

Government of Madras.

EDUCATIONAL DEPARTMENT.

Recd.

Regd.

} 1915.

Enclosures

Spare copies

G.O. No. 185, 19th February 1915.

Mechanical Engineering School.

Directing that the proposed — for the Northern Circars be located at Cocanada in connection with the local fund workshop at the place.

7
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Directing that the proposed — for the Northern Circars be located at Cocanada in connection with the local fund workshop at the place.

GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

READ—the following papers:—

I

G.O. No. 121, Educational, dated 27th January 1914.

ABSTRACT.—Directing that a school be established at Cocanada for providing instruction in mechanical engineering of an elementary grade for the benefit of intelligent artizans.

II

Letter—from K. T. B. TRESSLER, Esq., Superintendent of Industrial Education.
To—the Director of Public Instruction.
Dated—Madras, the 21st February 1914.
No.—563 L.

With reference to Proceedings No. 1035, dated 30th January 1914, I have the honour to make the following observations.

1. The character of the proposals framed by me will depend primarily on the funds allotted. I consider that to establish a school of the character required will cost anything between Rs. 20,000 and Rs. 40,000 in first cost and will involve annual maintenance charges which may amount to between Rs. 10,000 and Rs. 15,000. The expenditure I contemplate is of this order.

2. Before submitting definite proposals, I wish first of all to call attention to the question of location. The value of the training afforded in an industrial school is determined mainly by two things:—(1) the qualifications of the superintendent and (2) the amount of commercial practice that can be combined with the purely manual training provided in the school proper. There are four places where the proposed industrial school might be located, each of which offers in a varying degree the advantages of skilled superintendence and workshop practice—

(1) At Vizagapatam there exists a small Mission school in charge of Brother Emile, a mechanical engineer of considerable mechanical ability. This school might be developed. The amount of commercial work now done is comparatively small but would probably increase if the school were recognised.

(2) At Cocanada there is a local fund workshop. If this place were turned into an industrial school, Government would have to find a superintendent. The workshop practice afforded would be adequate.

(3) At Dowlaishwaram there is a Public Works workshop which is at present in charge of a Public Works officer of, I believe, mechanical ability but no special mechanical training. The workshop practice afforded would be excellent.

(4) At Bezwada there is another Public Works workshop at present in charge of a trained mechanical engineer. The workshop practice afforded would be excellent here also.

3. The advantage of developing the existing Government workshops lies in the fact that Government itself secures the material benefit arising from the investment of capital. Moreover one of the principal difficulties arising in connection with industrial education—that of securing proper superintendence—falls away in a Government shop. These advantages are very great but they are at present off-set by the following drawbacks.

(a) The system of workshop management followed in Public Works workshops is not satisfactory from the educational point of view. If the Public Works workshops are to prove of any value as places of training it is absolutely essential

that the system of management should accord with modern industrial practice and this a system such as the present one—designed primarily to conform to departmental rules—emphatically fails to do.

(b) The control is constantly changing. Sometimes, as at Bezwada at the present moment, the superintendent is a properly qualified mechanical engineer: sometimes he is merely a civil engineer placed in charge of the workshops.

The fact that the Officer-in-charge of the workshops serves Government in a dual capacity—executive as well as educational—and represents, on the executive side, a paying proposition, justifies a scale of pay sufficiently high to attract a first-class man. Such a scale of pay it would be impossible to contemplate in connection with an educational appointment pure and simple. In an ordinary industrial school I do not think it would be possible to offer more than Rs. 300 or Rs. 400 for a superintendent and on this salary there would be great difficulty in securing the right class of man. Objections (a) and (b) are of course not insuperable and there should be no difficulty in arriving at a working arrangement with the Public Works Department whereby these shops could be converted into efficient training institutions.

4. The objection to the Cocanada scheme is that Government would have to find a superintendent: a matter, as already explained, of some difficulty in view of the pay that could be offered. The objection to the Vizagapatam scheme is that the school authorities have in the past exhibited a good deal of pusillanimity in their dealings with Government, which spirit does not augur well for the future. Moreover, the value of the Vizagapatam school as an industrial institution is conditional entirely on the continuation of Brother Emile in the post of superintendent. The mission decline to give an undertaking that, in the unfortunate event of this gentleman having to leave India, they will replace him with a man of equal qualifications, and there exists accordingly a good deal of uncertainty regarding the future development of this school. As with the Government workshops, so in the case of the Cocanada and Vizagapatam schools, the objections stated need not be regarded as insuperable, but if all things are taken into account the balance of advantage seems to be in favour of the Government workshops.

5. Before submitting detailed proposals, I therefore request to be informed which of the above schemes Government wishes to proceed with. Personally I should like to have two schools, one at Waltair and the other at Bezwada, as these two places are the most central for the Northern Circars.

Endorsement N. Ref. on Cur. No. 1035, dated 31st March 1914.

Submitted to Government for favour of orders, with reference to G.O. No. 121, Educational, dated 27th January 1914.

