

(1) Number of pages 44 22
(2) Date of repair 31-7-86
(3) Initials of the Referencer bug

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

PUBLIC WORKS DEPARTMENT

G.O. No. 2109 W	Press.
B.P. No.	Mis.
Dated 10-5-1878	197.

Not to be folded or roughly handled

2109
1

GOVERNMENT OF MADRAS
PUBLIC WORKS DEPARTMENT

10th May 1878, No 2,109 W

Buildings and Roads
Civil Works.

Read the following papers —

No. 104. Proceedings of the Madras Government in the Political Department,
dated 17th April 1878, No 217

From MEER HOOSSAIN ALLY SAHIB, Acting Government Agent and Paymaster
of Carnatic Stipends, Chepauk, to the Chief Secretary to Government, dated
25th September 1877, No 364

I HAVE the honor to forward two letters, dated respectively 17th and 22nd instant,
for the favorable consideration of Government, received from the Secretary to His
Highness the Prince of Arcot, the former requesting certain alterations in the water-
supply pipes laid down in the Amir Mahal compound through the Municipality and
also requesting the sanction of Government to place a pump with its necessary
fittings at his disposal, and the latter to have the ground and tank of the said
compound levelled and repaired by relief coolies

No 1,828.

REFERRED to the Consulting Architect for report, in communication with the
President of the Madras Municipality.

FORT ST GEORGE,
28th September 1877.

(Signed) D. F. CARMICHAEL,
Chief Secretary.

From R. F. CHISHOLM, Esq, F.R.I.B.A., Consulting Architect to Government, to the
Chief Secretary to Government, dated Chepauk, 11th December 1877,
No 1,258

I HAVE the honor to acknowledge the receipt of letter, No 364, dated the 25th
September, from Meer Hoossain Ally
One estimate Sahib to your address and forwarded to
me in original with your memorandum, No 1,828, dated the 28th September 1877

2 On receiving these letters I placed myself in communication with the
President of the Municipality and the Superintendent of the Government Stores and
Workshops From the information and documents supplied by them I am enabled to
submit the accompanying estimate amounting to Rupees 2,893.

3 Mr. Burrows mentions a point in connection with the water-supply which
should be brought to the notice of Government He says "in forwarding these
estimates, however, I think it should be pointed out that a charge, at the rate of
2 Annas per 1,000 gallons, will be made for the water supplied for irrigating the
compound, the purpose for which the work is designed, and that the probable discharge
from the 4-inch pipe would be 11,280 gallons per hour If the water were turned
on for, say, only three hours per diem the daily cost would be Rupees 4-2-9".

4 In addition to the above estimate Rupees 290 have already been expended by the Municipality at the request of the Private Secretary to His Highness, who now desires that the sum should be included and added to the estimate herewith forwarded. If the Government desire this to be done the sanction should be given for expending Rupees 3,188 in place of Rupees 2,898. The details of the difference I will hereafter obtain from the Municipality.

From Lieutenant-Colonel F. H. TYRRELL, Government Agent and Paymaster of Carnatic Stipends, Chepauk, to the Chief Secretary to Government, dated 31st January 1878, No 34.

With reference to official memorandum, No. 8, dated 4th January 1878, I have the honor to inform you that His Highness is not disposed to incur the charge of Rupees 1,500 per annum for additional water to be laid on to the Amir Mahal but His Highness has requested me to obtain a copy of the estimate for the alterations for his information, with a view to finding out if any less expensive arrangements could be made.

2 His Highness has requested me to remind you of his application for the loan of a pump and fittings from the Public Works Department made in his letter, No. 63 of 1877, forwarded with this office letter of 28th September 1877, No 364.

No 166.

ORDER.—As requested in the Government Agent's letter, dated 31st January 1878, copies of the estimates furnished by the Consulting Architect will be furnished for the information of His Highness the Prince of Arcot.

FORT ST GEORGE,
18th March 1878

(Signed) D. F. CARMICHAEL,
Chief Secretary.

Memorandum from Colonel E. A. FOORD, R.E., Secretary to Government, Public Works Department, to the Chief Secretary to Government, dated Fort St George, 8th January 1878, No 134.

The Secretary to Government, Public Works Department, has the honor to furnish the statement showing expenditure upon the Amir Mahal from the commencement, called for in the Chief Secretary's memorandum of the 4th instant, No 6, Political.

