bellary	Cumbatore	Madura	
Pondicherry & Chintapet	South Creek	Tanjore	
	Malabar	Vizagapatam	Canara

Establishment of Officers belonging to Port Office

1	Chief Assistant	600
1	2d Assistant	300
1	3d Do	200
1	Assistant to the Pilots at Do	150
1	Do at Do	120
1	Writer	130
1	Do Do	80
1	Do	80
1	Peon	70
1	Peon Writer to Board	60
1	Do	60
2	Do to Do at 40 each	80
2	Do to Do at 35 Do	70
1	Do	30
4	Do to Do at 25 each	100
5	Do at 20 Do	100
2	Do at 15 Do	30
2	Do at 12½ Do	25
1	Do	10
1	Do	12
1	Do	12
12	Do at 7 each	84
		2533

For Counting Engineer for Irrigation

		Rs
1	Head Clerk	150
1	Accountant	60
1	Clerk	40
1	Do	30
1	Do	25
1	Draftsman & Estimator	75
1	Do	50
1	Do	40
1	Overseer	8
1	Peon	6
3	Lascars at 5 each	21
		555

For 5th Head Qrs Divisions

		Rs
1	Head Clerk	100
1	Draftsman & Estimator	50
1	Do	40
1	Accountant	50
2	Writers (40 & 30)	75
2	Chainis (30 & 25)	55
2	Surveyors (15 & 15)	33
1	Overseer	10
5	Peons (6 & two 5)	27
		440

For 6th Head Qrs Divisions

		Rs
1	Head Clerk	80
1	Draftsman & Estimator	50
1	Accountant	45
2	Writers (35 & 30)	65
1	Chainis	25
2	Surveyors (15 & 12)	27
1	Overseer	10
7	Peons (6 & two 5)	50
		352

For 8th Head Qrs Divisions

		Rs
1	Head Clerk	70
1	Draftsman & Estimator	45
1	Accountant	40
2	Writers (30 & 25)	55
1	Chainis	20
2	Surveyors (15 & 12)	27
1	Overseer	10
7	Peons (6 & two 5)	50
		317

For the 9th Upper Bari Doab Canal Division

		Rs
1	Head Accountant	70
1	Writer & Accountant	50
1	Do — Do	45
1	Draftsman	80
1	Overseer	35
4	Lascars @ 7	28
		308

For the Dist. Engr. Bangalore Establishment.

		Rs
1	Head Accountant	60
1	Assistant Accountant	50
1	Do	40
1	Draftsman	50
1	Store keeper	40
2	Lascars at 6	12
		252

For Consulting Architect

		Rs
1	Draftsman	65
1	Do	45
1	Estimator	70
1	Clerk	30
2	Peons at 7 & 1 at 6	20
		270

Note. This includes that the Assistant Engineer Bangalore and the Artificer Guards shall also be in Account with the Contractors, and Clerks of Superintendents of their Ranges as aforesaid.

For 21 Offrs. Mess employed on General Military Duties

		Rs
1	Draftsman and Estimator	40
1	Clerk and Assistor	30
4	Lascars at 7	28
		98

For the Garrison Engineer Bangalore and Outstations

		Rs
2	Accountants @ 60	
2	Estimators @ 50	
1	Draftsman	
1	Writer	
1	Store Keeper	
2	Peons @ 7	

For 12 Subsidiary Offrs & Engineers.

		Rs
1	Writer and Accountant	22
1	Lascar at 7 & 5 at 6	13
		35

For 86 Ranges as follows.

				Rs
23	as per annum 1st Class @			171
22	Do	2d	Do	136
34	Do	3d	Do	96
1	official for the Bellary Range			201
1	Do for the Madras Sub Collector's Range			103
1	Do for the Cuddapah Range			167
1	Do for the Chembrambadam Range			81
1	Do for the Cuttery Range			281/2
1	Do for the Principal Co, Cuttack			70
1	Do for the Pamban Do			138

Particulars of the three Cooking Ranges Establishments noted above are as follows.

First Class

		Rs
1	Accountant	60
1	Draftsman & Estimator	40
1	Offrs Mess Keeper	30
1	Do	20
3	Lascars at 7	21
		171

Second Class

		Rs
1	Accountant	50
1	Draftsman & Estimator	40
1	Apds Accts & Writer	25
3	Lascars at 7	21
		136

Third Class

		Rs
1	Accountant	40
1	Apds Accts & Writer	20
1	Do	15
3	Lascars at 7	21
		96

Particulars of the 7 Special Range Establishments noted above are as under

Bellary Range

		Rs
1	Head Accountant	60
1	Apds — Do	30
1	— Do	20
1	Draftsman	40
1	Writer	30
3	Lascars at 7	21
		201

Madras Waterworks Range

		Rs
1	Accountant	40
1	Draftsman	35
4	Lascars at 7	28
		103

East Coast Canal Range

		Rs
1	Accountant	40
1	Writer	35
1	Draftsman	40
1	Moodeen	10
1	Peon	7
5	Lascars at 7 Rs	35
		167

Cheimbrambakkum Range

		Rs
1	Accountant	40
1	Apds Do	20
3	Lascars at 7	21
		81

Vykery Range

		Rs
1	Head Accountant	100
1	Clerk	40
1	Copyist	30
1	Draftsman	80
3	Lascars at 10½	31½
		281½

Irrigation Range - Coimbatore Dt

		Rs
1	Accountant	30
1	Draftsman	40
		70

Pannbem Range

		Rs
1	Writer	30
1	Gunnadah	25
1	Tindal	9
4	Lascars at 7	28
1	Carpenter	15
1	Smith	15
1	Hammerman	11
1	Bellows Boy	5
		138

Distribution of the 86 Range Establishments

Districts	1st Class	2d. Class	3d. Class	Remarks
Ganjam	1		2	
Vizagapatam	1	1	2	
Godavery	2	2	2	
Krishnah	4	1	2	
Nellore	1	2	1	
Cuddapah	1	1	2	
Kurnool	1	1	2	
Bellary	1	2	3	1 at Rs 200
Chingleput	1	2	1	1 at Rs 103 1 at Rs 167 1 at Rs 81.
North Arcot	3	1	2	
South Arcot	1	1	2	
Salem	1	1	1	
Tanjore	4	3	3	
Trichinopoly	1	1	3	
Combaconum	1	2	1	1 at Rs 70
Malabar with Wynaad	2	1	2	1 at a. 281½
South Canara	4	1	2	
Madura	1	1	1	1 at Rs 138
Tinnevelly	1	2	1	
Total	23	22	34	7

Office Establishment for 2 Sub Cutcherys for Peons

Peons for 167 Overseers

1 Bailiff	—	Rs 15
2 Peons	—	12
		27

Lithographic Establishment

1 Superintendent	—	Rs 250
1 Draftsman	—	150
1 — Do	—	100
1 — Do	—	80
1 — Do	—	70
1 — Do	—	50
1 — Do	—	30
1 — Do	—	25
1 — Do	—	20
1 — Do	—	15
1 — Do	—	25
1 Tracer	—	16
1 Tracer & Mooreha	—	35
1 Head Printer	—	12
1 Pressman	—	64
8 Pressmen at 8 Rs each	—	14
2 Do — at 7 Rs Do	—	12
2 — Do — at 6 Rs Do	—	968

Public Works Store Department

1 Gent. Storekeeper Monthly salary inclusive of House Rent & Conveyance allowance		352½
1 Store Keeper		200
1 Do — Do		70
1 Accountant and Clerk		60
1 — Do		40
1 Clerk		25
1 Cuffadar at 9 Rs 16 Peons at 7 Rs		57
12 Peons at 6 Rs		72
		870½

Establishment of the Audit & Accounts

		Head Branch	
1	Head Accountant	—	Rs 300
1	Accountants & Transfer		275
2	Accountants at Rs 150 Each		300
1	Accountant		110
1	Ajahs	@	80
1	—	@	60
1	—	@	45
		Appropriation Branch	
1	Accountant		150
1	Ajahs	@	60
		Salary Branch	
1	Accountant		150
1	Ajahs	@	80
2	—	@	60
1	—	@	35
		Audit Branch	
5	Accountants	at Rs 110 Each	550
3	Ajahs	@ at 80	240
2	—	@ at 60	120
3	—	@ at 50	150
4	—	@ at 45	180
3	—	@ at 40	120
2	—	@ at 35	70
3	—	@ at 30	90
		General Branch	
1	Indexer		100
3	Clerks at Rs 40 Each		120
2	—	@ at Rs 30	60
1	—	@	25
1	—	@	20
3	Copyists at Rs 16 Each		48
1	—	@	15
		Record Branch	
1	Keeping Records		70
1	Ajahs	@	30
2	—	@ at Rs 25 Each	50
1	—	@	20
1	Bill Stamper		6
1	Moochee		6
2	Peons at Rs 7 Each		14
6	@	at Rs 6 @	36
1	Sweeper		5
			3840

No. 186-

27

Minute by H. E. The President

My opinion seems to be chiefly required on two points discussed in the Papers now before Government and which are intimately connected with each other; on the Constitution of the Department of Public Works and on the Agency by which the Minor Irrigation Works of the Presidency should be maintained.

II. The Amount Annually granted from Imperial and Local Funds for Public Works in the Presidency is no doubt insufficient for all the wants of the Country but this reflection is one under which the Government can exercise little direct influence. The Appropriations are proportioned to the resources and exigencies of the Imperial Government and to the

means of local taxation at our disposal.

The Imperial revenue is beyond our control, the local revenue is susceptible of development but it is necessarily restricted in its application. It is therefore of the last importance that the funds which we possess should be administered and applied with the greatest economy and efficiency and that they should be supplemented by unpaid Agency where that can be obtained without injustice or oppression.

III. The application of the funds belonging to the Public Works Department is in my mind undoubtedly defective and defective on account of the Character and Constitution of the Department.

The deficiencies of the Department are owing to two causes, partly to the incapacity of Officers, chiefly to the manner in which their Authority and duties are distributed and exercised.

IV. There will of course always

be some element of incapacity in every State establishment and we cannot hope to see it eliminated in India. The Superior officers of the Department of Public Works are supplied by the Royal Engineers, the Military Staff Corps of the Presidency and the Engineering profession in England but the Second class need scarcely be considered here. The Royal Engineers receive the highest education which can be afforded by a Government institution at home. They are subjected to the severest tests. The Candidates from the Civil Engineering profession are passed through a Competitive examination which is said, at present, not to be of a very stringent character owing to the limited number of Applicants for employment in India. Both classes of officers come to this Country at an early age with little practical experience and are thrown at once into the

exercise of most trying and multifarious duties, deprived of many means of self improvement and exposed to the hardships of a dangerous and debilitating climate. There is no division of labour. The Indian Engineer must do everything at once and everything for himself. It is not wonderful that he cannot do every thing well. It is wonderful that he does so much successfully. I see little prospect of any improvement in the character and qualifications of our Engineers by any thing that we can advise or do. Some advocate the exclusive employment of Civil Engineers freely selected or educated in a College at home. We should probably gain nothing in professional attainments and lose something in Authority with the people and in responsibility to the State. We have had many Civil Engineers already. They are in the main

superior to Military Engineers. If Civil Engineers whether independently instructed or instructed by the State are to come out here as Members of a State establishment, they must come out young that is inexperienced and immature. They must be formed for Indian duty in India as they are now, as the Military Engineers are now. We shall obtain better Civil Engineers and better Military Engineers gradually as the preparatory Standard rises and the preparatory Method improves in England but we shall gain nothing in my humble judgment by the exclusive use of one class. On the whole I think the Military Engineer will be the best for the complete circle of State employment in India but the Mixture is a good one. It embodies the principle of Comparison and emulation

The two classes ought, however, to be put on a better footing of equality than exists at present.

V. It is not then by improving the quality of the Engineer Officer that we can increase the efficiency of the Department here, it is by employing him more judiciously.

The defects in the organisation of the Public Works Department in the Provinces have been justly noticed in the Report of the Majority of the Commission. They consist (1) in the want of Supervision. (2) in the complete divorce of the Engineering Agency from the Revenue Agency and interest in the Country.

VI. The Presidency is divided into 8 Divisions each of which

is placed under a Superintending Engineer. These Districts are subdivided into 38 ~~50~~ ranges administered by Executive Engineers of very different degrees of ability and professional position. The correspondence of the Department in my mind teems with proofs that the duties of Superintendence are most imperfectly performed. The Superintending Engineer cannot possibly find time to traverse the vast area committed to his Superior charge loaded as he is with a great amount of Office work as well as with the design of projects and improvements of an important character. The result is that many works are practically uninspected. The fact is manifested

rule and bad work the exception, that the Department is on the whole conducted with prudence and ability, that it is not the only Department in which mistakes occur and that it is the Department in which mistakes are most patent and conspicuous. It is equally true that similar and worse examples might be adduced from the Canal works and Railway works conducted by Private Agency here and elsewhere. Yet I cannot doubt that the proportion of errors and failures to which I have adverted might be considerably reduced, I cannot believe that it is inseparable from every System of organization. We are plainly warranted in endeavouring to Ameliorate the System which now exists.

on frequent failures and corresponding waste. I would ask the Members of Government to recall to their memories the current shortcomings of the Department in the last few years. I have a lively recollection of bridges falling in from insufficient waterway, bad foundations, or bad construction, of Reservoirs bursting on account of bad Materials or defective Plans, of roads neglected or ill repaired, of Civil and Military buildings promptly found defective on account of bad tiles, unseasoned timber, or imperfect constructive knowledge, of pipes that leak, of drains that stagnate, of insufficient estimates, of unsanctioned undertakings. Every form of Misfortune and error has been lamented and reprobated in the Proceedings of Government. It is true that good work is the

VII. The Divisions of the Superintending Engineers are however, not only too large, not only do they offer insuperable material impediments to the duties of inspection, they are also most arbitrary in their character. They do not respond to any natural or traditional circumscription in the Country. They do not associate the Engineer Officer closely with any distinctive circle of public Administration or with any functionary equally concerned in public improvement. The Superintending Engineer labours apart. He does not act in harmony with any one. He has to do with two or three Collectors to whom he is often half a Stranger and sometimes almost an Adversary. The estrangement between the Revenue and public works Services is unfortunately notorious but I did not expect to see

hostility avowed in a formal and public document with the asperity which characterizes the separate report signed by Major Mullins and Major Shaw Stewart. I attribute the antagonism which prevails between the two Departments mainly to the relations in which they have been placed by the present Constitution of the Department of Public Works.