J. H. STONE,
Ag. Director of Public Instruction.

III

Memorandum No. 2793-1 L., dated 2nd June 1914.

It is proposed to open a Government mechanical engineering school in the Northern Circars and it has been suggested that it should be located at Cocanada in connection with the local fund workshop there.

2. The Gōdāvari District Board is requested to report whether it is willing to hand over the management of the workshop to the Director of Industries for the proposed school on the understanding that the school will undertake whatever mechanical work the District Board may require of it.

3. The District Board is requested also to furnish information on the following points:—

- (a) the nature of the machinery, plant and other property in the workshop;
- (b) the District Board's title to this property and the buildings in which the workshop is now located;

- (c) the terms on which they may be made over to Government ;
 (d) the existing establishment maintained by the Board in the workshop ; and
 (e) approximately the value of the work turned out there in each of the last three years, with a description of its general nature.

W. FRANCIS,
 Secretary to Government.

To the President, District Board, Godāvari.

IV

Letter—from E. B. ELWIN, Esq., I.C.S., President, District Board, Godāvari.
 To—the Secretary to Government, Local and Municipal Department.
 Dated—Cocanada, the 26th August 1914.
 No.—Ref. on G.C. 145/D.B.

Adverting to the correspondence ending with Government Memorandum No. 2793-1 L., dated 2nd June 1914, and reminder, dated 20th August 1914, thereon, I have honour to state that the subject will be considered at the District Board meeting to be held next on Saturday the 29th August 1914.

2. A final reply together with copy of the District Board resolution regarding the transfer of management of the local fund workshops at Cocanada to the Department of Industries, will be sent up soon after that date.

V

Letter—from E. B. ELWIN, Esq., I.C.S., President, District Board, Godāvari.
 To—the Secretary to Government, Local and Municipal Department.
 Dated—Cocanada, the 31st August 1914.
 No.—R. Dis. 142/D.B.

Adverting to the correspondence ending with Government Memorandum No. 2793-1 L., dated 2nd June 1914, and in continuation of this office letter Ref. on G.C. No. 145/D.B., dated 26th August 1914, I have the honour to forward herewith a copy of the District Board Resolution No. 11, dated 29th August 1914, and to furnish the information called for in paragraph 3 of the memorandum.

(a) Statement B enclosed shows the machinery, plant, tools, etc., in the workshops.

(b) The District Board purchased all the articles of machinery and plant and manufactured some tools in the workshops. The buildings have been constructed from the District Board funds. The land on which the shops now stand was originally acquired from the Marine department.

(c) The buildings, machinery, plant, tools, etc., will be handed over to Government on payment of the present value to be estimated by Government Public Works Department.

(d) The existing permanent establishment maintained in the shops is as hereunder—

One overseer on Rs. 100 per mensem.
 One accountant, Rs. 20—1 (biennial)—25.
 One time-keeper, Rs. 15
 One lascar, Rs. 6
 Two watchmen, Rs. 6 each.

All petty supervision, etc., is paid on daily wages and met from works in hand.

(e) The approximate value of work turned out in the shops is given in the enclosed statement A.

The nature of work done is —

- (1) Carpentry (furniture, roof work, bridge planking, ballacut platforms, doors and windows, etc.).
- (2) Smithy (market sheds, bridge works, ballacuts, tools, etc.).
- (3) Moulding.
- (4) Fitting.
- (5) Sawing.
- (6) Painting.
- (7) Caulking.
- (8) Fitters' and turners' work, etc.

2. The balance under the different stocks in the workshops is reported to end of June 1914 as detailed below :—

	RS.	A.	P.
One workshop stock	8,020	15	6
One rail stock	766	14	6
One iron stock	4,943	0	10
One boring stock	1,008	3	4
	14,739	2	2

ENCLOSURES.

(1)

Proceedings of the District Board, Godāvari, dated 29th August 1914.

PRESENT :

The Collector, Godāvari.
 The Divisional Officer, Rajahmundry.
 The Treasury Deputy Collector, Godāvari.
 The Assistant Inspector of schools.
 M.R.Ry. Diwan Bahadur Duriseti Seshagiri Rao Pantulu Garu, B.L., Vice-President.
 The Rev. Everette Gibbs Smith, M.B.
 Saiyid Maula Sahib Bahadur.
 Mr. Edward Hugh D'Cruz.
 M.R.Ry. Rai Sahib Madireddi Venkataratnam Nayudu Garu, B.L.
 The Tahsildar of Peddapur.
 M.R.Ry. Yachuri S. Somayajulu Garu, Tahsildar, Amalapur.
 " Kommireddi Lakshminarasimham Nayudu Garu, Deputy Tahsildar, Tuni.
 M.R.Ry. Ganti Lakshmana Garu, B.L.
 " Anantatmula Narayana Rao Garu.
 " Burra Surya Prakasa Rao Garu, B.L.
 " Bokka Narayanamurti Pantulu Garu.
 " Ganti Subbarayudu Garu, B.L.