ENCLOSURE No 1

EXPENDITURE incurred on the Conversion of the Royapettah Police Court premises into a residence for the Prince of Arcot

	RS	A	P	
In 1872-73	1,027	12	1	Debited to Civil Department
In 1873-74	40,387	9	3	
In 1874-75	32,703	10	8	
In 1875-76	32,587	2	3	
In 1876-77	7,317	4	0	
In 1876-77	18,950	10	9	Do to Public Works Department
In 1877-78 up to end of July 1877	257	6	8	
Total	1,33,231	7	8	

There has been no expenditure subsequent to July 1877, in which month the work was reported to have been completed.

5th January 1878

(Signed) L. CONWAY-GORDON, Major, R.E.,
Examiner of Public Works Accounts

From Lieutenant-Colonel F. H. TYRRELL, Government Agent and Paymaster of Carnatic Stipends, Chepauk, to the Chief Secretary to Government, dated 27th March 1878, No 114.

I HAVE the honor to forward a letter from the Secretary to His Highness the Prince of Arcot, G.C.S.I., returning the estimates forwarded to me with G.O., No 166, dated 18th March 1878, and requesting that certain of the works may be carried out, viz, the works provided for by the estimate for alterations and additions to the existing system of water-supply, excluding certain items estimated to cost Rupees 115-8-8 which reduces the total of the estimate from Rupees 514-2-6 to Rupees (398-9-10) three hundred and ninety-eight Annas nine and Pies ten.

2 His Highness also desires that the estimate for repairs and additions to the Amir Mahal buildings, amounting to Rupees (264-5-6) two hundred and sixty-four Annas five and Pies six should be fully carried out.

3. His Highness also desires that a small wooden shed should be constructed at the northern entrance of the zenana to shelter a sentinel.

ADVERTING to the letter from the Government Agent, No 114, His Grace the Governor, in Council sanctions the estimate* of the probable cost for additional

* Rupees 514-2-6

work in connection with the water-supply to the Amir Mahal (excluding the charge for "stand-pipe for servants, &c, &c," amounting to Rupees 115-8-8) and the estimate, amounting to Rupees 264-5-6, for "repairs and additions."

2 Sanction is also accorded for the erection of the sentry-box.

3 The estimates will be forwarded to the Public Works Department, in view to orders being issued for carrying out the works, and for provision of funds.

(True Extract)

(Signed) D. F. CARMICHAEL,
Chief Secretary.

No 104-A Memorandum in the Financial Department, dated 9th May 1878, No 768

No 105 ORDER THEREON, 10th May 1878, No. 2,109 W.

THE Consulting Architect to Government will at once carry out the two works for which sanction has been given, the needful funds being provided from the Provincial Reserve of 1878-79.

2 An estimate should be submitted for the sentry-box.

(True Extract)

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Govt, P.W.D.

(True Copy)

Major, R.E.,
Under Secy. to Govt, P.W.D.

To the Consulting Architect
" Examiner of Public Works Accounts.
" District Engineer, Presidency.
" Political Department
Exd T. D. Ryan
Spare Copies

BUILDINGS AND ROADS
CIVIL WORKS

Govt. of (1878) Madras.

PUBLIC WORKS.

The CONSULTING ARCHITECT,

Ac, & &

Dated 27/1/78

From

To

G. O. 10th 1/1878. No. 2101 W

REY.

Nos. 101-105.

The Consulting Architect, Madras.
The Chief Engineer, Madras.
The Chief Engineer, Arcot.
The Chief Engineer, Bangalore.
The Chief Engineer, Bellary.
The Chief Engineer, Channarayana.
The Chief Engineer, Channarayana.
The Chief Engineer, Channarayana.

GOVERNMENT OF MADRAS.

POLITICAL DEPARTMENT.

17th April 1878, No 217.

Amir Mahal.

Read the following papers —

No. 22 From MEER HOOSSAIN ALLY SAHIB, Acting Government Agent and Paymaster of Carnatic Stipends, Chepauk, to the Chief Secretary to Government, dated 25th September 1877, No 364

I have the honor to forward two letters, dated respectively 17th and 22nd instant, for the favorable consideration of Government, received from the Secretary to His Highness the Prince of Arcot, the former requesting certain alterations in the water-supply pipes laid down in the Amir Mahal compound through the Municipality, and also requesting the sanction of Government to place a pump with its necessary fittings at his disposal; and the latter to have the ground and tank of the said compound levelled and repaired by relief coolies.

No. 1828.

Referred to the Consulting Architect for report, in communication with the President of the Madras Municipality.

FORT ST GEORGE,
28th September 1877.

(Signed) D F CARMICHAEL,
Chief Secretary

No. 23 From R F CHISHOLM, Esq, F.R.I.B.A, Consulting Architect to Government, to the Chief Secretary to Government, dated Chepauk, 11th December 1877, No 1258

I have the honor to acknowledge the receipt of letter, No 364, dated the 25th September, from Meer Hoossain Ally Sahib to your address and forwarded to me in original with your Memorandum, No. 1828, dated the 28th September 1877.

