

- (1) பக்கங்களின் எண்ணிக்கை 12
 (2) புதுக்கித் திருப்பிய நாள் Dec 29
 (3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் low

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

P.W.D துறை

(34)

அரசாணை எண். மு. கோப்புத் தாள் எண்.	3220	அச்சகம் பலவகை
நாள் :	13-11-1889	198 .

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

READ—the following paper :—

From Colonel C. COWIE, R.A., Officiating Inspector-General of Ordnance, to the Secretary to Government, Military Department, dated Fort St. George, 18th September 1889, No. G. 68.

With reference to para. 2 of the enclosed copy of Government of India Military Department letter No. 535 M.W., dated Fort William, the 14th March 1889, to the address of the Director-General of Ordnance in India, I have the honor to forward, duly countersigned in token of approval, an estimate, amounting to Rs. 84,830, with the marginally cited annexures, for constructing new workshops in lieu of the existing smiths' and turners' shops and steam-hammer and boiler sheds at the Gun Carriage Factory, Madras, with a view to its being approved by Government in the Military Department, and transferred, if approved, to the Public Works Department for disposal.

1 Plan, original.
1 Plan, revised, with three attachments.
1 Plan of engines.
1 Plan of boilers.
1 Estimate, abstract.
1 Estimate, abstract, general.
1 Report.

2. The original estimate for constructing the new workshops according to the plan, one of the annexures, marked "original" amounted to Rs. 1,13,000, but this has been revised as far as possible in accordance with the wishes of the Government of India, and reduced to the amount now stated. The original estimate included provision, at a cost of Rs. 41,440, of 56 cast-iron forges, Cyclop's pattern, but in the revised estimate now submitted 28 double smiths' hearths 6'x4' complete with Tuyere's cistern and hearth backs, estimated to cost Rs. 9,240, have been substituted.

3. A copy of letter No. 264 C., dated 31st ultimo, from the Superintending Engineer, V Circle, is enclosed, from which it will be seen how far the modifications proposed by the Government of India have been effected.

4. Rupees 19,483 has been allotted in the current year's budget, circulated with G.O., No. 1159 W., Public Works, dated 1st May 1889, *vide* item 9, class B. works, but, as the Superintending Engineer has informed me that with this amount only materials can be purchased, and that a grant of the balance of the estimate must be awaited before the work can be proceeded with, but that if sufficient funds were now allotted the work could be carried on to completion, I wired to the Director-General of Ordnance in India asking that a further allotment of Rs. 65,347 may be provided.

5. So that no delay may take place in commencing the work, should the balance of funds be allotted, I have the honor to request that sanction may be given to the estimates as soon as possible, and that in the meantime Government in the Public Works Department may be asked to authorize the Superintending Engineer to proceed with the work at once, as it is one of a very urgent nature. During the dismantling of the old and the building of the new shops the outturn by the Gun Carriage Factory will necessarily be very small.

ENCLOSURES.

From the Secretary to the Government of India, Military Department, to the Director-General of Ordnance in India, dated Fort William, 14th March 1889, No. 535 M.W. (Ordnance Works).

I am directed to acknowledge the receipt of your letter No. 142, dated 10th January 1889, submitting for the orders of the Government of India a project for the erection of new workshops, &c., in the Gun Carriage Factory at Madras, the estimated cost of the work being approximately Rs. 1,13,000.

2. In reply, I am to state that, after consideration of the facts brought forward, the Government of India accept the proposed work as necessary in the interests of the public service, and the project for the building should now be placed in the hands of the Government of Madras who will deal finally with the estimate in communication with the Ordnance Department.

3. I am to communicate the following remarks regarding the design and arrangement of the proposed new building for such action as you may deem necessary.

The style of building seems suitable. But the placing of the workshops close to the boundary of the factory and using the boundary wall as the back wall of the new building appears open to objection, as it interferes with ventilation, makes the lighting of the building difficult and unsatisfactory and the drainage of the water from the roof on to the public road would probably give rise to difficulties; the height also seems insufficient for buildings of such width.

The position of the boilers and engines appears objectionable, being completely closed in, and it is not clear how the fuel is to be stored and the boilers worked in such a position.

The area of the building and the number of forges absolutely necessary should be carefully considered, and nothing superfluous provided; the new shed for the 15 cwt. steam-hammer for instance would appear to admit of considerable reduction.

