

Public Works (1898) Department.

✓ G.O., No. 1988 ^W

DATED 6th August 98

[Despatch Abstract.]

Road from Sembanore to Elayangudy
Estimate of Rs 30,628 for Construction
a — in the Madras St, sanctioned,
with remark.

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2/8/98

BACK PAPERS.

FURTHER PAPERS.

BUILDINGS AND ROADS.
CIVIL WORKS.

Government {1898} of Madras.
PUBLIC WORKS.

Recd.

Regd.

} 1898.

Enclosures

Spare copies

G.O., No. 1988 W., 6th August 1898.

AUGUST.

Road from Sembanore to Elayangudy

Estimate of Rs. 30,628 for constructing a — in the Madura district, sanctioned, with remark.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads,
Civil Works.

READ—the following papers :—

From Lieut.-Col. O. V. BODDY, R.E., Superintending Engineer, VI Circle, to the Chief Engineer, Public Works Department, dated Trichinopoly, 23rd June 1898, No. 879 M.D.

I have the honour to forward for sanction an estimate amounting to Rs. 24,900

- 1 Index map.
- 1 Quarry map.
- 1 Detailed survey with longitudinal and cross sections (19 sheets).
- 1 Longitudinal and cross section, drainage streams (3 sheets).
- 1 Plan of masonry works (3 sheets).
- 1 Report.
- 1 Sheet of hydraulic details.
- 1 Mileage statement.
- 1 Data sheet.
- 1 General abstract.
- 1 Detailed estimate for earthwork.
- 1 Detailed and abstract estimates for masonry works.
- 1 Detailed and abstract estimate for repairs to existing tunnels.
- 1 Detailed and abstract estimate for gravelling road.
- 1 Detailed and abstract estimate for supplying new mile and furlong stones.
- 1 Proceedings of the District Board, Madura, and Taluk Board, Sivaganga.

for the construction of a road from Sembanore to Elayangudy in the Sivaganga zemindary, Madura district, together with an index map, detailed survey and level sections of the road; also plans of masonry works and statements as per enclosures noted in the margin.

2. The accompanying report recast by the District Board Engineer under instructions from this office gives full particulars relating to the road and the proposed works. It will be seen that the line of road is intercepted in twenty-six places by cross drainages, tanks and irrigation channels. At three places where the bed of channel or stream is hard laterite rock, it is proposed to slope the road down and cross on the natural bed. This may be approved. At all other places suitable masonry works have been provided.

3. The designs of masonry works are of the ordinary type. The size of vents for culverts numbered 1, 2 and 6 (*vide* mileage statement) has been calculated and the working sheets are appended. Numbers 3, 7 and 15 are culverts proposed in tank beds to connect waters in the separated parts of the tanks and ample waterway is provided in each case, viz.—

6' × 4', 6' × 6' and 6' × 5'.

The size of all the vents in culverts over irrigation channels, 10 in number, is made 2' × 1½', in order to admit of repairs being carried out without inconvenience.

4. The rates are fair. Data for cut-stone and roughstone in mortar are submitted. The estimate is recommended for sanction. The proceedings of the District Board, Madura, No. 127, dated 13th December 1897, and those of the Taluk Board, Sivaganga sanctioning the estimate, are forwarded.

Note by the Chief Engineer, Public Works Department.

The estimate, with the alterations noted below, is recommended for the sanction of Government.

2. The gravelled width of the road should be 12 feet and not 9 feet, and the depth of gravel 6 inches and not 5 inches. The extra cost involved is Rs. 5,918.

3. The front wall to the road dams should be omitted, and the apron in rear extended to 12 feet, the rubble being packed on end, and the interstices being filled in with chips well driven home with crow-bars. The coping of the rear wall and retaining wall of apron should be of cut-stone on edge in surki mortar. These alterations effect a saving of Rs. 190 on the cost of road dams.

4. The deviations above recommended raise the total of the estimate from Rs. 24,900 to Rs. 30,628.

(Signed) W. B. DEWINTON,
Chief Engineer.

28th July 1898.

ORDER—No. 1988 W., dated 6th August 1898.

The estimate amounting to Rs. 30,628, as altered by the Chief Engineer, for constructing a road from Sembanore to Elayangudy, in the Madura district, is sanctioned.

2. Attention is drawn to the Chief Engineer's note read above.
3. This sanction has been registered as Local No. 15 W. of 1898-99.

(True Extract.)

Under Secretary to Government.

To the Superintending Engineer, VI Circle.
,, Local and Municipal Department, with sixteen enclosures.

Exd. T. K. Narayana Aiyangar.

Papers to be read in Proceedings:—

Again G.O., dated

189 , No.

Again G.O., dated

189 , No.

Current No. 5442 of 1898, dated 23rd June 1898, from The S. E. VI Circle

" " " 189 , " 28th July 1898, " The Chief Engineer P. W. D.

" " " 189 , " "

ORDER.

16/188 W of 6-8-98

To
The Secy to Govt. L & M Dept.
for favour of c. i.

2.11
2.8.98

The estimate, amounting to Rs 30,628, as altered by the Chief Engineer, for constructing a road from Sembare to Elayangudy, in the Madurai district, is sanctioned.