2 On receiving these letters I placed myself in communication with the President of the Municipality and the Superintendent of the Government Stores and Workshops From the information and documents supplied by them I am enabled to submit the accompanying estimate amounting to Rupees 2,898.

3 Mr Burrows mentions a point in connection with the water-supply which should be brought to the notice of Government He says "in forwarding these estimates, however, I think it should be pointed out that a charge, at the rate of 2 Annas per 1,000 gallons, will be made for the water supplied for irrigating the compound, the purpose for which the work is designed, and that the probable discharge from the 4-inch pipe would be 11,280 gallons per hour. If the water were turned on for, say, only three hours per diem the daily cost would be Rupees 4-2-9."

4 In addition to the above estimate Rupees 290 have already been expended by the Municipality at the request of the Private Secretary to His Highness, who now desires that the sum should be included and added to the estimate herewith forwarded. If the Government desire this to be done the sanction should be given for expending Rupees 3,188 in place of Rupees 2,898. The details of the difference I will hereafter obtain from the Municipality.

No. 24 From Lieutenant-Colonel F. H. TYRRELL, Government Agent and Paymaster of Carnatic Stipends, Chepauk, to the Chief Secretary to Government, dated 31st January 1878, No 34.

With reference to Official Memorandum, No 8, dated 4th January 1878, I have the honor to inform you that His Highness is not disposed to incur the charge of Rupees 1,500 per annum for additional water to be laid on to the Amir Mahal but His Highness has requested me to obtain a copy of the estimate for the alterations for his information, with a view to finding out if any less expensive arrangements could be made.

2. His Highness has requested me to remind you of his application for the loan of a pump and fittings from the Public Works Department made in his letter, No 63 of 1877, forwarded with this office letter of 28th September 1877, No 364.

No 25
No 166

ORDER—As requested in the Government Agent's letter, dated 31st January 1878, copies of the estimates furnished by the Consulting Architect will be furnished for the information of His Highness the Prince of Arcot.

FORT ST GEORGE,
18th March 1878 (Signed) D. F. CARMICHAEL,
Chief Secretary.

No 26 Memorandum from Colonel E. A. FOORD, R.E., Secretary to Government, Public Works Department, to the Chief Secretary to Government, dated Fort St George, 8th January 1878, No. 134.

The Secretary to Government, Public Works Department, has the honor to furnish the statement showing expenditure upon the Amir Mahal from the commencement, called for in the Chief Secretary's Memorandum of the 4th instant, No 6, Political

ENCLOSURE No 1

EXPENDITURE incurred on the Conversion of the Royapettah Police Court premises into a residence for the Prince of Arcot

	RS	A	P	
In 1872-73	1,027	12	1	Debited to Civil Department
In 1873-74	40,387	9	3	
In 1874-75	32,703	10	8	
In 1875-76	32,587	2	3	
In 1876-77	7,317	4	0	
In 1876-77	18,950	10	9	Do. to Public Works Department.
In 1877-78 up to end of July 1877	257	6	8	
Total	1,33,231	7	8	

There has been no expenditure subsequent to July 1877, in which month the work was reported to have been completed.

5th January 1878. (Signed) L. CONWAY-GORDON, Major, R.E.
Examiner of P.W. Accounts

No 27 From Lieutenant-Colonel F. H. TYRRELL, Government Agent and Paymaster of Carnatic Stipends, Chepauk, to the Chief Secretary to Government, dated 27th March 1878, No 114.

I have the honor to forward a letter from the Secretary to His Highness the Prince of Arcot, C.S.I., returning the estimates forwarded to me with G.O., No 166, dated 18th March 1878, and requesting that certain of the works may be carried out, viz, the works provided for by the estimate for alterations and additions to the existing system of water-supply, excluding certain items estimated to cost Rupees 115-8-8 which reduces the total of the estimate from Rupees 514-2-6 to Rupees (398-9-10) three hundred and ninety-eight, Annas nine and Pies ten.

2 His Highness also desires that the estimate for repairs and additions to the Amir Mahal buildings, amounting to Rupees (264-5-6) two hundred and sixty-four, Annas five and Pies six should be fully carried out.

3 His Highness also desires that a small wooden shed should be constructed at the northern entrance of the Zenana to shelter a sentinel.

No 28. ORDER THEREON, 17th April 1878, No 217.