VIII. To correct the double mischief of impracticable duty and alienated feeling I think the only efficient remedy has been suggested by the Majority of the Commission, the abolition of the Divisions with their Superintending Engineers and the restoration of the order of District Engineers. Not subject to Collectors but united with them. This would make inspection possible and even efficient, it would

harmonize the position and action of the chief local Agent in the Public Works Department with the chief local Revenue Authority, it would identify both in the same sphere of public duty; backed by a decided course on the part of Government it would put an end to recriminations and resentments.

My opinion may not be deemed of the same value as the opinion of those who possess professional knowledge and who have been longer acquainted with the interests of the Country but I desire to submit it in the most emphatic manner. No alteration of the Constitution of the Public Works Department will in the Presidency be materially and morally effective without the restoration of District Engineers and I must add that this course is doubly necessary

At the present moment with a view to the contemplated development of road works and building works under the Bills for local taxation now before the Legislative Council.

IX. Having thus given my cordial assent to the Capital proposal of the Majority of the Commission I regret that I cannot meet their views in regard to the position which they have assigned to the Head of the Public Works Department in his relations to Government. The Majority suggest that the Secretary for the Public Works Department should be abolished that the business of the Secretariat should be amalgamated with the Revenue Secretariat and that the Revenue Secretary should be the Channel of Public Works business to Government but that he should

be aided by a professional Under Secretary. The head of the professional Department would be termed, as formerly, Chief Engineer and he would be appointed to deliberate and act in Connection with the Board of Revenue as an Ex Officio Member of that body in so far as Public Works business is Concerned.

X. In my humble judgment there are serious objections to this Course which may briefly be enumerated as follows.

(1) The project is unjust to Government. The Government has a right to direct, Constant, and personal intercourse with the highest and most competent Authority in the Matter of Public Works. This interest is daily attaining a higher position in the general interest of the State. If the

Public Works Department was merely a vehicle for improving Tanks and irrigation Channels and making district roads it's Chief might properly be an Adlatus to a Board of Revenue Officers. But the Department is already engaged, or will shortly be engaged, in the expenditure of public revenue on undertakings of the most arduous, diversified, and costly Character. Many of which are only indirectly Connected with revenue interests. The field that lies before us is immense if the work of the Department in the next generation is to bear any proportion to the designs of the present one. Whole rivers like the Coovkoolia, the Toongobuddra, the Cauvery, the Perryaur, the Tumbrapoorny regarded as Single instruments of Irrigation have to be gauged,

stored and distributed over vast extents of Country lying in different provinces, Presidencies and even States, on comprehensive views of public utility. Marine works will be undertaken involving the construction of Quays, breakwaters and Seadefences. Sanitary drainage and the Water Supply of towns will become an important Sphere of engineering duty. Civil buildings for a great variety of objects will be erected in Connection with the multifarious requisitions of Modern municipal public and Social life. Inland fortifications will be carried out for the protection of the Chief Military Stations, Arsenals, Magazines, factories, and railway Centres which are all now absolutely defenceless. Railways will be executed and worked by direct State Agency. With some of these fields of enterprise the Board of Revenue have nothing

to do, on Some of them could the Board definitively decide. The Revenue Secretary in such matters could only be a Channel and his Under Secretary would either be the Mouthpiece or the Critic of the Chief Engineer. In the first case he would be superfluous, in the Second pernicious. The Government would in fact never be contented with an imperfect, indirect Scriptory intercourse with the head of the Public Works Department in these important Concerns. The Chief Engineer would constantly be taken into the Council room where he would appear in very anomalous relations to the Revenue Secretary and the professional Under Secretary. I would rather have him there in his proper place giving Government

the benefit of his full, prompt, constant and responsible advice.

(2) The arrangement which would be unjust to Government would also be unjust to the head of the Department of Public Works and to the profession to which he belongs. The head of the Department may properly claim to have free, open, spontaneous communication with Government. He may justly demur to have his views strained through the medium of an uninformed officer of another department and of a subordinate officer from his own. His position would be a galling one to himself and to his class. The Royal Engineers among whom there is a strong esprit de Corps and the Civil Engineers who are sufficiently sensitive would

alike feel themselves reduced to the position of subordinates and accessories, with a place in the Outerroom instead of the Council room. This would not promote a good spirit or good work. They would do their duty but they would not do it heartily and existing jealousies would rather be aggravated than assuaged.

(3) The transaction of business would not fail to be impeded. The Chief Engineer is to minute to the Members of the Board. They would all minute. They might all minute in different senses and their minutes might last for months. A great mass of conflicting opinion would be accumulated. It would be sent to the Revenue Secretary who would send it to his professional Under Secretary who would have his opinion too. But the Revenue

Secretary might have a different opinion, for if the Board can differ with the Chief Engineer the Revenue Secretary could differ with his Under Secretary. The whole series of Minutes and opinions piled one on another would work their tardy way to the Council at last. The Members of Council would probably also minute but even that [illegible] for the Chief Engineer and [illegible] take a decision with his advice which I humbly think they ought to do after reserving to themselves the power of course, of referring specific points affecting revenue and agriculture to the Board if such points were presented. I need scarcely say that the time of the Revenue Board and of the Revenue Secretary would be seriously burdened if in addition to their proper duties they had all the Public works business to

upon their hands and these departments which cannot move very fast at any rate would move slower than ever. If any member of the Public Works Department should be associated with the Revenue Board it ought surely to be the Chief Engineer for irrigation not the head of the Department but if we would not tie up either of them in such an unwelcome yoke.

(4) Another objection to this part of the Scheme of the Majority is that it would raise great opposition in Authoritative Quarters. The proposal to reestablish District Engineers however expedient will not be very acceptable. If we propose the abolition of the Secretariat in the Public works Department we might create an insurmountable obstacle which would frustrate

the whole project. It seems unlikely that the other Presidencies will dispense with their Secretaries in the Public Work Department or that the Government of India, which has a decided propensity to assimilate, would place Madras in an exceptional position in so prominent a feature of administration. It is never wise to ask for much when it is difficult to get anything, but here we should not only be asking for much but for something which many might naturally consider impolitic and ill timed.

(5) Finally it appears to me that it would be undesirable to make the Department of Public Works a dependency of the Board of Revenue because it might prove to be a transitory connection. There is no Board of Revenue in Bombay or in the Punjaub and it appears probable that the Bengal Board will be reduced to the smallest possible dimensions. In my limited experience I have derived the impression that the Madras Revenue Board introduces an element of delay and perplexity in the transaction of public business, though I recognize the great merits of individual members of the Board and the services which they have rendered in dealing with special questions of Revenue administration. It seems probable to me that the Board of Revenue may hereafter be absorbed by the Revenue Secretariat to Government which would be strengthened and remodelled so as to perform the same functions with greater energy and expedition. This is not the place to discuss the question at large but the contingency of the consolidation of the Board with the Secretariat would cause me to hesitate in investing

the former body with novel and expansive functions.

XI. The Report of the Majority while advocating the restoration of the office of Chief Engineer as the professional head of the Public Works Department proposes to strengthen the Department by the addition of two Superior Inspecting officers who would be at the disposal of Government and the Chief Engineer for special inspections and projects. It appears to me that these officers are not requisite and that we possess already in the Constitution of the Department the means of performing the same duty.

The business of the Department falls naturally into four classes, business connected with Irrigation, with Communications, with Civil buildings, with Military buildings. For

the design and occasional inspection of Irrigation works of the higher character we possess already in the Secretary for Irrigation. He is the Chief Engineer for Irrigation. I would consolidate the duties of the Consulting Engineer for the Madras Irrigation and Navigation Company with his office. ~~and give him the assistance which he might require in the form of an Assistant Secretary or Assistant Engineer.~~

The present Consulting Engineer for Railways would become the Chief Engineer for Railways and Communications. He would be employed in the Superior direction and inspection of State Railway works as well as in the inspection and control of independent lines, he might also be employed in the inspection of Imperial lines of Road, Railway feeders, and Saltwater Canals, if such be necessary. The Government Architect

might undertake the occasional inspection of Civil buildings. The Secretary to Government for the Public Works Department might himself assume the inspection of Military Constructions which will probably be confined in this Presidency to a few Capital and accessible places such as Madras, Bangalore, Bellary, and Cannanore. In this way no new Office of the first class would be created. The ordinary purposes the District Engineers would be the Superintendents and Inspectors, in extraordinary cases the duty of Superior inspection and consultation would be exercised by the Officers above mentioned.

XII. It has been contended that under the present System which I propose to continue the Head of the Public Works Department loses his Professional character, that he ceases to be Chief Engineer and becomes a Mere

Secretary to Government so that nothing is gained by having an Engineer Officer in that position. I think that this result is more apparent than real. The present Secretary for the Department actually exercises a superior and definitive Judgment on projects and works which he communicates to Government, though his opinions are more exclusively embodied in Drafts for Government Orders than is perhaps desirable. It would, however be easy for Government to require the Secretary to embody his views and reasons in independent Memorandums. I have already stated that he might be occasionally employed on inspecting duty. It is true that there is no absolute necessity that the Head of the Public Works Department should be an Engineer Officer or a Professional man at all.

the business of the Department might be transacted with Government by a Civilian, who had no other duty, with a Chief Engineer below him. Such arrangements exist in Countries where Parliamentary duties render it difficult to employ professional Men as Heads of Departments, but as there is no such embarrassment here and as Military agency is largely employed in the Executive and Superintending branches of the Department it appears to me most convenient that the head of the Department should be a professional Man and a Royal Engineer. It remains with Government to see that he does not merge his Authority as an Engineer too much in his duties as Secretary.

XIII. In the suggestions contained in the Report of the Majority for the

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reorganization of the Subordinate ranks in the Department of Public Works I heartily concur.

The class of Masonries which it is desired to restore would be of course exclusively composed of Natives, that is of Hindoos, Musulmans, and Christians of Native birth.

In the grade of overseers it might perhaps be too sweeping a change to exclude Europeans and East Indians altogether, but I would confine them to one fourth of the whole number employed. It is believed that they may be usefully occupied at head Stations or Works of considerable importance.

Two thirds of the appointments in the rank of Superviser and Sub-Engineer should eventually be reserved for Natives of the Country and they should be admitted

directly to those grades in exceptional cases and in virtue of University degrees.

I agree with the Majority of the Commission in regarding the more extensive employment of Natives in the Department of Public Works as a matter of high importance.

XIV. The institution of pensions or bursaries in the Civil Engineering College for the exclusive benefit of a numerous class of European Student drawn from the ranks of the Army was a measure of questionable expediency. The plan originated in a laudable desire to provide an avenue of advancement for meritorious Soldiers and to secure for the Public Works Department disciplined, hardy, honest and energetic subordinates. But the project was one sided and

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in some respects unreflecting. The claims of the Native Community and the Native Army were left out of sight, nor was sufficient consideration bestowed on the peculiar position thus created for Europeans of the lower Classes. The Report has correctly indicated the disadvantages attached to the establishment. The Government cannot afford to give to European subordinates salaries which can render their existence in the Provinces independent and respectable. Poverty, isolation and temptation have had and will have in many instances their deteriorating effects. Nor will sober and honest Europeans in this condition often acquire the knowledge of languages and the conduct which are requisite to render them acceptable and influential with the people of the Country especially in remote places. I would maintain the thirty bursaries now appointed in the Engineering College and I would not

exclude Europeans from these benefactions
of Government, but I would restrict
the number of Europeans to ten, and
I would direct the Principal of the
College to present a project under
which the remaining twenty would
be filled by East Indians or Natives, a portion of whom
should be drawn from the Madras
Sappers.

XV. The present condition of the
Irrigation Works of the Madras Presidency
when compared with their condition in
past times has been the subject of much
discussion. It is not my purpose
to enter upon a detailed examination
of the question in which exact evidence
is wanting. My own impression is
that the higher order of irrigation
works such as weirs, large irrigation
channels from rivers and the
greater Tanks connected with rivers
and furnished with Masonry works
have never been since the Country
became known to Europeans in as good
order as at the present time.

The superior Science, the more
extended dominion and the undisturbed
action of the English during a long
period of unbroken peace have given
a correctness, solidity, and expansion
to the higher class of works which they
could never have attained under
Native Authority. But it is certainly
probable that Causes have been
at work which have produced a
deterioration of the Minor Works
especially of those which are not
connected with permanent and
reliable Sources of Water Supply.
The increased value of labour, the
declining authority of the land owners
or land holders, the Comparative
independence of the working classes,
the Constitution of the Public Works
Department, accepting weighty responsi-
bilities with insufficient Means, and
the complete separation of that
Department from the Revenue

Agencies of the Country have no doubt concurred in producing that relaxation in the current repair of Village works of which there is manifest evidence in many places. I admit that this deterioration is not so great as the superficial observation of a Stranger might lead him to suppose. For more of the Minor irrigation works of the Country were mistaken in their original design, or have become unprofitable from Natural Causes, or have been superseded by other works than is generally believed. Yet with every justifiable deduction on these grounds there is plainly an amount of work unperformed which the Government are bound to rectify. Even if the Condition of the Minor irrigation works was as good as it ever was before, which I do not believe, their Condition is susceptible of improvement and the improvement should be effected.

