

- (1) பக்கங்களின் எண்ணிக்கை 40
 (2) புதுக்கித் திருப்பிய நாள் 1/90
 (3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் 10/90

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

P. W. D. துறை

அரசாணை எண். 2274
 மு. கோப்புத் தாள் எண்.

அச்சகம்
 பலவகை

நாள் : 22. 8. 1890

198

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From A. JOYCE, Esq., Executive Engineer in charge of IV Circle, to the Chief Engineer, Public Works Department, dated Pudupadi, 24th July 1890, No. 250/E.W.

I have the honor to forward, herewith, correspondence respecting alterations and improvements regarding the water-supply to the Lawrence Asylum, Ootacamund. You will, I think, be able to observe from the revised estimate forwarded by the Executive Engineer, Coimbatore division, that the proposed alterations are actually a saving. My predecessor, Major D. McNeil Campbell, has approved of the alterations in his No. 462 C.I. of 16th June 1890 and 310 C.I. of 29th April 1890 addressed to the Executive Engineer, Coimbatore. He was, however, of opinion that, under the circumstance of the case, the matter should receive the formal sanction of Government.

ENCLOSURES.

From the Officer in charge of No. 1 Sub-division, Ootacamund, to the Executive Engineer, Nilgiri Division, dated Ootacamund, 11th January 1890, No. 483.

I beg to inform you that I went to Lovedale this morning to meet P. Thompson, Esq., with a view to arrange for his firm erecting the iron tank (in the tower) which has just arrived from England in pieces, and am sorry to say that, on comparing the size of the tank with the room in which it was to be erected, we found that both the tank and interior of room to be of the same size nearly, viz., tank is 14' x 14', between walls of room 14' 2" x 14' 1 1/2", so that it could not be riveted together, as we require at least 18" clear space between the walls and sides of the tank for the purpose. Again, the entrance of this room is by a small door from the turret stairs and this door is at right angle to one of the diagonals of the room, so that it reduces the room by about 6 inches on two sides. Moreover, the tank and girders when in position will be 6 1/2 feet in height and the door is only about 4 1/2 feet above the floor level and would have to be raised accordingly.

2. Under these circumstances, I think we shall have to abandon the idea of having a tank in the tower and I don't see that it is absolutely necessary as we could meet the principal requirements, viz., in case of fire, without it by the following method:—

(1) In the main line of piping and at a central spot with regard to the buildings (this I think would be near the present cook-house) I would put a fire plug in having a stop cock below it so as to cut off all supply below this point.

(2) I would have the present tank erected on a masonry platform of sufficient height to supply the lower rooms and lavatories by gravitation and in the main pipe, which is to supply the tank, I would have a stop cock fixed so that it could cut off the supply to the tank. Then we should get the full pressure due to head of water in the reservoir about 80 feet on the fire plug. This, I think, would be quite sufficient to command all the adjacent buildings in cases of fire, if a sufficient quantity of hose was available.

(3) If you would kindly arrange to come out there with me, I could explain it perhaps better on the ground.

(4) In the meanwhile, I will not make any arrangement with the Ashley Works regarding the work.

From J. W. MARTIN, Esq., Executive Engineer, Coimbatore Division, to the Superintending Engineer, IV Circle, dated Ootacamund, 8th April 1890 No. 1641.

In forwarding the accompanying copy of letter, No. 483, of 11th January, from the Officer in charge of the late No. 1 Sub-division, Ootacamund, in the matter of the water-supply, Lawrence Asylum, I have the honor to explain, after inspecting the works, that the sanctioned estimate provides for fixing a wrought-iron tank or cistern in the fourth storey of the tower of the boys' school at a height of about 55 feet above the ground, with a view to distributing water to the adjacent buildings, for daily use, and in case of fire, the fourth storey being higher than any of the buildings except the tower. The estimate provides for a tank 14' x 14' x 5' deep, made of wrought-iron sheets supported on three wrought-iron rolled girders to contain 6,110 gallons against 7,000 gallons, the estimated supply required for one day for the boys' school. The wrought-iron sheets and girders are at site, but they have not yet been put together.