4. The enclosures of your letter are returned herewith.

From Colonel W. H. BURTON, R.E., Superintending Engineer, V Circle, to the Inspector-General of Ordnance, Fort St. George, dated Bangalore, 31st August 1889, No. 264 C.

With reference to your letter No. O/19680, dated 29th March 1889, I have the honor to return the plans and estimate for the new workshops at Gun Carriage Factory revised so far as is possible or advisable in view of the purposes for which the work is required, in accordance with the letter of Government of India No. 535 M.W., dated 14th March 1889.

2. I would point out in view of the remarks made in the above letter regarding the former shop against the boundary wall of the factory and using it as a rear wall of these buildings is unavoidable for want of space within the factory.

3. In order to remove the objection as to want of ventilation and in steam-hammer shed a portion of the roof is proposed to be raised 3 feet above the level of adjoining roofs, as may be seen in the drawings.

4. To remove a similar objection made in regard to the smiths' shop, engine and boiler house an open space about 18 inches deep will be left between the top of the wall and the underside of the roof covering.

5. To increase the ventilation and improve the lighting of the turners' shop provision has now been made in the plan and estimate for eight additional windows six square, and one within and without.

6. To further improve the lighting of this shop provision is made for increasing area of glass lights in the roof to 1,920 f.s. Similar lighting in the roof of the smiths' shop will be 1,360 f.s. in area and 490 f.s. in that of steam-hammer shed.

7. The drip of rain water from off these roofs into the surface drain alongside of the over, generally speaking the paucity of funds available for Military works in this Presidency prevents any provision for cast-iron eaves, gutters and rain-water pipes.

8. The position of the boiler engine and in the boiler house has been reconsidered and the supports of roof modified as will enable the Superintendent of the Factory setting up the boilers, &c., as shown on the drawings.

9. A special fuel store is certainly desirable near the boiler house, but for want of space it is very difficult to put one there, but as the local departmental officers are satisfied with existing arrangements in regard to fuel storage, and as these estimates have been returned once or twice in order to be reduced in amount, no provision for a new fuel store has been made.

10. I was told at the factory that the proposed floor area for the different buildings does not exceed actual present requirements.

11. I would request you to place the plans and estimates after approving the same in the hands of Madras Government in order that they may be finally dealt with as ordered in para. 2 of Government of India letter No. 535 M.W., dated 14th March 1889, as early as possible; the Executive Engineer should be enabled to make a fair start well before the commencement of north-east monsoon or very little will be done before January next.

No. 6465, Military.

Approved and transferred to the Public Works Department for disposal.

FORT ST. GEORGE,
21st September 1889.

(Signed) H. R. SHELLEY, Colonel,
for Secretary to Government.

Note by the Chief Engineer, General Buildings and Roads Branch, Public Works Department.

The common rafters should be spaced $2\frac{1}{2}$ feet apart from centre to centre to avoid any sag in the reapers.

2. The details of the manner in which the ventilation under the eaves is to be secured should be shown in the drawings, and it should be explained why the section of roofing shown on GH has been adopted in place of continuing the section shown on EF. It is observed that although the sections on AB and CD give details of eaves ventilation, there are no corresponding details in the plan to show how the roof is supported, and to indicate the lateral extent of the openings provided for ventilation.

3. It is not clear from the estimate whether 14 double Cyclop's forges are to be provided as shown in the plan, for the estimate refers to 28 double forges at a cost of Rs. 330 each. This may lead to a serious mistake if not rectified before the forges are ordered:

CHEPÁK,
8th October 1889.

(Signed) R. R. E. DRAKE-BROCKMAN, Lt.-Col., R.E.,
Ag. Chief Engineer, P.W.D.,
General Buildings and Roads Branch.

ORDER—dated 12th October 1889, No. 2867 W., Public Works.

The estimate, amounting to Rs. 84,830, for constructing new workshops in lieu of the existing smiths' and turners' shops and steam-hammer and boiler sheds at the Gun Carriage Factory, Madras, is sanctioned.