XVI. To reduce the irrigation works of the Presidency to good order it is necessary to obtain an accurate classification of them and then to procure a Competent and appropriate agency for the maintenance of the Minor Sort.

Should the grade of District Engineer be restored I would suggest that the first duty of the District Engineer should be in connection with the Collector to divide the existing irrigation works of the District into three Categories.

(1) Imperial Works.
(2) Local Works.
(3) Useless Works.

The Maintenance of Works designed as Imperial would continue to be effected as at present by the Officers of the Public Works Department and paid labour.

The local works would be Maintained by the Local Officers and unpaid Labour.

The useless works would be abandoned and the tank or Channel bed with the irrigable area would be given up to the cultivators at once and for ever at an appropriate dry assessment or relapse into the Condition of Government Waste.

XVII. The Traditions of the country, the Usage of Native States, and the practice of Zemindars on their own properties, alike attest that the duty of Maintaining the Minor irrigation works in good order is incumbent on the holders of Government land. If the obligation did not exist it should be created both in the interest of the cultivator and of the Government. It is impossible for the Government to carry out repairs of this Nature, in which the Cultivator is still more deeply Concerned

than the State, by departmental agency and paid labour over so vast an Estate as that which is constituted by the Ryotwary tenures of this Country. The occupiers of land alone can do it effectually under Government impulse and Authority. The works are either Farm works or Village works. In the case of the former the obligation should lie on the holder of the Puttah, in the case of the latter on the Village Officers representing the Commune. It stands to reason that in placing works in the Category of local works and thus subjecting them to Customary labour the Revenue Authorities and the Government would act with great circumspection and tenderness for the rights and condition of the people, but the decision having been once taken the obligation should be absolute and complete, the labour rendered should be altogether gratuitous

and the duty should be enforced by Summary legal process.

XVIII. It is the universal opinion that the obligations of Customary labour should be revised but a great difference of opinion exists as to the Manner of directing, inspecting and supplementing this form of labour, some contending for the Collector and the Tahsildar, some for the District Engineer and the Taluk Overseer.

XIX. The Majority of the Commission appear to me to steer a middle way. They would not subordinate the execution of the Customary labour works to the Collector with a Special executive establishment but neither would they make the Ryot subject to the Public Works Officer in the performance of the obligatory work. They favor some arrangement by

Which the work would be made incumbent on the land holder who would receive some form of indemnity if on inspection it was found to be well done, either in the shape of remission of assessment or direct money payment. The duty of verification or inspection would be exercised by the Revenue and Public Works Officers in conjunction.

The views of the Majority are not very decidedly stated but as far as I can judge I do not think that they could be adopted with advantage. ~~They do not seem to be necessary for the purpose of adoption.~~

I would give the duty of superintending and enforcing Customary labour to one Department or to the other plainly, to the Tahsildar or to the Overseer. On the whole I lean to the Overseer. The preponderance of argument is, in my humble

The system proposed does not sufficiently distinguish between and secure on the one hand the performance of the obligatory labour which would be necessary for the repair of tanks and on the other hand the performance of such labour as might be required for the repair of irrigation channels.

judgment, in favour of the Department of Public Works.

XX. Time has wrought a great change in the Subordinate Revenue Agencies of this Presidency. The Talooks have been expanded by consolidation. The Tahsildar has more education, a higher sense of duty, he has more work at the desk and in the Court but he has less local connection and perhaps less knowledge of the rural people and of Country matters, he is a better Magistrate but not so good a General Manager. He has no longer the crowd of Miscellaneous Agents that were formerly at his Command. All has become more accurate more under rule, less pliable less arbitrary. If the Care of the Minor irrigation

works was now restored to the Tahsildars there must be more Tahsildars and more agents under their orders. A Subordinate agency would mentally grow up an agency dealing with public works in the same area if not for the same objects as the agency belonging to the Department of Public Works. There would be conflict and waste of power and the efficiency of the Tahsildar might suffer in reference to one branch of his duties while he might be only half competent for the other.

XXI. The Department of Public Works on the other hand if strengthened by the restoration of District Engineers by the introduction of a greater number of Native Subordinates and by

the reestablishment of the class of Maistries on a liberal scale would appear to be competent for the charge of the Minor irrigation works, for the direction of Customary labour and for it's enforcement in case of negligence by the prosecution of the Offenders. The Revenue Agency in the performance of this duty might be more agreeable to the people, but the other appears to me best calculated to attain the end desired, and I can only hope that under a better constitution of the Department it would be supported by the Cooperation of the Collector and his Subordinates.

XXII. The Obligation and the Sphere of Customary labour having been defined and the directing Agency determined the Question

arises whether the Government should be empowered to Commute the obligation to render customary labour into a Money payment in the interest of the Cultivator. For the present the Government ought not to manifest any desire to substitute a Cess for a labour claim. Such a course would provoke suspicion. There can be no mistake about an Obligation to work. If the work is rendered it is seen and the benefit is felt. It can be imposed at times when it causes little hardship. But an Obligation to pay is generally obnoxious, when the work is done the result is not obviously proportioned to the exaction, and it may be feared that the paid work would sometimes not be done, or it would be done too late. I do think however

that with the progress of Society a commutation of Customary labour for Money payment may in some parts of the Country become desirable and I consider that the Act should empower Government on the representation of the Collector of the District to substitute an irrigation cess for unpaid labour.

XXIII. Having thus briefly stated my opinions with reference to the main points brought under the consideration of the commission, the Constitution of the Public Work Department and the agencies by which the Minor Irrigation works of the Presidency should be repaired and superintended I append a plan of the Public Works Establishments prepared

in harmony with these views which would involve an Annual expenditure of £ 22.52.637. X

It is true that an exact and definitive Scheme of Establishments can only be framed in conformity with the wants which experience may disclose but I do not see that any Material deviation from such a plan as that which I have ventured to suggest need occur except with reference to the Number of Maistris entertained in connection with the Minor Irrigation Works.

XXIV. The Commission have strongly affirmed the expediency of retaining a percentage of receipts from Irrigation as a first Charge on revenue for the purpose of effecting repairs and minor improvements on irrigation works not maintained by customary labour

X involving an excess of Rs. 2.93.263 over the Public Works Establishments of the Presidency which involves an excess of Rs. 59.34.0. The ways & Establishment attached to the local Funds is to be regulated with a view to the gradually reduction by the future gradual substitution of cesses for unpaid labour in minor irrigation works.

or provided for otherwise. This percentage which would never reach the Imperial Exchequer is ~~fixed~~ fixed at 5. per Cent on the Gross revenue and I understand the Commission to Mean that the full amount retained in each District is to be Spent in each District. I entirely Concur in the principle that a repair fund should be struck off the Gross revenue and retained in the hands of the Local Government and I consider that 5 per Cent is a reasonable amount to reserve for the purpose indicated on the whole net revenue of the Presidency, but I would deal with the Amount as a single fund to be apportioned and applied according to the exigencies of the Year and the wants of each District equitably considered. I would not tie the Government down to any rule of expenditure applicable to all places alike. In some Districts the irrigation works are now in a worse condition than in others, and in some the percentage of revenue requisite for current repairs will always be greater than in others owing to natural causes, while occasionally there will be Catastrophes in particular Districts, like that of last Year in Tinnevelly, when the District Repair fund would not be sufficient for a pressing need. It appears to me that the general repair fund should be at the absolute disposal of Government which would however make as equal a distribution to the several Districts as possible.

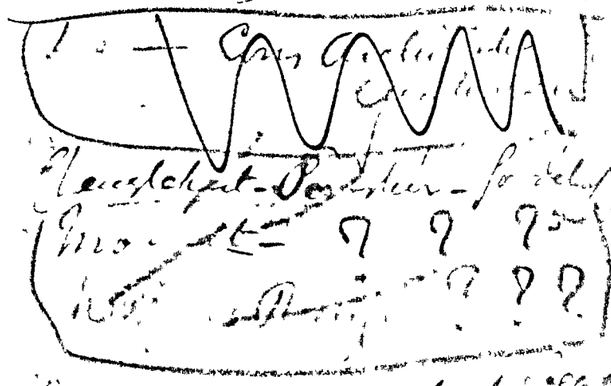
XXV. It does not seem desirable to extend the obligation of Customary labour or the Authority of the Revenue officers to the Maintenance of village or district Roads. The

former measure would be an innovation on popular custom and inconsistent with the levy and application of the road cess. The latter would involve the institution of double establishments and burden the Revenue officers with duties which could be efficiently performed by the Department of Public Works. Would the Office of District Engineer be restored.

I am Sir
Madras. June 10th 1870.

Eq Corps

Cavalry Corps



Statement of the cost of the present and proposed Public Works Establishment of the Madras Presidency

Present Establishment	Rate	Monthly	Annually	Total under each head	Grand Total
Direction					
1 Secretary to Government		2500	30000		
Office Establishment for Secretary		2533	30396		
Contingencies		50	600		
1 Chief Engr & joint Secy to Govt Irrign Dept		2000	24000		
Office for Do		500	6000		
House rent for Chief Engr & joint Secy to Govt Irrigation Deptt		60	720		
Travelling allowance for the Chief Engr for Official Purposes		166⅔	2000		
			99716		99716
Suptg Engineers					
5 Suptg Engineers 1st Grade		1600	4800	11050	132600
		1350	4050		
3 Do Do 2d Do		1100	3300		
2 Do Do 3d Do		1100	2200		26400
Office Establishment			5499		65988
1 Consulting Architect			1200		14400
Military Allowances			4		4000
Office Establishment for 5 Suptg Engrs			6499		77988
Office rent for 5 Suptg Engineers			233⅓		2800
Travelling allowance for Do			300		3600
Batta for Office Establt of Do			1200		14400
			312		3744
Office Contingencies for 5 Suptg Engrs		30	240		2880
Official Postage			1500		18000
					261528

Proposed Establishment	Rate	Monthly	Annually	Total under each head	Grand Total
Direction					
1 Chief Engineer & Secretary to Govt		2500	30000		
1 Do & Under Do		1500	18000		
1 Office Establishment for Secretariat		2533	30396		
Contingencies		50	600		
1 Consulting Engineer for Irrigation		2000	24000		
Office for Do		500	6000		
House rent for Chief Engineer & Consulting Engrs for Irrigation		120	1440		
Travelling allowance for Chief Engrs Official purposes		166⅔	2000		
					115436
4 District Engrs 1st Grade		1500	6000	72000	
4 Do 2d Do		1350	4050	48600	
3 Do 3d Do		1100	5500	66000	
5 Do 4th Do		900	6300	75600	
7 Do for Bangalore & the Neighborhood		700	1400	16800	
2 Do			1200	14400	
1 Consulting Architect			1200	14400	
5 First class Dt Office Establishment		463	2315	27780	
6 Second Do Do		352	2112	25344	
8 Third Do Do		317	2536	30432	
2 Fourth Do as at present			560	6720	
Office Establishment for Consg Architect			270	3240	
Office rent where required for Dt Engrs			400	4800	
Travelling allowance for 25 Dt Engineers		125	2500	30000	
Batta for 20 Office Establishments		25	500	6000	
Carriage allowance to Consg architect and Dt Engineers, Bangalore		50	100	1200	
Office Contingencies for 22 Officers		20	440	5280	
Office Establishment				18000	
House rent for Dt Engrs Residency and Chief Asst & for Consg Architect		60	120	34440	
Total Direction				115	1380

Present			Rate	Monthly	Annual	Total Grand
						Total
3	Executive Engineers	1st Grade	2nd Rate	22.50	267.000	
8	do	do	2	do	950	~~5700 6650~~
21	do	do	3	do	800	~~6400 7600~~
9	do	do	4	do	650	~~5200 6240~~
					550	~~4950 5940~~
1	~~34 Sub Engrs~~	~~1st Grade~~			1250	~~12500 15000~~
10	~~do~~	~~2nd do~~			700	~~7000 8400~~
4	~~do~~	~~3rd do~~			200	~~1000 1200~~
	~~Military allowances~~					
4	Sub Engineers	1st Grade		400	1600	19200
3	do	2	do	300	900	10800
7	do	3	do	250	1750	21000
15	Superintendents	1st Grade		200	3000	36000
26	do	2nd do		150	3900	46800
187	Overseers		do		11220	134640
1	Mechanical Engineers				720	8640
Petty	Establishment					1400
Contingencies						1000
242	Office Establishment				22378	268440
						142902
For Rangoon Office Establishment						
Minor Establishment						56376
& Petty Contingencies						
Pay Proper of deceased Officers						9600
Military allowances of Subordinates						23333 1/3
Military allowances of Subordinates						28000
Presidency Establishment to Exc Engineers						
and Executive Subordinates					175	2100

1	Executive Engr for the Presidency			700	8400	
15	Asst District Engrs	1st Grade		600	9000	108000
16	do	2d	do	500	8000	96000
16	do	3d	do	400	6400	76800
12	Probationary Asst Engineers			250	3000	36000
7	Sub Engineers	1st Grade		300	2100	25200
13	do	2d	do	250	3250	39000
15	do	3d	do	200	3000	36000
27	do	4th	do	150	4050	48600
40	Overseers	1st	do	100	4000	48000
60	do	2d	do	80	4800	57600
87	do	3d	do	60	5220	62640
90	Maistries	1st	Grade	35	3150	37800
145	do	2d	do	30	4350	52200
205	do	3d	do	25	5125	61500
2	Mechanical Engineers				720	8640
	Office Establishment					
For 21 officers to be employed on General & Special duties				98	2088	24696
For 12 Probationary Asst Engineers				35	420	5040
For 1 Exc Engr at the Presidency as at present						~~4952~~ ~~5424~~
For 6 Rangers as at present						11230½ 134766
For 2 Sub Engrs for the Presidency				27	54	648
For 67 Overseers as at present				27	4509	54108
Pay Proper of deceased officers						8000
Military allowances of Subordinates						30000
Presidency Establishment to Exc Engrs and Executive Subordinates					115	1380