2. The estimate provides for the sheets of the tank to be taken to the fourth storey room of the tower and put together there, but this is not practicable, for the size of the room is 14' 2" by 14' 11" against 14' x 14', the size of the tank; the margin between the sides of the room and the tank is so small that it would be impossible to rivet the sheets together; for this purpose there should be at least a clear space of a foot and a half wide between the sides of the tank and walls of room. Again, as the girders are 17 feet long they cannot be placed in position except by making holes in the walls and pushing them through from the outside. Moreover, I am doubtful if the walls are strong enough to bear the tank when full, for there are some iron tie rods now in them, as some cracks have appeared. The weight of the tank and water would be about 30 tons; so it is desirable that the walls should be very strong.

3. Fortunately there is, I think, no necessity to provide a tank at 55 feet above the level of the ground, for the fall from the offtake pipe at the reservoir supplying the water to the ground level at base of tower is 101.64 feet as ascertained by Mr. Bragg from levels taken recently by him. This head is sufficient to distribute water to all the buildings commanded by the tower, and will throw water over them in case of fire. Under these circumstances, I think the proposal made by Mr. Bragg in para. 2 of his letter referred to above should be substituted for the arrangement provided in the sanctioned estimate.

4. The tank proposed to be fixed in the tower referred to above would hold nearly one day's supply of water for the boys' school. But I do not think it is necessary to store a day's supply, for the diameter of the pipe supplying the school is 2 inches. In the report it is stated that with a head of 53 feet a 2-inch pipe will discharge at the rate of 15 gallons per minute. But if the water is distributed from the ground level at the place Mr. Bragg proposes to fix a fire cock, the head will be 101.64 feet and consequently the maximum discharge will be much more than 15 gallons per minute.

5. I enclose, for information, the original report and an old survey on which is shown the line of piping, &c., to be returned.

6. Please give orders as soon as possible as to what you consider should be done, for the laying of the pipes is nearly completed down to the boys' school and soon the work must be stopped, unless it is decided at once whether the original scheme of having a tank in the fourth storey of the tower is to be carried out, or the alternative arrangement proposed by Mr. Bragg, viz., to put a fire cock, &c., in the centre of the group of buildings at the boys' school and distribute the water from that place.

From Major D. McNEIL CAMPBELL, R.E., Superintending Engineer, IV Circle, to the Executive Engineer, Coimbatore Division, dated Coimbatore, 29th April 1890, No. 310 C.I.

With reference to your No. 1641, dated 8th April 1890, I have the honor to observe that setting aside the difficulty of fixing the wrought-iron tank in the fourth storey of the tower, it seems that as it would not be safe to have it in that position as you report that the walls of the tower show signs of cracking and are tied together by rods.

2. I therefore consider that the tank should not be erected in the tower and I see no reason why any tank is necessary; it seems to me that the water can be laid on direct as is, I believe, the case at Government House, Ootacamund. I request that you will at once get a revised estimate prepared allowing for direct supply, unless there is any special reasons why a tank is necessary, in which case the present tank should be erected on a masonry platform as suggested in clause 1, para. 2 of Mr. Bragg's letter, No. 483, dated 11th January 1890.

3. In the meantime the main piping can be taken to a central spot with regard to the buildings as proposed in clause 1, para. 2 of the same letter.

4. I would bring to your notice that the Sub-division officer's letter on this important subject is dated 11th January and it was only forwarded for orders on 8th April.

From G. B. LAMBERT, Esq., Executive Engineer, Coimbatore Division, to the Superintending Engineer, IV Circle, dated Coimbatore, 10th June 1890, No. 2666.

With reference to your letter, No. 310 C.I., dated 29th April 1890, in the matter of Lawrence Asylum water-supply at Ootacamund, I have the honor to forward, for your approval, a comparative statement showing the difference between the sanctioned estimate and the revised one which provides for direct supply in lieu of the wrought-iron tank.

