Public Works (1898) Department.

G.O., No. 940 W.

DATED 6 April 1898

Urgent

14/4/98

[Despatch Abstract.]

Tunnels: Estimate of Rs. 7,700 for constructing – on the road from Puducherry to Palakurichi, in the Tanjore Dt, sanctioned.

100/3

6/4/98

Indexed.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

His Excellency the Governor.

BUILDINGS AND ROADS.
CIVIL WORKS.

Government (1898) of Madras.

PUBLIC WORKS.

Recd.	1898.	*Enclosures*	
Regd.		*Spare copies*	

G.O., No. 940 W., 6th April 1898.

APRIL.

Tunnels

Estimate of Rs. 7,700 for constructing — on the road from Puducheri to Palakurichi, in the Tanjore district, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From the Superintending Engineer, V Circle, dated 30th May 1894, No. 178 W.

From Lieutenant-Colonel C. C. RAWSON, R.E., Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department, dated Chepâk, 20th February 1896, No. 61 W.

I have the honour to submit for sanction the enclosed plan and estimate of Rs. 6,800 for constructing masonry works on the village road from Puducheri to Palakurichi, received from the President, District Board, Tanjore, and scrutinized in my office.

The necessity for the work is explained in the report which accompanies the estimate.

The necessary hydraulic particulars for the two new bridges will be submitted as soon as they are received from the President, District Board.

From the Superintending Engineer, V Circle, dated 17th April 1896, No. 30 W.C.

From Lieutenant-Colonel C. C. RAWSON, R.E., Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department, dated Sríperumbúdúr, 17th February 1897, No. 6 W./C.

With reference to your memo. No. 3715 C., dated 26th October 1896, I have the honour to re-submit for sanction the enclosed plan and estimate of Rs. 6,800 with hydraulic details showing the spans provided for the bridges on the village road from Puducheri to Palakurichi.

From Lieutenant-Colonel C. C. RAWSON, R.E., Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department, dated Chepâk, 18th June 1897, No. 191 W.

With reference to your No. 2848 C., dated 11th June 1897, I have the honour to point out with reference to the concluding part of paragraph 7 that there is no stone to be obtained in the Negapatam division and the cost of conveyance of stone by rail about 80 miles from Trichinopoly will be very great.

2. I am not forwarding your memorandum to the President, District Board, until I receive a reply from you to this letter.

ENCLOSURE.

COPY of a communication from the Local Fund Engineer, Tanjore, to the President, Taluk Board, Negapatam, dated 3rd December 1897, No. 19 E.

With reference to your current No. 685/G B. of 1897, dated 10th October 1897, I have the honour to send herewith the required sections and to re-submit the estimate duly corrected after making the alterations suggested. As already explained, the delay has been caused by the difficulty in taking levels with water in the rivers.

Dis. No. 1371.

Forwarded to the Superintending Engineer, V Circle, with reference to his Nos. 177 M., dated 11th July 1897, and 184 M., dated 15th July 1897, the enclosures to which are herewith returned.

2. Orders have been issued to stop the work till the receipt of sanction of Government to the estimate.

(Signed) T. N. SIVANGNANAM PILLAI,
for President.

27th December 1897.

No. 9 W.

Submitted to the Chief Engineer, Public Works Department, in continuation of this office No. 412 W., dated 6th October 1897.

The plans and estimate with the required sections are re-submitted for sanction.

(Signed) H. A. MOSS,
for Superintending Engineer, V Circle.

11th January 1898.

Note by the Chief Engineer, Public Works Department.

The girders proposed for the 25 feet span bridge are weak, and as, to guard against deflection, the depth should not be less than $\frac{1}{20}$th span, it will be necessary to provide girders 28′ × 15″ × 5″ at 42 lbs. per foot run which will increase the estimate to Rs. 7,700. The depth of concrete under the abutments and wings of the bridges should be 6 feet as stated in Chief Engineer's memo. No. 2848 C., of the 11th June 1897, paragraph 7, and not 4 feet as corrected in the plan.

The Superintending Engineer is requested to see that Local Fund estimates are submitted in future in a complete form. The want of proper information in this particular case has delayed sanction for nearly four years.

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

30th March 1898.

ORDER—No. 940 W., dated 6th April 1898.