50 per cent increase for Myvad Office — 610 — 7,320

Travelling allowances & Batta to

Office Establishments		2,16,884
Contingencies ~~and official postage~~		~~10000~~ 13650
Establishment		
Lithographic ~~Department~~	968	11,616
Contingent allowance	50	600
~~Stores Department~~		~~6216~~
Temporary Establishments		50,000
Civil Engineering College		40,250
	22½	270
Total for Construction		11,46,350

1 Controller of P.W. accounts	1600	19200	
1 Dy do	550	6600	
Presidency House rent	105	1260	
Travelling allowances		6000	
Office Establishment	3840	46080	
do Contingencies	50	600	
		53740	53740
Establishments for ~~Conservancy~~		94590	94590
Grand Total			1,53,1

Abstract

	Rs
Direction	
Construction	11,5,,60
Accounts	
Conservancy	14,5,,0
	1,,3,,1

Special allowance to the Myvad Establt — 5000

Travelling allowances & Batta to

Office Establishments		231020
Contingencies and Official postage under all heads		1292.60 ~~12960~~
Lithographic Departt as at present	968	11,616
Contingent allowance for do	50	600
Store Department as at present		10446
Temporary and Survey Establishments		50,000
Civil Engineering College		40,000
Total for Construction		11,27,964 ~~11,,,,,~~

1 Controller	1350	16,200	
1 Dy do	550	6,600	
Presidency House rent	105	1,260	
Travelling allowance	166⅔	2,000	
Office Establishment	3840	46,080	
do Contingencies	50	600	
		9000	27740
Establishments as at present		60,650	
		96089	
Grand Total			24,74,985
			21,74,66

Abstract

	Rs
Direction	~~54,8,,,,~~
Construction	5,70,07½
Accounts	~~4,68,,84~~
Conservancy	92740
	96,089
	~~24,74,985~~
	21,74,66

ages in the ~~District~~ Imperial
District with the Superintending

Box 25
No 188.

I have very carefully considered
the Report of the Committee, and
the subsequent evidence taken by
them on the different subjects of
their enquiry. The recommendations
of the Com.ee are based on a com-
prehensive, which however did not
avail to secure unanimity.

On the important question
of the future organisation of the
Dept.t of Public Works, the recommend-
ations of the Committee viz. 1/ to appoint
a District Engineer to each District
to Side and District with Executive

apee in the ~~District~~ Superintending
Engineer's Circle, the Superintending Engineer

Rangers, each in charge of an Assistant or other subordinate, to establish the number of Superintending Engineers and to control the Debt in the Chief Engineers and is the Executive a Member of the Board of Revenue and to have the other duties of Special Officers as Superintendents of Irrigation - of the Executive Engineers and Professional Assistants and Sanctioning the Establishments of the Revenue Officers of Superintendents in the Service of the Secretary to Government - The Commissioner has framed a detailed scheme of the Establishment required, but states that if only an annual allotment of 19 Lacs will be given for the Irrigation

His Lordship concurs in the recommendations to direct the selection of District Engineers and to establish the grade of Superintending Engineer - His Lordship would consider the Controlling Engineer for Railways - the Chief Engineer for Irrigation - the Civil Architect and Chief Engineer for Communications - Irrigation Civil Buildings - leaving the control of Military Buildings to the Chief Engineer Secretariat to Government - His Lordship would make no change.

I am sure he to this Board which we should be glad to support both the establishment of both

Engineers & the revisal of the Office of District Engineer. Experience has shown that at the Ports for the Engrs are for to keep & submit for their exercising any effective control or supervision. It is the Officers duty in practice the Engrs & Public Works under the Engineer of the Province Immediately District - and the lately has not had occasion of a single Officer in Honduras - And the Post to serious disadvantage of attaching Engrs is the isolation from the Public Works under Orders as noticed by H. E.

Work which connecting with this subject in addressing the Public Works Officers of the Province to Engr I cannot

4.

agree in the Official superintendence & Direction of the Public Agencies. It seems to me essential that the Post should have the means of knowing how the District Engineers are performing the duties entrusted to them and I cannot think the occasional visit of the Provincial Chief Engr would adequately answer the purpose - The Chief Engineer duties of these Officers necessarily keep him at Head Quarters near the Port and certainly on Engineer Inspection & Communications throughout the Republic it would be impossible for

ment - he sees the necessity of

private Communications the Provincial De-

the Consulting Engr. for Railways, the Chief Engr. for Irrigation (who is also joint Secy. to Govt.) & the heads of Executive Officers directly under his immediate orders. The Engr. Scheme & Estimates Executive Engrs. — the Commissioner in Command 2. Assuming that these Officers are restricted to the duty of executive heads of important circles only — and sending the District Engrs. with their subordinates, [illegible] it is not unlikely that there may be three grades of pay about the rise of England, with facilities for steady locomotion —

[illegible] Secretary of Executive Engineers as [illegible]

[illegible] to which [illegible] his Lordship in advocating the ability of the Officers of the Executive Engr. I cannot

the former by class of pay District Engineer I need say little in support of his Lordship's argument. It is in my judgment an established fact of first administration — that at the stations after change, many be made efficiency will be kept to be secured. The particular [illegible] of service in favor of this by class is [illegible] originally [illegible] suitable [illegible] in the Punjab — and the daily [illegible] in the Civil Service. His Lordship has taken [illegible] pay as a station — and Canada in the Province. The position can be [illegible] ment — he see the [illegible] private Contractors the [illegible] de-

I deduct deducting from the principle
the Revenue will be capable and while
four keys: & one Custom & District will
be deprived of its advantages of the
system - It must be remembered too
that since the Commissioners reported, the
Local Funds last two years in Existence
and a part in credit of which will be
stopped, as the Parliament. The Bills - which
in fact are only a Talook - will be brought
forward in the ensuing Spring, & might
be omitted in the Committee - but every other
District should, I am thank, bear its Expen-
the variations in which will be subject
met by Differences
in Commissioners. The
will not be an Exci
Officers as now

Mr Keble

his Individuals in addressing the Public
of the Officers of the Revenue Establishment Esqr I cannot

Old Notes Ref.

3/

I think it may be necessary that he
should be the auditing officer of his
circle. The respective attestations being
afforded to him for the Purpose. The
present system of leaving the Audit
to a Central Office in London is
practically useless. to for an Expenditure
or work is Concerned - As a Matter
of fact the misapplication of Public
funds - such as have occurred in
Ireland for instance - is seen or can
be detected by the Office. and for the
Purpose of check it might as well
be located in London - If I am not

Mr.

ment - we see no

Private Communication the Inspector in the de-

Mr Talbot the Accountant of the Treasury
District in which the Records
were examined and had an Extensive
Scale were considered safe Debtors
The Central Office should combine
the accounts of the Residencys &
and Salaries & other similar charges,
and the Audit of the Revenue Returns or works
being entrusted to the District Engineer
who ~~to~~ his local knowledge in which
which during becomes a kind
of arithmetical process.

As regards the general condition
of the debt and its relation to the

Mr Talbot ...
His Lordship in addressing the Public
of the officers of the Inland Revenue Engd I cannot

Road Debts I cannot confess that I see
the reason to change the views expressed
in my Minute of 1869 - which form an
Appendix to the Report - 65X

One of the most prominent
defects of the present system is, in my
judgment, the want of a "Head" de-
partment to Parliament it has been found
essential to vest the Supreme Executive
Control in some body or person and I cannot
understand why the Debt of Public Works
should alone be exempt ~~exempt~~ made an Excep-
tion. The Police has its Inspector Genl - the Revenue
Debt has its Board - the Medical Debt has
its Inspector Genl - every Debt in short
save that of Public Works - which can Exam-
ine every Expenditure in Execution Instruc-
tions - he sees the ...
private Contractors the two Provincial De-

all discussions & Experiments Engineers have a Department & Head to manage & control its Operations and agency. The Plan of uniting Military & Civil functions in the Duties of a Secretary of State has not answered in this Presidency, and, I feel sure, can never be made to answer. The late Lord of first Secretary of State at Chief Engineer - the Duties of the latter office conducted on the 8 Superintending Engineers - do not any thing like so extensive agency & control has been lost - Nor could any attended this arrangement - the first Secretary of State became a more effective Controlling Officer & could be more personally cognizant & more responsible for every act of

Mr Thomason

His Lordship in addressing the Board of the Officers of the Engineering Establishment I cannot

4/ his own in a different Capacity. It is hard to understand what right different from a Native should be united in the same - or how it could be expected that their union could be for the Benefit of the Public Service. As Secretary he is merely a Ministerial Officer - a Clerk - his duty it is to lay for King's Consideration before the Council any decision & to draw the first bill in the Financial Department & he is responsible for its correctness & accuracy & the decisions of the Chief Engineer he is an Executive Officer to carry them into effect - he has no control over the Superintending Engineers the Superintending

his Large Houses, and besides the
for his Residence of them to the first
Class The Premises which he has broke
the work which he has accomplished
his Successors & his Pioneers - it is duty
of the first & his Assistant Staff of first - and as
such Staff to take the orders of the first &
communicate them of their Staff and
carry them out as Chief Engineer - this
acts as Chief Engineer may be a Colonel
of the first - and the Staff Officers of
his orders Director Chief Engineer or the
may be Lieutenant Colonels and the Staff
may to
then Consider themselves - An exceptional
Chief Engineer - from Case of Colonel Civility
may attend himself & his first

Work which Concerning in the
his Lordship in addressing the ability
of the Officers of the Engineering Staff I cannot

in an Engineering Division towards the
other - while a Colonel or other Chief Engr.
may [illegible] direct himself of the
Detail - by ingeniously drawing the
first into every thing - The Duties of the other
Officers are wholly in case of a Battle -
and the result of the Engagement must be -
as soon it has been - satisfactory in
the Defence. The first duty of the
the Dept is to work hole - it must
have an Officer standing in the same
Relation to it as the Colonel does
to Police or the Inspector Genl of Police
of the Police Force. I will then
state my Views first to Consult the
Chief Engr of Irrigation in to the Hands to
of the Dept and give him Executive
sient - he see in [illegible]
Private Companies the Superintendent de-

a seat in the Board of Rev. will be found the best arrangement. It will place at his command the valuable information & influence which the Board possess - and will prevent the harmonious co-operation of both Depts. But whether this plan or the ~~Chief Engr.~~ Chief Engr. be considered a separate & independent office I am confident that at the Dept. absolutely requires an Officer at its head whose duties shall be restricted to the Direction & Control - the duties of the Sec'y of the Dept. being performed by a Clerk

Mr Kelly concurring with his predecessor in advocating the abolition of the office of Superintending Engr I cannot

57. the S.P.W. in the Secretariate should again be entrusted to the Asst Engr with the aid of Engineer Officers. I made a similar proposal in my minute. If the plan be adopted of placing the Dept under the Chief Engineer, as its responsible head, the necessity of giving the Chief a professional adviser - as he is - is removed. The Chief Engr ought to be the absolute Officer of the Dept and be the professional point to it is on his advice that the Dept should rely - not on the advice of an irresponsible Secretariate. Committees the less professional de-

-cretary. To constitute the Legal
the professional adviser of the
Pat. is in fact to supersede the
Head of the Dept. and to make
their Legal servant Pat. into
virtually its master - or at least colleague, for
as the Pat. can by professional knowledge
knowledge it cannot make up for being
led by its Legal Pat as private
individuals are accordingly led by
their legal or medical advisers. It is
a great mistake for a Pat. to assume
executive functions - and when a Pat
consists of several in this case the

Mr Childers concurring with
his Lordship in advocating the abolition
of the office of Chief Engr I cannot

exercise of such functions is practically impossible - A Pat. cannot be its own Engineer - any more than its own Lawyer. I admit I know that much may be said on the other side - in favor of a separate & professional Secretariate - and if the control of the Dept. be vested in a Chief Engr. associated with the Board of Revl I should be inclined to fix the ~~of~~ Board. As regards the relations of the District Engr towards the Col. I see no reason to change the views I expressed in my Memt of 1869 - Experience since then has confirmed my opinion - we see in numerous cases - private Companies the professional de-

the Chief officer of the District in his
first petition & it has nothing
[illegible] in it. The professional working
Engineer will not be under the orders
of the Collr. - any more than the Supt.
of Police now is - his duties & relations
is no more than must be, if the following
~~to the Public~~ the training of Experience to main-
tain one Chief Administrative Officer
in each District. ~~Without explaining~~
There is nothing
~~that~~
novel or anomalous in this arrange-
ment - we see in Municipalities &
Private Companies the two functional de-

[illegible] that is the best
[illegible] the chief authority in the Collr
[illegible] Magte & he is responsible & the head
[illegible] on the professional qualifications of the Supt. and
[illegible] ~~to the~~ ~~Superintendence~~ ~~of~~ ~~Police~~ ~~establishment~~
[illegible] functions of the two officers [illegible]
[illegible] with them - The Police have a standing
[illegible] the relations to the Magte on that subject
[illegible] to assign to the Engineer.
[illegible] Supt. Dept. has charge & Control of
[illegible] which is under study & success.
degree of subordination which it is
[illegible] to assign to the Engineer is not
[illegible] than is necessary strictly to [illegible]
[illegible]