Read correspondence ending with Government Memorandum No. 2793-1 L., dated 2nd June 1914, requesting the District Board to report whether it is willing to hand over the management of the local fund workshops to the Department of Industries for the Government mechanical engineering school proposed to be located at Cocanada on the understanding that the school will undertake whatever mechanical work the District Board may require of it.

Letter thereon D. Dis. No. 870/D.B.E., dated 28th July 1914, from the District Board Engineer.

Resolution No. 11.—The District Board is willing to hand over the management of the workshops on condition that Government pay it Rs. 14,739 on account of the value of the stock now in hand and also the present value of the buildings, machinery, plant, tools, etc., as estimated by the Public Works Department.

(2)

APPROXIMATE statement of the value of the work turned out in the shops for the last three years.

Year.	A			Value.		
				RS.	A.	P.
1911-1912	..	..	..	42,856	9	11
1912-1913	..	..	..	34,113	1	8
1913-1914	..	..	..	40,674	5	6

N.B.—The above figures include cost of materials purchased also.

VI

Memorandum No. 2146 Wks./A-1, dated 5th October 1914.

In connection with a proposal to open a Government mechanical engineering school in the Northern Circars, a suggestion is under the consideration of Government to take over the local fund workshop at Cocanada with the plant therein. The Superintending Engineer, I Circle, is, therefore, requested to submit, at an early date, a valuation of the *whole* concern—land, buildings, machinery, stock in hand, etc.

D. MARSHALL,
Deputy Secretary to Government.

To the Superintending Engineer, I Circle.

VII

Letter—from the Executive Engineer, Gōdāvari Northern Division.
To—the Superintending Engineer, I Circle.
Dated—the 10th November 1914.
No.—1655-S.

I beg to inform you that I inspected the local fund workshops at Cocanada on 29th October 1914 and then gave necessary instructions to the Overseer to collect necessary information for the disposal of this reference.

2. A site survey has been prepared and sent to the Collector on 5th November 1914 for giving the value of the land. The Overseer is estimating the values of the sheds, etc., but as for the machinery I really do not know how this is to be valued. Most of it is home-made. So it is very difficult to try and value it by a comparison with a machinery catalogue of Burn & Co. or any other such firm.

3. I am unable to give any definite date for a disposal of the reference but hope to do so within ten days if a reply is received from the Collector by then.

No. 1704 W./G.N., dated 7th December 1914.

Copy submitted to the Chief Engineer, Public Works Department, for information in continuation of this office No. 1590 W./G.N., dated 9th November 1914.

M. R. KHAREGAT,
Superintending Engineer, I Circle.

VIII

Letter—from M. R. KHAREGAT, Esq., A.M.I.C.E., Superintending Engineer, I Circle.
To—the Joint Secretary to Government, Public Works Department.
Dated—Vizagapatam, the 12th January 1915.
No.—45 W./G.N.

With reference to your No. 2146 Wks./A-1, dated 5th October 1914, I have the honour to submit an approximate estimate amounting to Rs. 33,460 showing the valuation of land, buildings, machinery, etc., of the local fund workshops at Cocanada. The Executive Engineer's valuation of the machinery may be taken as fair.

Order—No. 185, Educational, dated 19th February 1915.

In G.O. No. 121, Educational, dated the 27th January 1914, the Government decided to establish a mechanical engineering school for the northern part of the Presidency and requested the Director of Industries to submit detailed proposals for the purpose. In his letter read above Mr. Tressler discusses the question of the suitability of certain places for the location of the school. The Government have considered these remarks and have come to the conclusion that the school should be located at Cocanada in connection with the local fund workshop at that place.

2. In its resolution, dated the 29th August 1914, the District Board of Gōdāvari has expressed its willingness to hand over the workshop to the Government on condition that the value of the buildings and tools and plant as estimated by the

Public Works Department, together with the value of the stock in hand, is paid to it. The Public Works Department estimate the value of the whole concern, including that of the stock in hand at the close of September 1914, at Rs. 33,460. Subject to such alteration in this estimate as the Public Works Department may find necessary at the time of transfer of control of the workshop, the Government accept the valuation made by that department and sanction the purchase of the workshop from the District Board.

3. The Director of Industries is requested to submit detailed proposals in regard to accommodation, staff and other matters connected with the establishment of the school.

4. For the Vizagapatam district the St. Aloysius Industrial School should be sufficient for the present. The Director is requested to report how this school may best be aided by the Government and developed.

(True Extract.)

P. RAJAGOPALA ACHARIYAR,
Secretary to Government.

To the Director of Industries.
" Financial Department.
" Local and Municipal Department.
" Public Works Department.

EDUCATIONAL DEPARTMENT

NOTES CONNECTED WITH G.O. No. 185, EDUCATIONAL, DATED
19TH FEBRUARY 1915.

[SUBJECT.—*Establishment of a Mechanical Engineering school in the Northern Circars.*]

From the Director of Public Instruction, dated 31st March 1914, No. 1035.