2. It will be observed from the accompanying statement that the excess is very trifling, viz., Rs. 105, and so a revised estimate will not be necessary.

No. 462 C.I.

MEMORANDUM.

[Letter No. 2666 of 10th June 1890, from the Executive Engineer, Coimbatore Division, forwarding a comparative statement showing the difference between the original and revised scheme for water-supply to the Lawrence Asylum, Ootacamund.]

As there is an extensive alteration to the original scheme, sanction of Government is necessary to the revised one and the Executive Engineer is therefore requested to submit a revised estimate, plan and report.

COIMBATORE,
16th June 1890.

(Signed) D. McNEIL CAMPBELL, Major, R.E.,
Superintending Engineer, IV Circle.

From G. B. LAMBERT, Esq., Executive Engineer, Coimbatore Division, to the Superintending Engineer, IV Circle, dated Coimbatore, 18th July 1890, No. 3345.

With reference to your memo. No. 462 C.I., dated 16th June 1890, I have the honor to forward, for sanction, a revised estimate, amounting to Rs. 12,090, for water-supply to the Lawrence Asylum, Ootacamund, together with a plan and report as called for therein.

2. The comparative statement shows that there will be a net saving of Rs. 260 in addition to the value of probable surplus materials, viz., Rs. 1,274, a detailed list of which is also forwarded.

ORDER—dated 22nd August 1890, No. 2274 W., Public Works.

The revised estimate, amounting to Rs. 12,090, for the supply of water to the Lawrence Asylum, Ootacamund, is sanctioned in supersession of the estimate of Rs. 12,350 referred to in G.O., No. 2139 W., dated 14th July 1888.

2. The plans and estimates have not been countersigned by the Principal and Secretary, Lawrence Asylum Committee.

(True Extract.)

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

To the Superintending Engineer, IV Circle, with eight enclosures.
" Examiner, Public Works Accounts.
" Military Department.
" Educational "

Exd. A. Aubert.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of Madras.
PUBLIC WORKS.

Dated August, 22nd.

Recd.

Encl.

G.O., 22nd Aug. 1890, No. 2274 W.

AUGUST.

Lawrence Asylum, Ootacamund

Revised estimate, amounting to Rupees
12,090, for the supply of water to the —,
sanctioned.

M 483
From

Perbel D. office P.W.D.
Ootacamund 11th January/90

The Officer

In ch. of M. S. S. D.

Ootacamund

To

The Executive Engineer
Nilgiri Division

Sir,

I beg to inform you
that I went to Roadale this
morning to meet R. Thompson Esq.
with a view to arrange for his
firm erecting the iron tank
(in the tower) which has just
arrived from England in pieces.
I am sorry to say that on com-
paring the size of the tank with
the room in which it was to be
erected, we found that both the
tank & interior of room to be
of the same size nearly viz:-
Tank is 14' x 14' - Between walls
of room 14' 2" x 14' 1 1/2" so that it could
not be re-erected together, as we
require at least 18" clear space

between

between the walls & sides of the tank for the purpose. Again the entrance of this room is by a small door from the turret stairs and this door is at right angle to one of the diagonals of the room so that it reduces the room by about 6 inches on two sides.

Moreover the tank and girders when in position will be 6 ft. in height and the door is only about 4 ft. above the floor level and would have to be raised & lowered.

2. Under these circumstances I think we shall have to abandon the idea of having a tank in the tower and I don't see that it is absolutely necessary as we could meet the Principal's requirements viz:—in case of fire without it by the following method:—

1. In the main line of piping and at a central spot with regard to the buildings (this I think would be near the present cook house) I would put a fire plug

plug in having a stop cock below it so as to cut off all supply below this point. ^{22/11}

2. I would have the present tank erected on a masonry platform of sufficient height to supply the lower rooms and lanterns by gravitation in the main pipe which is to supply the tank I would have a stop cock fixed so that it could cut off the supply to the tank. Then we should get the full pressure due to head of water in the reservoir about 80 feet on the fire plug. This I think would be quite sufficient to command all the adjacent buildings in case of fire, if a sufficient quantity of hose was available.