[illegible] which concerning in the
[illegible] Jurisdiction in addressing the public
[illegible] the officers of the Engineering Dept. I cannot

-cretar...

h- there that in the Presidency t-
t-element there introduces in all
t-ht professional work- the inspec-
t-fessional. The arrangement will be
a-turally enough be unfeelingable at
f-st- but I am sure it will be found
the best for the public interest. As
reports special work such as there
enumerated by this Lordship no diffi-
-culty need be experienced, for they
can always be entrusted to selected
-d officers. The great bulk of the Ex-
a-ditions will however be on Canal
Di-fficulties work- & that the expen-
-ses of a Chief Engineer, his assi-
-stants, & Establishment of Draftsmen
found in the Country in charge of Canals
which will be available from the Service
for the new Canal Irrigation Act- which finds
will be working right to the extent of the Local
Boards by which the Colleges will be the
Presidency- In addition to work executed
from the Loans- the Director Engineer
necessarily occupies a position of the
-portance of the Chief Engineer of the Board
of Revenue & must be a person of
intelligence in the Execution of the duties
which the Commissioner knows best to attach-
I mean the effect which the new System
of regarding the Land Revenue as a Tax instead of
Service & permanently exchanges between

-cret.

how shall that in the Presidency of

Engineers
between Officers in India & those who must
have an the interests of the country. Must
the old by when the Indian Battalions
of the Engineer Corps raised & established
in India during the while period of
their service - Entering in their Rules
while young - they acquired knowledge
of the languages and familiarity
in the the humble feelings & character
of the people - and looking on the
country in their home for during their
official career - and the Engineers
I trust know can be formed upon
by you how knowledge of the con-

7. The laws by when the
a Post Campaign - when the
in the Indian Service at the
age when the acquisition of
Campaigns is difficult - the
short duration of their tour of
Service will prevent the same
interest being felt in the early
& the habits - and the Engineers
formed will be consequently
lost - of the superior attain-
ments and if knowing & &
Should it the position "value" has.

pa.

fully & really of the
Officers of the Corps of Royal
Engineers, these cannot be
doubted or questioned - but under
the Civil Law they can be remedied by some
change in the Superintendence
it will be proper or right to
be called upon to consider - it will
be necessary to consult the
Lord Lieutenant of the County &

maintain the Corps at a strength
sufficient to the Military
requirements - and also to enquire
can be advantageously utilised
in Civil Duties.

I see under Law to
a Householder can distrain
- Bailiff in carrying the Law
- Powers of the Commissioners
in regard to "Rural Nuisances
- Paint." Times have changed
since the System of Compulsory

pa.

1791[9]

F. W. Jun. 12. Sept. 1/11
L.L. 186 & 188

patentees Lives Existed - and
a general Principle it seems
has very frequently been
attempted to be laid down
which has a Right Conduct to
Guide -

On the other hand to Di
minish the Confidence
agreed with the Commissioners

L. P.

186 & 188

Public Works Dept.

No. 2318.

Proceedings of the Madras Government,

Read the following

Minute by the Right Honorable the Governor } Fort St. George dated 10th May 1871

From Honorable A. J. Arbuthnot " 19th May 1871

" " D. D. Cunn " 13th May 1871

Ordered that the foregoing Minutes be recorded.

No 2319.

To

The Secretary to the
Govt. of India. P.W. Dept.

Sir,

I am directed to submit the report of the Commissioners appointed to enquire into the working and reorganization of the Department of Public Works together with the Minutes of His Excellency the Governor and the Hon'ble Members of Council and the Resolution describing in details the organization which this Government have decided on recommending for trial. I am to

I must submit this
A.P.

A.P.

S.41. 11 Sept 1871 Ln. No 186.

briefly notice the more prominent objections to the existing system, and the local circumstances which prevent the adoption of an organization entirely in accordance with those principles which it is known have the approval of the Government of India for other parts of the country.

2. The Government of India are aware that the existing organization corresponds in a great measure with the departmental arrangement in (other parts of India) that is that this Presidency aggregating

aggregating 19 Collectorates, is divided into eight Divisions each under charge of a Superintending Engineer, the Each Division consists of an average of two Collectorates (in some cases three) and each Collectorate is subdivided into from 3 to 7 Executive charges, locally termed Ranges, each in charge of an Executive or Assistant Engineer or of an Upper Subordinate, that is a Sub Engineer or a Supervisor, the officers holding the most responsible charges and the subordinates those of less importance either from extent or the nature of the works in progress, (but they having equal powers and responsibility, each in his own

Collectorate = Division
Three or four Collectorates = Division

the next

but all Range officers of whatever class have the same powers and responsibilities in their

Ranges are alike directly in communication with the Superintending Engineer as regards the designing and execution of works, and with the Controller in respect to the accounts to whom they are forwarded without the intervention of the Supg Engineer or any other departmental Officer.

By this arrangement it was intended that the control of the accounts should rest with the Accounts Office, and that of the works with the Supg Engineer.

3. Owing however to the very great area comprised in a Superintending Engineer's Charge it has

* in the Division over which the Superintending Engineer has charge

restricted ranges

been found practically impossible for them to visit all parts of their Divisions as frequently as is necessary to ensure a proper supervision of the works in progress, and as a natural consequence, being unable to visit all, they have practically been in the habit of giving their chief attention to those Ranges in which the most important works are being carried out and the largest expenditure incurred, while those very Ranges, being in charge of the Officers of the Engineer Establishment, are in some respects those in which there was least need for general supervision.

and Recent disclosures in Tuticorin where one of the oldest and best of the Sub Engineers has been discovered to have been engaged in an extensive system of defrauding the Government by collusion with Contractors, and been convicted in the Sessions Court of fraud and sentenced to five years imprisonment transportation, has convinced this Government that some change in the organization by which the Executive Agent will be brought under close departmental supervision is absolutely necessary.

In drawing up a

Turn over

most experienced

"and since this
has been "proved in court
is not used in any "work".
Strong reminds the
Committee of this fact.
I would say
"Having found the
conviction which for some
time past has been entertained by this Government
and by the whole superior
officers both of the
Civil Dept. and the
Marine Dept. in this
Presidency."

for the sake of a general
uniformity.

The proposed Subordinate Civil Branch comprises the several grades of Subordinate Engineers Executive Engineers and Assistants.

scheme that would supply this want His Excellency in Council would have been glad if it could have been managed that Superintending Engineers, Executive Engineers and Assistants should form Members of the Establishment but there is such a remarkable preponderance of evidence in favor of a District Engineer for each Collectorate being the local head of the department, and this Government are so unanimous in the opinion that no other organization is to be called suited for the requirements of this Presidency, that it has been decided not to provide any Supt Engineer but that the

unit.

but for the time having arrived at the conclusion that it is expedient to unite the grade of Superintending Engineer and to place

District Engineer should be in direct communication with the Government. The plan of having the local head of the Department in each District an Executive Engineer who should be subordinate to the Engineers of Divisions as at present has been suggested, but there is the one fatal objection to it that the Dist Engineers would be virtually the head of the Department in the Provinces and while in proximity to the Collector of one of the Districts comprising his Division, would be (prevented) by never seen by the others which is one great source of complaint on the part of the Revenue authorities. With these

at the head of the P. W. Dept in each Province a District Engineer shall be in charge of his district and shall communicate with the Administration Board of the District and as professional subjects is to be assigned shall act with the Chief Engineer & Secretary to Government of the P. W. Dept

[illegible] be [illegible] operation in N

preliminary remarks I am to describe the scheme which this Government under all the circumstances of the case consider the one best calculated to remedy the existing defects as follows.

I. That the head of the Department shall continue to be Secretary to Government, but that he shall also be Chief Engineer, and in that capacity be responsible for the designs which he submits to Government for sanction, while the proper execution and properly working of the works will rest with the District Engineer, and it will be the duty of the Chief Engineer in laying projects before the Govt.

to express his own views and opinions on the merits or demerits of each.

II. That a Consulting Engineer for Irrigation shall be substituted for the present Chief Engineer and Joint Secretary to Govt. if it seems to His Excellency in Council an anomaly to have two Chief Engineers at the head of a dept. which from the peculiar circumstances of the Madras Presidency can have no divided [illegible] the other, and there is practical inconvenience for the same reason in having a Joint Secretary.

3. By making the Chief Engineer

while

in connection with the Department

minor a recurrence

Consulting Engineer for Irrigation, the Govt. will retain all the advantage they now have in his careful examination of projects and his close personal supervision of their execution by frequent tours of inspection, and he will still be available for personal consultation in the Council Chamber, when desirable.

III. That the rank of the Supt. Engineer shall be abolished, and that in lieu thereof a District Engineer shall be appointed to each Collectorate. The re-appointment of District Engineers will be restoring to the system which existed prior to the reorganization of 1903, a system which never had a fair trial, and which so far as it related

only to the District Engineers themselves was formed to work well (and which) it is believed, when somewhat modified according to the experience that has since been gained, is the only plan that, taking all the circumstances of this Presidency into consideration, will enable the working of the Dept. to be efficiently controlled. The reappointment of District Engineers will bring the local head of the Dept. into constant and intimate communion with the Revenue Officers of the District, and will, it is confidently hoped, provide that co-operation between the two Depts. which

is

The want of this harmonious action between the Officers of the two Departments is a defect in the present system of which the Govt have the deepest sense and which it is impossible to remedy without circumscribing their respective duties to the same territorial limits, and thus identifying them with the same interests and imposing on them the habit of [illegible] intercourse and consultation.

N.B.

especially on those of the inferior grade N.

is so essential to the interests of a district (but which was unattainable where there was no interference like pride between the Range Officer and the Fire Engineer, whose protracted absence from the District while occupied in other portions of his large charge, prevented his having perennial communications with the Collector - & would also provide a more effective control over the Range Officers who, while having a responsible and to a certain extent an independent charge, should certainly not be left without much more frequent professional advice and supervision than it is possible for a Fire Engineer

in charge of two or more Collectorates to afford

The District Engineer it is intended shall take the place of the present Supt Engineers and he will exercise the same powers as they now do. ~~and with the~~ Proposing a ~~the~~ more limited charge. ~~and~~ aided in the majority of Districts, ~~with the personal~~ by ~~aid of~~ an Apt. District Engineer, and (seeing that his duties will be entirely of the nature of superintendence) the works in progress will receive a degree of personal attention and supervision (from experienced officers) that has never been before attainable.

entrusted to the duties of superintendence

this officer will be enabled to give to works in progress

IV. That there shall be one Deputy Chief Engineer and Under Secy. to Govt. in place of the Under Secretary lately added to the Govt. Office. This Officer is not intended to have any separate office Establishment or district charge. He will be associated with the Chief Engineer and Secretary in this Department taking a share of the general business, but chiefly employed in assisting (them) in examining plans and estimates sent up by the District Engineers. (of whom as there are 21 to) take the place of the existing eight Supt Engineers it must be expected that many projects will reach the

the Heads of the Dept

as two of the Officers of the latter class will

and will be subject to as intermediate execution or control

Govt. Office in a much less perfect state than at present, and it would not be practicable for one Officer with all the other business to attend to, to deal satisfactorily with them. It is also necessary to provide for the occasional inspection of works by an Officer of standing and independent of the District Engineer as in the case of Irrigation Works now by the Chief Engineer for Irrigation and who will be styled Consulting Engineer for Irrigation.

V. That in lieu of the existing Executive and Assistant Engineers a

It would manifestly be impracticable for a single officer burdened with other duties, to apply to such a mass of designs the accurate scrutiny and analysis which the Govt would have a right to expect and which could alone save them from unprofitable expenditure. Occasions would also probably occur when it might be expedient to enquire into and report locally on the inspection of important building works or road works in progress under the authority of the District Engineers and for this purpose the Govt might have at their disposal an officer of tried ability fitted to inspire confidence and respect. The Deputy Chief Engineer & Under Secretary to Govt would in the performance of such functions occupy a position analogous to that which would be held by

The Consulting Engineer for Irrigation in his appropriate sphere of duty.

V.

Ganjam.
Vizagapatam.
Trichinopoly.
South Canara.
Kurnool.

number of Assistant District Engineers shall be appointed 47 in all, inclusive of 12 Probationary Apt. Engineers.

Of these 47, 26 are intended to be employed in charge of the minor irrigation Ranges. It will be for General Duty as Assistants to the District Engineers, being one for each Collectorate omitting those as per margin for which no General Assistant has been provided, while 21 Assistants are retained for special duty with the 26 Assistants in charge of Ranges do not need description. They are the

Non ms

have as (are) discharged by Executive Engineers in other parts of India. The Sr. for general duty are intended to be employed as ~~district~~ Assistants to the District Engineer either in ~~general~~ supervision of a distinct portion of the District such as ~~day~~ the Sub-Collectorate, or generally throughout the District at the District Engineer's discretion. They will have no office establishment beyond what is necessary to aid them in preparing reports on ordinary projects, and it is not intended that they shall have anything to do

1 c Supra dele

with the preparation of accounts. They will be employed in inspecting and reporting on works in progress and ~~works~~ proposed in aiding the Subordinates in charge of Ranges by their advice in preparing plans and estimates of works ~~to be executed~~ and examining those prepared by Subordinates, and it will be a very important part of their duty to exercise as close a supervision as is practicable over expenditure by a careful examination of Station books & Vouchers in the course of their frequent tours, and when an opportunity offers the

monthly measurements of work done on Contractors. Certificates should be verified and Completion Certificates under similar circumstances be signed by these Officers.)

