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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

PUBLIC WORKS DEPARTMENT

G.O. No.	1605. W.	Press.
B.P. No.		Mis.
Dated	26.6.1882.	197.

K. m. K.

Not to be folded or roughly handled

26TH JUNE 1882, No. 1605 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 176.

READ—the following papers:—

From Messrs. ARBUTHNOT and Co., to the Secretary to Government, Public Works Department, dated Madras, 9th March 1882.

We have the honor to address you on the subject of the supply of Portland Cement, locally manufactured, to the Public Works of this Presidency.

2. It will be in the recollection of Government that some years ago General H. R. Morgan started cement works at Madras, and that, besides supplying various local wants, he delivered a large quantity which has been used in connection with the Harbour Works. At one time, from cause which it is needless to define, but which are not the least likely to occur again, cement below the required test was delivered to the Harbour Works. But the late supplies were all that could be desired, and Mr. Thorowgood was thoroughly satisfied with their quality. Since the Harbour Works ceased requiring cement, the works have gone on manufacturing for local wants, and we are assured by the Manager of the works that the cement has invariably given satisfaction. The last supply manufactured has been tested to stand over 1,000 lb. tensile strain, which is more than the best brands of English Cement are guaranteed to bear in this country, and which is more than is wanted for all practical purposes.

3. We observe that the Government of India have called the attention of local Governments to the desirability of employing local Portland Cement, wherever its quality and its price compare favorably with English importations. As we have acquired the cement works from General Morgan—his interest in them having entirely ceased—Government will have a substantial guarantee that any contracts we enter upon will be strictly fulfilled. The quality of the cement will of course be guaranteed, and with reference to its price, we are willing that this should remain as at present at Rs. 40 per ton of 20 cwts. In Calcutta the Government have a contract for five years with a Cement Manufactory there, and the price they have agreed to pay is about Rs. 48 per ton. Our cement works are at present capable of turning out from 350 to 400 tons per month, and we have it in contemplation to increase the production to about 600 tons. With the reconstruction of the Harbour Works in prospect, and with other large projects in hand throughout the Presidency, the Government demands will be considerable for some time to come. We therefore venture to request that, acting on the suggestion of the Government of India, as published in the last *Gazette of India*, and following the example of the Bengal Government, the Madras Government will be pleased to enter into a contract with us for the supply of Portland Cement, locally manufactured, for a period of five years. We of course undertake to supply an article equal to English Cement, and at the price of Rs. 40 per ton. The minimum quantity to be taken by Government to be 300 tons per month, and this to be increased to 450 tons when the additions to our works have been completed.

4. We trust that our request will be favorably regarded. It is a request founded on the present policy of the Government of India—a policy we venture to think a wise one, which is to encourage local enterprise as far as possible. It is a request also we have some confidence in making, as we know the cement we can supply compares favorably both as to quality and price with any that can be imported.

5. We beg the favor of the early orders of Government on our application.

No. 176-A.

From N. Sr. B. BEARDMORE, Esq., C.E., Acting Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, dated Madras, 16th March 1882, No. 90 W.

I have the honor to acknowledge your memorandum, No. 612 C., of 11th March 1882.

2. The usual test that Mr. Parkes has required in London for Portland Cement has been, I believe, a tensile strain of 800 lb. on a briquette of $2\frac{1}{4}$ square inches made under the usual conditions and kept in water for seven days. There are other minor points usually required in a specification for cement which may be found in one that I submitted to Government with my letter dated 21st July 1876.

3. The total quantity of cement required for the restoration of the works, according to Mr. Parkes's maximum estimate in his report dated 9th March 1882, will be 11,150 tons. According to his minimum estimate it will be 8,360 tons, in both cases 10 per cent. being added to cover lost and damaged cement. In either case a thousand tons should be ordered as soon as sanction is accorded for the restoration of the works to arrive per steamer. Mr. Parkes says a thousand more may come per sailing ship using ordinary despatch, and the rest might arrive in quantities of about 800 tons per month.

No. 176-B.

From N. Sr. B. BEARDMORE, Esq., C.E., Acting Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, dated Madras, 4th May 1882, No. 5 W.

Referring to your memorandum, No. 26 E., of the 20th April last, I forward you copy of specification under which I shall be glad to take cement from the Madras (Portland) Cement Company. I have forwarded copy of same specification to Messrs. Burn and Co., of Calcutta, who manufacture an hydraulic cement similar to Portland Cement.

2. From recent experiments (only concluded last week, or I would have replied to your memorandum earlier) I find the damaged cement of the Madras Cement Company now in our warehouses is not so bad as it at first appeared, i.e., although the upper portion is, in an unaccountable manner to me unless it is by absorption of moisture from the atmosphere, damaged by having become set and hardened, the underportion where it is still fine and uncaked remains good. Nevertheless a large portion of it is caked and hardened.

3. I think if Messrs. Burn and Co. also supply cement under this specification, 300 tons per month will be too great a quantity to take from the Madras Company.

No. 177.