3. If you would kindly arrange to come out there with me I could explain it perhaps better on the ground.

4. In the meanwhile I will not make any arrangement with

with the ash by work regarding
the work.

I have &c

Sigd R. A. Bragg Sub-Engineer
S. L. Engineer

1 True copy

Sigd J. W. Martin
Executive Engineer
8-4-90

1 True copy

A. Joyce
Executive Engineer
in charge W. Fire

Sub
PW 7/15/90

No. 250

2274
E. W. Supg. Engineer's office, 4 Fire,
Camp Pudukkottai,
Coimbatore, 24th July 1890.

From,

A. Joyce, Esq.,
Executive Engineer in ch: 4 Fire,

To,

The Chief Engineer,
P. W. Department.

*2 will follow Sir,

Encls. 13

I have the honor to forward
herewith correspondence respecting
alterations and improvements regarding
the Water Supply to the Laurence
Asylum, Cotacamund. You will,
I think, be able to observe from the
revised estimate forwarded by
the Executive Engineer, Coimbatore
Division that the proposed alterations
are actually a saving. My pre-
decessor Major D. McNeil Campbell has
approved of the alterations in his
No. 462 C.S. of June 16th, 1890 and 310 C.S.
of 29th April 1890 addressed to the
Executive

Executive Engineer, Coimbatore. He
was however of opinion that under
the circumstance of the case, the
matter should receive the formal
sanction of Government.

I have the honor to be,
Sir,

Your most obed^t. servant,
A. Joyce

Exec. Engineer, in charge of field.

Enclosures. 13.

* 2 will follow

2274
6

1. Executive Engineer's letter No 1641 of 8th
April 1890 with its 3 Enclosures
1. Supg. Engineer's letter No 310 C.F. of 29th
April 1890.
1. Executive Engineer's letter No 2666 of 10th
June 1890.
1. Supg. Engineer's memo No 462 C.F. of
16th June 1890.
1. Executive Engineer's letter No 3345 of
18th July 1890.
1. Sketch map.
1. Revised Estimate.
1. Comparative Statement
1. List of probable surplus materials
at the water supply.
1. Report

P.W. Co. 7131
 From
 The Supg. Engrs
 4th Circle

Fr. Aug 1970 w 3 23.7.87
 ... 1067 w 3 9.4.88
 ... 2139.40 w 3 14.7.88
 ... 3303.84 w 3 17.10.88
 ... 19 w 3 7.1.89
 ... 82 w 3 14.1.89
 ... 412 w 3 13.2.89
 ... 1462 w 3 3.6.89
 ... 1782 w 3 5.7.89

File sent to Mr. ...

Dated 24th }
 Despd 28th } July 1890

No. 250
 E.W.

Encls. 13.

Water supply to the Law-
 rence Asylum Botacamund
 Forwarding correspond-
 ence regarding alterations
 and improvements to the
 — for the formal sanc-
 tion of Government.

[Signature]

10/9

2274
 No 1641
 Executive Engrs office
 Coimbatore Division
 Camp Ooty 8th April/90

From

J.W. Martin Esq
 Executive Engineer
 Coimbatore D^y

To

The Superintending Engr.
 Fourth Circle

Sir,

Enclosures
 1 Copy of letter
 No 483 of 11th
 Jan/90 from
 Mr. Bragg.
 1 Original
 Report and
 Survey

In forwarding the
 accompanying copy of letter
 No 483 of 11th January from the
 Officer in Charge of the late
 No 1 Sub division, Ootaca-
 mund, in the matter of the
 water supply, Lawrence Asy-
 lum, I have the honor to ex-
 plain after inspecting the
 works that the sanctioned
 estimate provides for fixing
 a wrought iron tank or
 cistern in the fourth storey
 of the tower of the Boys' School
 at a height of about 55 ft. above
 the ground, with a view to dis-
 tributing

tributing water to the adjacent buildings, for daily use, and in case of fire, the fourth storey being higher than any of the buildings except the tower. The estimate provides for a tank $14' \times 14' \times 5'$ deep, made of wrought iron sheets supported on three wrought iron-rolled girders to contain 6110 gallons against 7000 gallons, the estimated supply required for one day for the Bojose school. The wrought iron sheets and girders are at site, but they have not yet been put together.