The estimate, amounting to Rs. 7,700 (as altered by the Chief Engineer, Public Works Department), for constructing tunnels on the road from Puducheri to Palakurichi, in the Tanjore district, is sanctioned.

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

3. This sanction has been registered as Local No. 1 W. of 1898–99.

(True Extract.)

Under Secretary to Government.

To the Superintending Engineer, V Circle.
„ Local and Municipal Department, with enclosures.

Exd. A. F. Eccleston.

His Excellency the Governor.

FOR ORDERS.

A

P.W. **DEPARTMENT.**

Papers to be read in Proceedings :—

No. 31 MAR 98

Again G.O., dated 189 ,

Again G.O., dated 189 ,

Current No. 4053 of 1894, dated 30th May 1894, from

" " 1756 " 1896, dated 20th Feby 1896, "

" " 3724 " 1896, " 17th April 1896, "

" " 1888 " 1897, " 17th Feby 1897, "

" " 6040 " 1897, " 18th June 1897, "

" " 323 " 1898, " 11th January 1898, "

The S.E. V circle

No 178 W.

30

Print

Note by the Chief Engr. P.W.D dy 30-3-98

N-940 W 6.4.98

ORDER.

The estimate amounting to Rs 7.700, (as altered by the Chief Engr. P.W.D), for constructing tunnels on the road from Puducherry to Palakurichi in the Tanjore District, is sanctioned.

2 Attention is drawn to the Chief Engr's note recorded above.

3 This sanction has been registered as Local No 1 W of ~~1897-98~~ 1898-99.

W.T. 24 J 5

30.3.98 W

Note.

CHAS 30.3.98

An explanatory note for the information of His Excellency is attached.

30.3.98

To

The Secy to Govt L & M Dept

for favour of counter-initials

Note for the Secretary

No objection on this Department

JR 1/4/98

A.S.H. 8.4.98

To

The S.E. V circle

- L & M Dept with ‖ enclos

D 4/5/98

[P. W. 4. 500—27-1-98.]

His Excellency the Governor.

FOR ORDERS.

So long ago as 30th May 1874 the Superintending Engineer, vide submitted plans and estimates, amounting to Rs 7000-, prepared by the Local Fund Engineer, for constructing bridges and culverts in the road from Vadugacherry to Puduchery, Tanjore District. These plans and estimates were returned with Chief Engineer's Memorandum Flag I No. 2401 C of 10th July 1894 as the works were found to be defective in design and there were no hydraulic details. With the Flag L Superintending Engineers letter No. 61 W dated 20th February 1896 the plans and estimates – reduced to Rs 6800 – were resubmitted the designation of the road being altered to "Puduchery to Palakurichi". On 17th April 1896, or about a fortnight after the plans and estimates had been re-scrutinized in this office, the Superintending Engineer asked for them back for reference and they were returned to him accordingly Flag E with memorandum No. 2122 C dated Flag H 1st May 1896. With his No. 237 W of 18th August 1896 he sent them up again with a list of hydraulic particulars that had not been submitted before; but though the hydraulic details given sufficed to shew that the spans provided for the bridges were suitable

[250-30-9-97.]

X When the … shed not then corrections be probably when these orders.

(vide calculation

be required vide plate 61 page

This was brought to notice

Secy Lr m. 30/3/98 } R. 3-4-98

they gave no information about the culverts, or tunnels as they were called, therefore the plans and estimates were again returned with memo: No 3715 C of 26th October 1896 for submission of the necessary particulars. Again they were re-submitted by the Superintending Engineer with his letter 610/C dated 17th February 1897, but being still defective as regards hydraulic details, and the designs for the bridges being faulty in respect to foundations, the estimates were once more sent back for revision with memo No 2848C of June 11th 1897 although some of the works had already been built by permission of the President of the District Board.

2. The estimates raised to Rs 7670 are now back again, and at last with all necessary information, and may be sanctioned. attention being drawn to a note by the Chief Engineer.

CAMS.
27/3/98.

Flag D

Flag F

30.3.98

P. W. Dept.

Seen A.H.

8. Flagged F

Note by the Chief Engr. P. W. D.