VI: That the existing system of Ranges as Executive Charges shall be continued each under charge of a member of the Engineer Establishment or of an Upper Subordinate, the appointment of a 1st Class Overseer being allowable when necessary and who on the higher salary of Rs 100, larger travelling allowances, and the aid that is now provided

It will be incumbent on them to verify the monthly measurements of work done on Contractors certificates and to sign completion certificates granted under similar circumstances. —

such an arrangement becomes indispensable. The Govt. thought not unreasonable that the disadvantages attached to these promotions must that selected Officers of the class referred to when entertained on the higher

salary of Rs. 100, supplied with commensurate travelling allowances and subjected to the close supervision of the District Engineer or his Assistant, may be found available for the efficient performance of the higher duties exceptionally entrusted to them.

Upper Subordinates

VIII That an Establishment

in the ready advice and constant supervision of the District Engineer or his Assistant, will it is expected be found quite equal to the charge.)

VII. That the Upper Subordinates shall be increased in number to make up for the loss of the Officers now in Executive charge of Ranges and who will be employed as District Engineers and Assistants in general duty, and that they shall all be styled Sub Engineers and be devided into four grades.

VIII. (That a Staff of Overseers in three grades and

in the proportion of one for each taluk shall be maintained, and shall be proportionably distributed to ~~Collectorates~~. (There to be employed at the discretion of the District Engineer and, though in the proportion of one to each taluk, not necessarily to be so allocated.)

IX. That a lower class of Overseers to be called Maistries (shall be entertained) and whose ~~[illegible]~~ sphere of duty will be very limited, (few consisting of fire work only) (shall be entertained) the number they will amount to 440 and they will go far towards meeting the want long

felt and ~~remarked on~~ specially indicated in the Commissioners Report of an adequate establishment at the Disposal of the P.W. Dept. for maintaining and Repair the numerous small works ~~scattered~~ dispersed over the Country. ~~but~~ It must not be concealed that to scattered and so numerous are these works that even this large numerical increase will be insufficient unless the willing aid and cheerful Cooperation of the Revenue Department is afforded. ~~and which~~ This result will be attained it is confidently hoped ~~that the~~ more intimate connection between the two Departments which the District Engineer System ~~ensures~~ by the calculated to

Overseers shall be mustered divided into three grades and ~~distributed~~ distributed to the several Districts in the proportion of one overseer to each Taluk. These Officers will not however be ~~recruited~~ accepted indiscriminately attached to each taluk but will be available for allocation at the discretion of the District Engineer when their Services may be most needed.—

~~will become~~ These Maistries are intended to be all natives. They will take the place of the existing petty establishments; and by having a permanent status and a definite prospect before them it is expected that as superior class of lower subordinates will become attracted to the Dept. In cases where their previous education has been such as to enable them to meet departmental requirements in examinations there will be nothing to prevent them from rising to the higher grade of Overseer. ~~but~~ The admission of ~~Christians~~ persons of Native Extraction into this Class will not be prohibited.

The duty of Maistries will afford special employment to the natives of the Country

To sum up. the Govt. proposal consists of:-

I 1 Chief Engineer and Secretary to Govt.
II 1 Deputy Chief Engineer graded as 2nd Class District Engineer.
III. 1 Consulting Engineer for Irrigation to be graded as Chief Engineer. 2nd Class.
IV 19 District Engineers for 19 Collectorates divided into 4 grades.
V 2 Do. 5th grade. for Bangalore & Neilgherry Hills.
VI 1 Consulting Architect.
VII 1 Executive Engineer for the Presidency.
VIII 47 Assistant Engineers as detailed in para 4 clause IV above in 3 grades.
IX 12 Probationary Assistant Engineers.
X 62 Sub Engineers in 4 grades.
XI 187 Overseers in 3 grades.
XII 440 Maistries in 3 grades.
XIII 2 Mechanical Engineers.

Demand for explanation in addition to those already afforded.

I. II. III. IV. (Do not call for any remarks beyond those already made) ~~except that~~ the salaries of the District Engineers have been fixed by a joint consideration of

responsibility in regards to
Area and Expenditure and of
the ~~legitimate~~ claims of ~~those~~ Officers
~~of~~ each
of Rank and Standing ~~as~~ when
compared with ~~what~~ the emoluments which
~~Same~~ Officers in a similar station
might expect
in other parts of India. ~~It~~ He
~~the~~ Office Establishment of
each District has been
framed solely with regard
to the quantity of Office
work in each ~~case~~ these words
the District Engineer's Salary
is from force of circumstances somewhat a personal one while his Office Establishment is exclusively a local one. The Salaries proposed are:

1st Class	Rs.	1,500
2d "	Do.	1350
3d "	Do.	1100
4th "	Do.	900

the present salary of a
The 1st being less than the highest
Engineer of the 1st grade. The
the salaries of
2d and 3d corresponding officers of
those grades
and the 4th being less than
the salary of a 1st Class Executive Engineer.

His Excellency in
Council feels that it may
be expected that a Superintending
Engineer's salary in any
case unduly high for a Dis-
trict Engineer whose sphere
of duty will lie of much
more limited extent. But I
am to explain that the
inability of the present
Supt Engineers to do justice
to the existing extensive
Divisions is a sufficiently
strong Reason for the change
proposed, and in reor-
ganizing the Department

and giving to the District
Engineer as extensive a
charge as one man is
deemed capable of efficiently
supervising, it would be
unreasonable and impolitic to deprive the department
~~to any considerable extent~~ of its incentives and rewards.
~~by very considerably reducing~~
~~his salary in the grounds~~
~~to a considerable extent~~. The salaries proposed
not that which is proposed are, it is confidently hoped,
is too high for the duty to at excessive if due
be done and the qualifi- regard be had to the
cations of the Officers who Salaries of the duties to be
will fill these places, performed, to the
but that they have hitherto qualifications of the
had the same or nearly officers who would be
so for much heavier appointed, to the salaries
duty, and His Excellency given in other branches
in Council is of opinion of the public service and to
that whether regard be had the ~~same~~ equivalent
to the nature of the duty in the same branch in
to be performed to the the other Presidencies. Indeed
standing & qualifications under the rates now suggested
of the Officers who would be a considerable sum will for
appointed or to the salaries some years have to be disbursed
given in other branches of to Officers as personal allowances
the service, those herein in compensation for the loss
proposed are not more which they would incur if
than sufficient, and even reduced to the regular emoluments
at the rates proposed a appropriated to these new grades.
very considerable sum
will for many years have
to be paid as personal
allowances to compensate
for loss of present salary.

~~under the other Presidencies~~

V. The Officers in Special
Charge of Bangalore and the
Neilgherries will be styled
District Engineers as they
will hold ~~the same~~ equivalent positions
They will be ~~to~~ in direct communication
~~with the Govt~~ and as Range
with the Secretary to Govt. and Officers in direct communication
Chief Engineer as District Officers. ~~relation~~ with the Controller.

VI. Does not require comment.

VII. The Officer in charge of the Presidency Range is proposed to be styled Executive Engineer as he will be subordinate to the District Engineer of ~~Thurjiapoot and~~ Madras and Chingleput Presidency.

VIII. Does not call for further remarks than that the Govt. would have to be able to provide 2 Assistants for General Duty in each District for which one only is now estimated, and one for each of the five Districts to which ~~he is at present limited~~ ~~assistants are allotted~~, and to have been in a position to require that all completion certificates should be granted by the District Engineer or his Assistant. As the aggregate expense admitted of any increase under this head.

~~The Govt are known prohibited from prohibited~~ by financial considerations from making any suggestion of increased expenditure under the head.

IX. Does not require remark.

X. As the duties of Sub Engineer and Supervisor in this Presidency are exactly similar there is no advantage in designating them differently, and it is proposed to call them all Sub Engineers.

XI. There is at present only one grade of Overseer. This ~~arrangement~~ ~~and it~~ has been found to work very badly on as much as the fixed salary of Rs. 60 is too low as a general rule, and for under such an arrangement they would have

there was no means of rewarding or encouraging deserving men who not being qualified for the charge of a Range could not be promoted to the rank of Superviser. It is proposed to ~~be remedied~~ remedy this defect by having three grades on Rs. 60. 80 and 100. respectively

XII. The necessity for Maistries is explained above.

XIII. There is at present only one Mechanical Engineer whose time is entirely occupied with the Gas Works in Fort St. George, and the want of another has been at times (sadly) felt. As circumstances such as to mention the duty of repairing which this embankment has been entrusted I am

on the Steam Roads at Negapatam and ~~Tuticorin~~ and superintending their repair, and ~~at~~ putting up the iron bridge over the Vyaree in Trichinopoly.

5. The total cost of the proposed establishment is Rs. 2,73,185 against the sanction for the current year of Rs 19,83,710 being an estimated ~~excess~~ increase of Rs 89,475, an ~~increase~~ increase which appears to be quite unavoidable if a really efficient establishment is capable of properly superintending expenditure and preventing fraud on an extensive scale is determined on. ~~And to~~ Considering ~~Measuring~~ that a greatly increased larger expenditure of local

funds ~~than hitherto~~ on
Public Works may now
be expected and that a
proportionate amount
of Rehabilitement cost
will be debitable to
Loan funds it is pro-
bable that even with
the more costly establishment
now proposed the final net
debit to Imperial ~~sources~~ and Provincial funds
~~the head of Ordinary~~ will
not be greater than in
preceding years In con-
nection with the subject
of increased charges I am
further to draw attention
to the fact that the cost
of the establishment now pro-
posed, Rs 27,73,185 and

confidently expected

Amendment
The Govt indeed engage
that there shall be
no excess of charge
to the Imperial Revenue.
N.

that which prevailed prior
to 1863 namely Rs: 16,60,000.
and to explain that the
latter Loan did not in-
clude the following items
which are now provided
in the Budget of this Dept.

Conservancy Rehabilitement	96,000
Account Dept. increase	50,000
Civil Engineering College	40,000
Temporary Establishment	44,000
Petty. in excess	36,000
Consg Engineer for Irrigation	32,000
Consulting Architect	15,000
Official Postage	30,000
Total	3,43,000
This added to	16,60,000
Makes	20,03,000

So

Under this explanation it is apparent that
~~In that~~ the real increase
in the cost of Establish-
ment now proposed ~~over~~ above
that ~~of the former Dis-~~ which formerly embodied the institution
~~trict Engineer arrange-~~ of District Engineers
~~ment~~ is only 1,70,185. ~~Rs~~ an excess caused by
~~a decrease of~~ a very general
improvement in Salaries compared with the rates that
~~ever what~~ prevailed in
those days and ~~for which~~ will ensure
much greater efficiency in the work of the Department.-
~~It~~ After a most careful
consideration of the
question by this Govern-
ment in every shape, His Excellency
in Council feels bound
to record that the only
reduction which is con-
sidered to be possible
in the ~~Estimate~~ estimate now sub-
mitted ~~is in the~~ would be in connection

number of Rangers. ~~The~~
~~the~~ Government cannot
however undertake to say to what
extent this will be practicable
and will only promise
that ~~it~~ the measure shall receive
the fullest and most
careful consideration
(and economical treat-
ment) as soon as possible
after the District Engi-
neers have been appoint-
ed and have become ac-
quainted with (the lo-
calities.)

omit

6 Intimately con-
nected with the question
of Establishment is that
of travelling allowance re-
garding which His Ex-
cellency in Council

The words of their charges respecting ~~localities~~.

N

is desirous of drawing par-
ticular attention to para
50 of the Commissioners'
report. In the principles
therein advocated the
Government wholly con-
cur, namely that half
the usual rate for each
Grade of District Engineers,
Apprentants and Sub Engineers,
should be paid as a fixed
charge dependent only on
a certificate that a
certain necessary equipment
has been maintained, and that
the other half be pay-
able as a daily allowance
whenever the Officer or
Subordinate is absent
from Head Quarters, none
being payable

for any days passed at Head
Quarters. On the other
hand no deductions
would be made on account of halts
when absent from Head
Quarters, the departmental
Superior being responsible
that the absence from
Head Quarters is properly
employed in the performance
of duty.

7. As regards enforced cus-
tomary labour the Govt.
have resolved to institute
a careful enquiry in each
District as to what work
of this kind has been
customary in order to the
further consideration of
the expediency of hereafter
enforcing the same by
legislative enactment.

This Government

has fully considered
the question of transfer-
ring the charge of Minor
Irrigation repairs to the
Revenue Authorities and has definitively adopted the
~~are decidedly of~~ opinion
that such a change
would be unexpedient;
and that it is preferable that the duty of effecting
all such repairs should
be vested in the pro-
fessional Agency. ~~Lastly~~ His
~~His~~ Excellency in Council is very favourably
inclined to the suggestion
in para 14 of the Com-
missioners' Report ~~for that~~ to the effect that
~~instructing~~ ordinary
should be entrusted to Associations
repairs to Villagers who
are willing to undertake

94 X

them on the estimates
of the Public Works Offi-
cers in preference to
Contractors. With regard
to the small tanks which
it is really unprofitable
to the State to maintain
as Irrigation Works this
Government proposes
to relinquish to State control
to abandon them, and
if they are not taken
up by private indi-
viduals to reduce the
assessment to that of
unirrigated land.