Adverting to the letter from the Government Agent, No 114, His Grace the Governor in Council sanctions the estimate* of the probable cost for additional work in connexion with the water-supply to the Amir Mahal (excluding the charge for "stand-pipe for servants, &c., &c," amounting to Rupees 115-8-8) and the estimate, amounting to Rupees 264-5-6, for "repairs and additions"

2 Sanction is also accorded for the erection of the sentry-box

3 The estimates will be forwarded to the Public Works Department, in view to orders being issued for carrying out the works, and for provision of funds.

(True Extract)

Chief Secretary

To the Public Works Department, with estimates
" Government Agent, Chepauk, with four enclosures returned

Edw. T. O'Connor

/

Summary of Estimates

- | | | | |
|---|------|---|---|
| 1. Estimate for increasing the water supply
by laying a new pipe, rising from the main in
West-cotts Road | 1541 | 8 | " |
| 2. Estimate for alterations and additions to the
existing system of water supply. | 514 | 2 | 6 |
| 3. Estimate for providing a Force pump and
suction hose. | 578 | " | " |
| 4. Estimate for repairs and additions | 264 | 5 | 6 |

Total Kubes, 2898 . .

Rupees Two thousand, eight hundred and ninety eight.

Comp. Actib^g Office
Chapau R^d December
1877.

Signed/ R. H. Chisholm.

Consq. Archt. to Government

to Aug 1-5-78

U.S.S. Val S.S. #

(1) Estimate for laying a 4 inch branch pipe from the 12 inch main in Westcott's road to the inside of the western gate of the Amur Mahal and fixing a T pipe and two 3 inch valves to dip wells to be built at the site pointed out by the Secretary to H. H. the Prince of Ararat.

Quantity Particulars Rate Per Amount Total

Piping 11⁰

Qty 1	Saddles 2" x 4"	12	..	each	12	..
" 1	Valve 4" complete	90	..		90	..
" 1	Covers for do	12	..		12	..
L. ft 500	4" Piping	1	8	..	feet	750
Qty 2	3 ft. Taper pipes 4" x 3"	4	8	..	each	9
" 2	Valves 3" complete	60	..			120
" 2	Covers for do	12	..			24
" 1	3 Feet T pipe 4"	4	8	..		4 8
L. feet 12	3" piping	1	4	..	feet	15
Qty 1	3 feet 1/2 bends 4"	4	8	..	each	4 8
" 4	do do 3"	3	12	..		15
						1056

Excavating, laying & jointing piping 18⁰

C. 34 222 2/3	Excavation	..	16	034	20	34
Qty 1	Cutting 4" holes in 12" main	4	..	each	4	..
"	Baling water	3	..		3	..
" 1	Fixing 12 x 4" saddle with rivets	2	..		2	..
" 1	Fixing 4" valve	2	..		2	..
" 2	do 3" do	1	8	..	3	..

Carried over Report 34 04 1056

Brought forward Refers 34 134 1056

L. gds 170³/₄ Laying & pointing 4" piping - 12. gds 128 ..
 " 8 " " 3" " - 10. " 5 ..
 At 3 Masonry for valves - 6 .. each 10 .. 105 104

5 per cent on materials for
 cover loss on the a/c - 52 12 9

10 per cent on materials
 and labor for supervision - 12 42 11

Subcircular Siph. Wells 6' x 5' x 3'

C. gds 27²/₇ Excavation - 18 Cfd - 70
 C. ft 78¹/₂ Concrete - 20 Cfd 11 7
 " 195¹/₂ Brickwork in Chumam - 24 " 28 82
 S. ft 84³/₄ Plastering with Cement - 5 " Sgs 17 23
 " 189 Paving with 2" granite stone
 including 3" concrete founda-
 tion & cement pointing - 23 8. " 44 76
 S. ft 27 Teakwood trunks for wells - 56 Sft 9 46
 10 per cent on labor & supervision - 11 24 122 11

Total Refers 1541 8

Madras Municipality
 Water Works Department
 3rd December 1877

(Signed) J. C. Jones
 Executive Engineer

(True Copy)

(Signed) R. St. Chisholm
 Consulting Architect to Government
 11th December 1877

2107

(2) Estimate of the probable cost for additional work on the
 old system of pipes laid to the Amur Mahal as informed
 by the Secretary to His Highness the Prince of Ararat.

Quantity Particulars Rate Per Amount Total

For Lahure and Ornamental fountain in Zenana

Piping &c.

L ft 60	1" Piping	76 ft	28 2.
N. 1	1/4" Discharge Cock	2 8. each	2 8.
" 1	3/4" Stop Cock	6 8.	6 8.
" 1	1 1/2" Tee	1 8.	1 8.
" 1	1" Tee	14.	14.
L ft 2	1 1/2" Piping	14. ft	7 42.
N. 2	Collars for do	1 " each	2 ..
" 3	1/4" Bends 1"	15.	2 13.
			46 1

Laying and pointing Piping &c.

