(1) Number of pages 32.

(2) Date of repair -10.87

(3) Initials of the Referencer [illegible]

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

PUBLIC WORKS. DEPARTMENT

G.O. No. B.P. No.	846. W	Press. Mis.
Dated	7. 4. 1885	~~198~~.

MY

Not to be folded or roughly handled

7th April 1885, No. 846 W., Public Works.

1/846

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following papers :—

From J. Lee-WARNER, Esq., President, Local Fund Board, Tinnevelly, to the Acting Secretary to the Board of Revenue (through the Chief Engineer for Irrigation), dated Tinnevelly, 9th December 1884, No. 144.

In reference to paragraph 2 of G.O. No. 1764 W., Public Works, dated 18th July 1884, communicated in the proceedings of the Board of Revenue, Mis. No. 7247, dated the 2nd August following, I have the honor to submit the alternative estimate, &c., as noted in the margin for the bridge over the Srívaikuntham anicut.

3 Estimates.
2 Reports.
2 Specifications.
13 Plans.
4 Diagrams.

2. This Board, however, adhere to the former estimate submitted by the Local Fund Engineer with certain modifications indicated in their resolution No. 7, dated 19th November 1884, copy of which is herewith forwarded.

3. Arrangements will be made for the preparation of materials for the piers as directed in paragraph 1 of the Government order *supra*.

4. After the estimate has obtained the sanction of Government steps will be taken for realising funds to meet the total cost, *minus* the sum of Rs. 25,394 already at the credit of this project.

No. 107 E.W.

Forwarded to the Chief Engineer, Public Works Department.

(Signed) A. S. RUSSELL,
for Chief Engineer for Irrigation.

No. 130 C., Public Works.

Forwarded to the Superintending Engineer, VI Circle, for scrutiny and report.

(By Order.)

Chepâk,
21st January 1885.

(Signed) C. BOWEN, Major, R.E.,
Deputy Chief Engineer, P.W.D.

From Lieutenant-Colonel H. R. MEAD, R.E., Superintending Engineer, VI Circle, to the Chief Engineer, Public Works Department, dated Trichinopoly, 11th February 1885, No. 689 T.N.

With reference to your endorsement No. 130 C, dated 21st January, I have the honor to point out that there are three designs for the Támbraparni bridge sent; they are as follows:—

1 Railway receipt (forwarded to the South Indian Railway station at Egmore on the 16th February 1885 in order to obtain delivery of the parcel).
1 Estimate.
16 Plans.

1st. A design without estimate for a bridge made of old railway iron; the cost of this was estimated at Rs. 62,500. As this has already been condemned, no further notice need be taken of it.

2nd. A design and estimate for a Warren type bridge, the transverse girders being attached to verticals, the transverse girder being crossed by small longitudinal girders and the whole covered with corrugated plates on which is a flooring of asphalte; the estimate for this is Rs. 1,05,000, the width of roadway between flanges of main girder being 17½ feet. In G.O. No. 1764, dated 18th July, will be found your note on the design and the Government order on it.

3rd. Another estimate, similar to the above, but the roadway made 6 inches wider. The flooring to be of wood with diagonal planking over it; this estimate amounts to Rs. 93,000. The dimensions of the iron in the girders and cross girders is the same as in No. 2.

4th. A plan and estimate for the bridge. Iron plate girders with cross girders placed above them overhanging on each side the roadway is 19 feet in width. The estimate amounts to Rs. 1,06,700.

2. It is of course impossible to compare these estimates as regards cost, especially as the rates for iron vary in No. 2; it is entered as Rs. 160 a ton. In No. 3 as Rs. 145 a ton and in No. 4 it is from Rs. 140 to 170 a ton, or on an average Rs. 155 a ton.

3. The Local Fund Board wish that No. 3 estimate should be sanctioned and object to No. 4 (which was prepared as ordered in G.O., No. 1764 W., of 18th July), as they consider it not advisable to raise the approaches which are already high.

I must say I agree with the Local Fund Board and consider it is advisable that the roadway should be kept as low as possible; the high floods that the river is subjected to necessitate the bottom of the girder being at least 17½ feet above the crest of the anicut. I therefore would urge that whatever type of bridge is adopted that the roadway should rest on cross girders resting on the lower chord or web of the girder, and, as this is the case, I cannot recommend No. 4 being adopted.