I have &c
G. Pilgrim
8/10/44

Turn over

The governor-general in Council has to state
regrets that a great delay has occurred in
forwarding the present plan for a reorganization
of the Dept.t of Public works. It will intersect the
Govt. of India that these suggestions have been
evolved with difficulty from a mass of opinions
many respects conflicting and that they represent
rather a compromise between the divergent
sentiments of the members of Govt than a
unanimous and complete concurrence. The
majority of this Government would have regarded
with favor a scheme of reconstruction which would
have united the Public works Dept.t more closely
with the existing Revenue Establishment
They have only abandoned this project in deference
to the apprehension that in claiming the
application of principles to this Presidency
radically different from those which are accepted
elsewhere they might lose the prompt realisation
of practical reforms which they deem imperfect
but which are nevertheless full of the highest
promise. The leading feature of the proposed scheme
is the re-instatement of District Engineers That is the
identification of the local officers of the Revenue and
Public Works Dept.ts in the prosecution of Public duty
and the creation of a Superintending Agency capable of
correcting errors, controlling extravagance and frequently found

this province all the members of Govt have from the
first zealously adhered as the indispensable
means by which alone the plots, corruption and abuses can be
remedied which the Govr. is after the instalment has
left these witness. In the absence of the measure here
recommended Sir I am to state that the Govt cannot
in the future without the gravest apprehension
see the existing state of things the Debt of Public works
is very imperfectly adapted to fulfil the expectations
of the Govt. & the country in maintaining existing works
in design and superintending new works in directing the
resources of the State to the most profitable objects and
in preventing a lavish application or criminal
misappropriation of those resources even when the objects
are wisely chosen. But the incompleteness of the
Debt to its present duties will be placed in a more
conspicuous light in connection with the extended
functions which it will be called hereafter. The
development of local taxation recently sanctioned by
Law will inevitably road works and building work
throughout the country in directly affect and
magnificent but defective of immense value and
high importance. The design and construction of these
works will be committed to the Department of Public
works. They are of a character which will require
the exercise of incessant superintendence and
strict economy. They will be watched by local
bodies with the greatest jealousy and extravagant
rates or defective results will produce a wide

To

The Secretary to the
Govt of India. P.W. Dept.

Sir

I am directed to submit
the report of the Committee
appointed to enquire into
the working and organi-
zation of the Department
of Public Works together
with the minutes of His
Excellency the Governor
and the late Member
of Council; and before
descending in detail into
the organization which
this Government have
decided on recommend-
ing, I am to briefly notice
the more prominent
objections to the existing
system and the local
circumstances which
prevent the adoption of
an organization exactly
in accordance with
those principles which
it-

A.

J. D.S.

I wish a brief
mention in the
Report that the
papers came to me
in circulation in May.
It is not in the packet.

A.

spread and pinched for extent. The Dept. of
Public works which has been recently
charged with the highest responsibilities to the
State in connection with reproductive
enterprises depend for material loans will
now be just as much as a general agency
in the service of the people. Should it fail to
satisfy public expectation it is certain that
claims for the introduction of independent local
Executive Establishments will be numerous and
loud. Nor would it be easy to resist them
Under these circumstances I am to state that
Govt consider themselves justified in earnestly
soliciting the assent of the Govt of India to the
scheme of reorganization now submitted. A scheme
which this Govt believe to embody a prudent
adaptation of existing agencies & institutions
to the present wants, the local sentiments
and the future requirements of the Presidency
of Madras

it is known have the
approval of the Govt. of
India for other parts
of the Country.

2. The Govt. of India are
aware that the existing
Organization corresponds
in a great measure with
the departmental
arrangement in the Govt.
of India - that is that
this Presidency appointing
Collectors is divided
into Eight Divisions each
under charge of a Superin-
tending Engineer. The
Division Engaged on an
average, of two Collectorates
but in some cases there
are three Collectorates in
a Division and each
Collectorate is subdivided
into from 3 to 7 Executive
Charges locally termed
Ranges. Each Range
is in charge of an
Executive or Assistant
Engineer or of an Upper
Subordinate, that is
a Sub-Inspector or a
Jamadar; the Officers

holding the most responsi-
ble charges and the
subordinates those of less
importance, either part
extent of the Estimates of
the works in progress
but all Revenue Officers
of whatever class have
the same powers with
responsibilities in their
respective charges and are
alike directly in Com-
munication with the
Superintending Engineer
as regards the discharge
and execution of work
and with the Controller
in respect to the accounts
which are forwarded by
that Officer without the
intervention of the Super-
intending Engineer to any
other departmental
Officer. By this arrange-
ment it was intended
that the control of the
accounts should be
with the Account
Officer and that of the
works with the Super-
intending Engineer

2. Giving Incidence to the Engineer Officers Combined in the Divisions over which the Superintending Engineer of the Circle has found practically impossible for them to visit all parts of their Divisions so frequently as is necessary to ensure a proper Supervision of the Works in progress and as a natural consequence being unable to visit all they have practically been in the habit of giving their chief attention to those Ranges in which the most important works are being carried on and the Executive Officers attend Municipal Councils, while those two Ranges, being in charge of the Officers of the Superintending Establishment

II.

Establishment the number of Engineers Reports there is Need for General Supervision. Report Increased, Directly Increased, by the most experienced of the Superintending Engineers, has been obliged to have recourse to an expensive System of Subordinate Supervision by Overseers, by Collusion with Contractors have been convicted in the Sessions Courts of fraud and sentenced to five years imprisonment. This strengthened the conviction which for some time past has been entertained by the Govt and by the most experienced Officers both of the Public Works Dept and of the Revenue Dept in this Presidency, that some change in the organization, by which the Executive Agent will

will be brought under
close departmental
supervision is absolutely
necessary
4. In drawing up a
scheme of establishment
to supply the wants of the
Executive Engineer shall
for the duties of a fiscal
Commissioner if it should
have been indispensable
that the Superintending
Medical Officer should
furnish the Annual Statistics
of Superintendents Engineers
Executive Engineers and
Apprentices total there in
find a remarkable fit
between Evidence
in favour of distinct
Engineers for each
Collectorate being the
local head of the
Department, and the
Secretariat see to
be unanimous in the
opinion that no other

other appointments
Engineers for the requirements
of this Presidency
that they have arrived
at the conclusion that
it is expedient to vest
the posts of Superintending
Engineer and to
place at the head of the
P. W. Department in each
Collectorate a Distinct
Engineer who is to discharge
the duties in close
concert with the Administrative Heads of the Districts
subjects to correspondence
direct with the Chief
Engineer and Secretary to
Government in the Department
of P. W. The plan of
placing the local head
of the Department in
each District the Executive
Engineer who should be
immediately subordinate to Superintending
Engineers Division,
Local presents has been
suggested, but there is the
one fatal objection that
that the Superintending

Inspection would be essentially the head of the Department in the Province, and while in Precedency to the Collector of the District comprised in the Division would be barely, or never seen by the Others, which is a great source of existing Complaint on the part of the Revenue Authorities. With these preliminary remarks I can, by a clear detail the Defects which the Survey under all the Circumstances of the Case, consider the one best Calculated to remedy the existing defects as follows, viz.

I. That the Head of the Department shall continue to be Secretary to Government - but that he shall also be Chief Inspector and shall

III.

Have, as that Capacity, be responsible for the Designs which have to be submitted to Government for Sanction while the duty of seeing that the Works are properly executed will rest with the District Inspectors the Chief Inspector in Carrying Projects before the Govt to express his own views and Opinions on the Merits or demerits of each

II. That a Consulting Inspector for Irrigation shall be Substituted for the present Chief Inspector and Joint Secretary to Govt. to Report to His Excellency in Council on Commonly to have two Chief Inspectors at the head of a Department which, from the peculiar Circumstances of the Province

Pendency thereof
is thereby excited.
There is a practical
inconvenience for the
Same reason in having
a Joint Sentence. By
inviting the Chief Inspector
Officer Consulting Inspectors
for Inspection, the Govt. will
retain all the advantages
they now have in the
careful examination
of Prisoners and the
close personal supervision
of their Execution
by frequent tours of
Inspection, while he
will still be accessible
for personal Consultation
in the Council Chamber
in connection with the
Hearing of the Representation
when desirable.
III. That the Grade of
Superintending Inspectors
shall be abolished
and that in lieu

there of a District Inspector
be appointed
to each Collectorate
The re-appointment
of District Inspectors
will in a great measure
conform to the
System that existed
prior to the re-organi-
zation of 1863: the
System that, in the
opinion of the Secy
to Council, gave the
most satisfactory
results only to the
District Inspectors them-
selves, forced to
work well. Budgets,
it is believed, would
somewhat modify
according to the
experience that has
since been gained in
this only flaw that
is likely to the ex-
istence of this
Presidency into

Consideration with
towards the working
of the Department
to be specially Con-
sulted. The Co-operation
must be distinct
Inspectors will bring
the local knowledge of
the Dept. into Contact
and intimate Con-
nection with the
Revenue Officers of
the District. It will
be Confidently hoped,
provide that Co-operation
between the two Depart-
ments which is so
essential to the interests
of the District. The want
of this harmonious
action between the
Officers of the two
Departments is a
defect in the present
system of which the
Government have the

IV.

the clearest evidence and
which it is impossible
to remedy without Co-
Compulsory. Their
respective duties to the
same territorial limits
and thus Either Depart-
ment with the same
interests and imposing
on them the habits of
incessant pursuit of
intercourse and Consulta-
tion. The contemplated
Changes will also provi-
vide a more effective
control over the Revenue
Officers especially over
those of the inferior
grade, who, while having
a responsible and to a
certain extent an
independent charge
should certainly not be
left without much more
frequent professional
advice and supervision
than it is possible for
a Superintending Inspector
in charge of two or more
Collectorates to afford.

The District Superintendent shall
entitled, shall take
the place of the present
Superintendency Inspectors,
and shall exercise
the same powers as they
now do. Possessing a
more limited charge,
aided, as the Inspectors
of Districts, by an Assistant
District Inspector and
restricted to the duties
of Superintendence, the
Officer will be enabled
to give to works in
progress a degree of
personal attention and
supervision that has
never been before attainable.
IV. That there shall be one
Deputy Chief Superintendent and
Under Secretary to Govt.
in place of the present
Secretary Petty assistant to
the Govt. Office. This
Officer is not designated
to have any Responsible
Office Establishment
or distinct Office

He will be associated
with the Chief Superintendent
and Secretary in the
Superintendence, taking charge
of the Journal of
business both with Govt
Chiefly employed in
keeping the Records of the
Department, in examining
the Plans and Estimates
sent up by the District
Inspectors, & preparing
Official Correspondence
will take the place of
the existing Civil Supt.
attending Inspectors
will be Officers subordinate
Medical Correction of
Control [illegible]
Apprehended that Surveys
projected will reveal the
Govt Office in Dublin
be better stated than
at present) it would
appear, be desirable
Cable for a Public Officer,
burdened with Offices
duties, to apply to that
to Govt. to determine
the Accounts Auditing

I would suggest
the omission of
this - The necessity
of work in connection
with

A.S.

as will come before him
as will come before him

Gangam
Vizagapatam
Trichinopoly
North Canara
Kurnool.

V.

V. That in lieu of the executive engineer and assistant engineer and superintendent a number of assistant district superintendents should be appointed each to have charge of 4 or 5 executive divisions and subordinate charges of the same importance as those now held by executive engineers and general duty assistants to the district superintendents being one for each collectorate, omitting those appointments for which general assistants have been provided. Which appointments will be retained for general duty. The duties of the 36 superintendents in charge of ranges should be of the same description. They should be charged by executive engineers in other parts of India. The 14 for general duty are

Each municipality should have the Govt. funds placed at its disposal to expend each year therein, for unforeseen expenditure. Each municipality should also have its property placed under the direct supervision and control of the local superintending engineer, who should be responsible for the proper execution of all works in progress under the authority of the district engineer and for this purpose the Govt. engineer should be at all times independent of municipal control, standing settled to assure confidence and respect. The deputy chief engineer and under secretary to Govt. should in the performance of their functions be empowered to inspect municipal works and to report to Govt. which should be held by the consulting engineer for irrigation in consultation with the municipality.

intended to be employed
as Assistants to the
District Inspectors Either
in Inspecting Any District
or Generally throughout
the District, at the District
Inspectors discretion.
They will have the Office
Established Beyond
which it is necessary to send
them in preference to Works
or Ordinary Projects
and it is not intended
that they shall have
anything to do with the
preparation of Estimates.
They will be employed
in Inspecting Only Reporting
on Works in Progress and
on Works Finished in
aiding the Individuals
in Charge of Ranges by
their advice: in prescribing
Plans and Estimates
of Works of a Inferior
Class and in examining
thine prepared by Assistants
Subordinate to them
they will be employed
in Inspecting Only Reporting
on Works in Progress and
on Works Finished in
aiding the Individuals
in Charge of Ranges by
their advice: in prescribing
Plans and Estimates
of Works of a Inferior
Class and in examining
they will be employed
in Inspecting Only Reporting
on Works in Progress and
on Works Finished in
aiding the Individuals
in Charge of Ranges by
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of Works of a Inferior
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of Works of a Inferior
Class and in examining

Superintendent of each
Class shall receive
addl Salary for each
Six Assistant he Serves
discretionable. The Gr.
Treasurer not withstanding
the Limitations
attached to these Appointments
trust that Selected Officers
of the Class referred to
herein entitled to the
Higher Salary of Rs. 100.
Supplied with Commandments
discretionary Allowances
and Subject to the
Closer Supervision of the
District Superintendent or his
Assistant, may be
found available for
the efficient performance
of the higher duties ex-
ceptionally entrusted
to them.

VII. That the Lifeguard Subordinates
Shall be increased in
Number to make up
for the loss of the Officers
now in Executive Charge
of Ranges who work

VI.
with the Employees under
District Superintendents and
Assistants on General duty
and that these Lifeguard
Subordinates shall also
be styled "Sub-Superintendents"
and be distinguished
from Foreigners.