2 Attention is drawn to the Chief Engineer's note read above.

3 This sanction has been registered as Local No 15 W of 1898-99.

APK
Cu 27.7.98.

P.K.S.

H.T.
29.7.98

Note.

The estimate is dealt with in the accompanying technical note, and the note by the Chief Engineer read above.

APK
Cu 27.7.98.

P.K.S.

To
The S. E. VI Circle
L & M Dept with 16 benches

38
Note by the Chief Engineer.

The estimate with the alterations noted below, is recommended for the sanction of Government.

2. The ^{gravelled} ~~paralled~~ width of the road should be 12 feet and not 9 feet, and the depth ^{of gravel} 6 inches & not 5 inches. The ~~total~~ extra cost involved is Rs 5918-0-0.

3. The front wall to the road dams should be omitted, and the apron in rear extended to 12 feet, the rubble being packed on end, and the interstices being filled ⁱⁿ with chips well driven home with Crow-bars.

The coping of the rear wall & retaining wall of apron should be of cut stone on edge in Surki mortar. These alterations effect a ~~total~~ saving of Rs 190-0-0 on the cost of road dams.

4. The deviations above recommended raise the total of the estimate from Rs 24,900 to Rs 30,628.

AER
27-7-98.

[Signature]
20-7-98
E.W.

no 52142

OW

Submitted with
reference to W
note.

A & note by
the Chief Engr. will
now be necessary,
before the same
training order is
drafted.

C₁

23-7-98

Mr. Berke.

Please supply the figures
left blank in paras 2, 7
& 8 of the note by Chief
Engr. & then send a
file to Office for
sanctioning B.O. & for
copy of note

attended to
10-2-98
23-7-98
23-7-98.

note by the Chief Engr.

the estimate, with the al-
terations noted below, is
recommended for the sanction
of Govt.

2. The parallel width
of the road shall be 12' and
not 9' & the depth 6" &
not 5" the total extra cost in-
volved is Rs 5918-0-0

3. The front wall to the
road drains shall be milled,
& the apron in rear extend-
ed to 12 ft. The rubble being
packed in end, & the inter-
stices being filled with chips
will divide house with
crossbars. The coping of
the rear wall & retaining
wall of apron shall be of
cut stone on edge in Indian
mortar. These alterations
effect a saving on the cost
of road drains.

4. The alterations above
recommended raise the total
estimate from Rs 24,900 to
Rs 30,628-

A & H
23-7-98.

Public Works Department.

Current No. 5442
Letter No. 879-M.D.
Dated 23rd June 1898
From the Sup^y Engineer II Circle

NOTE BY TECHNICAL SECTION.

Name of work - Constructing a road
from Sembanore to Elayangudi
in the Sivagunga Zamin district -
Madura District -
Est Rs 24,900.

W
Estimate may be sanctioned
with alterations to road
dams, as specified at the end of the Technical
note.

A.K.

18.7.98.

Yes - a lay out that
the parallel with
the 12' x 12"
9' x 6" depth 6"
x 12' 5" at an
extra cost of Rs

L.H.

21.7.98

Madras

The Sup^y Engr II Circle submits
for sanction an Estimate
amounting to Rs 24,900
for constructing a road from
Sembanore to Elayangudi, in
the Sivagunga Zamin district.
Length 10 miles 1240 feet.
Elayangudi is one of the most
important towns in the
Sivagunga Zamin district but
is not connected by any
road, & traffic to and from
it is very difficult. The
Taluk Board have decided
to connect it with Sivagunga
by extending existing road
No 16, which runs from
Sivagunga to Sembanore,
as far as Elayangudi. This

Extension will run, practically, along the old track constructed by the D.R.W. before the introduction of Local Funds and subsequently abandoned.

An Estimate was originally submitted for Earthwork & gravelling only, the intention being to simply repair the old D.R.W. masonry works & to construct others gradually, but the Estimate now submitted provides for all works necessary to complete the road under the orders of the Sups Engrs.

Alignment. The Road passes in a South. Easterly direction - vide Index map - close to the villages of Suravendi, Suchanendal, Nasattam, angadi - and, as stated above, practically along the old track constructed by the D.R.W.

Formation level. The top width of the road will be 16 feet with side slopes $1\frac{1}{2} : 1$ of which 9 feet ^{will} be provided for a depth of 5" and maintained as such. The Local Fund Engineer says, "in practice it has

has been found that handies will confine themselves to 9" width" - but this is doubtful, 12 feet is considered to be the minimum. It is proposed to allow the Earthwork to consolidate for one year before spreading Gravel over it.

Gradient. Gradients have been regulated according to the nature of the ground through which the road passes, avoiding unnecessary height of embankment side.

Longitudinal Section.

Cross Drainage have to be provided for at 26 places along the line of road as detailed in Statement (B) showing position, description, hydraulic details &c for proposed masonry works along road. In 16 places culverts of various sizes are proposed - in 4 places Road drains are provided - and in 3 places the road is simply sloped down as laterite rock is met with - for the remaining 3, old culverts built by the D.R.W. are utilized. The road runs through

the beds of 4 tanks which irrigate lands under them in the 2nd, 3rd, 4th & 5th miles respectively. The top level of road is kept $\frac{1}{2}$ ' to $3\frac{1}{2}$ ' above M. W. L. of the tanks according as the road passes at the ends or centers of tanks. Water communication between the divided portions of tanks are made by culverts provided with adequate waterway.

