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G.O. No. 2678

Press
Mis.

444-49

Dated 19 9 1874.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
19th September 1874.*

Read the following papers:—

No. 444. From Major J. BEATTY, R.E., District Engineer, Godavery, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Dowlaishweram, 25th August 1874, No. 1,669.

In continuation of my letter, No. 1,342, of 31st July 1874, I have the honor to forward, herewith, a revised estimate of the cost of Coal-boring operations in the present official year, including the cost of certain rope and tools supplied last year but to be paid for in this.

- 1 Revised Estimate.
1 List of Tools required from England.

2. I have tried at Madras and Calcutta, but unsuccessfully, for the piping, pumps, and other articles that Mr. Vanstavern now asks for, and therefore beg you will be good enough to have them ordered from England. I enclose a list of what is wanted.

Extract from List of new Boring Tools and Pumps required for next season's operations at the Beddadanole Coal Field.

1. Piping.—4½ inches inside diameter, 100 feet, in 10 foot lengths, flush joints, and two top pipes 5 feet long each with slot for lifting gear, and two bottom pipes 10 feet long each with steel cutter at bottom, (total 130 feet).
2. Piping.—3½ inches inside diameter, 200 feet long, in 10 foot lengths, flush joints, and two top pipes 5 feet long each with slots for lifting gear, and two bottom pipes 10 feet long each with steel cutter at bottom, (total 230 feet).
3. Rods.—400 feet, 1½ inches square rods, in 10 foot lengths.
4. Tools.—One 5½ inches set of earth boring tools, including valve-bucket and sand auger. One double set, 4½ inches rock and earth boring tools, complete with sand auger.
5. One double set, 3½ inches rock and earth boring tools, complete with sand auger.
9. Two sets of Tiller, coupling, uncoupling, lifting tools, etc., complete.
10. Twelve spare couplings.

Estimate of the probable cost of Coal-boring operations at Beddadanole, Yernagudem Taluq, during the Official year 1874-75.

Description.	Amount.		
	Rs.	A.	P.
Actual expenditure already incurred from 1st April to 15th June 1874, including Executive Engineer's salary ...	2,886	0	0
<i>Estimated expenditure from November to March.</i>			
Repairs to tools as per Workshop estimate	232	0	0
Carriage of tools and plant from Dowlaishweram to Beddadanole Batta to trained laborers, viz., one maistry and nine men on their journey from Dumagudiem to Beddadanole ...	183	0	0
...	18	6	9
Erecting shelter for laborers and stores ...	50	0	0
A Hospital Assistant for five months, at Rupees 60 per month...	300	0	0
Boring three holes at Rupees 486 monthly — vide details in Appendix ...	2,430	0	0
Executive Engineer's pay at Rupees 800 per month ...	4,000	0	0

*Proceedings of the Madras Government, Public Works Department,
19th September 1874.*

Travelling allowance of Executive Engineer from Dowlais- weram to Beddadanoie	RS.	A	P.
Manilla rope and Carpenters' tools supplied in last year but to be paid for in this	25	0	0
Contingencies	533	2	6
	382	6	6
Total Expenditure for 1874-75...	11,040	0	0

DOWLAISHWERAM,
25th August 1874.

(Signed) J. BEATTY, Major, R.E.,
District Engineer, Godavery.

APPENDIX.

Detailed Estimate of the probable Monthly cost of boring three holes.

	RS.
1 Maistry	50
1 Sub-Maistry	15
6 Trained men, at Rupees 12 each...	72
30 Men for working, at Rupees 7 each	210
1 Blacksmith	16
1 Hammerman	10
1 Do.	8
1 Bellows-man	7
1 Cash Peon	7
3 Store Peons, at Rupees 6 each ..	18
Stores, oil, charcoal, hemp, etc., etc.	50
Contingencies, at 5 per cent.	23
Total	486

No. 445. From the same Officer, dated Dowlaisweram, 1st September 1874,
No. 1,761.

With reference to G. O., No. —, of 20th August 1874, I have the honor to report that the tools which Mr. Vanstavern used last season at Beddadanoie are still under repair in the Workshops, but will be ready in ten or twelve days more, when Mr. Vanstavern will start for Juggiapett. Meantime, in the next trip of the *Godavery* he will get down his trained workmen from Dumagudiem, and Major Hasted will have sheds erected for the party at the place for borings.