VIII. That an Establishment
of Overseers shall be
maintained similar
to that prescribed
distributed to the several
Districts in the Superintendence
of the Executive to aid
Salaries. These Officers
will not however be
necessarily, in their Duty
attached to each District
but will be available for
allocation at the discre-
tion of the District Superin-
tendent where their services may
be most needed.

IX. That a lower class of
Overseers, to be called
"Inspectors" shall be
entertained whose

Police Duty should be
being basically officer oriented
stating up as work of
individuals they will
continue to do so with
highly trained professionals
meeting like bomb, gang
fell-and specialty units
allocated within the Police
departments and the
Police Force as a whole
training civil and
Cheerful Co-operation of
the Revenue Defendants is
afforded. This result it
is confidently hoped
will be attained by
the more intimate con-
nection between the two
Departments which the
District Supervision system
is calculated to establish
The Class of Trainees
will afford special em-
ployment to the Motions
of the Country. They will
take the place of the
existing petty constabul.
Initially and by having
a permanent situation
and a definite prospect
before them, it is expected
that a superior class
of men will be attracted to
the Department. In
Consideration of their previous
education has been
such as to enable them
to meet departmental
requirements in examin-
ations there will be
nothing to prevent them
promoting to the higher
grade of Overseer.

The Establishment of persons
first Natives of India
into this Class will be
absolutely prohibited.

In lieu of the Establishment
hereby proposed by this
Govt. Consists of

I. 1 Chief Engineer and Secretary to Govt.
II. 1. Deputy Chief Engineer practical as well as
scientific Engineer.
III. 1. Consulting Engineer for Bridges to be
practical & Chief Engineer. 2nd Class.
IV. 19 District Engineers for 19 Collectorates.
Civil and Military Branches.
V. 2. District Engineers & Surveyors for Bungalows
and Hill Stations.
VI. 1. Consulting Architect.
VII. 1. Executive Engineer for the Presidency
VIII. 47. Assistant Engineers as detailed in para 4.
Classed & above, in 3 grades.
IX. 12. Probationary Assistant Engineers
X. 62. Sub. Engineers in 4 grades.
XI. 187. Overseers in 3 grades.
XII. 440. Maistries in 3 grades.
XIII. 2. Mechanical Engineers.

I. II. III. IV. Demand five
explanations in addition
to those already offered.

III. The Colonies of the District
Engineers have been
fixed by a joint Con-
sideration of responsibility
to expend to Encumbrance
Expenditure, and of the
Estimated Value of the
Officers Land and Build-
ings Standing Rents
Combined with the
Emoluments which
Officers in a Similar
Position might expect
in other parts of India.
The Office Establishment
of each District has been
framed strictly with
reference to the Quantity
of Office work in each
District Engineers Salary
is from Rs. 1,500 Allowances somewhat a-
gainst personal Rs, which the
Office Establishment brings
in exclusively a Local Allowance
Pay & Salaries from Rs
1st Class — Rs. 1,500
2nd do — " 1,350
3rd do — " 1,100
4th do — " 900.

the Superintending Inspector
of the Grade. The
Emolument corresponding
to the Salaries of Superintending Inspectors of
Steam Vessels and the
Salary of a First Class
Executive Inspector.

His Excellency the
Council felt that it
may be Contended
that the Superintending
Inspectors belong to the
Class of Officers of this
Board to continually of
Independent Executive
extent. In reply to this
Objection I am to
explain that the
Continuity of the Executive
Superintending Inspectors to do
justice to the existing

extensive Division of
a Capital Instance for
the Change proposed
and for the appointing
the Superintendent and
Still giving to the District
Inspectors an extensive
a Charge as are main
to deemed Capable of
efficiently Supervising,
it would be unreasonable
and Unjust to deprive
the Superintendent of the
increased Emoluments
The Salaries proposed
are the is Completely
Inferior to the
if due regard be had
to the Nature of the duty
to be performed, to the
Qualifications of the
Officers who would be
appointed, to the Station
which in Other branches
of the public Service
and to those awarded
to the same branch
in the Other Provinces.

Indeed under the
late arrangements
a considerable sum
will for some years
have to be distributed
to Officers as personal
allowances in Compensation for the loss
which they would otherwise
sustained to the regular
Emoluments & superseded
to the new scales.

V. The Officers in Chief
Charge of Boundaries
and the Inclosures
will be styled District
Engineers as they will
hold an equivalent
position. They will be
in direct Communication
with the Secretary for War
and Chief Engineer as
District Officers and as
Range Officers they will
be in the same relation
with the Controller

VI. Does not require
Comment.

VII. The Officers in charge
of the Presidency Ramps
is proposed to be
styled Executive Engineer
to be with the Subordinate
to the District Engineer
& Inadvertent Chief
Post

VIII. The Govt would have
been glad to have been
able to provide 2
Assistants for General
duty in each District
for which we only to
now estimated, and one
for each of the five
Districts to which is
to assistant has been
appointed, for under
such an arrangement
they would have been
in a position to require
that all completion
Certificates should be
granted by the District
Engineer or his
Assistants.

Financial Qualifications
however prohibit any
suggestion for increased
expenditure under this
head.
IX. Does not require remark
X. As the duties of a
Sub. Inspector and a
Superior in this Presidency
are exactly similar
there is no advantage
in designating them
differently and it is
proposed to call them
all Sub. Inspectors
XI. There is at present
only one grade of Sheristadars.
This arrangement has
been found to work
very badly in as much
as the fixed salary
of Rs. 60 is too low as
a general rule and
there are no means
of rewarding or encouraging deserving
men who, not being
qualified for the
charge of a Range,
cannot be promoted
to the rank of Superior.
It is proposed to remedy
this defect by having
three grades on Rs. 60, 80,
and 100 respectively.
XII. The necessity for
Draughtsmen is explained
above.
XIII. There is at present
only one Mechanical
Engineer, whose time is
entirely occupied with
the Gas works in Fort
St. George. The wound of
another has been at
times seriously felt.
In recent instances in
which this Department
has been experience
d. I am to mention
the duty of reporting
on the Steam Dredges at
Nepapatam and superintending their repair
and that of fitting of
the Iron Bridge over
the Iyanar in Trichinopoly.
5. The total cost of the

proposed establishment
is Rs: ~~21,73,785~~ 21,74,985 against
the sanction for the
current year of Rs: 19,83,710
being an estimated excess
of Rs: ~~1,89,075~~ 1,91,275 an excess
which appears to be quite
unavoidable if a really
efficient establishment
capable of properly superin-
tending expenditure
and preventing fraud
on an extensive scale
is determined on.
Considering that a frequently
increased expenditure
of local funds in public
works may now be
expected and that a
proportionate amount
of establishment-cost
will be debitable to
loan funds, it is
confidently expected
that even with the
more costly establishment

[illegible] 12,000

included, if the P. Civil Engineer
requires it, the Rs: [illegible]

establishment-charges pro-
posed that local debited
to Imperial and Pro-
vincial funds will
not be greater than in
preceding years, the
~~sanctioned~~ language
of the minute should be
so altered as to
the Imperial Revenue.
In connection with
the subject of increased
charges I am further
to draw a comparison
between the cost of the
establishment, viz: 21,74,985
proposed Rs: ~~21,73,785~~
and that which ex-
isted prior to 1863
namely Rs. 16,60,000
and to explain that
the latter sum did
not include the
following items which
are now provided
in the Budget of this
Department:

Conveyancing Establishment	96,000
Accountant Dept: increase	50,000
Civil Engineering College	40,000
Penitentiary Establishment	44,000
Petty, in excess	36,000
Conf: Expenses for Inspection	32,000
Consulting Architect	15,000
Official Postage	30,000
Total	3,43,000
Miscellaneous	16,60,000
	20,03,000

Under this explanation it is apparent that the Real increase in the Cost of Establishment now proposed above that formerly entrusted the Institution of Distant Inspectors is only 1.71.985 ~~1,71,985~~ an excess caused by a very general increasement in salaries compared with the rates which prevailed in those days and which will cause much perfect efficiency in the Work of the Department after the final execution of the Question by this Govt. In every shape, His Excellency in Council feels bound to record that the only reduction which is considerable possible in the estimate now submitted would be in connection with the number of Clerks. The Govt. cannot however undertake to say to what extent this will be feasible and can only promise that the measure shall receive the fullest and most careful consideration as soon as possible after the Distant Inspectors have been appointed and have become acquainted with the wants of their respective Charges.

Whereas the Officer
Subordinate to Head
Quarters
being payable
at any Dep[ot] other
than Head Quarters
the Officer would be
Under the necessity of
being absent from
Head Quarters, the Depu-
tation of Superior
Authority responsible that
the period of absence
from Head Quarters
is properly employed in
the performance of duty.
And whereas enforced
Customary Labour the
Govt. have resolved to
substitute a Corps
Corps of Civil Subject
to do what work of this
kind has been customary
in order to the further
Consideration of the
expediency of hereafter
enforcing the same by
Legislative enactment.

6th Intimately Connected
with the Question of
Establishment is that
of Travelling Allowance
regarding which His
Excellency in Council
is desirous of drawing
particular attention
to Page 50 of the
Commissioners Report
In the Principles therein
advocated the Govt.
wholly Concur, namely
that half the Actual
Rate for each Grade
of Officers Engineer,
Assistant and Sub-
Engineer should be
granted as a fixed
Charge dependent only
on a Certificate that a
Certain necessary
Equipment has been
Maintained and that
the other half be
payable as a daily
Allowance whenever

His Excellency the President
Considers the Question
of transferring the Charge
of Irrigation Repairs
to the Revenue Authorities
and have definitively
adopted the Opinion
that such a Change
would be inexpedient
and that it is preferable
that the Duty of Erecting
all such Repairs should
be vested in the Provincial
Professional Agency.
His Excellency in Council
is however fully disposed
inclined to the Suggestion
in para 4th of the Commissioners
Report to the effect that
ordinary Repairs might
be entrusted for execution
to Villagers who are
willing to undertake
them on the estimates
of the Public Works
Officers in preference
to Contractors

With regard to the
small Tanks which
it is really impracticable
able to the State to
maintain as Irrigation
Works this Government
proposes to relinquish
them to State Ryots
and if they are not
taken up by private
individuals to reduce
the assessment to that
of unirrigated land.
The Governor in
Council, I am to state,
regrets that so great a
delay has occurred
in forwarding the present
plans for a less expensive
form of Tank Sluice
of Public Works. It will
not escape Your Lordship's
notice that these
suggestions have been
received with difficulty
from a Native Board
Governor in many
respects conflicting

and that the Representation either as Corporations between the divergent sentiments of the Members of Govt. Thus a Complete Concurrence. No Inquiry of this Govt. would be regarded with favour a Scheme of Re-Construction which would not limited the Public Works Department even more closely with the existing Revenue Establishment. They have only abandoned this principle from the apprehension that in clamping the application of principles to this Presidency radically different from those which are accepted elsewhere they might lose sight of principle. Realisation of practical reforms which they deem imperfect but which are inconsistently

Here has really been no valid reason for the delay. R.A.

XI.

~~to constantly~~ field of the highest promise. The binding feature of the proposed scheme is the re-establishment of distinct Responsibility that is the identification of the local Officers of the Revenue and Public Works Departments in the prosecution of public duty and the creation of a Superintending Agency capable of correcting error, controlling extravagance and protecting Land. To this provision all the Members of Govt. have given their assent, although only adhered to the indispensable because by this alone the shortcomings and abuses can be remedied of which the Government has often the complaint

but helpless victims.
In the absence of this
measure here referred
to, I am to state,
that the Govt. cannot
regard the future
without the gravest
apprehension. In the
existing state of things
the Dept. of Public Works
is very imperfectly adapted
to fulfil the expectations
of Govt. and the country
in intrusting to it many existing
works, in designing and
superintending new works,
in directing the resources
of the State to the most
profitable objects and
in preventing a total
misapplication or criminal
misappropriation of those
resources even when the
objects are wisely chosen.
But the incompetency

of the Dept. for its
present duties will
be placed in a more
conspicuous light in
connection with the
expanded functions
which will be called
into existence. The Clerical Staff
must be Professional
Recently transferred by
Land will multiply
Road Work, Canal
Building, Inland Navigation
&c. the County Cess
will Chief Engineer to
be Chief Engineer to
Land Improvement Boards
The Survey and Construction of Works
to be committed to
the Dept. of Public
Works. They are Boards
Chiefly the Chief will
require the exercise
of Professional Superin-
tendence and Direction

economy, they will be
watched by local
bodies with the greatest
jealousy and exa-
ggerated faults & defects
defective results will
produce a wide spread
and justifiable discontent.
The Department of Public
Works which has been recently
charged with the responsi-
bilities to the
State in connection
with the introduction
of the proposed
gigantic Imperial Loan
will undoubtedly be put on its
trial as a general agency
in the service of the people.
Should it fail to satisfy
public expectation it
is certain that claims
for the introduction of
independent local
Executive Establishments

will be numerous and
loud; nor would it
be easy to resist them.
Under these impressions,
I am to state, this Govt.
considers themselves
justified in earnestly
soliciting the attent-
ion of the Govt. of India
to the scheme of re-
organization now
submitted: a scheme
which this Govt. believes
embodies as
to embody a prudent
adaptation of existing
institutions to the
present wants, the
local peculiarities
and the future re-
quirements of the
Presidency of Madras.

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Desp. 21/9/71 with 25 Inclosures
Copies of the letter, orders
& two statements & seven
Forms.

Government of India
Local Finance
Relative to the Introduction

18/9/07
18-6-07
20-3-15
22-7-1[illegible]

[illegible] of H.E. Gladras.

PUBLIC WORKS.

Encl

[illegible] Despatch No. 229

No. 1866/89.—
176

Submitting proposals for the re-organisation of P.W.D. Establ.