2. The estimate provides for the sheets of the tank to be taken to the fourth storey room of the tower and put together there, but this is not practicable, for the size of the room is $14' - 2''$ by $14' - 12''$ against $14' \times 14'$, the size of the tank; the margin between the sides of the room and the tank is so small

2274
small that it would be impossible to rivet the sheets together, for this purpose there should be at least a clear space of a foot and a half wide between the sides of the tank and walls of room. Again as the girders are 17ft long, they cannot be placed in position except by making holes in the walls and pushing them through from the outside. Moreover I am doubtful if the walls are strong enough to bear the tank when full for there are some iron tie rods now in them as some cracks have appeared. The weight of the tank and water would be about 30 tons, so it is desirable that the walls should be very strong.

3. Fortunately there is, I think no necessity to provide a tank at 50ft above the level of the ground, for the fall from the offtake pipe at the reservoir supplying

supplying the water, to the ground level at base of tower is 101.64 ft as ascertained by Mr. Bragg from level taken recently by him. This head is sufficient to distribute water to all the buildings commanded by the tower, and will throw water over them in case of fire. Under these circumstances, I think the proposal made by Mr. Bragg in para 2 of his letter referred to above should be substituted for the arrangement provided in the sanctioned estimate.

4. The tank proposed to be fixed in the tower referred to above would hold nearly one day's supply of water for the boys' school. But I do not think it is necessary to store a day's supply, for the diameter of the pipe supplying the school is 2". In the report, it is stated that, with a head of 55 or two inches pipe will discharge at the rate of 15 gallons per minute

minute. But if the water is distributed from the ground level at the place Mr. Bragg proposes to fix a fire cock, the head will be 101.64 ft, and consequently the maximum discharge will be much more than 15 gallons per minute.

5. Enclose for information the original report and an old survey on which is shown the line of piping, &c. to be returned.

6. Please give orders as soon as possible as to what you consider should be done, for the laying of the pipes is nearly completed down to the boys' school, and soon the work must be stopped, unless it is decided at once whether the original scheme of having a tank in the fourth storey of the tower is to be carried out, or the alternative arrangement proposed by Mr. Bragg, namely

namely to put a fire cock ⁱⁿ
in the centre of the group of build-
ings at the Boys school, and
distribute the water from that
place.

I have &c. &c.

J. W. Marden
Executive Engineer

Free copy

A. J. J. J.
Executive Engineer
In Charge W. Circle

2274

No 310.
C.G.

Supg. Engineer's office, 4 Circle,
Coimbatore, 29th April 1890.

From,

Major D. McNeil Campbell R.E.,
Supg. Engineer, 4 Circle,

To,

The Executive Engineer,
Coimbatore Division.

Sir,

With reference to your No 1641
dated 8th April 1890, I have the
honor to observe that setting a-
side the difficulty of fixing the
wrought iron tank in the fourth
story of the tower it seems that
as it would not be safe to have it
in that position as you report that
the walls of the tower shew signs of
cracking and are tied together by
rods.

2. I therefore consider that the
tank should not be erected in the
tower and I see no reason why any
tank is necessary, it seems to me
that

that the water can be laid on direct as is, I believe, the case at Government House, Cotacamund. I request that you will at once get a revised estimate prepared allowing for direct supply unless there is any special reasons why a tank is necessary, in which case the present tank should be erected on a masonry platform as suggested in clause 1, para 2 of Mr. Bragg's letter No. 483, dated 11th January 1890.