The question of establishing a mechanical engineering school in the Northern Circars was long under consideration. At first it was suggested that an engineering school should be opened at Bezwada—*vide* Sir Murray Hammick's note on page 10 of Demi-official No. 282-1, Educational, dated 3rd April 1911; then it was suggested

Extract from the Legislative Council Proceedings stitched with G.O. No. 547, Educational, dated 10th June 1913, (pages 13 and 14 of the Government order.)

that it should be started at Dowlaishwaram—*vide* the Hon'ble Mr. Davidson's speech at the meeting of the Legislative Council held on the 14th March 1913, in connection with the resolution on the same

subject moved by the Hon'ble Mr. Narasimheswara Sarma. But when the question was finally considered, it was decided to drop the idea of arranging in the institution

Please see notes on pages 15 and 16 of notes to G.O. No. 121, dated 27th January 1914.

for instruction in civil engineering, but to confine it only to teaching mechanical engineering of the elementary grade for

the benefit of the intelligent artizans. On the suggestion of Sir Alfred Bourne it was decided to open the school at Cocanada. He was of opinion that it might be difficult to make suitable arrangements at Dowlaishwaram where the work on a commercial basis would be carried on by the Public Works Department, but that if the school was established at Cocanada the local fund workshop there could be taken over. Please see Sir Alfred Bourne's note, dated 20th December 1913, on page 16 of the notes with G.O. No. 121, Educational, dated 27th January 1914.

2. While Sir Alfred Bourne considered that Public Works Workshop would be unsuitable for a school, Mr. Tressler favours only such, to the exclusion of other under the management of local bodies or private agencies. His objection to taking over the latter is based on the ground that it will be difficult to get a suitable Superintendent for the pay that will be usually offered for him. He does not, therefore, favour the location of the school at Cocanada. He prefers either Bezwada or Dowlaishwaram, but would personally like the former where the workshop is under a trained mechanical engineer. He would also have two schools one at Waltair and the other at Bezwada and he requests orders on these suggestions before submitting detailed proposals.

3. The proposal to have two institutions is not a new one; so far as the Northern Circars are concerned the arrangements already contemplated are—

G.O. No. 99, Educational, dated 14th February 1911.

(i) that the St. Aloysius School, Vizagapatam, should be developed with the aid of Government grant; and

G.O. No. 121, Educational, dated 27th January 1914.

(ii) that a mechanical engineering school should be opened at Cocanada.

It is not clear whether by proposing to have a school at Waltair, Mr. Tressler means to drop entirely the original idea of developing the St. Aloysius school at Vizagapatam and to start a separate Government workshop at Waltair for the new school. The former proposal has been under consideration since 1909 and the

G.O. No. 2734, Revenue, dated 18th August 1910.

G.O. No. 55, Educational, dated 22nd January 1913.

G.O. No. 296, dated 18th November 1913.

Government offered favourable terms to the institution; but for one reason or other the original arrangements still remain unsettled. First the defect in the title of the Bishop to the property was in the way. The Government, being anxious to see that the arrangement should not fall through, dispensed with the legal agreement; then Mr. Tressler was on leave; and lastly the mission would not give an undertaking to find a qualified Superintendent for the school in the event of the present Superintendent, Brother Emile (an able mechanical engineer), leaving India. There was also some trouble about the mission securing the ordinary teaching grant for the school, as it refused to furnish the financial statement relating to the school—G.O. No. 94, Educational, dated 22nd January 1914. Mr. Tressler does not consider that the difficulties above noted are insuperable. It may not be easy to start afresh a Government school and workshop at Waltair. If the mission comes to terms, it will be a satisfactory solution of the matter. It is, therefore, for consideration whether Mr. Tressler may be asked to report finally in consultation with the mission whether they will come to any reasonable understanding as to its development or whether all prospects of it should be abandoned.

4. As regards the suggestion of Mr. Tressler to open the school at Bezwada, it is submitted that if the Vizagapatam scheme fails and if it is decided to have only one school, it may be preferable to locate the school at Dowlaishwaram, instead of at Bezwada, as the former is more central. As a settlement of this question must necessarily take some time, it may perhaps be desirable to decide on the Bezwada scheme at once, as the Director prefers it. No information is available as to the working of the workshops here or at Dowlaishwaram. Mr. Tressler is confident that the drawbacks in the system of management and the defect due to frequent changes in the *personnel* can be got over by arrangement with the Public Works Department. That Department may be asked u.o. to state if they see any objection to this suggestion. On the receipt of the advice of the Public Works Department, Mr. Tressler may be asked to send up proposals for the opening of the new schools and for a further report on the St. Aloysius school.

T.K.—29-4-14.

C. RAMANUJACHARI—2-5-14.

His Excellency the Governor considers that Cocanada had better be chosen for the site of the Government school and that for Waltair the Aloysius school will be sufficient and Mr. Tressler may be asked how it may best be aided. Please draft.

W. FRANCIS—3-5-14.

A draft order is submitted for approval.

S.K.—6-5-14.

C. RAMANUJACHARI—9-5-14.

Will Local and Municipal please note what information is available about the local fund workshop at Cocanada?

The District Board must at least be consulted.