2. With the tools indented* for in addition to those he now has, he would be able to carry on two borings at one time in the peculiar soil met with at Beddadanoie, as well as one boring in the ordinary soil which he expects to meet with at Juggiapett. He will therefore take sufficient tools with him for boring one hole at a time at Juggiapett, and leave the remainder here for the Beddadanoie work.

3. In order that next working season at Beddadanoie may be employed to advantage, it is of the greatest importance that the additional tools should be obtained as early as practicable. Such of them as must be obtained from England should be despatched by steamer as soon as possible after the order is received. I beg therefore that the Superintendent of Public Works Stores may be instructed to make the necessary arrangements for the prompt supply of these tools.

*Proceedings of the Madras Government, Public Works Department,
19th September 1874.*

From T. VANSTAVERN, Esq., Executive Engineer, Public Works Department, to Major J. BEATTY, R.E., District Engineer, Lower Godavery District, dated Dowlaisweram, 31st August 1874, No. 70.

I HAVE the honor to acknowledge receipt of your Memorandum, No. 1,703, dated 29th last, enclosing copy of Proceedings of Madras Government, Public Works Department, here enter No. 1,399, dated 4th August 1874, and in reply to inform you—

1st.—The tools indented for were specially intended for the borings in the peculiar soil met with at Beddadanoie; should these be procured, then one set of the old tools will not be required, and these can remain and be used in the Kistna District when the Beddadanoie operations are resumed.

2nd.—It is this one set I intend taking with me; now they are still under repair and will be completed in some ten or twelve days more, and, whenever finished, I shall leave here at once for the Kistna District. I have addressed Major Hasted, R.E., District Engineer of the Kistna, on the subject of bandies from Bezvada, and also about the construction of a couple of sheds for shelter at the boring site, and notified to him what will be the probable time of my departure from here.

3rd.—I shall write to Mr. Moore advising him of the sanction of his entertainment, and to join me at Juggiapett. I presume the Government will sanction his cost of travelling on the scale of an Overseer.

No. 446. Endorsement of the District Engineer, Presidency, dated Fort Saint George, 9th September 1874, No. 3,563 :—

From J. N. GRAINGER, Esq., General Superintendent of the Public Works Stores and Workshops, to Lieutenant-Colonel J. GODDARD, R.E., District Engineer, Presidency, dated Chepauk, 8th September 1874, No. 906.

With reference to your endorsement, No. 3,506, of 5th instant, on Memorandum, No. 684, of 3rd instant, from 1 List. Chief Engineer, relative to the supply

of boring tools to Mr. Vanstavern, I have the honor to state that a similar list of tools required was received by me from the District Engineer, Godavery, in reply to which I stated that only incomplete parts of boring tools were available in the Public Works Stores as per list attached, but that whatever more was required could be made up in the Workshops.

2. On reference to the records, I find that in December 1870 and January 1871 twelve cases of boring tools were received from England on telegram from Simla, 24th August 1870, and despatched to the Upper Godavery, and therefore I conclude that the boring tools now required should be interchangeable with those already received from England as above.

3. From the Packing Account of those tools, I see there is a great difference between the sizes of the tubes and method of fastening the rods together and those we have in store, as also between Major Beatty's list and those in store. The list sent by Major Beatty gives the inside dimensions of tubes required, whilst the Packing Account gives the outside dimensions of tubes; but both agree as having been taken of the same tube.

4. The other items in Major Beatty's list and the Packing Account agree generally, and the concluding "Note" of that officer's list says "all screws to be of Withworth pitch" which seems to show the necessity for the boring tools now

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19th September 1874.*

required to be interchangeable with those formerly supplied direct to Major Hay, the then Superintending Engineer, Upper Godavery.

5. With the exception of the tubes, the boring tools now required could be made in the workshops if the parts of boring tools now in Upper Godavery were sent to work to, but the tubes must be obtained from England.

6. I beg, therefore, to submit that an indent be prepared on the Home Government for the whole of the tools now required by Mr. Vanstavern, as they could there be made of the same sizes and pattern as those already in use, and by the same makers, and they would in all probability be received in Madras about January 1875. I do not think it advisable to incur further delay by referring to Bombay, but would beg to suggest that a telegram of the same purport as that "from Simla, 24th August 1874," be despatched by Government for the tools in question, including two ordinary hand pumps for raising water a height of 50 feet with 2-inch piping in 10 feet length with flush joints.