4. With regard to No. 3, I have already given my opinion; it is the same as No. 2 on which I have already written a note (see papers in G.O., No. 1764 W., of 18th July 1884). No. 3 is similar, except with a slightly wide roadway 18 feet and a wooden roadway in place of the corrugated iron and asphalte roadway. I believe the 40 feet spans required a good plate girder bridge with 17½ feet, or 18 feet roadway as desired by the Local Fund Board could be designed, and that it would be better and probably cheaper than the design No. 3 as designed by Mr. Lowry.

From the President, Local Fund Board, Tinnevelly, dated 17th February 1885, No. 64.

Note by the Chief Engineer, Public Works Department.

In G.O. No. 1764 W., dated 18th July 1884, the Local Fund Board, Tinnevelly, was called upon to submit an alternative estimate for constructing a bridge over the Támbraparni river at the Srívaikuntham anicut, providing for plate girders, continuous over three bays, and for an overhanging road with flooring of timber.

2/846

2. The Local Fund Board now submit three estimates—

1st. For Warren girders, with plate cross girders, and small longitudinal girders, bearing corrugated plates covered with asphalte and concrete;—width of roadway 17½ feet, and estimated cost Rs. 1,05,000.

This estimate is the same as that originally prepared and submitted, except that the objectionable girders of old rails first proposed have been rejected.

2nd. Of the same general design as above, but the roadway to be 18 feet wide, and the flooring to be of wood, as recommended by the Superintending Engineer, VI Circle. Estimated cost Rs. 93,000.

3rd. The alternative estimate called for in the Government order above quoted, providing for plate girders and cross girders resting on top booms with an overhanging planked roadway 19 feet wide. Estimated cost Rs. 1,06,700.

3. The Local Fund Board object to this last design on the ground that it is not advisable to raise the approaches further, and the Superintending Engineer concurs in that view.

4. The Local Fund Board recommend for sanction the second estimate, amounting to Rs. 93,000; but the Superintending Engineer still adheres to his opinion that plate girders, with cross girders attached to bottom booms, so as to obviate additional raising of approaches, would be better and probably cheaper.

5. The Superintending Engineer's anticipation that plate main girders, with cross girders resting on bottom booms, would be cheaper than the Local Fund Engineer's design for a Warren girder bridge, is apparently erroneous, if the latter's figures be accepted; inasmuch as the Local Fund Engineer's alternative estimate, providing for continuous plate girders, with cross girders resting on top booms, is already more expensive than the estimate for Warren girders; and it follows that the plate girders, with cross girders resting on bottom booms, will also be more expensive.

6. The Chief Engineer is by no means satisfied as to the accuracy of the third estimate; but, all points considered, he thinks it best to accept the Local Fund Board's recommendation in favor of the second estimate, amounting to Rs. 93,000, and providing for Warren girders with an 18 feet roadway and wooden floor.

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Chief Engineer, Public Works Department.

21st March 1885.

ORDER—dated 7th April 1885, No. 846 W., Public Works.

The Government accept the opinion of the Chief Engineer, Public Works Department, and sanction the estimate, amounting to Rs. 92,000, for constructing a bridge over the Srívaikuntham anicut.

2. This sanction has been registered as Local No. 1 W. of 1885-86.

(True Extract.)

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

To the Board of Revenue, with twenty-eight enclosures.
„ Superintending Engineer, VI Circle.
„ Chief Engineer for Irrigation.
„ Financial Department.

Exd. A. Grubert.

Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1885) Madras.

PUBLIC WORKS.

Dated April, 7th.

Recd. Encl.

G.O., 7th April 1885, No. 846 W.

APRIL.

Bridge over the Srivaikuntham Anicut

Estimate for —, sanctioned.

To W. 846 W
7.4.85

Tambraparni Bridge.

In G.O. No 1764 W. of 18th July, 1884, the L.F. Board was called on to submit an alternative Estimate providing for plate girders, continuous over 3 bays, and for an overhanging road, with flooring of timber. —

Three Estimates are now sent up:—

1st. For Warren girders, with plate cross girders, & small longitudinal girders, bearing corrugated plates covered with asphalte and concrete. Width of roadway 17½ ft. Cost, Rs. 1,05,000.