W. FRANCIS—11-5-14.

To the Local and Municipal Department.

LOCAL AND MUNICIPAL DEPARTMENT.

So far as the records of this department show, the local fund workshop at Cocanada was started in 1886-1887 by the Gōdāvari District Board as a temporary measure for the advantage of local fund works with the marginally noted establishment. The maintenance of the workshop having been found useful, the establishment sanctioned for it was from time to time continued until at last the District Board resolved to maintain the establishment permanently with the sanction of Government accorded in G.O. No. 156 L., dated 25th January 1895.

	RS.
1. Head accountant	40
1. Clerk	15
1. Time keeper	12
2. Night watchers	6 each

The present establishment of the workshops at Cocanada consists only of one accountant on Rs. 20-1 (biennial)—25 and one time-keeper on Rs. 15. The rules for regulating the maintenance of accounts in the local fund workshop are printed on pages 2 to 4 of G.O. No. 1054 L., dated 31st July 1907.

2. A draft reference to the President, District Board, Gōdāvari, is placed below as directed. It is proposed to ask the District Board whether it is willing to hand over the management of the workshop at Cocanada to Government and to inform it at the same time that the proposed school will undertake whatever the District Board may require of it in the way of mechanical work—*vide* the suggestion of the Director of Public Instruction, dated 20th December 1913, on page 16 of the notes with G.O. No. 121, Educational, dated 27th January 1914. It is presumed that the workshop will have to be taken over with the property in it such as tools and plant and the buildings in which it is located, and it is proposed to request the Board to report the nature of the property and the Board's title to it and the buildings, and the terms on which they can be made over to Government—*Cf.* Memorandum No. 1321 A/09-4, Revenue, dated 17th February 1910, on page 27 of G.O. No. 736, Revenue, dated 8th March 1910.

S.D.—28-5-14.

K.V.V.—28-5-14.

Memorandum approved.

(The workshop seems a much smaller affair than I had imagined or Mr. Tressler's letters led me to expect.)

W. FRANCIS—2-6-14.

[Memorandum No. 2793-1 L., dated 2nd June 1914.]

From the President, District Board, Gōdāvari, dated 26th August 1914, No. 145.

From the President, District Board, Gōdāvari, dated 31st August 1914, No. 142.

The District Board is willing to hand over the management of the local fund workshops at Cocanada to the Department of Industries on condition that the Government pay the Board Rs. 14,739 on account of the value of the stock on hand and also the present value of the buildings, machinery, plant, tools, etc., as estimated by the Public Works Department. The President has also furnished the information called for in Memorandum No. 2793-L., dated 2nd June 1914. Submitted that the file may now be returned u.o. to the Educational Department.

S.A.M.—11-9-14.

K.V.V.—11-9-14.

Yes.

W. FRANCIS—15-9-14.

To the Educational Department.

EDUCATIONAL DEPARTMENT.

The proposal to locate the Government Mechanical Engineering School for the Northern Circars at Cocanada was first made by Sir Alfred Bourne who noted in December last as follows:—

Sir A. Bourne's note, dated 20th December 1913, on page 16 of notes to G.O. No. 121, Educational, dated 27th January 1914.

"At Cocanada there is a local fund workshop the *management* of which could probably be taken over, that is to say, the school would undertake whatever the District Board required in the way of mechanical work. Mr. Tressler could doubtless furnish detailed proposals."

Mr. Tressler, who was asked to report on the matter, was not in favour of locating the school in connection with the local fund workshop at Cocanada, as he thought that it would be impossible to secure a properly qualified Superintendent for the pay that could be offered. He, therefore, recommended the opening of the school in connection with the Government workshops at Waltair or Dowlaiswaram, where there were qualified mechanical engineers as superintendents. His Excellency, however, selected Cocanada for the location of the school. The District Board of Gōdāvari, which was consulted by the Local and Municipal Department on the question of taking over the local fund workshop under the Government management, states that the Board would be willing to hand over the management of the workshop to the Government, if the latter would pay Rs. 14,739 on account of the value of the stock now in hand and also the present value of the buildings, machinery, plant, tools, etc., as estimated by the Public Works Department.

2. What was originally intended by the Director of Public Instruction was apparently to take the *management* of the workshop alone under the Government, the institution still remaining a local fund one; and the condition proposed, viz., that the Government should undertake to do all the works for the Board at the workshop, supports this view. But what is now agreed to by the District Board is only an outright sale of the whole concern to the Government and not a lease as originally contemplated. The condition above has apparently now been dropped on this account. Evidently the Board will not view with favour any proposal short of a sale.

3. The question then for consideration is whether the Government should purchase the property. If the decision to locate the school at Cocanada is to be maintained, there seems to be no alternative to *purchasing* the workshop. This course would apparently be agreeable to Mr. Tressler also, as it would conduce to independent action at the workshop and to efficient management under qualified supervision. No doubt the initial cost of the establishment of the school will thereby be enhanced. In paragraph 1 of his letter, dated 19th February 1914, Mr. Tressler states that this cost would be between Rs. 20,000 and Rs. 40,000; apparently this estimate was based on a transaction like the present. The *exact* amount to be paid for the purchase of the Cocanada workshop has yet to be determined. We have information only about the stock on hand. The Public Works Department will have to estimate the value of the buildings and plant. It is desirable that before further proceeding in the matter, there should be available information as to the *total* approximate initial cost involved in the scheme. The Public Works Department may be requested to obtain an estimate.