L ft 48 Excavation through flooring,
 losing through walls & repairing - 4. Lft 12 ..
 Cutting the 1 1/2" piping and making
 joint with Tee and Collars. 2 ..

L. gds 20 Laying 1" piping - 2. gds 2 8.
 N. 6 Cuts and Screws on 1" Piping - 8. each 3 .. 19 8

Masonry work for Cistern

C. gds 5²³/₂₇ Excavation - 16 Cfd - 89
 C. ft 75¹/₂ Concrete in foundations - 23 Cfd 13 6 10
 " 126²/₃ Brickwork in Chumam - 25 " 19 21
 S. ft 175 Plastering with Cement - 5 " Sgs 8 12. 41 13 8

Carried over Refers 107 68

Brought forward Pipes 107 6 8

Stand pipe for servants near the large gateway.
Piping &c

Lft 130	1" Piping	76 Lft	60 15
No 1	3/4" Discharge Cock	2 8 " each	2 8 "
" 3	1 Inch 1/4" Bends	15 " "	2 13 "
" 1	1 Inch Stop Cock	8 " "	8 " "
" 1	Cover for do	12 " "	12 " "
" 4	1 Inch Couplings	46 " "	1 2 "

87 6

Laying and joining Piping
Incubation for tapping and
serving hole on Main in Pipes
Road and laying pipe
Tapping and serving 1" hole

L 43 1/3	Laying and joining 1" piping	2 L 43	5 68
No 4	Cuts and Screws for do	8 " each	2 " "
"	Fixing 1" Stop Cock	4 " "	4 " "
"	Masonry for do in road way	2 " "	2 " "
"	do for stand pipe	15 " "	28 28

Altering the position of a
2 inch stand pipe

Lft 1 1/2	2" Piping	1 8 " Lft	7 4 "
No 2	Cuts and Screws on piping	1 " " each	2 " "
"	Repairing stand pipe	1 " " "	1 " "

5 4

1 1/4 Branch on West side of building
to the summer house from the 2"
branch to fountain

Lft 125	1 1/4 Piping	10 " Lft	78 2 "
"	1 1/4 Tees	1 2 " each	2 4 "
"	1 1/4 " x 1" Taper Couplings	8 " "	1 8 "
Carried over Pipes 81 1/4 228 3 4			

Brought forward Rs 81 1/4 228 3 4

No 1	1/4 1/4 Bend	1 2 " each	1 2 "
Lft 100	1" Piping	76 ft	46 1/4 "
" 6	5/8" do	56 " "	2 1 "
No 3	1" Stop Cocks	8 " " each	24 " "
" 3	Covers for do	12 " " "	36 " "
" 3	1" 1/4 Bends	15 " " "	2 13 "
" 1	Copper flat jet	4 " " "	4 " "
" 2	1" x 5/8" Taper Couplings	66 " "	13 " "

179 9

Laying & joining &c

Incubation 1

Tapping and serving a 1" hole 2

No 3	Cuts and Screws on 1 1/4" piping	10 " each	1 1/4 "
" 8	do do 1" do	8 " each	4 " "
" 2	do do 5/8" do	6 " " "	12 " "

L 42 Laying and joining 1 1/4" piping 26 Lft 6 9

" 33 do do 1" do 2 " 4 2

" 2 do do 5/8" do 2 " 4

No 3 Fixing 1" Stop Cocks 4 " each 12

" 3 In doing for do in Compound 1 " 3 " 24 5

5 per cent on materials to

Cover losses on store account

on Rs 337 - 4 - 0 16 138

10 per cent on materials and

labor for supervision on Rs 452 1 4 45 36

Total Pipes 514 26

Madras Municipality
Works & Works Dept
3 December 1877

/signed/ J. A. Jones
Mechanical Engineer

/True Copy/
/signed/ R. Thakur
Consulting Architect & Joint
11 December 1877

(3)

Estimate of the cost of a double barrel Force Pump
and suction hose for the Amir Mahal.

Quantity	Item	Rate	Per	Amount
1 No	Double barrel Force Pump	400	.. Each	400 ..
50 Sin: ft.	Suction hose	3	.. Sinft	150 ..
	Damage & contingencies @ 5 percent			28 ..

Total Rs. 578 ..

11th December 1877

(Signed) R. P. Pishkolee.
Consulting Archt. & Eng.

(4) Estimate of the cost of certain repairs and additions to the Amur Mahal, Royapettah.

Quantity	Item.	Rate per	Amount	Total
----------	-------	----------	--------	-------

Main Palace Building

Repairing terrace cracks
with cement to prevent
leakage Repairing the
Upper lights of Towers.