2. Attention is drawn to the note by the Chief Engineer, Public Works Department, above recorded.

3. A sum of Rs. 19,483 has been provided for the work in the current year's Military Works budget. The Inspector-General of Ordnance states that this grant will only suffice for the collection of materials, and requests that the Superintending Engineer may be authorised to proceed with the work at once in anticipation of an additional allotment, for which application has been made to the Director-General of Ordnance in India. As it seems doubtful whether that officer will be able to provide the amount applied for, the Government regrets its inability to authorise expenditure on the work in excess of the sanctioned grant. The Superintending Engineer will, however, see that the current year's grant is fully utilised, and that arrangements are made to prosecute the work in the event of funds being provided by the Director-General of Ordnance.

4. The sanction accorded in para. 1 of these Proceedings has been registered as Imperial No. 18 W. of 1889-90, and classified as Military, Original Works.

(True Extract.)

(Signed) R. R. E. DRAKE-BROCKMAN, Lt.-Col., R.E.,
Ag. Joint Secy. to Govt., P.W.D.

To the Superintending Engineer, V Circle, with eight enclosures.
„ Examiner, Public Works Accounts,
with the general abstract estimate.
„ Military Department.

Exd. J. Moses.
Spare Copies

3220

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BUILDINGS AND ROADS.
MILITARY WORKS.

Govt. of {1889} Madras.

PUBLIC WORKS.

Dated October, 12th.

Recd.

Encl.

G.O., 12th Oct. 1889, No. 2867 W.

OCTOBER.

Gun Carriage Factory, Madras

Orders sanctioning estimate for new
workshops at the —.

ORDNANCE DEPARTMENT.

3220
Copy of a letter from the Director General
of Ordnance in India
to the Superintending Engineer 5th Circle, Madras
No. 4692 E dated Simla 18th October 1889.

With reference to your No. 336 of the 26th
Ultimo (received on the 14th instant). I
have the honor to state that no money
can be transferred from the grant for the
construction of the new workshops for
the Gun Carriage Factory, Madras, to the
work of renewal of roofs of the 36 quarters
in the Ordnance lines, Madras. Copy of a
3433-E dated 27th August 1889. } letter addressed by
me to the Secretary to the Government of
Madras, on this subject is annexed for
information.

2. The erection of the Gun Carriage Factory
workshops is a most important work and
with reference to your No. 3714 of the 4th
September 1889, to the Inspector General of
Ordnance, Madras Circle, the Government
of India have been asked to sanction
if possible, an additional grant for this
work so that it may be pushed on as
quickly as possible.

3. It is hoped that the scheme for
improving the water supply to the Gun
Carriage Factory will not be long in abeyance
as it also is considered an important work

4694 E

Simla 18th October 1889

Forwarded for information in
continuation

Continuation of this office no: 3433 - C
dated the 27th August 1889.

W. H. Lewis Major Genl.
Dir. Genl. of Ordnance in India

The Secretary to the Government of Madras
Public Works Department.
Madras.

Recd 24.10.89

No 3036 W of Oct 28, 1889
B

Recorded with
reference to G.O. No
2867 W of 12 Oct 1889

W. H. Lewis
25.10.89

B
en
28/10
28/10

Buildings

No. 7854

Government of Madras.

MILITARY DEPARTMENT,
Fort Saint George the 12th November 1889

From the Inspector General
of Ordnance to the Secretary to
Government, Military Department, dated
12th November 1889, No. G/93.

With reference to para 3 of
Government Order No 2867 W Public
Works dated 12th October 1889 for-
warded with Proceedings of Madras
Government, Military Department, No 480,
dated 30th idem, I have the honor to

"1176. Additional funds sanctioned
for Carriage Factory workshops.
letter follows." } annex in the margin
a copy of a Telegram
received this morning from the
Director General of Ordnance in India,
and to request that Government in the
Public Works Department may be
moved

moved to issue orders for the immediate
commencement of the work.

Order. Communicated to
the Public Works Department,
with reference to Proceedings of
Government No 2864 W, dated 12th
October 1889, for favor of very
early action.

[True Extract]

Alfred Herbert B. Gent
Secretary to Government

To

The Public Works Department.

Ans.

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(J)

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ho 2867w. 12.10.89.

MC 10793

329495w

12.11.89
ho 3220w of 13.11.89

B
Communicated to
the ~~Comm. Circle~~
the ~~Chap. Ring~~ Circle,
who will take in:
- immediate steps to com-
- mence the work.

2. A report as to the
amount of the additional
allotment now made
will be awaited.

(6)

WCM
12.11.89

B/

to the Circle
to be made

22.11.89

15/11-