4. While this is being done in the Public Works Department, Mr. Tressler may work out the details of the proposals for opening the school on the understanding that it will be attached to the Cocanada Workshop, which will be taken over by the Government. This course will save further delay and will give a *full* idea to the Government simultaneously of both the initial and recurring charges involved in the scheme. The draft order already submitted has been slightly revised. If approved, it may be sent to Financial for acceptance.

5. After its issue, the file may be sent to the Public Works Department for obtaining the information referred to in paragraph 3.

S.K.—17-9-14.

C. RAMANUJACHARI—17-9-14.

There is no use in asking Mr. Tressler to work out any *details*, when it is not decided if we are to take up the Local Fund Workshop at all. The District Board want to *sell* the whole thing, and ask for Rs. 14,739 (stock in hand) *plus* present value of buildings, machinery, plant, etc. What the latter will come to is not stated by the board. They presumably leave it to the Government to make the valuation. The Public Works Department will please make a valuation of the *whole* concern, land, buildings, machinery, stock in hand, etc., and tell Educational the result, so that it may then be considered whether the purchase can be justified.

P. RAJAGOPALA ACHARIYAR—18-9-14.

To the Public Works Department u.o.

PUBLIC WORKS DEPARTMENT.

Deputy Secretary—

A draft memorandum to the Superintending Engineer, I Circle, is submitted.

G.V.A.—30-9-14.

T.V.N.—1-10-14.

D. MARSHALL—7-10-14.

[Memorandum to the Superintending Engineer, I Circle, No. 2146 W.A-1, dated 5th October 1914.

From the Superintending Engineer, I Circle, dated 9th November 1914, No. 1590-W/G.N.

From the Superintending Engineer, I Circle, dated 5th December 1914, No. 1704-W/G.N.

Deputy Secretary—

Please see the Executive Engineer's letter. The Superintending Engineer's further report may be awaited till 4th January 1915

K.R.—7-12-14

T.V.N.—7-12-14.

D. MARSHALL—8-12-14.

From the Superintending Engineer, I Circle, dated 8th December 1914, No. 1718-W/G.N.

From the Superintending Engineer, I Circle, dated 15th January 1914, No. 45-W/G.N.

Deputy Secretary—

The Superintending Engineer has now submitted an estimate amounting to Rs. 33,460 approximately showing the valuation of the whole concern, that is, land, buildings, machinery and stock on hand for the month ending September 1914. The valuation may be approved and forwarded to Educational with reference to their note above.

K.R.—16-1-15.

T.V.N.—18-1-15.

D. MARSHALL—19-1-15.

To the Educational Department u.o.

EDUCATIONAL DEPARTMENT.

Please see this department note on page 4 and above.

2. The Public Works authorities estimate the cost of the buildings, machinery and tools and value of the stock in hand in the local fund workshops at Cocanada at Rs. 33,460. It is for orders whether this expenditure may be agreed to. Besides

this, additional amounts may be required for the construction of a building for the school itself. In the next year's budget a provision of Rs. 40,000 has been made for buildings for the industrial schools at Cocanada, Waltair and Coimbatore. Only a portion of the non-recurring cost of the Cocanada school can be met from this provision. The Imperial grant of Rs. 21,000 has not yet been earmarked for any specific object. It may therefore, be possible to meet a portion of this expenditure from that grant also. Orders may, therefore, be now issued on this case, if the Financial Department would accept the proposal. The idea of opening an engineering school

Please see portion A at the bottom of page 12 of notes to G.O. No. 121, Educational, dated the 27th January 1914.

in the northern part of the Presidency originated with the Hon'ble Sir Harold Stuart and the Government approved the proposal in G.O. No. 121, Educational, dated the 27th January 1914. His Excellency the Governor has selected Cocanada for the location of the school.

S.K.—25-1-15.

C. RAMANUJACHARI—26-1-15.

Let me have a clean copy of the draft Government Order you would propose to issue. We can send it to Financial for acceptance.

P.R.—27-1-15.

A revised draft order is submitted for approval. It is not likely that any expenditure will be incurred on account of the school before the close of the current official year.

S.K.—28-1-15.

C. RAMANUJACHARI—28-1-15.

P.R.—1-2-15.

To the Financial Department.

FINANCIAL DEPARTMENT.

For the Assistant Secretary—

Please see Financial note, dated 20th January 1914 on page 17 of notes to G.O. No. 121, Educational, dated 27th January 1914.