This is the same as that originally prepared & submitted, after rejection of the objectionable girders of old rails first proposed —

2nd. Of same general design as above, but roadway 18 ft. wide, and flooring, as recommended by S.E., of wood. Cost, Rs. 93,000.

3rd. The alternative design called for in G.O. Plate girders & cross girders resting on top, with overhanging planked roadway 19 ft. wide. Cost, Rs. 106,700. —

The L.F. Board object to this last design on the ground that it is not advisable to raise the approaches further, & S.E. agrees with Board in this.

The Board recommend the 2nd Estimate for sanction — that for Rs. 93,000, but S.E. still adheres to his opinion that plate girders, with cross girders attached to bottom booms so as obviate additional raising of approaches, would be better and probably cheaper. —

S.E.'s anticipation that plate main girders, with cross girders resting on bottom booms, would be cheaper than Mr. Lowry's design for the Warren girder bridge is

---

Estimate No. 3 – (Rs. 93,000)

The number of the cross girders is 132; and of the longitudinal 165. Their total weight, including rivets is 108.379 tons; and their total cost is Rs. 20,813.

Estimate No. 4 – (Rs. 1,00,700)

The number of the cross girders is 390. Their total weight, including rivets, is 132.276 tons, and their total cost is Rs. 26,206.

From the above — Girders of Est. No. 4 exceed Girders of Est. No. 3 by 23.897 tons in weight; and by Rs. 5,393 in cost.

Details

Est. No. 3. — The number of the cross Girders equals 33×4 = 132; of the Longitudinal 33×5 = 165. — The weight of the Cross Girders equals 0528

way, if we accept the la
inasmuch as No. 2's altern Estim
and providing continuous plate girders
with cross girders resting on top booms,
already more expensive than the Estim
for the Warren girders. "a fortiori" the pl
girders with cross girders resting on
bottom booms will be more expensive.
I confess I am doubtful as to the
correctness of the Estimates, and tha
for the alternative design which see
to me excessive.
Too much case too is, in my opin
made of the raising of the ~~roadway~~ approac
consequent on an overhanging roadw
and full advantage has not been tak
of modifications that might be ma
to keep such raising to a minimum
The whole matter so far then rem
pretty much "in statu quo ante"; a
we have not a design & Estimate
as that advocated by S.E. This m
be called for, but work will be ag
delayed. There is of course the altern
of sanctioning the Estimate of No. 2
recommended by the Board.

CS.
16.3.85

I am by no means satisfied a
to the accuracy of the alternat
estimate, but all points conside
I think it is best to accept th
Board's recommendation in
favour of No. 2 above. i.e.
the Warren girder type, with
roadway & wooden floor, —
estimated to cost 93,000/ —

17.3

I.

4/840

Please ascertain from recent numbers of "Engineer" what are the prices now current for iron — plate, bar, angle, rolled, & cast — also best Lowmoor? —

From 3rd & 4th Estimates let me have below a comparative statement of the number, weight, dimension, & cost of the cross girders supporting roadway.

CS.
23.2.85

D.W.

The following are the only prices given in the "Engineer" — 16th Jan/85 — Unmarked bars vary from £5½ to £6½ per ton. Common sorts of angle iron, £6 per ton. Sheet iron, fair quality, £ s d 6-12-6 per ton.

The comparative statement is given in the accompanying papers.

B.H.
25/2/85

Estimate No. 3 – (Rs. 93,000)

The number of the cross Girders is 132; and of the longitudinal 165. Their total weight, including rivets is 108·379 tons; and their total cost is Rs. 20,813.

Estimate No. 4 – (Rs. 1,00,700)

[illegible] number of the cross Girders is 390. Their total weight, including rivets is 132·276 tons; and their total cost is Rs. 26,206.

From the above – Girders of Est. No 4 exceed Girders of Est. No. 3 by 23·897 tons in weight; and by Rs. 5,393 in cost.