7 ..

3 ..

10 ..

Zenana.

Repairing the cracks with
cement to prevent leakage.

7 ..

6 N^o. Fitting semi. cir. openings
with glass and frames.

3 8 . Each 21 ..

4 . Fitting openings on North
side with frames & glass shut-
ters

5 . . . 20 ..

509 . Closing spaces between joists
with 1/2 inch planks—

. 36 . 111 56

37 . Providing planks to open-
ings in lieu of perforated zinc

1 . . . 37 ..

13 . Iron gratings to drains—
Repairing the flooring
of the yard—

. 12 . 9 12 ..

3 ..

209 16.

Nowbut Khana.

21 . Providing 1/2 inch plank-
ing behind ornamental
railings.

1 . . . 21 ..

21 ..

Carried over Rupees— 240 16

Brought forward Rs. 240-1-

Shifting tiles in the out buildings	
to stop leakage	12 ..
Contingencies	12 4 ..

Total Rupees 264 5

Consy Archt Office
Chhapau 18th Decr 1777

Signature

P. Chisholm.

Consy Archt to Govt

Enc. and Col. 22/78

to H. C. 19/6/78

Estimate for increasing
the water supply and
providing a Force Pump
at the Amir Mahal.
Royapettah

Rupees ... 2898. 0. 0

Consulting Architects
Office -
11th December 1877

L. P. 2. 725/77.

2169
17

Amir Mahal - Royapettah

Summary of Estimates

- | | |
|---|---------|
| 1. Estimate for increasing the water supply by
laying 4 inch pipes from the main in Westcott
Road | 1541 8 |
| 2. Estimate for alterations and additions to the
existing system of water supply | 514 2 6 |
| 3. Estimate for providing a force pump and
suction hose | 578 |
| + Estimate for repairs and additions | 264 5 6 |

Total Rupees 2898

Rupees Two thousand, eight hundred and ninety eight

Cons. Archts Office
Shepards 11th December
1877

V. Miskin
Cons. Archt to Government

2 1/2 / 3

Estimate for laying a 4 inch branch pipe from the 12 inch main in Westcotts road to the inside of the western gate of the Amir Mahal and fixing a T pipe and two 3 inch valves to dip wells to be built at the site pointed out by the Secretary to H. H. the Prince of Arcot.

Quantity	Particulars	Rate	Per	Amount	Total
<u>Piping &c</u>					
No 1	Saddles 2" x 4"	12	each	12	
" 1	Valve 4" complete	90	"	90	
" 1	Cover for do	12	"	12	
2 ft 500	4" Piping	18	foot	750	
No 2	3 ft Taper pipes 4" x 3"	48	each	96	
" 2	Valves 3" complete	60	"	120	
" 2	Covers for do	12	"	24	
" 1	3 Feet T pipe 4"	48	"	48	
2 ft 12	3" Piping	14	foot	15	
No 1	3 Feet 1/4 bends 4"	48	each	48	
" 4	do do 3"	3 1/2	"	15	1056

Excavating, laying & jointing piping &c

69, do 222 2/3	Excavation	" 16 Cgd	20 13 4
No 1	Cutting 4" hole in 12" main	4	each 4
	Baling water	3	" 3
" 1	Fixing 12" x 4" saddle with red lead	2	" 2
" 1	Fixing 4" valve	2	" 2
" 2	do 3" do	18	" 3

Carried over Pipes & 34 13 4 1056

Brought forward Rs 34 13 4 1056

Lyd 170 $\frac{2}{3}$	Laying & jointing 4" piping	" 12" yd.	128	
" 8	do do 3" do	" 10 "	5	
N ^o 3	Masonry for valves	6 " each	18	185 13 4

5 per cent on materials
to cover losses on store &c 52 12 9

10 per cent on materials
and labor for supervision 124 2 11

Two circular deep wells 6' x 3' + 5' x 3'

6 yds 5 $\frac{23}{27}$	Excavation	" 13 C yd	" 7 3	
6 ft 7 $\frac{1}{2}$	Concrete	" 23 C ft	11 7	
" 195 $\frac{1}{2}$	Brickwork in chumaw	" 24 "	28 8 2	
Sup ft 343 $\frac{1}{4}$	Plastering with Cement	5 " S yd	17 2 8	
" 189	Paving with 2" granite stones including 3" concrete foundation & cement pointing	23 8 " "	44 7 6	
Lg ft 27	Seaweed trough for wells	" 56 S ft	9 4 6	
	10 per cent sundries & supervision		11 2 4	122 11