The girders proposed for the 25 feet span bridge are weak, and as, to guard against deflection, the depth should not be less than 1/20th span, it will be necessary to provide girders 28' × 15" × 5" at 42 lbs per foot run which will increase the estimate to Rs 7,700. The depth of concrete under the abutments and wings of the bridges should be 6 feet as stated in Chief Engineer's Memorandum No. 2848C of the 10th June 1897, para 7. and not 4 feet as corrected in the plan.

The Supdg Engr is requested to see that Local Fund Estimates are submitted in future in a complete form. The want of proper information in this particular case has delayed their sanction for nearly [illegible]

E. W. Evans

CAMS
30.3.98.

30.3.98

Bridge 16 feet the

Road

Letter

Dated 11th January 1898.

From the Supt. Engineer I Circle

NOTE BY TECHNICAL SECTION.

Name of work Estimate for constructing Tunnels on Puduchi-Palakurichi village road in the Tanjore District

Amount of Estimate Rs 7,620.

Rs 7670.

The Supt. Engineer re-submits with his letter No. 9W dated 11th January 1898 plans and Estimates for constructing Tunnels based on Chief Engineers Memoranda Nos 2848 dt 11-6-97 and 3107C dt 7th July 1897.

With reference to the former call (1) longitudinal and Cross sections of the Channel have now been supplied from which the fall is found to be 2.6 feet per ~~second~~ mile against 2 feet per mile formerly entered and the velocity works out to 2.25 feet per second (vide hydraulic calculation attached) instead of 3 feet assumed in previous calculations.

The area arrived at (vide calculation sheet

be required vide plate 61 page 2

This was brought to notice

The revised estimate of Rs 7670 raised to Rs 7700 and may be sanctioned with a note drawing attention to the fact that the girders proposed for the 25 feet span bridge are weak and as, to guard against deflection, the depth should not be less than $\frac{1}{20}$th span it will be necessary to provide girders 28' x 15" x 5" at 42 lbs per foot run which will increase the estimate to the amount above stated. The depth of concrete under the abutments & wings of the bridges should be 6 feet as stated in Chief Engineer's memorandum No. 2846C of 11th June 1897, para 7 and not only 4 feet as entered in the plan.*

CGMS
27/3/98

P. W. 60
260—30-9-97.

*When Mr Murray passed then correction he probably did not notice these orders.

[illegible]ously do[illegible] contrary allowan[illegible] [illegible]ge, viz 88 square feet-

para (2). Longitudinal and Cross Sections have also been supplied for stream over which it is proposed to build a bridge 25 feet span. This stream has a fall of 2 feet per mile & the velocity works out to 2.07 feet per second (vide calculation sheet) against 3 feet per second previously assumed. Area 110.68 sq. ft. against 175 square ft. allowed in plan.

The plans and estimates for constructing the masonry works on the road were not approved as originally submitted and ordered to be revised in ccordance with certain nstructions contained in Chief Engineer's memo under notice. This has accordingly een done and re-submitted or sanction. The smaller orks (Tunnels) provided for in the Estimate amounting Rs 3774 have already been onstructed on the authority the President District Board, lthough they were considered he ill-designed by the ief Engineer vide his mo dated 10th July 1894.

Yes

Bridge 16 feet Span. The District Board Engineer states that he has found it necessary to retain the original superstructure of the bridge as the iron work had already been supplied in order to utilize the allotment of the year 1892-93. The sections of the girders allowed in Est. appear ample.

Bridge 25 feet Span. The Sections for girders are weak. They are proposed to be 8" × 6" weighing 36 lbs per foot whereas they should be of a section 12" × 5" weighing 39 lbs per foot run according to the weight it has to carry, vide calculation below, but ~~as~~ as the depth of the girder is made below $\frac{1}{20}$th of the span a section 15" × 5" weighing 42 lbs would be required vide Dorman & Long's catalogue of Steel Sections.

Calculations

Load on Girder

Steel Joists 7 × 4' 7½" (4" × 3") × 14 lbs = 463

Planking 25 × 4' 7½" × 3" × 46 lbs = 1330

Liveload 25 × 4' 7½" × 120 = 13875

Total weight lbs 15,658

By formula $W = WL$

$$W = \frac{15,658 \times 25}{2240} = 175 \text{ Tons}$$

for which a section of 12" × 5" weighing 39 lbs will suffice vide plate 67 page 25. but as the dep of the girder is made below $\frac{1}{20}$th span a section 15" × 5" would be required vide plate 61 page 2 This was brought to notice

Yes

-0. 3. 96.