Orders—dated 26th June 1882, No. 1605 W., Public Works.

His Excellency the Governor in Council accepts and approves of the recommendations made by the Acting Superintendent, Madras Harbour Works, regarding the supply and testing of the Portland Cement for the Harbour Works.

(True Extract.)

Under Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintendent, Madras Harbour Works.
— Messrs. Arbuthnot and Co.
Messrs. A. F. Goodall.
By the Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1882) Madras.
PUBLIC WORKS.

Dated June, 26th.

Re: d.

Encl.

G.O., 26th June 1882, No. 1605 W.

JUNE.

Nos. 116-177.

Madras Harbour Works.

Portland Cement for the —. Accepts and approves the recommendations of the Acting Superintendent regarding the supply and testing of the —.

31 P1

Madras, 9th March 1882

Colonel R. H. Langley R.E. & B.

Secretary to Government P.W.D.
Madras.

Sir

We have the honor to address you on the subject of the supply of Portland Cement locally manufactured to the Public Works of this Presidency.

It will be in the recollection of Government that some years ago General H. B. Morgan started Cement Works at Madras, and that besides supplying various local wants, he delivered a large quantity which has been used in connection with the Harbour Works. At one time, from cause, which it is needless to define but which are not the least likely to occur again, Cement below the required test was delivered to the Harbour Works. But the late supplies were all that could be desired, and Mr. Thorneycroft was thoroughly satisfied with their quality. Since the Harbour Works ceased requiring Cement, the works have gone on manufacturing for local wants, and we are assured by the manager of the works that the Cement has invariably given satisfaction. The last supply manufactured has been tested to stand over 1000 lbs. tensile strain which is more than the best brands of English Cement are guaranteed to bear in this country, & which is more than is wanted for all

practical

practical purposes.

We desire that the Government of India have called the attention of local Governments to the desirability of employing local Portland Cement, whenever its quality and its price compare favorably with English importation. As we have acquired the Cement Works from General Mergon - his interest in them having entirely ceased - Government will have a substantial guarantee that any contracts we enter upon will be strictly fulfilled. The quality of the Cement will of course be guaranteed, & with reference to its price, we are willing that this should remain as at present at Rs. 40. per ton of 20 Cwt. In Calcutta, the Government have a contract for five years with a Cement Manufacturing Works, & the price they have agreed to pay is about Rs. 48. per ton. Our Cement Works are at present capable of turning out from 350 to 400 tons per month. & we have it in contemplation to increase the production to about 600 tons with the reconstruction of the Harbour Works in prospect, and with other large projects on hand throughout the Presidency the Government demands will be considerable for some time to come. We therefore venture to request that acting on the suggestion of the Government of India, as published in the last Gazette of India, and following the example of the Bengal Government the Madras Government will be pleased to enter into a contract with us for the supply of Portland Cement locally manufactured for a period of 5 years. We of course undertake to supply an article equal to English Cement, and at

the price of Rs. 40. per ton. ^{-4- P2} The minimum quantity to be taken by Government to be 300 tons per month & this to be increased to 450 tons, when the additions to our works have been completed.

We trust that our request will be favorably regarded. It is a request founded on the present policy of the Government of India - a policy we venture to think a wise one - which is to encourage local enterprise as far as possible. It is a request also we have some confidence in making, as we know the Cement we can supply compares favorably both as to quality and price with any that can be imported.

We beg the favor of the early orders of Government on our application, &

We have the honor to be
Sir,

Your most obedient Servants,

Shankar Lal

P. W. C. No. 1574
Recd for Mr. [illegible]

FROM

No. 90W 5- P3

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS,

TO

The Secretary to Government
Public Works Department

MADRAS, 16th March 1882.

Sir,

I have the honour to acknowledge
your Memorandum No 612 C of 11 March 1882.

The usual test that Mr Parkes has
required in London for Portland Cement
has been, I believe, a tensile strain of
800 lbs on a specimen of 2 1/4 square
inches made under the usual conditions
and kept in water for 7 days. — There
are other minor points usually required
in a specification for cement which
may be found in one that I
submitted to Government with
my letter dated 21st July 1876.

The total quantity of cement
required for the Restoration of

the Works according to Mr Parkes' Maximum Estimate in his Report dated 9th March 1882 will be 11,150 tons. According to his minimum estimate it will be 8360 tons, in both cases 10 per cent being added to cover loss and damaged cement. In either case a thousand tons should be ordered as soon as sanction is accorded for the restoration of the works to arrive per steamer, Mr Parkes says a thousand more may come per sailing ship rising ordinary despatch, and the rest might arrive in quantities of about 800 tons per month.

If not manu-
factured in
Madras?

I have the honor to be,
Sir,
Your most Obedt Servant,
Hattley Beardmore
Ag^t Superintendent,
Madras Harbor Works

L.B. 2520-29. Sept 76.

L.B. 6130 - 11-3-82.

B. 5054 - 23-2-82.

L. 7814 - 23-3-82.

Buildings & Roads

From

The Ag Superintendent
Madras Harbour Works

No 90 W.