SUBMITTED for orders in reference to memorandum, No. 684, dated 3rd September 1874, from the Chief Engineer, Public Works Department.

(Signed) J. GODDARD, Lieut.-Colonel, R.E.,
District Engineer, Presidency.

List of Well-boring Tools in the Public Works Stores.

	No. in Store.
Well rod, usual length ... {in 20 feet length 25 {in 11½ " " " 2	
Worm auger, 7", 4½", 4¼", 4", 3½", and 3" 6	
Open auger for clay from 3¼" to 3½" 34	
Flat chisel for stone or flint, 9½", 7½", 5½", 3½" 7	
Spring dart to draw faulty pipes from the bore-hole None. Do. do. for smaller pipes from 3" to 5" 5	
Bell screw for withdrawing broken rods None.	
Bell box for do. for 5" (internal) pipes 2	
Auger nose shell with valve for loose soil or sand 4	
Flat nose shell for similar purposes None.	
Shoe nose shell for harder ground "	
Hand dog for screwing and unscrewing the rods 2	
Pipe clams or rests None.	
Tee chisel for flint or stone "	
Wad hook, for withdrawing stones, etc., which may fall into the bore-holes "	
Spiral angular worm for withdrawing broken rods "	
Diamond or drill pointed chisel for hard ground, 3½" to 8" 4	
Lifting dog for raising and lowering the rods 5	
Long pipe clams or rests None.	
Tillers or levers for turning the rods "	
Wrought iron screwed well bore pipe "	
Short rod with swivel head 3	
Crows foot for extracting the broken rods from bore-hole None.	
Pair of well rod joints ready to shut up for greater lengths "	

*Proceedings of the Madras Government, Public Works Department,
19th September 1874.*

List of Well-boring Tools in the Public Works Stores.—(Concluded.)

	No. in Store.
Pipe tongs or heaters for making joints to pipes	None.
Tee piece or pipe dog for lowering the pipes	"
Brazed and collard pipe with water-tight soldered joints	"
Common revetted pipe strong make	"
Spring hook to be attached to well rope for raising tools, etc.	"
Windlass complete, for boring or sinking	"
Strong well sinking bucket	"
Pipes, cast iron, flush joint, 9' x 3"	15
Do. do. 9' x 4½"	18
Do. do. 9' x 6"	5
Do. do. 9' x 8"	20

CHEPAUK,
8th September 1874.

(Signed) J. N. GRAINGER,
General Superintendent, Public Works Stores.

No. 447. From Lieutenant-Colonel J. GODDARD, R.E., District Engineer, Presidency, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Fort St. George, 12th September 1874.
No. 3,621.

I HAVE the honor to report that, in obedience to the orders conveyed in your telegram, dated 12th September 1874, the General Superintendent, Department Public Works Stores and Workshops, has been directed to forward his indent for boring tools to England by the mail of the 16th instant.

No. 448. Endorsement of the District Engineer, Presidency, dated Fort St. George, 14th September 1874, No. 3,635.

From J. N. GRAINGER, Esq., General Superintendent of the Public Works Stores and Workshops, to Lieutenant-Colonel J. GODDARD, R.E., District Engineer, Presidency, dated Chepauk, 14th September 1874, No. 944.

With reference to your No. 3,600, dated 12th September 1874, I have the honor to forward herewith an indent in duplicate on the Home Government for the boring tools required for use in the Godavery District; also a copy of the same re-cast in the form required by the Government of India.

SUBMITTED to the Chief Engineer and Secretary to Government, Department Public Works, in reference to his telegram of the 12th September 1874.

(Signed) J. GODDARD, Lieut.-Colonel, R.E.,
District Engineer, Presidency.

No. 449. ORDER THEREON, 19th September 1874, No. 2,678.

ACCOUNT, No. 22.

<p>ACCOUNT, No. 22.</p>	<p>ORDERED that an emergent indent for the boring tools and pumps, the urgent need of which is reported in the above correspondence, be sent to England by the mail leaving Ootacamund on the 15th</p>
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*Proceedings of the Madras Government, Public Works Department,
19th September 1874.*

instant; with request that the articles indented for may be despatched to Madras by steamer *via* Suez at the earliest possible date.

2. The Government of India will be addressed on the subject of special allotment of funds to defray the cost of coal-boring operations.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the District Engineer, Presidency.

Godavery.

Officiating Controller of Public Works Accounts.