The Educational Department now propose to purchase from the District Board, G.O. No. 121, Educational, dated 27th January 1914. Gōdāvari, the local fund workshop at Cocanada and to establish there a mechanical engineering school of an elementary grade for the benefit of intelligent artisans. The cost of the workshop and stock in hand is estimated at Rs. 33,460. It is proposed to meet this amount of expenditure partly from the provision of Rs. 40,000 made in next year's budget on account of the industrial schools at Cocanada, Waltair and Coimbatore and partly from the Imperial grant of Rs. 21,000. No expenditure is likely to be incurred in the current official year. The draft order may be accepted and the file returned to Educational. The proposal involves a further charge—recurring and non-recurring—on account of equipment and establishment. The extent of this further expenditure is not known.

W.O.F.—3-2-15.

T.H.R.—5-2-15.

Chief Secretary—

Financial may agree to the draft provided it is clearly understood that the grants already provided in the next year's budget on account of grants-in-aid of industrial education cannot be supplemented in the course of next year.

B. LAVILLE—15-2-15.

Accepted subject to the above condition. Honourable Member Financial should see.

A. BUTTERWORTH—11-2-15.

To the Educational Department.

EDUCATIONAL DEPARTMENT.

For orders as to the circulation of the draft to His Excellency and Honourable Member (Financial.)

C. RAMANUJACHARI—13-2-15.

His Excellency the Governor—

Honourable Member (Financial)—

P.R.—15-2-15

P[ENTLAND]—16-2-15.

H. A. S[UART]—17-2-15.

Issue.

P.R.—18-2-15.

[G.O. No. 185, Educational, dated the 19th February 1915.]

List of Tools & Plant &c., in *L. J. Workshop* Inspected by the
for the year 1919 up to the end of May 1914

No.	Particulars.	BALANCE AT THE CLOSE OF THE YEAR 31-3-19					Approximate value of Unserviceable tools.		REMARKS.
		Balance as per Tools return on 31-1-19	As actually counted.	Repairable.	Serviceable.	Unserviceable.			
							Rs.	A. P.	
1	Anvils	4							
2	Drilling machines	5							
3	Bench Vices	4							
4	Punch Hand machine	1							
5	Swage Blocks	1							
6	Punching and Shearing machine	1							
7	Grind Stone	1							
8	Portable Forge	1							
9	Portable Engine	1							
10	Fly wheel	1							
11	Split wooden pullies	5							
12	Pump Donkey	1							
13	Iron water tanks	1							
14	Power Saw bench circular	1							

List of Tools & Plant &c., in

L. J. Workshop Inspected by the
for the year 1919 up to the end of May 1919.

No.	Particulars.	BALANCE AT THE CLOSE OF THE YEAR 31-3-19					Approximate value of Unserviceable tools.	REMARKS.
		Balance as per Tools return on 31-1-19	As actually counted.	Repairable.	Serviceable.	Unserviceable.		
							Rs. A. P.	
15	Blades for saw							
	Circular	3						
16	Saw Sharpening							
	machine	1						
17	Steam Frame							
	Saw mill	1						
18	Lamp girder	1						
19	Buzzers Hammers	16						
20	Sledge Hammers	10						
21	Hand Hammers	7						
22	Slat Scaling do	2						
23	Jinn Crow	1						
24	Runners	13						
25	Concrete Road Roller	1						
26	Spoke Shaves	3						
27	Screw jacks	3						
28	Tool racks	2						
29	Telegraph Scales	1						
30	Straining Screw	1						
31	Well's Gas Lamp	2						

List of Tools & Plant &c., in

L. J. Workshop Inspected by the
for the year 1919 up to the end of May 1919.

No.	Particulars.	BALANCE AT THE CLOSE OF THE YEAR 31-3-19					Approximate value of Unserviceable tools.	REMARKS.
		Balance as per Tools return on 31-1-19	As actually counted.	Repairable.	Serviceable.	Unserviceable.		
							Rs. A. P.	
32	Saw 36"	1						
33	Mortar pestle	1						
34	Tenon Saw	1						
35	Pump bucket pump	1						
36	Iron Bow Saw	1						
37	Saw blades for							
	Saw mill	12						
38	Black's Clapnet							
	Vice	1						
39	Derivets	1						
40	Crab winches	2						
41	Screw Cutting							
	Lathe	1						
42	Box wrench for							
	Lathe	1						
43	Ballipuns	3						
44	Centre punch	1						
45	Fans of the foundry							
	Shop	2						

List of Tools & Plant &c., in

18 L. F. Workshop Inspected by the
for the year 19 19 up to the end of May 1914

No.	Particulars.	BALANCE AT THE CLOSE OF THE YEAR 31-3-19 .					Approximate value of Unserviceable tools.			REMARKS.
		Balance as per Tools return on 31-3-19	As actually counted.	Repairable.	Serviceable.	Unserviceable.				
							Rs.	A.	P.	
46	Notion Boards	2								
47	Portable Torpedo blast forge.	1								
48	weighing machine	1								
49	Bench for carpenters	1								
50	Carpenters' axe	1								
51	Boxes of taps & dies as per detailed list	4								
52	Tripod hot pump	1								
53	Tube expanders	3								
54	Slide Filistinphone	1								
55	Snap	19								
56	Roots Blower	1								
57	Scriber	1								
58	Collyburn's Pannus	2								
59	Set of Steel rollers	1								
60	Pincers	4								