Details

Est. No. 3. – The number of the Cross Girders equals 33×4 = 132; of the Longitudinal 33×5 = 165. – The weight of the Cross Girders equals 0528

longitudinal, 3
ad of the rivets, 4.919 t
he cost equals (103.46 to
wrought iron at Rs. 145 p
n) Rs. 15,002 + (4.919 tons o
owmore iron for rivets a
300 per ton) Rs. 1,476 + (fit
e 108.379 tons of ironwork
40 per ton) Rs. 4,335 = Rs. 20,81

st. No. 4. — The number o
e Cross Girders equals
x12 = 396. The weight of
ss Girders equals 127.105
ad of the rivets, 5.171 tons.
he cost equals (16.132 tons
r iron at Rs. 140 per ton
s. 2,258 + (23.017 tons of plat
n at Rs. 170 per ton) Rs. 3,91
ngle iron, 87.956 tons, at
. 150 per ton) Rs. 13,193 + (5
best Lowmore iron for r
t Rs. 300 per ton) Rs. 1,551 +
. 32.276 tons of iron work
fitted up at Rs. 40 per to
Rs. 5,291 = Rs. 20,200

BH
25/2/85

Estimate No. 4. — (Rs. 106,700)

If the Cross Girders be obtained from Richardson and Cruddas of Bombay — (see Sec. 12A of Catalogue D of 1885) — then, their number is 396; their weight is 50.384 tons; the total cost is Rs. 10,077.

By this arrangement the Cross Girders of Est. No. 3 exceed the Cross Girders of Est. No. 4 by 57.995 tons in weight; and by Rs. 10,736 in cost.

Details —

The number of rolled iron Cross Girders is 33×12 = 396. Their weight equals (length of girder 19 ft; weight per foot 15 lbs.) — 19×15×396, or 112,860 lbs. = 50.384 tons. Their cost equals (50.384 tons at Rs. 160 per ton) Rs. 8,062 + (fitting up 50.384 tons at Rs. 40 per ton) Rs. 2,015 = Rs. 10,077.

BH 25/2/85

No. 25 E.A.

7/846

Transferred to the Chief Engineer, P. W. Department for disposal.

A. S. Russell

For Chief Engineer for Irrigation

Chepauk
23rd February 1885

CHIEF ENGINEER
21 FEB
885
FOR IRRIGATION

1885

TINNEVELLY L. F. Board OFFICE

[illegible] 1675

From

The President
Local Fund Board
of Tinnevelly

To

The Chief Engineer
for Irrigation
Madras.

Dated 17th
Despatched 17th
Received 24th
February 1885

No. 64

ENCLOSURES. —

Former Reference. This office letter No 144 dated 9th December 1884 to the Secretary to the Board of Revenue, Madras, through you.

Sir,

I have the honour to request that you will be good enough to forward at an early date for the sanction of the Board and Govt. the alternative estimate

for the bridge over the Srivaikuntham
anicut.

I have the honor to be
Sir
Your Most Obd^t. Servt.

J. Lee Warner
President

ARL
[illegible]

Local Fund Board ~~Office~~
No. 1464. Tinnevelly,
9th December 1884.

[illegible]

From,
J. Lee Warner Esquire
President, Local Fund Board
Tinnevelly.

To,
J. T. Mackenzie Esquire
Acting Secretary to the
Board of Revenue
Madras.

Through the Chief Engineer D. P. W.

Estimate — 3.
Report — 2.
Specification — 2.
Plans — 13
Diagrams — 4
Total 24.

Sir,

In reference to para 2 of Government Order No 17×64 W. Public Works dated 15th July 1884, communicated in the Proceedings of the Board of Revenue No 7247 Mis., dated the 2nd August, I have the honor to submit the following alternative estimate &c as noted in the margin for the bridge over the Srivaikuntham anicut.

× Not exmind D.E.J

2. This Board, however, adhere to the former estimate submitted by the Local Fund Engineer with certain modifications indicated in their Resolution No 7 dated 19th November 1884, copy of which is herewith forwarded.

3. Arrangements will be made for the preparation of materials for the piers as directed in para 1 of the Government Order

6. After the estimate has obtained the sanction of Government steps will be taken for realizing funds to meet the total cost, minus the sum of Rs 25394 already at the credit of this project.

I have the honor to be
Sir
your most Obdt servt

President

CHIEF ENGINEER
12 DEC
1884
FOR IRRIGATION

SE 1097

CHIEF ENGINEER
23 JAN 85

p 2 Chepauk
21st January/85

No 130C

Forwarded to the Supt Engineer VI Circle, for scrutiny and report

(By order)

C. Warren Mayalll
Dy Chief Engr PWD

22-1-85

[illegible]

CHIEF ENGINEER
19 DEC
1884
FOR IRRIGATION

1884

R5270

LOCAL FUND BOARD'S OFFICE
TINNEVELLY.