Total Rupees 1541 8

Madras Municipality
Waterworks Department
3rd December 1877

Signed J A Jones
Executive Engineer

True copy

W. Minshull
Consulting Architect & Engineer

11th December 1877

2109 $\frac{1}{14}$

Estimate of the probable cost for additional work
on the old system of pipes laid to the Anair
Mahal as informed by the Secretary to His
Highness the Prince of Arcot

Quantity	Particulars	Rate Per	Amount	Total
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For Latrine & Ornamental fountains in Zenana

Piping &c

Lft 60	1" Piping	" 7 6 ft	28 2	
N ^o 1	3/4" discharge cocks	28 " each	28	
" 1	3/4" stop cocks	68 " "	68	
" 1	1 1/2" Tee	18 " "	18	
" 1	1" Tee	" 14 " "	" 14	
Lft 2	1 1/2" Piping	" 14 ft	12	
N ^o 2	Collars for do	1 " each	2	
" 3	1/4" Bends 1"	" 15 " "	23	46 1

Laying & jointing Piping &c

Lft 48	Excavation thro' flooring, boring thro' walls & repairs	" 4 " Lft	12	
	cutting the 1 1/2" piping & making joint with Tee & collars		2	
Lyd 20	Fixing 1" piping	" 2 " yd	28	
N ^o 6	Cuts & Screws on 1" piping	" 8 " each	3	19 8

Masonry work for Cistern

6 yds 5 $\frac{23}{27}$	Excavation	" 16 C yd	" 89	
6 ft 95 $\frac{1}{2}$	Concrete in foundation	" 23 C ft	13 6 10	
" 126 $\frac{2}{3}$	Brickwork in chumaw	" 25 "	19 2 1	
Sup ft 175	Plastering with Cement	5 " S yd	8 12	41 13 8

Carried over Rupees 107 6 8

Brought forward Rupees 107 68

Stand pipe for servants, near the large gateway.

Piping &c

Lft 130	1" Piping	76 Lft	60 15.
N ^o 1	3/4" Discharge cock	2 8. each	2 8.
" 3	1 inch 1/4 Bends	15. "	2 13.
" 1	1 inch stop cock	8. "	8. "
" 1	Lower for do	12. "	12. "
" 4	1 inch couplings	46 "	12. "

876

Laying and jointing Piping

Excavation for tapping and screwing hole in masonry

Pyrocraft, road slaying pipe

Tapping & screwing 1" hole

Lft 43 1/3	Laying & jointing 1" piping	2. d. 3/4	56 8.
N ^o 4	Cuts and screws for do	8. each	2. "
	Fixing 1" stop cock	4. "	4. "
	Masonry for do in roadway		2. "
	do for stand pipe		15. "

28 28

Altering the position of a 2 inch stand pipe

Lft 1 1/2	2" Piping	18. Lft	24. "
N ^o 2	Cuts & screws on piping	1. each	2. "
	Re-fixing stand pipe	1. "	1. "

54

1 1/4" Branch on west side of building to the summer house from the 2" branch to fountain.

L. feet 125	1 1/4" Piping	10. Lft	78 2.
N ^o 2	1 1/4" Tees	12. each	24. "
" 3	1 1/4" x 1" Taper couplings	8. "	18. "

Carried over Rupees 81 11. 228 34

Brought forward Rs 81 11. 228 34

N ^o 1	1 1/4" - 1/2 Bend	1.2. each	12. "
Lft 100	1" Piping	76 ft	46 14.
" 6	5/8" do	56. "	21. "
N ^o 3	1" stop cocks	8. each	24. "
" 3	Covers for do	12. "	36. "
" 3	1" 1/4 Bends	15. "	2 13.
" 1	Copper flat jet	4. "	4. "
" 2	1" x 5/8" taper couplings	66. "	13. "

1999

Laying & jointing &c

Excavation

Tapping & screwing a 1" hole

N ^o 3	Cuts & screws on 1 1/4" piping	10. each	1 14.
" 8	do do 1" do	8. "	4. "
" 2	do do 5/8" do	6. "	12. "

Lft 42	Laying & jointing 1 1/4" piping	26 Lft	69. "
" 33	do do 1" do	2. "	42. "
" 2	do do 5/8" do	2. "	4. "

N ^o 3	Fixing 1" stop cocks	4. each	12. "
" 3	Masonry for do in compound	1. "	3. "

24 5.

5 per cent on materials to cover losses on store account on Rs 337.4.0

16 13 8

10 per cent on materials and labor for supervision on Rs 452.1.4

45 36

Total Rupees 514 26

Madras Municipality,
Waterworks Depart^t
3rd December 1877.