C.E. No 16 C of 20/4/82

Dated 16 March 1882.

Portland Cement

Submits opinion on the
Quality & quantities of
— likely to be required
for the Restoration of
the Works

No. 511.

7-PS

FROM

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS,

TO

Colonel R.H. Sankar, L. B. P. C.
Secretary to Government, P.W. Dept
Buildings & Roads
Fort St. George
MADRAS, 14 May 1882.

Sir

Referring to your Memorandum
No 26 E of the 20th April last I forward
you copy of Specification under which
I shall be glad to take cement from the
Madras (Portland) Cement Company.

I have forwarded copy of same Specifi-
cation to Messrs Brown & Co of
Calcutta who manufacture an hydrau-
lic cement similar to Portland cement.

2. From recent experiments (only con-
cluded last week or I would have re-
plied to your Memorandum earlier)
I find the damaged cement of the
Madras Cement Company now in
our warehouses is not so bad as
it at first appeared i.e. although

the

only 17/4/82

(14)

The upper portion is in an unaccountable manner to me unless it is by absorption of moisture from the atmosphere, damaged by having become set and hardened; the under portion where it is still fine and uncaked remains good. Nevertheless a large portion of it is caked and hardened. -

B. I think if Messrs Burn & Co. also supply cement under this specification, 300 tons per month will be too great a quantity to take from the Madras Company. -

I have the honor to be

Sir,

Your most Obedt Servt

Wm. B. Beaudenore

Acting Superintendent

Madras Harbour Works

2857
Buildings & Roads

From

The Ag. Superintendent
Madras Harbour Works

No 5 W

Dated 4th May 1882

No of Enclosures one

+ Specification
being separately
disposed of by
30-6-82

Indian Cement
Submits with remarks
Specification for -

9
Specification for Portland Cement.

1. Fineness. To be such that the Cement will all pass a sieve having 625 meshes to the square inch and leave only 15 per cent of residue when sifted through a sieve having 2500 meshes per square inch.
2. Colour. The Cement to be of a cold grey colour, and when mixed to show no change of colour if left in either air or water.
3. Weight. The Cement to be allowed to run quietly and smoothly through a zinc spout fixed at an angle of 55° into a bushel. measure the mouth of the spout being 5 inches above the top of the measure the whole apparatus being on a solid floor on which there is no vibration and when piled up above the measure to be carefully struck off level with a straight edge: the weight of the struck bushel to be then not less than 112 lbs and not more than 116 lbs.
4. The Specific Gravity to be between 3.00 & 3.05

M.S. 10/5

only 5/5 074. 6/16

- 5 Tensile Strength. As each sample arrives upon the Works, the Cement to be tested will be taken indiscriminately from at least half a dozen sacks or casks as the case may be, and will be well mixed in a dry state before commencing the test. In making into Mortar a minimum of water required will be used. Specimens which have been placed and kept in water after mixing to carry at the expiration of seven days 400 lbs per square inch without fracture, and at the expiration of twenty eight days from making to have increased in strength at least 25 per cent and at the expiration of 6 months from making to have increased in strength at least 30 per cent above what it bore at 7 days.
- 6 Set. A pat made with the minimum quantity of water, to set in not less than three hours nor to take more than six hours.
- 7 Expansion or Contraction. Pats left in air or placed in water to show no cracks or other signs of deviation in form.

Payment. If the above Specification is complied with up to the test after 28 days, two thirds payment to be made one month after delivery. If the final test after six months is complied with, the final one third payment to be then made. If the final test is not satisfactory the Cement will be returned and the Cost is to be refunded by the Manufacturers, or the Cement will be sold by public auction and the Government will hold the Manufacturers liable for any loss that may be incurred, or will take the benefit of any profit that may be made.

If the Superintendent of the Madras Harbor Works uses for blockmaking any of the Cement before the expiration of six months after delivery (ie if he foregoes the final test) then the Manufacturers may claim final payment for the quantity of Cement so used.

Wm. B. Beardmore
C.E.

Ag. Superintendent
M.H. Works

Madras
4th May 1882

1605A

13- No 1605W 134 R
CL 846

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 26th June 1882
Read the following:-

From
Messrs. Arundell & Co (A.C. - of 9th March 1882)
The Supt. Madras Harbour Works (No 90 W of 10th - - -)
" " " " (" " 5 W of 4th May -)

His Excellency the
Governor in Council accepts
and approves of the recommen-
-dations made by the Acting
Superintendent, Madras
Harbour Works, regarding
the supply and testing of
the Portland Cement for
the Harbour Works.

Supt. M. H. Works ✓
Messrs. Arundell & Co.
21/6

Att 21.6.82
21/6

1867. 7/7

Govt of (1882) Madras.
PUBLIC WORKS.

Dated

Recd.

Encl.

Pres 28/6
a.o. 26 June 1882, No. 16052

Nos. 1765177

Madras Harbour Board.
Portland Cement for the
Accept & approve the
recommendation of the
Agent regarding the
supply & testing of the

20/7/6