FROM
THE PRESIDENT
LOCAL FUND BOARDS,
TINNEVELLY,

TO
THE SECRETARY TO THE
BOARD OF REVENUE,
MADRAS.

Through the Chief Engineer for Irrigation Madras

Dated 9th }
Despatched } December 1884
Received }

No. 1164

ENCLOSURES. Seventy-five

No.

SUBJECT.

Submitting alternative Estimate for the Construction of a bridge over the [illegible] Channel.

p 3 No 107 EW

Forwarded to the Chief Engineer PWD

A. S. Russell
for Chief Engr for Irrign.

OFFICE OF THE SUPERINTENDING ENGINEER,
6TH CIRCLE.

Trichinopoly 11 February 1885.

No. 689 T.N.

p 3 4

From
The Superintending Engineer,
6th Circle

10/846

To
The Chief Engineer
P. W. D.

Sir,

With reference to your Endorsement No 130 C dated 21st Jany, I have the honor to point out that there are 3 designs for the [illegible] Bridge sent, they are as follows: —

1st A design without estimate for a bridge made of old Railway iron, the cost of this was estimated at Rs 62,500. As this has already been Condemned no further notice need be taken of it.

2d A design and estimate for a Warren Type Bridge the transverse girders being attached to verticals the transverse girders being crossed by small longitudinal girders and the whole covered with corrugated plates on which is a flooring of asphalt, the estimate for this is Rupees 105,000, the width of Roadway between flanges of main girder being 17½ ft. In G.O. No 1764 dated 18th July will be

Forwarded to the S. I. Ry Station at Egmore on the 16-2-85 in order to obtain delivery of the parcel.

ENCLOSURE.

1 Estimate &
16 Plans.

Sent separately

Warren

forward your note on the design and the Govt. order on it.

3d Another estimate similar to the above but the Roadway made 6" wider. The flooring to be of wood with diagonal planking over it, this estimate amounts to Rs 93,000. The dimensions of the iron in the girders & cross girders is the same as in No 2

4th A plan and estimate for the Bridge. Iron plate girders with cross girders placed above them overhanging on each side the Roadway is 19 ft in width. The estimate amounts to Rs 106,700 –

It is of course impossible to compare these estimates as regards cost especially as the rates for iron vary in No 2, it is entered as Rs 160 a ton in No 3 as Rs 145 a ton and in No 4 it is from Rs 140 to 170 a ton or on an average 155 a ton –

The Local Fund Board wish that No 3 estimate should be sanctioned and object to No 4 (which was prepared as ordered in G.O. No 1764 W of 18 July) as they consider it not advisable to raise the approaches which are already high.

I must say I agree with the Local Fund Board and consider it is advisable that the Roadway should be kept as low as possible, the high floods that the river is subjected to necessitates ?

the bottom of the girder being at least 17½ above the crest of the Anicut I therefore would urge that whatever type of Bridge is adopted that the Roadway should rest on cross girders resting on the lower chord or web of the girder and as this is the case I cannot recommend No 4 being adopted. –

4. With regard to No 3 I have already given my opinion, it is the same as No 2 on which I have already written a note (see papers in G.O. No 1764 W of 18 July 85). No 3 is similar except with a slightly wider Roadway 18 ft and a wooden Roadway in place of the Corrugated iron and asphalte Roadway I believe the 40 ft spans required a good plate girder Bridge with 17½ ft or 18 ft Roadway as desired by the Local Fund Board could be designed and that it would be better and probably cheaper than the design No 3 as designed by Mr. Lowry.

I have the honor &c
Sir
Your most obedient servant.

1st Feb 1886

Supt Engineer, Sinde.

P. W. D. 6th CIRCLE.

No. 1926 d/ 14. 6. 69
449 d/ 14. 3. 72
1777 d/ 26. 7. 72
1764 W d/ 18. 7. 84

From
The Superintending Engineer,
6th Circle.

To
The Chief Engineer
P.W.D.

No. 689 T.R.

14 FEB 85

Dated 11
Received } February 1885.

Enclosure

+ Recd 17. 2. 85.