Exd T. O'Connor.

Exd. E. C. Shunker.

Spare Copies

Gobt. of 1874 Madras.
PUBLIC WORKS.

To

THE DISTRICT ENGINEER, PRESIDENCY,

Ac., Ac., Ac.

Dated September 19th.

Recd

Encl.

G. O. 19th September 1874, No. 2,078.

SEPTEMBER.

Nos. 444-449

Indent.—Ordered that an indent for boring tools and pumps required for the coal-boring operations in the Godavery District be sent to England, with a request that the articles indented for may be despatched to Madras by steamer via Suez.

PUBLIC WORKS DEPARTMENT.

No. 31/of 1874.

TO THE MOST HONORABLE THE MARQUIS OF SALISBURY,

SECRETARY OF STATE FOR INDIA.

MY LORD MARQUIS,—We have the honor to forward herewith, for your Lordship's information, the accompanying reports on the result of last season's operations in boring for coal in the Beddadanole Coal Field of the Godavery District, which is sufficiently favorable to have determined us to persist in these operations till the field shall have been thoroughly explored. It will be observed that, owing to the nature of the strata met with, and the want of efficient boring tools, considerable difficulty was experienced in penetrating to the requisite depth. It has been found impracticable to obtain the appliances required either in Madras or Calcutta, and we have accordingly the honor to submit by the Mail which takes this Despatch an emergent Indent on the Home Government for the requisite boring tools, pumps, etc., which we desire may be sent out to Madras by steamer *via* the Suez Canal at the earliest possible date, in order that operations next season may be commenced as early as circumstances may admit, and be carried on without impediment from defective apparatus. We trust that the descriptions given in the Indent may be found sufficiently explicit to enable the exact tools wanted being procured.

We have the honor to be,

My Lord Marquis,

Your Lordship's most obedient,

humble servants,

OOTACAMUND,
14th September 1874.

Exd. E. C. Shunker.

OOTACAMUND.
PUBLIC WORKS DEPARTMENT.

*Letter to the Most Honorable
the Marquis of Salisbury,
Secretary of State for India.*

*Dated 14 September
No. 31 of 1874.*

TRANSMITTING reports relating to last season's coal boring operations in the Godavery District, and requesting sanction to an emergent indent for tools, etc., for the continuation of the work in next season.

N^o 1669 District Eng^r Office, Godavery,
Dowlaiswaram 25 Aug^r 1874
From,
Major J. Beatty R.E.
District Engineer Godavery.

Enclosed To,
Revised
estimate
1 list of
tools
required
for
boring

Colonel G. W. Walker R.E.
Secretary to Government D.W.
Madras.

In continuation of my letter
N^o 1342 of 31st July 1874 I have the honor
to forward herewith a revised esti-
mate of the cost of Coal boring ope-
rations in the present official year,
including the cost of certain rope and
tools supplied last year, but to be paid
for in this.

2. I have tried at Madras and
Calcutta, but unsuccessfully, for the
piping, pumps, and other articles
that Mr. Vaistavernu now asks for,
and therefore beg you will be good
enough

enough to have them ordered from
England. I enclose a list of what
is wanted.

I have the honor to be,

Sir,

Your most obedient Serv^t.

J. Peatty. Major R.E.

District Engineer Godavery.

Comp^d
J.

Estimate of the probable cost of coal boring operations at Reddadanoole, Yernagudem Taluq, during the official year 1874-75.

Description.	Amount.
Actual expenditure already incurred from 1 st April to 15 June 1874, including Executive Engineer's Salary	2886
Estimated Expenditure from November to March.	
Repairs to tools as per Workshop Estimate	232
Carriage of tools and plant from Dowlaishewaram to Reddadanoole	183
Batta to trained laborers viz, one Mistry and 9 men on their journey from Duma-gudem to Reddadanoole	18 6
Erecting shelter for laborers and stores	50
A Hospital Assistant for 5 months at Rupees 60 per month	300
Boring three holes at Rs 486 monthly vide details in appendix	2430
Executive Engineer's pay at Rs 800 per month	4000
Carried forward	10,099 6

2nd 1874
To the District Engineer
Godavery.
To the Secretary to Govt.
MADRAS.

Dated 25th August 1874
Resd 1st 1874
No 1669

Enclosed are
- need estimate of coal boring operations in 1874-75 with a list of pricing & other articles to be obtained from England.

- Abstract from list of new boring tools and samples required for next season's operations at the Reddadanoole coal field.
1. Ripping — 4 5/8" inside diameter, 100 feet long, 10 feet length, fluted joints, and two top joints, 5 ft. long each with slot for lifting gear and two bottom joints 10 ft. long each, with steel cutters at bottom. (Total 130')
 2. Ripping — 3 5/8" inside diameter, 200 feet long, 10 feet length, fluted joints and two top joints 5 ft. long each with slot for lifting gear and two bottom joints 10 ft. long each with steel cutters at bottom. (Total 230')
 3. Rods — 400 feet, 1 1/2" square rods, in 10 ft lengths.
 4. Rods — One 5 1/2" set of 400 ft boring rods including valves, fluted and end wrench — One double set.
 5. 4 1/2" rock and earth boring tools, complete with handles.
 6. One double set 3 1/2" rock and earth boring tools, complete with handles.
 7. Two sets of "Teller", complete, including, 4 ft. rods, complete.
 8. Twelve spare complete.

Chas Webb
25th 8/74

From England.
25th 8/74

Brought Forward	10099 6
Travelling allowance of Executive Engineer from Dowlaishwarum to Beddadanoole	25
Mauilla rope and Carpenter's tools supplied in last year but to be paid for in this	533 3 6
Contingencies	382 6 6
Total Expenditure for 1874-75	11040

Dowlaishwarum
25th August 1874

J. Peatty Major R.E.
District Engineer Godavery D.

Appendix.

Detailed estimate of the probable monthly cost
of boring three holes.

One Maistry	50	"
One Sub Maistry	15	"
Six trained men at Rs 12 each	72	"
Thirty men for working at Rs 7 each	210	"
One blacksmith	16	"
One Hammer man	10	"
One Do	8	"
One Bellows man	7	"
One Cash peon	7	"
Three Store peons at Rs 6 each	18	"
Stores, oil charcoal Kemp &c &c	50	"
Contingencies at 5 per cent	23	"
Total Rupees	486	"

10/2

No 1761

District Eng^{rs} Office, Godavery.
Dowlaishwaram 1st Sept 1874

From,

Major. J. Beatty R.E.
District Engineer Godavery.

To,

Enclosure 1

Colonel G. W. Walker R.E.
Secretary to Government P.W.D.
Madras.

Sir,

With reference to G.O. No. of
20 August 1874, I have the honor to report
that the tools which Mr. Taustavern
used last season at Beddadamole
are still under repair in the Work-
shops, but will be ready in 10 or 12
days more, when Mr. Taustavern
will start for Suggiapett. Meantime
in the next trip of the "Godavery" he
will get down his trained workmen
from Durnagudem, and Major
Hasted will have sheds erected for
the party at the place for borings.

P. M. 5422/74
per J. J. 29 Sept 1874
In B. A. 4444

2. With the tools indented for, in addition to those he now has, he would be able to carry on two borings at one time in the peculiar soil met with at Beddadanole, as well as one boring in the ordinary soil which he expects to meet with at Suggiapett. He will therefore take sufficient tools with him for boring one hole at a time at Suggiapett, and leave the remainder here for the Beddadanole work.

3. In order that next working season at Beddadanole may be employed to advantage, it is of the greatest importance that the additional tools should be obtained as early as practicable. Such of them as must be obtained from England should be despatched by Steamer as soon as possible after the order is received. I beg, therefore, that the Superintendent of Public Works Stores may be instructed to make the necessary arrangements for

for the prompt supply of these tools.
I have the honor to be,
Sir,

Your most obedient Servant
J. Beatty. Major R.E.
District Engineer Godavari

Comd
J

Dowlaiswaram.

No. 70.

31st August 1874.

From,

J. Vanstavern Esq^r.

Executive Eng^r P. W. D.

To,

Major J. Beatty R. E.

District Engineer L. C. D.

Sir,

I have the honor to acknowledge receipt of your Memo No. 1703 dated 29th last, enclosing copy of Proceedings Madras Government P. W. D. A. E. No. 1399 dated 4th August 1874 and in reply to inform you:-
1st The tools indicated for, were, specially intended for the borings in the peculiar soil met with at Beddadanole; should these be procured, then one set of the old tools will not be required, and these can remain and be used in the Pudukottai District when the Beddadanole operations are resumed.

2. It is this one set I intend taking with me; now they are still under repair and

P. W. D. 1874
J. Vanstavern Esq^r
No. 5646.

The District Engineer

Godavery.

The Secretary to Govt.

Public Works Department

Madras.

Dated 1st September 1874.
Recd 8th September 1874.

Mr. Vanstavern will
reporting that

start for Bangalore

in 10 or 12 days and

inspecting that it is

of importance that

the additional tools

be supplied promptly

No 445
as to 6 Oct 8 1874

L. O. No. 2678. 189274.

and will be completed in some
10 or 12 days more - and, whenever
finished, I shall leave here at once
for the Kistna District. I have
addressed Major Hasted R.E. Dist.
Engineer of the Kistna on the subject
of Bandies from Berawada, and
also about the construction of a couple
of sheds for shelter at the boring site,
and notified to him what will be
the probable time of my departure
from here.

3rd I shall write to Mr. Moore
advising him of the sanction of his
entertainment and to join me
at Suggiapetta. I presume the Govt.
will sanction his cost of travelling
on the scale of an Overseer.

I have the honor to be,

Sir,

Your most obedient Servant

/s/ J. Vanstavern

Ex Eng. R.W.D.

(True copy)

L. Beatty Major R.E.
District Engineer.

12/15

Encl: header

Public Works Store Department
Chepauk 8 September 1874

No 906.
From

The General Superintendent
Public Works Stores & Workshops

To

The District Engineer
Presidency

Sir

With reference to your Endorsement No 3506 of 5th instant on Memo No 684 of 3rd instant from Chief Engineer, relative to the supply of Boring Tools to Mr. Vanakaverru, I have the honor to state that a similar list of tools required was received by me from the District Engineer Godavery, in reply to which I stated that only incomplete parts of Boring Tools were available in the P. W. Stores as per list attached; but that whatever more was required could be made up in the Workshops.

On reference to the records, I find that, in December 1870 and January 1871, twelve cases of Boring Tools were received from England on Telegram from Simla 24th August 1870, and despatched to the Upper Godavery; and therefore, I conclude that the Boring Tools now required should be interchangeable with those already received from England as above.

From

124. 27/19 Sept 1874
From 21/15. 1.4.45.
J. Vanakaverru

Engineer
on special duty

For District Engineer

Godavery.

Dated 31st Aug 1874

Recd. P. W. 5646/74

1290

Report to the proba-
ble state of Chepa-
ture to the District
District, and of
his having placed
himself in communi-
cation with all those
about his entertainment

3 From the Packing Account of those tools,
I see there is a great difference between the sizes of the tubes
and method of fastening the rods together, and those we have in
Store, as also between Major Beatty's list and those in Store.
The list sent by Major Beatty gives the inside dimensions
of tubes required, whilst the Packing Account gives the outside
dimensions of tubes; but both agree as having been taken of the
same tube

4 The other items in Major Beatty's list and
the Packing Account agree generally, and the concluding note
of that Officer's list says "all screws to be of witherth pitch" which
seems to show the necessity for the Boring Tools now required to be
interchangeable with those formerly supplied direct to Major
May, the then Superintending Engineer, Upper Godavery.

5 With the exception of the tubes, the Boring
Tools now required could be made in the Workshops,
if the parts of Boring Tools, now in upper Godavery,
were sent to work to; but the tubes must be obtained from
England.

6 I beg therefore to submit that an
Indent be prepared on the Home Government for the
whole of the Tools now required by Mr Vanstaen, as
they could there be made of the same sizes and pattern
as those already in use, and by the same Makers, and
they would in all probability be received in Madras
about January 1875. I do not think it advisable to

incur

incur further delay by preferring to Bombay, but would beg to
suggest that a Telegram of the same purport, as that from
Simla 24th August 1874, be despatched by Government for
the Tools in question, including two ordinary hand
pumps for raising water a height of 50 feet with two inch
piping in 10 feet length with flush joints.

I have the honor to be

Sir

Your Most Obedt Servant

J. H. Mearns
Genl Supt of W Stores &c.

List of well boring tools in the P.W. Stores.

Well Rod, usual length	in 20ft lengths	25
Worm Auger. 7", 4 1/2", 4 1/4", 4", 3 3/4" & 3"	in 11 1/2 ft lengths	2.
Open Auger for Clay from 3 1/4" to 8 1/2"		1.
Flat Chisel for Stone or Flint 9 1/2", 7 1/4", 5 3/4", 3 1/2"		34
Spring Bar, to draw faulty pipes from the borehole.		7
10" 10" for smaller pipes from 3" to 5"		Stone
Bell Screw for withdrawing broken Rods		5.
Bell Box, for 10" for 5" (internal) pipes		Stone
Auger Nose Shell with valve for loose soil or Sand		2.
Flat Nose Shell for similar purposes		4.
Shoe Nose Shell for harder ground		Stone
Hand Dog, for screwing and unscrewing the Rods.		Stone
Pipe Clamps or Rests		2.
Tee Chisel, for Flint or Stone		Stone
Mad Hook, for withdrawing Stones 8 1/2", which may fall into the borehole.		Stone
Spiral Angular Worm for withdrawing broken Rods		Stone
Diamond or Drill pointed Chisel for hard ground 3 1/4" to 8"		4.
Lifting Dog for raising and lowering the Rods		5
Long pipe Clamps or Rests		Stone
Winders or Levers for turning the Rods.		Stone
Wrought Iron Screwed Well Bore Pipe		Stone
Short Rod, with Swivel Head.		3.
Worms foot for extracting the Broken Rods from borehole.		Stone
Pair of Well Rod Joints ready to shut up for greater lengths		Stone
Pipe Congs or Meters for making joints to Pipes.		Stone
Tee piece or Pipe Dog for lowering the pipes		Stone
Brazed and lapped Pipe with water tight soldered joints		Stone
Common Rivetted Pipe Strong make		Stone
Spring Hook to be attached to Well Rope for raising tools &c.		Stone
Windlass complete, for Boring or Sinking		Stone
Strong Well Sinking Bucket		Stone
Pipes Rust Iron Black joint - 9' x 3"		15
10" 9' x 4 1/2"		18
10" 9' x 6"		5
10" 9' x 8"		20.

Chapman (June copy) - J. J. Harris
 8th September 1874 General Supt. P.W. Stores
 Dr. J. Harris
 Dr. J. Harris

11/24/11
 From General Supt. P.W. Stores
 The District Engineer
 dated 18th September 1874
 Recd J. J. Harris
 Enclosed
 J. J. Harris
 I beg to thank you for the tools
 required by the District Engineer
 for boring operations and
 to inform you that the
 same have been sent to
 the District Engineer
 for his use.

No 3563.
 Submitted for order in
 reference to Memo No 1684
 dated 3rd September 1874
 from the Chief Engineer.
 J. J. Harris
 District Engineer
 to the Chief Engineer & J. J. Harris
 J. J. Harris
 J. J. Harris

Enclosed in a letter
from the General
Lieut. O. M. L. for Mr.
Frederick to the Rev.
Congregational Preachers
at St. George's Wm.
8th September 1874
C. H. 906

C. H. 5702/74

Ms. 2719 Sept 1874
In 15. N. 446.

NO 14

No 3621
From,

20.13
31

The District Engineer
Presidency

The Chief Engineer, and
Secretary to Government
D.P.W.

Sir,

I have the honor to report that in obedience to the orders conveyed in your telegram dated 12 September 1874 the General Superintendent D.P.W. Stores and Workshop has been directed to forward his indent for boring tools to England by the mail of the 16th instant.

I have the honor to be
Sir,

Your most obedt. servant

Fort St. George
12 Sept 1874.

Col.

Do forward

District Engineer
Presidency

P. W. 1874 10 parts
No: 7808 for Mr
No: 5702.

From:

The District Engineer
Presidency

Re: 9" { Sept 1/74.
Re: 10" {
No 3563.

Submitting a letter from the Genl Supt. P.W. Stores suggesting that a telegram be sent to England for the tools required by Mr. Vanstaunem for coal boring operations for next season -

G.O. No: 2678. 15-9-74
Telegram

to Mr. Vanstaunem
to prepare indent for boring tools to
be sent by next mail.
D.P.W.

At 4.40
Recd to Port 10 Sept 74

No 944

Public Works Stone Dept

From

J. N. Granger Esq

Genl. Supl. P. W. Stone

To

The District Engineer

Providence

Sir

With reference to your No 3600,
of 12th Sept 74. I have the honor to for-
ward herewith an indent in duplicate
on the Name Govt. for the boring tools
required for use in the Cadaverly Div,
also a copy of the same receipt in the
form required by the Govt. of India

I have the honor to be

Sir

Yours Most Obedt Servant

J. N. Granger

Genl. Supl. P. W. Stone

Chepaunt
14th Sept 74

Order 123
Recd. 123 Sept 1874.

To the Chief Engineer
Providence
8 pm
Sept 1874

No 3600

Reports that the
Genl. Supl. P. W. Stone

has been directed to
forward on indent

for boring tools to

England by the mail

of the 16th inst

Ed. No: 2678. 13th 74

Order 123 Sept 1874

Richards

San Francisco & P.O. Office

San Francisco & P.O. Office

2036351

Fort St. George

14th Sept 1874

Submitted to the Chief

in the name of the

the 12 September 1874

the 12 September 1874

the 12 September 1874

the 12 September 1874

the 12 September 1874

the 12 September 1874

P. W. 1874 Sept.
No. 5804

From
The Dist. Engr.
Presidency

14 Sept
No. 3635
E. 3

Submitting
a letter from the
General Supt. P. W.
Hues forwarding
an indent on the
Home Government
for coal boring
tools required for
use in the Godavery
District -

G. O. No. 2673. 15.9.74

14.4.8
16.9.74

No 31 of 1874

To
The Rt. Hon the
Secretary of State for India.
My Lord Marquis.

We have the honor
to forward herewith for
your Lordship's information
the accompanying reports
on the result of last
season's operations in
boring for coal in the
Godavery District.
Biddanda coal field
which is sufficiently fertile
and to be preserved
able to have determined
determination to persist
in these operations till
the field ^{space} have been
thoroughly explored -
It will be observed
that owing to the nature
of the strata met with
and the want of
efficient boring tools
considerable difficulty
was

1953 April July 1874

149

was experienced in
penetrating to the
requisite depth. It has
been found impracticable
to obtain the appliances
required either in Madras
or Calcutta, and we
have accordingly the honor
to submit by the mail
which takes this
Despatch an urgent
Indent on the Home
Government for the
requisite boring tools,
pumps, &c, which we
desire may be sent on
to Madras by steamer,
via the Suez Canal
at the earliest possible
date, in order that
operations next season
may be commenced
as early as circum-
stances may admit,
and be carried on
without impediment
from defective appa-
ratus

ratus. We trust that
the descriptions given in
the Indent may be
found sufficiently ex-
plicit to enable the
exact tools wanted
being procured.
Yours

Desd in L-8 14/9/74.

Public Works Department
Fort St. George

Letter to the Most Honorable
the Secretary of State for India
Dated 11th Sept. 1874

Copy sent to Govt of India
on the 30th Sept 1874

Original despatched by
manuscript on the 11th Sept
from Port - spare copies
despatched from Calcutta 23-9-1874
manuscript
reports relating to
last season's coal
borring operations in
the Godavery Dist.
+ requesting sanction
to an emergent indent
for tools &c for the
continuation of the
work in next season.

26781

From

The District Engineer
Godavery

H.E. No. 1669 of 25 Aug. 1874
" " 1761- " - 1st Sep - " -

" " " " " " 3568. 9 " 00 " "

" " " " " " 3621. 12 " 00 " "

" " " " " " 16. 8/11/74

Ordered that an
Emergent Indent for the
Boring Tools and Pumps,
the urgent need of which
is reported in the above
correspondence, be sent
to England by the mail
leaving Ratanamund on
the 15th Instant; with
request that the articles
indented for may be
despatched to Madras
by Steamer, via Suez,
at the earliest possible
date.

The Government of
India will be addressed
on the subject of special
allotment of funds to
defray the cost of the
Coal

MD
16/9

Coal Bring operations
C.M.M.

B.R. Residence
" " Goddard
Cont. P.W.A.

S. Capin de 25/9/74

Print - 2000

For 1000
1000 3

1000 9

444 - 449

Civ 12/9/74

Ptd 15/9/74

1547² 564⁶ 570² 571⁴ 580⁴

Gobt. of Madras.

PUBLIC WORKS.

To

The Dist. Engr.
Residency

Dated

Recd.

Encl. 3

G. O. 19th Sept. N. 2678

Nos. 444-449.

Indent

Ordered that an
Indent for the Boring
Tools & Pumps required
for the Coal boring
operations in the Godavari
District be sent to England
with a request that the
Articles indented for
may be despatched to
Madras by Steamer or Vice
Vice.