-rates have already been scru-
inized and found to be fair.
Estimates have been countersigned
by the President District Board
but the plans have not been
countersigned by the Supᵗ Engr.
for President District Board.

H. C. U.
7-2-98

1.

2.

Ca

3. Copy of District Board's resolution
passed on this Estimate has not
been submitted as required by
para 35 of local fund rules.

H. C. U.
7-2-98

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Hydraulic Calculations

No 5 or 16 ft span bridge.

C. S. VI (above)

Mean depth 2.15 × 40 breadth = 86 area
W. B. = 55 - R = 1-6

C. S I

Mean depth 1.30 × 82 ft. = 106.6 area
W. B. = 90. R = 1.2

C. S. VI (below)

Mean depth 2 × 25 breadth = 50 area
W. B. = 62 . R = ·8

Mean area 80.8 sq ft. Mean R = 1.2
$V = \cdot 9\sqrt{2f \times \text{HMD}}$
$= \cdot 9\sqrt{5.26 \times 1.2} = 2.25$ ft per second
D = 2.25 × 80.8 = 181.8 Cub ft per second

For 25 feet span bridge

C. S. 101

Mean depth 1.73 × 35 ft = 60.55 area sq ft
W. B. = 62 - R = ·97 -

C. S. 4

Mean depth 2 × 105 ft = 210 area sq ft
W. B. = 115 - R = 1.8 -

C. S. 7

Mean depth 2.46 × 25 = 61.5 area sq ft
W. B = 54 - R = 1.14 -

Mean area sq ft 110.68
Mean R = 1.04
$V = \cdot 9\sqrt{2f \times \text{HMD}}$
$= \cdot 9\sqrt{4 \times 1.30}$
$= \cdot 9\sqrt{5.33} = 2.07$ ft per second
D = V × A = 2.07 × 110.68 = 229.00
Cub ft per second

H. C. U.
7. 2.

T

I want to see you about this est —

16/2/98

DW/ As personally ordered by Mr. Murray I have altered the foundation from 6 to 4 ft. in depth* for the 16 & 25 feet span bridges. The total estimate has been reduced from Rs 7690 to Rs 7450 or a saving of Rs 240 by the alteration.

25-3-98.

* also depth of girder from 8"×6" to 16"×5" for the 25 ft. bridge.

This alteration should not be made. A depth of 6 feet of concrete was specially asked in Chief Engineer's memo: No. 2846 of 11-6-97-Kera. C.H.B.B. 27/3/98.

Bridge of 25 feet span with Hobson's flooring plates on wheel steel girders &c. complete.

Weight of platform.

Hobson's plates —	19 × 9'3" × 2¼" × ¼" — =	3,954
Angle iron under Do. —	20 × 9'3" × (2½" × 2½") ¼ =	903
Wheel guard —	2 × 28'0" × 1'6" × ¼ =	840
Brackets —	12 × 1'3" × (4" × 2½") ¼ =	78
Standards —	12 × 5'6" × (4" × 3") 3/8 =	546
Angle iron fastenings	4 × 28' × (2½" × 2½") 5/16 =	546
Hand rail tubing	4 × 28 × 1" diam. =	291
Attachment plates	40 × 6" × 6" × ¼ — =	100
Bearing plates	4 × 2' × 1' × 3/8 =	10
Knee plates —	38 × 2½" × 5" × ¼" =	33
Ballast plates	2 × 28' × 9" × ¼ =	420
Bolts & nuts say —		279
Total lbs —		8,000

From weight of platform 28 ft. long = lbs 8000

∴ for 25 ft. the span of bridge = lbs 7,143

and ½ this weight on 1 girder = 3,572

add metalling 25 × 4'7½" × 6" × 145 lbs = 8,383

Live load — 25 × 4'7½" × 120 lbs = 13,875

Total lbs 25,830

or say in tons 11.5.

W = WL = 11.5 × 25 = 287.5 Tons & taking c as the coefficient a section 16" × 5" weighing 50 lbs per foot run will be required.

Please see over for cost.

Public Works (1898) Department.

CURRENT No. 323

Order 740W

From The Supdg Engineer V Circle

No. 9W

Dated 11th January 1898

Received 14.1.98

Enclosures 11 (4 plans)

Spare copies

SUBJECT.