3. In the meantime the main piping can be taken to a central spot with regard to the buildings as proposed in clause 1, para 2 of the same letter.

4. I would bring to your notice that the Sub Division officer's letter on this important subject is dated 11th January and it was only forwarded for orders on 8th April.

(True copy) D. McN. Campbell Major, R.E.,
Supg. Engineer, 4th Circle.

Exec. Engineer in charge, 11th Circle

2274
12
No. 2666. Executive Engineer's office,
Coimbatore, 10th June 1890.

From,

G.B. Lambert, Esq.,
Executive Engineer,
Coimbatore Division.

To,

The Superintending Engineer
Fourth Circle, Coimbatore.

Sir,

With reference to your letter No. 310, dated 29th April 1890 in the matter of Lawrence Asylum Water Supply at Cotacamund, I have the honor to forward for your approval a comparative statement showing the difference between the sanctioned estimate and the revised one, which provides for direct supply, in lieu of the wrought iron tank.

2. It will be observed from the accompanying statement that the

the excess is very trifling, viz Rs 105, and
so a revised estimate will not be neces-
sary.

I have &c a,
(sd) G.B. Lambert,
Executive Engineer.

(True copy)

ajoyce
Executive Engineer
in charge, IV Circle.

No. 462.
C.J.

2274
13
Supg. Engineer's office, IV Circle
Coimbatore, 16th June 1890.

Memorandum

Letter No 2666 of 10th June 1890
from the Executive Engineer, Coimbatore
Division, forwarding a comparative
Statement showing the difference
between the original and revised
scheme for water supply to the Lawrence
Asylum, Otacamund.

As there is an extensive
alteration to the original scheme,
sanction of Government is necessary
to the revised one and the Executive
Engineer is therefore requested to
submit a revised estimate, plan
and report.

(sd) D. Mott. Campbell, Major R.E.,
Supg. Engineer, IV Circle.

(True copy)

ajoyce
Exec Engineer in charge IV Circle.

No 3345.

2274
14
Executive Engineer's office,
Coimbatore, 18th July 1890.

From,

G.B. Lambert,
Executive Engineer,
Coimbatore Division,

To,

The Superintending Engineer,
Fourth Circle, Coimbatore.

Sir,

With reference to your memorandum No 462 A.I., dated 16 June 1890, I have the honor to forward for sanction a revised estimate amounting to Rs 12090 for water supply to the Lawrence Asylum Cotacamund, together with a plan and report as called for therein.

2. The Comparative Statement shows that there will be a net saving of Rs 260, in addition to the value of probable surplus materials viz: Rs 1274, a detailed list of which

i

is also forwarded.

I have read

(Sd) G.B. Lambert,
Executive Engineer.

(True Copy)

A. J. J. J.

Exc. Engineer in charge IV file.

295W991

592

2274

2274
191

The Chief Engineer

Chief. Works Dept. reports
that he cannot utilise
the iron tank procured
for the Lawrence Asylum
water supply.

The papers must
apparently be now laid
before Govt. for orders
whether the Asylum should
be reimbursed the
cost of the tank from
Provincial Funds.

A sum of Rs. 1000
is included in the
revised estimate as
the cost of the tank, &
the estimate should ap-
parently be reduced by
that amount. The
actual cost of the
tank is however reported
to be Rs. 1200.

The question as to
what should be done
with the tank remains

consideration

by action on the
it will probably fetch
less than the price of
the iron. The S.S. might
adventure in the business
before for tenders or
its purchase.

Cu
No. 1-91

* it has not yet been put together

The iron tank can
be utilized in the
workshop of the
College of Engineering.
The S.E. should see that
the tank is painted &
kept in good order, so
that there may be
no difficulty about its
transfer to Madras when
next. A sketch of the
tank with details, that
be supplied to the C.A.
(I must trust) after in-
forming the authorities for
the College Workshop -
The Engineer should be satisfied
with the value of the tank
& all incidental expenses
1951-12-6 of which

2274/10
the cost of the

work only will be
debatable to the
College Workshop estimate.
I do not think it is
necessary to call upon
Mr de Winton for an
explanation regarding
the work, but if the
C.O. is to refer to the
subject, it will be
necessary first of all
to obtain Mr de Winton's
explanation on the
following points.