List of Tools & Plant &c., in

9 L. F. Workshop Inspected by the
for the year 19 19 up to the end of May 1914

No.	Particulars.	BALANCE AT THE CLOSE OF THE YEAR 31-3-19 .					Approximate value of Unserviceable tools.			REMARKS.
		Balance as per Tools return on 31-3-19	As actually counted.	Repairable.	Serviceable.	Unserviceable.				
							Rs.	A.	P.	
61	Chatwin's Tensuring machine.	1								
62	Patent drill with bits	1								
63	Ratchet	1								
64	Steel Chisel	1								
65	Black's Staple wire	1								Two inches.
66	Pipe wrenches	3								
67	Set of Steel figures	1								
68	3-Ton road rollers	2								
69	Iron rammer	16								
70	Stamping punch or L. F. Seal	2								
71	Pulley Blocks	4								
72	Lupola	1								
73	Trolley arrangement to take the metal from the Lupola	1								
74	Wood turning lathe	1								

List of Tools & Plant &c., in

20
L. F. Workshop Inspected by the
for the year 1919 up to the end of May 1920

No.	Particulars;	BALANCE AT THE CLOSE OF THE YEAR 31-3-19					Approximate value of Unserviceable tools.			REMARKS.
		Balance as per Tools return on 31-1-19	As actually counted.	Repairable.	Serviceable.	Unserviceable.				
							Rs.	A.	P.	
1	Leak iron caps for Hubs	1								
2	Boring rods	2								
3	Hand Shell Augurs	2								
4	Spring Bone wrenches	1								

H. H. Hall

Heavy
District Board Engineer
W. B.

SHIP BUILDING SLIP

LOG YARD
ERFCT IONZARD



SAW SHED

ENGINE ROOM
25'x18'6"

TIMBER YARD
(OPEN)
25'x35'

LIGHT RAILWAY

6'x25' 1
6'x25' 2
6'x25' 3
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6'x25' 5
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6'x25' 100

STORE 175'0"

ROAD TO WORKS

NEW ROAD

PRACTICE SHOP
70'x25'

CARPENTERS SHOP
70'x25'

CLASS ROOM
25'x25'

CLASS ROOM
25'x25'

VALUABLE STORE
30'x25'

John J. J.

DIRECTOR OF INDUSTRIES

MADRAS

of Mr. Trepper and have come to the conclusion that the school should be located at Cocanada in connection with the local fund workshop at that place.

2. In its resolution dated the 29th August 1914[±] the District Board of Godavari has expressed its willingness to hand over the workshop to the Govt on condition that the value of the building & tools & plant as estimated by the P.W.D. together with the value of the stock in hand, is paid to it. The Public Works Department estimate the value of the whole concern, including that ~~value~~ of the stock in hand at the close of September 1914, at Rs 33460. Subject to such alteration in this estimate as the P.W.D. may find necessary

page 13 of cf.

page 12 of note file.

at the time of transfer¹⁶
of control of the workshop,
the Govt accept the
valuation ~~made~~ made
by that Dept^t and sanction
the purchase of the
workshop on ^{from} payment
of the above sum to
the District Board.

2. The Director of Industries
is requested to submit
^{details} proposals in regard
to accommodation, staff
~~to~~ and other matters
connected with the
establishment of the
School.

4. For the Vizagapatam
District, the St. Alphonsus
Industrial School
should be sufficient
for the present. The
Director is requested
to report how the school
may best be aided by
the Govt & developed.

Noted in CB
25/2/15

S. Coling
22/2/15

SN
27/2/15

Report his
24/4/15

To The S. G. (200) with Plans
of estimate
" Civil Dept^t placed for
" L. & P. W. D.
" P. W. D.

SK
28.1.15. CA
28.1.15

24/4/15

ORDINARY.

PRESS SLIP.

PREFERENCE.

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DEPARTMENT.

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 (b¹) Notes
 (b¹)

Brief subject.....

(c)
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(b) Each letter, memorandum, or order, or set of orders, in the file of correspondence should be headed in succession with the Roman numeral I, II, III, etc., the number being written in red ink or blue chalk above the item. The particular papers to be printed in the special issue-copies should be indicated by the Roman numeral (I, II, etc.) by which that item has been headed in the correspondence file. All matter, including marginal remarks or references, to be printed should be written in ink and matter which should not be printed should be encircled. Initials and signatures that are not quite legible should be re-written distinctly.

(b¹) For rules regarding printing of notes, see rule 315 of the office Manual.

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Type may be released after usual interval

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Clerk.

Referencer.
Clerk.

Supdt.

Supdt.

Supdt.

SPECIAL INSTRUCTIONS.

Mechanical Eng. School 248P

During that a school be established at Coimbatore for providing instruction in Mech. Engineering of an elementary grade for the benefit of intelligent artisans.

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