Pudichiri – Palakurichi Village road — Resubmits the plans & estimate for constructing tunnels on — for sanction

I/ On [illegible]

13/1/98

T. can you tell me
what Hartung's
flooring would cost
compared with the steel
girders & teak planking
provided?
only 2 main girders
& the flooring would be
required for each bridge

8/2/98

WD/ The cost of an iron plat-
:form as above with the required
sections of girders for the 25 feet
feet span bridge will be Rs
1400 against the estimated
provision of Rs 740. for partly
wooden & partly iron platform,
vide calculations attached.

2. In regard to the 16 ft.
span bridge, the platform is
already estimated to be of
iron with Hartung's flooring
plates &c.

9.11.98.

Cost

Platform weight as above lbs 8000
Girders, 2 × 28'0" (16" × 5") × 50 = 2800
Total lbs 10,800
in cwts 96.43

96.43 cwts of iron work de-
:livered at site of work
at Rs 14.2.. per cwt. — Rs 1362
Erection charges say — 38
Cost of iron platform 1400

against Rs 740 for partly iron
& partly wooden platform.

9.11.98.

BACK PAPERS.	
No.	Date.
4150 C	13-10-97
3107 C	7-7-97
2848 C	11-6-97
3715 C	26-10-96
2122 C	1-5-97
~~2401 C~~	~~10-7-94~~
~~3717 C~~	~~11-11-93~~
377 D	14-6-95
39 D	23-4-95
721 C	26-2-95
2674 W	20-10-94
2401 C	10-7-94
3717 C	11-11-93
722 D	8-8-94
2546 C	26-7-94
856 D	24-8-94

FURTHER PAPERS.	
No.	Date.

Copy of a communication from the Loca
Fund Engineer, Tanjore, to the President Taluk
Board Negapatam No. 19 B. dated 3rd December 189

With reference to your current No. 685/G.B. of 18 dated 10th October 1897, I have the honour to send herewith the required sections and to resubmit the estimate duly corrected after making the alterations suggested. As already explained, the delay has been caused by the difficulty in taking levels with water in the rivers.

Dis 1371

Forwarded to the Superintending Engineer V Circle with reference to his No. 177 R dated 11th July 1897 and 184 M. dated 15 July 1897, the enclosures to which are herewith returned

2. Orders have been issued to stop the work till the receipt of sanction of Government to the estimate.

Encl: 11
1. Specification
1. Report
2. Hydraulic details
1. Detailed estᵉ
2. Abstract Estes
1. Levels of Cross Sec: of Chl. No. 5 –
1. Survey Sketch & Longl. Section of Chl. No. 5 –
1. do do Chl. No. 17 –
1. Plan of bridges –

(Signed) T. Swaugnanam Pillai
27.12.97
for President.

No. 9W dt 11-1-98

Submitted to the Chief Engineer P.W. Department in continuation of this office No.

412 W.

12 W. dated 6th October 1897.

The plans and estimate with the required ections are resubmitted for sanction.

41500
13.10.97

H. Moss
for Supg. Engineer 5 Circle
11.1.98

Public Works (1897) Department.

CURRENT No. 6040

Order

From
The Superintending Engineer
5th Circle

No. 191 W.

Dated 18th June 1897.
Received 23.6.97
Enclosures
Spare copies

SUBJECT.

Village Road from Puducherry to Palakurichi.

Pointing out with reference to the concluding part of para 7 No. 2848 C dated 11th June 1897 that there is no stone to be obtained in Negapatam &c for constructing masonry works on –

Sd/ Anderson
24.6.97

o L.S. 235

BACK PAPERS.

G.O.	No.	Department.	Date.
	2848 C	P. W.	11-6-97
	3715 C	"	26-10-96
	2122 C	"	1-5-96
	2401 C	"	10-7-94
	377 D	"	14-6-95

FURTHER PAPERS.

G.O.	No.	Department.	Date.

No. 191 W. 5 New print

Superintending Engineer's Office,
V Circle, Madras,
Chepâk, 18th June 1897

From Lt. Colonel C. C. Rawson, R.E.
SUPERINTENDING ENGINEER,
V Circle,

To

The Chief Engineer,
Public Works Department.

Enclosures.

Sir,

With reference to your No. 2848 C dated 11th June 1897.

2. I have the honour to point out with reference to the concluding part of para 7, that there is no stone to be obtained in the Negapatam Division and the Cost of Conveyance of Stone by rail about 80 miles from Trichinopoly will be very great.

3. I am not forwarding your memo. to the President, District Board until I receive a reply from you to this letter.

I have the honour to be,
Sir,
Your most obedient Servant
C. C. Rawson
18/6/97
Lt. Colonel R.E.
Superintending Engineer, V Circle.

500—31-3-97.

17.6.97

[illegible] dated 6th October 1897

From

THE SUPERINTENDING ENGINEER,
V CIRCLE,

To

THE

Dated }
Recd. } 189 .

ENCLOSURES.

No.

Public Works (1897) Department.

CURRENT No. 1888

4 Remit

Order

From The Supg Engineer
5th Circle

No. 62/c

Dated 17th February 1897

Received 20.2.97

Enclosures 19+ (+2 Plans)

Spare copies

SUBJECT.

Village Road from Puduchēri to Palakunchi.

Resubmitting for Sanction the plan & Estimate of Rs 6800 with hydraulic details showing the spans provided for the bridges on.

T/ for scrutiny

Closed D.W. 6/3/97

Ths 8/3

O.L.S.95

R 11/6

BACK PAPERS.

G.O.	No.	Department.	Date.
	3715C	PW	26-10-96
	2122C	"	1-5-96
	2401C	"	10-7-94
	377D	"	14-6-95
	39D	"	23-10-95
	665C	"	19-2-95
	2674W	"	20-10-94
	856D	"	24-8-94
	2546C	"	26-7-94
	3717C	"	11-11-93

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Print

W 4

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, MADRAS,
Camp Streeparambudur
~~Chepák~~, 17th February 1897.

No. 6 M/C

From
Lieut.-Colonel C.C. Rawson R.E.
SUPERINTENDING ENGINEER,
V CIRCLE,

To
THE Chief Engineer,
Public works Department

Enclosures. 9
1 Plan
1 Section of levels
~~1 Report~~
1 Abstract estimate
1 General abstract estimate
1 Detail estimate
1 Report
1 Specification
2 Hydraulic statement
9

SIR,

With reference to your memorandum no. 3715 C. dated 26 October 1896, I have the honour to resubmit for sanction the enclosed plan and estimate of Rs 6,800/. with hydraulic details showing the spans provided for the bridges on the village road from Puducheri to Polakurichi.

I have the honour to be,
Sir,
Your most obedient Servant
C.C. Rawson
17.2.97
Lt. Col. R.E.
Superintending Engineer
5 Circle

1,000—25-2-96.

16.2.97

From

THE SUPERINTENDING ENGINEER,

V CIRCLE,

To

THE

Dated }
Recd. } 189 .

ENCLOSURES.

No.

---

3 [illegible]

No. 30 W / C

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, MADRAS,
Camp Tanjore ~~Chepauk~~, 17 April 1896.

From
Lieut: Colonel C. C. Rawdon R. E.
SUPERINTENDING ENGINEER,
V CIRCLE,

To
THE Chief Engineer P. W. Department

SIR,

I have the honour to request that you will be so good as to return the plans and Estimate for constructing masonry works on the Village Road from Puducheri to Palakurichi, submitted with my No. 61 w d/ 20th February 1896 as they are required for reference by the President District Board Tanjore for furnishing certain hydraulic particulars.

Enclosures.

Cm/1756 [illegible] to S.A. [illegible] 21/4/[illegible]

I have the honour to be
Sir
Your most obdt: Servt:

C. C. Rawdon
17.4.96
Lt Col: R.E.
Supg Engineer V Circle

Gh
16.4.96

1,000—25-2-96.

P.W. CURRENT No. 3724

From

THE SUPERINTENDING ENGINEER,
V CIRCLE,

To

THE Chief Engineer.
P.W. Department.

Recd: 20.4.96

Dated 17th } April 1896.
Recd. }

ENCLOSURES.

No. 2499 W of 22-10-85
" 3717 C " 11-11-93
" 2546 C " 26-7-94
" 722 D " 8-8-94
" 856 D " 24-8-94
" 2674 W " 20-10-94
" 665 C " 19-2-95
" 721 C " 26-2-95
" 39 D " 23-4-95
" 376-7 D " 14-6-95
" 2401 C " 10-7-94.

No. 30 W/C

Village road from Puduchri to Palakurichi

Requesting to return the plans & Estimate for constructing Masonry Work on the –

0.L.S. 32 R 1/5

---

2 Print

Print

No. 61 W

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, MADRAS,
Chepâk, 20th February 1896.

From Lieut. Colonel C. C. Rawson R.E.
SUPERINTENDING ENGINEER, V CIRCLE,

To

THE Chief Engineer P.W. Department

SIR,

I have the honour to submit for sanction the enclosed plan and Estimate of Rupees 6,800 for constructing masonry works on the village road from Puduchери to Palacurichi, received from the President District Board Tanjore and scrutinized in my office.

The necessity for the work is explained in the report which accompanies the Estimate.

The necessary hydraulic particulars for the 2 new Bridges will be submitted as soon as they are received from the

President

Enclosures. 7

1 Plan
1 Levels
1 Report
1 Specification
2 Abstract Este:
1 Detailed Este:

7

250—31-10-94.

President District Board.

I have the honour to be
Sir
your most obedt. Servt,

C. Lamm
20/2/96

Lt Colonel R.E.
Supg. Engineer V Circle

P. W. CURRENT No. 1756

From

THE SUPERINTENDING ENGINEER,

V CIRCLE,

Encls 7 (1 plan)

Recd: 21.2.96

To

THE Chief Engineer

P.W.D

Dated 20th } February 1896.
Recd.

ENCLOSURES. 7

No. 61W.

Village road from Paducheri to Palacurichi in Negapatam taluq. Submits for sanction plans & estimate of Rs 6,800 for constructing masonry works on

For scrutiny

CWBS
22.2.96

O.L.S. 32 — R1/5

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(1) Vide rec'd ...

No. 678 W.

SUPERINTENDING ENGINEER'S OFFICE,
V Circle, Madras,
Chepâk, 30th May 1894.

From J C Larminie Esquire

SUPERINTENDING ENGINEER, V CIRCLE,

To

THE Chief Engineer

P. W. Department.

SIR,

Enclosures. 9

1 Detailed Estt.
1 abstract do
1 Specification
1 Memorandum on Iron bridges by the L. F. Engineer.
4 Tracings No: 1 to 4
1 L. F. Engineer's remarks on note by S. E. Vand.
9

I have the honor to submit herewith enclosed estimate of Rs 7000 with connected papers as per margin for constructing tunnels and bridges on Puducherry Village road from Vadugacherry to Puducherry in Negapatam taluq Tanjore District received from the District Board Tanjore & scrutinized in my office.

2. The resolution of the Taluq & District Boards on the estimate together with Local Fund Engineers note thereon are forwarded for information.

3. The plan of bridge of 25 feet span

sheet

Sheet No. 3 has the word "Cancelled"
written across it but this has been adopted
in the estimate submitted as shown by the
red ink entry thereon.

It was pointed out to the Local
Fund Engineer that simple bridges a
timber platform supported by a pair of
rolled steel beams & cross beams (similar
to those I erected on the Coleroon Ghat)
would be much cheaper and quite good
enough for a Village road, but he prefers
the iron superstructures as per ~~tbt~~ his plans
& shows in a memo that they are more
economical. But I find that a super-
structure of the kind alluded to by me
would cost for a 25 foot span about
Rs 700 against Rs 1263 as now estimated
for. With these remarks the estimates
are submitted for sanction.

Should be Rs 1763
a saving of 151%

I have the honor to be
Sir
Your most obedient servant

J C Larminie
Superintending Engineer
V Circle

30/5

P. W. DEPARTMENT No. 4053

From

THE SUPERINTENDING ENGINEER,
V CIRCLE,

To

THE Chief Engineer
P. W. Department.

Dated 30th May 1894.
Recd. 31st

ENCLOSURES. ~~9~~ 11 (4 plans)

No. 178 W.

Bridge on Puduchery Village road from Vadaguchery to Puduchery in Nagapatam Taluq.

Submitting an Estimate &c. amounting to Rs 7000 for Sanction for constructing the — with certain remarks—

St. 155 9/7

31. V. 94

I