Bridge over Srivaikuntham Anicut:—

Returns the Estimate &c for a — with his report:—

P. W. Deptt

17/1846

Letter from the President, L. F. Bd. Tinnevelly, No. 1144 d/ Decr. 9. 1884.
do from the Supdg. Engr. VI Circle . . . . " 689 T.R. d/ Feby 11. 1885.
do from the President, L. F. Bd. Tinnevelly " 64 d/ Feby 17 " "

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

In G.O. No. 1764 W d/ 18th July 1884, the L. F. Board Tinnevelly, was called upon to submit an alternative estimate for constructing a bridge over the Tambraparni River at the Srivaikuntham Anicut, providing for plate girders, continuous over three bays, and for an overhanging road with flooring of timber.

2. The L. F. Board now submit three estimates, (1st). For Warren girders, with plate cross girders, and

nd small longitudinal
irders, bearing corrugated
plates covered with asphaltate
nd concrete; width of roadway
~~to be~~ 17½ feet, and estimated
cost Rs 1,05,000/-.

This estimate is the same
as that originally prepared
and submitted, except
that the objectionable
girders of old rails first
proposed have been rejected.

2.) Of the same general
design as above, but the
roadway to be 18 feet
wide, and the flooring
to be of wood, as recommended
by the Supt Eng^r VI Circle.
Estimated cost Rs 93,000.

3.) The alternative estimate
called for in the G.O.
above quoted, providing
for plate girders and
cross girders resting on

top booms, with an over-
hanging planked roadway
19 feet wide. Estimated
cost Rs 1,06,700.

3. The L. F. Board
object to this last design
on the ground that it is
not advisable to raise the
approaches further, and
the Supt Engineer concurs
in that view.

4. The L. F. Board
recommend for sanction
the second estimate, amounting
to Rs 93,000/-; but the
Supt Engineer still adheres
to his opinion that plate
girders, with cross girders
attached to bottom booms,
so as to obviate additional
raising of approaches, would
be better and probably
cheaper.

5. The Supt Engineer's
anticipation that plate

main girders, with cross girders resting on bottom booms, would be cheaper than the L. F. Engineer's design for a Warren girder bridge, is apparently erroneous, if the latter's figures be accepted; inasmuch as the L. F. Engineers' alternative estimate, providing for continuous plate girders, with cross girders resting on top booms, is already more expensive than the estimate for Warren-girders; and it follows that the plate girders with cross girders resting on bottom booms will also be more expensive.

The Chief Engineer is by no means satisfied as to the accuracy of the third ~~alternative~~ estimate; ~~but~~

but, all points considered, he thinks it best to accept the L. F. Board's recommendation in favour of the second Estimate amounting to Rs 93,000/-, and providing for Warren girders with an 18 feet roadway and wooden floor.

CW.
21.3.85

WS.
21.3.85

Cw

G.O. 1764. W d/ 18-7-84
" 1777 d/ 26-7-72
" 449 d/ 14-3-72 (Revenue)
" 1926 d/ 14-6-69

Incl 295

Rec 20/3/85

Cir: 31/3/85 Rd 1/4/85

No. 846. W

P.W. Department,

Proceedings of the Madras Government,
Under date the 7th April/85.

18/840

Read the following:—

Letter from the President, L.F.Bd, Tinnevelly Dt } (Rc. No. 1164 d/ Decr 9. 1884)
do from the S.E. VI Circle ….. (" " 689 I.N. d/ Feby 11th/1885)
do from the President, L.F.B. Tinnevelly Dt (" " 64 d/ " 17th ")
Note by the Chief Engineer P.W. Dept (d/ March)

The Government accept the opinion of the Chief Engineer P.W. Dept, and sanction the estimate amounting to Rs 93,000/- for constructing a bridge over the Srivaikuntham Anicut

Mu

2. This sanction has been registered as Local No. 1 W of 1884/85 1885/86.

6 APL 85

C.S.
.3.85

21.3.85

To,

The Board of Revenue
with 28 enclosures.
S.E. VI Circle
" C.E. for Irriga^n^
" Financial dept
(Ch. Secy. for communication)

Cir: 31/3/85

16/846

2958

Govt. of Madras.

PUBLIC WORKS.

Please Book [illegible]

Dated

Recd. Encl.

G.O. 7 Apr 1885. No. [illegible]

Bridge over the

[illegible]

110
5