The Natar River in the 5th mile is of much larger dimensions than any of the streams crossed along the line of road but, as it has water running in it for only 3 or 4 days every year during heavy rains, it will be sufficient to slope the roadway down to bed level, the cost of bridging being unnecessary & more than the Board can afford.

The Thachanandal tank in the 3rd mile is now in a ruined state but as it may, at any time, be restored the estimate provides for keeping the top level of road

sufficiently high.

The alignment of road in 4th mile is taken circuitous in view of utilizing an existing old masonry work, and avoiding the high embankment through the waterspread of the tank.

Hydraulic details - Hydraulic details for the old culverts built by the P.W.D. known to be utilized are not furnished also for the culverts connecting waterway of tanks through which the road passes. The hydraulic details for 3 culverts are given in Sheet A (Calculation Sheet of L. F. Supriat) & have been checked & found correct.

Masonry works. The foundations of all masonry works have been determined with reference to trial pits dug at the sites, and the materials used are such as are available at the localities.

For the road dams provided front & rear walls are allowed but W, with reference to road dams for another road in the same district, was of opinion that there is no necessity for a front wall

* Madura - Sagayamanallur road.

to the road-dams. It was therefore omitted and the apron in rear extended to 12 ft - the rubble packed on end and interstices filled with chips well driven home with crow-bars - The coping of the rear wall and retaining wall of apron being of cut-stone on edge in brick mortar. By these alterations there was a saving, if approved, might be adopted in the present case -

mile & furlong stones are provided.

Rates - Fair - detailed data have been furnished for cut stone and Rough stone.

The Estimate has been sanctioned by the District Board, Madurai, in their proceedings dated 13th December 1897.

APK
14.7.98.

Please note in margin saving effected by omission of front wall & other alterations, above approved, to road dams. APK
14.7.

They should be adopted

There will a saving of Rs 190 in both road-dams. If latelite is used as a coping instead of cut stone as proposed by L. F. Engineer, there will be a saving of Rs 348. The Estimates have been altered, in pencil, for cut stone. 15.7.

Public Works (1898) Department.

CURRENT No. 5442

Order

From

The Sup^r Engineer
VI. Circle.

No. 879. m.D

Dated 23rd June 1898.

Received 30-6-98

Enclosures 16 (5 plans)

Spare copies

SUBJECT.

Road from Sembanore to Elayangudy in the Siva-ganga Zemindary, Madurai District.

Forwarding for sanction an estimate amounting to Rs 24,900 for the construction of a -

For sanction
APK
11.7.98
D

253-126/98

BACK PAPERS.

No.	Date.
6607	11-3-98

FURTHER PAPERS.

No.	Date.
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No. 879 m. O

From

Superintendent's office, Madras
Trich. poly. 23rd June 1898.
J 25

Lt Col. A. V. Boddy R.E.

Superintendent, Madras

To

The Chief Engineer
P. W. D.

Sir,

Enclosures: 16. Sent by
Packet Post.

1. Index map.
1. Quarry map
1. Detailed Survey with Long. & cross sections (19 sheets).
1. Long & cross sections, drainage streams (3 sheets).
1. Plans of masonry works (3 sheets).
1. Report
1. Sheet of Hydraulic details
1. Mileage statement
1. Data sheet
1. General abstract
1. Detailed Estimate for Earthwork
1. Detailed and abstract esti. - make for masonry works.
1. Detailed & abstract Estimate for repairs to existing tunnels
1. Detailed and abstract esti. - make for travelling road.
1. Detailed and abstract esti. - make for supplying new mile and furlong stones.
1. Proceedings of the District Board, Madras, and Taluk Board, Chidambaram.

I have the honor to forward for sanction an estimate amounting to Rs 24,900 for the construction of a road from Sembanore to Elayangudi in the Sivagangha Zemindari - Madras District, together with an Index map, detailed survey and level sections of the road; also plans of masonry works and statements as per enclosures noted in the margin.

2. The accompanying report received by the District Board Engineer under instructions from this office gives full particulars relating to the road

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This may be approved. At all other
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3. The designs of masonry works
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vide Drainage statement, has been calcu-
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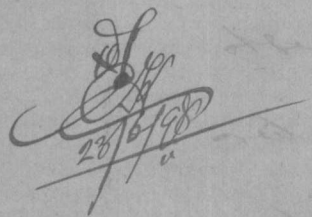
The size of all the vents in Culverts
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are submitted. The estimate is re-
commended for sanction. The Pro-
ceedings of the District Board, Ina-
dura, No. 127 of 13 December 1897 &
those of the Tahsy Board, Sivagangah,
sanctioning the estimate are for-
warded.

I have the honor to be
Sir.

Yr. Most obedient Servant.

D. V. No. 114/1897
Superintending Engineer
T. Cherth


28/6/98