- (1) Why he considered it
necessary to provide
an iron structure on
the top of the tower?
- (2) Whether he had
measured the room
which was to contain
the column, & had
satisfied himself that
the tank could be
fitted up there?
- (3) Whether he had examined
the walls of the tower
& satisfied himself that
they could safely carry
the weight of the column when
full of water. Mr de Winton

(46) 257

Water Supply Lawrence
Asylum

Dr 2274
17

A sum of Rs 1000
is entered in the revised
estimate as the cost
of the iron tanks -

The S.D. reports
that its total cost is
Rs. 1900 -

The reply of the
Chief Engr. Nidley, works
to the reference made
by the S.D. II. Circle
might perhaps be
awaited.

Syn.
12.1.91

Cir.
12.1.91

S.D. pending
from the report
from the S.D. II
circle
on
12.1.91

Current No. 7131
 Letter No. 251 E.M.
 Dated 24th July 1890
 From the Superintendent of the

Sanction 008

NOTE OF REMARKS. 4.8.90

The accompanying
 revised estimate amounting
 to Rs 12,090 for the Water
 Supply Scheme in connection
 with the Lawrence School
 at Cotacumund is submitted
 for sanction.

The original estimate
 sanctioned from Imperial
 Government in G.O. No. 904 of 7th
 January 1889 amounted
 to Rs 12,300 the saving effected
 is therefore Rs 210, in addition
 to this amount it is stated
 that there are surplus
 materials the value
 of which is estimated
 at Rs 1274 -

It is explained in the
 report accompanying the
 Est. that it was found
 impracticable to erect
 the new tank in the 4th
 story of the tower of the
 Law School as originally
 intended owing to the
 being too large. Consequently
 the main line of pipes
 terminate in an hydraulic

It is obviously
 impossible for
 the new tank to
 be set up in the
 4th story of the
 tower, and this
 being so the
 arrangements now
 proposed seem
 suitable. It is
 not mentioned in
 the report, but,
 presumably provision
 has been made for
 supplying the lower
 rooms direct,
 instead of as proposed
 by means of the
 present tank raised
 on a masonry
 platform.

008
 4.8.90

Stand pipe placed in the center of the yard of the boys school, the spot was selected in view of its being a convenient position to communicate the building by means of a hose in case of a fire breaking out -

The branch lines are to some extent affected by the alterations in the terminal as it was originally intended that several of them should take off from the main trunk -

In the case of the water-carried quarters the stand pipe has been placed outside the compound in view of bringing the water within easy reach of the water carrier class by the means of a pump has been 200 ft of 3/4" service pipes with taps -

It is stated that several items which were omitted in the original estimate have been provided for in the revised estimate including a turned canvas rubber lined delivery hose being Rs 400 -

The rates for the additional items as far as the charges are fair -

18/9/90

2274/9

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

From the E IV Circle at 2250 EW, dated 24 July 1890.

The revised estimate amounting to Rs 12,090 for the supply of water to the Lawrence station, Ottumund, is sanctioned in pursuance of the estimate of Rs 12,350 reported to in Govt No 2139 W, dated 14th July 1888.

2. The plans and estimates have not been countersigned by the Principal Secretary, Lawrence station Committee.

To
The Sub Engineer IV Circle
with 5 enclosures.
- Govt Pros.
- Military Department.
- Educational Dept.

5073
12.8.90

18/9

may

2224
20

Obs 66-viii
Km 15-viii
m 20-viii

7/31.

Govt. of Madras.

PUBLIC WORKS.

Dated

Recd.

Encl.

G.O. 22 Aug 90 No. 22740

Lawrence Bigham
Cotacaimund.

Revised estimate
amounting to Rs 12090,
for the supply of water
to the — sanctioned

22/8/90

20