(Signed) J. A. Jones
Executive Engineer

(True copy)

M. S. S. S.
Kinnathuricht to Govt.
11 Dec 1877

2104
10

Estimate of the cost of a double barrel Force Pump
and suction hose for the Amur Mahab.

Quantity	Item	Rate	Per	Amount
1 No	Double barrel Force Pump	400 ..	each	400 ..
50 Lin. ft	Suction Hose	3 ..	lin. ft	150 ..
	Carriage & Contingencies @ 5 per cent.			28 ..
Total Rs.				578 ..

W. H. Wilson.
Consulting Archt & Engr.

11th December 1877

3169
17

Estimate of the cost of certain repairs and additions to the
Amir Mahal, Royanettah

Quantity	Item	Rate	per Amount	Total
<u>Main Palace Building</u>				
	Repairing terrace cracks with cement to prevent leakage		7 ..	
	Repairing the Upper lights of Towers		3 ..	
				<u>10 ..</u>
<u>Zenana</u>				
	Repairing the cracks with cement to prevent leakage		7 ..	
6 sq.	Fitting semi cir openings with glass and frames	3 8 . each	21 ..	
4 .	Fitting openings on North side with frames and glass shutters	5 . . .	20 ..	
507 .	Glazing spaces between joints with 1/2 inch planks	3 6 .	111 5 6	
37 .	Providing planks to openings in lieu of perforated zinc	1 . . .	37 ..	
13	Iron gratings to drains	12 . .	9 12 .	
	Repairing the flooring of the Yard		3 ..	
				<u>209 1 6</u>

Nowbat Khana

21 .	Providing 1/2 inch planking behind ornamental railings	1 . . .	21 ..	21 ..
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Carried over Page 240 1 6

Brought forward Rupees 240 1 6

Shifting tiles in the out buildings

to stop leakage

12 ..

Contingencies

12 10

Total Rupees 264 5 1

Cong. Archts Office }
Chepauk 11th Decr 1777 }

W. M. M. M.
Cong. Archts to Government

be provided.

2 The note implies a doubt whether the charge for the works to be undertaken at the *Amur Mahal*, should not be an 'Imperial Charge': which doubt has been definitely dispelled, of by G. O. Political Department, dated 4th December 1876, N^o 796. - G. O. Public Works Department, 22nd February 1877, N^o 589, and, G. O. Financial Dept. dated 4th January 1878, N^o 17.

Atacamama
9th May 1878

[Signature]

To the Secretary to Govt
Public Works Dept.

11th December 1878

See Fol. No. 785

2100
1/2
cl works

Estimate for increasing the
water supply and providing
a Force Pump &c at the
Anur Mahal. Pnyapettah.

Ruppes. 2,898. 0. 0

Consulting Architects Office
11th December 1877.

See Pol. No 785/77

2109/19
P. S. K.
cl works

2109/19
Financial Department

No 1768

Official Memorandum

The Chief Secretary has
the honor to return the endorsement
of the Secretary to Government
Public Works Department No 2040,
dated 8th May 1878, and to
inform him that he does not
read the Hon^{ble} W Audleston's
note on the draft order, referred
with the endorsement, as requiring
the Financial Department to indicate
the source whence funds should
be.

2109/12 P.W. Works

No 2109 of Public Works Department
Proceedings of the Madras Government
Read the following.

Proceedings in the Political Dept. (H.E. No 217 of 17th April 1878)
Memorandum in the H.E. No. 768 of 9 May, 1878
Pol. Dept.

The Consulting
Architect to Government
will at once carry out the
two works for which sanction
has been given, the needful
funds being provided from
the Provincial Reserve of
1878/79.

I think this should be an
Engl. Charge.

An estimate
should be submitted
for the sentry-box.

W.H.
2.5.78.
GAT

Consulting Architect of
Examiner P.W. Acc to
d. Engrs Presidency
Political Department

24-5-78

Ends P.W. 

A. L. Peel May

N^o 2048

Referred to the Finance
Dept with the view to
the source whence funds
should be provided being
decided.

E. G. M. Col. R. L.
Secy. to Govt.
S. L. Dept.

5th May 1878.

To Govt 1-5-78.

Recd 3-5-78. Recd 5-5-78.

1985
50/1



Gobl. of (1878) Madras.

PUBLIC WORKS

To The Eng: Architect

Dated

15-5-

Issued

Recd

Encl

G. O. 10-11-1878, No. 2109/1

Hos.

Amir Mahal at Royapettah,
Presidency. The Eng: Archi-
-tect instructed to carry out
the works of increasing the
water supply & providing a
Force Pump. See at the —
& requesting the submission
of an estimate for the duty
being requested.

Encl in Reg: