

(1) Number of pages 22.

(2) Date of repair 29. 10. 38

(3) Initials of the Referencer [Signature]

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No.	File No.
Dated	13

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
for the month of January 1860.*

No. 28. Read the following letter from Lieutenant-Colonel J. H. BELL, Chief Engineer ;
to J. D. BOURDILLON, Esq., Secretary to Government, dated 16th December 1859,
No. 8391.

With reference to the order of Government, No. 1649, 7th July 1859, returning for reconsideration a list of roads proposed as railway feeders with remarks ;
I have now the honor, after communication with the District
Engineers, a further reference to the Consulting Engineer, and
a consideration of the Collectors' opinions as far as they have
been received by me, to forward a revised map, and a list of
roads, which I would recommend for construction ; and in the
preparation of which the Deputy Chief Engineers of the Central and the Southern Circles have
also been consulted.

2. The list contains all the roads as before proposed ; and opposite each is noted, the
opinions of the Consulting Engineer, the District Engineers, and the Collectors ; while my own
remarks are put in red ink.

3. The map shows all existing roads and those under construction in red ; those proposed,
but which I recommend being omitted, are dotted yellow ; while those recommended for construction and in which the Deputy Chief Engineers and I also coincide, are coloured yellow.

4. A simple list of the latter, and another of those which I recommend being omitted, is
also appended.

5. The roads which I recommend and for which estimates are ready and enclosed are
No. 7. Sholinghur to Cauverypauk, amount of estimate, Rupees..... 20,400
.. 25. Salem to Terramungalum, do. of do 2,300
.. 40. Paulghat to Cullungode, do. of do 4,000
.. 45. Wattapollum to Cherpulcherry do. of do 5,100
.. 48. Penany to Mullappootum via Tirroor do. of do 61,800

6. Should the Government approve of their construction, I would recommend sanction being
obtained to the expenditure of Rupees 10,000 on No. 7 in the coming year. Rupees 20,000 on
No. 48 and the full amount of the estimates on Nos. 25, 40 and 45.

No. 29. ORDER THEREON, 21st January 1860, No. 170.

It is observed that of the five estimates referred to in paragraph 5 of this letter, one only,
viz. No. 7 for the road from Sholinghur to Cauverypauk finds a place in the Chief Engineer's
budget with a proposed expenditure of 10,000 Rupees in the ensuing year. This estimate is
sanctioned, but with respect to the remaining four estimates the Government desire to be informed
whether funds are available to meet the expenditure recommended on them, as in that case
they will be prepared to sanction their entry in the budget.

(Signed) T. PYCROFT,
Chief Secretary.

Delivered 24 June 1859

Comptroller to the Public Works Department

*District Engineer
Malabar*

Richard C. M. et. N^o 15 of 1859/60

District - Labrador

North Carolina and Tennessee the road from Collegeport to Panama
major and Paulsboro.

Quantity	Description of Work	Rate	Amount	Total
5417	Cubic Yards of Earth Soil @	1	526 1	526 1
2305	" " " " " " " " " "	16	364 56	234 56
5740	Square Yards of Surface @	4	10 44	19 94
6136 1/2	Cubic Yards of Gravelled @	5	107 10 6	1917 10 6
	Summed	5	109 13 8	109 13 8
	Bridge No. 1			
340 1/2	Cubic feet of Brick in Churn	2	42 9	
	Excavating foundation 1/2		1 7 8	
	Summed		2 15 9	47
	Bridge No. 2			
502 3/8	Cubic feet of Brick in Churn	2	60 10 8	
	Excavating foundation 1/2		1 44	
	Summed		3 49	68
	Bridge No. 3 the same as Bridge No. 1		47	47
	Bridge No. 4			
405 3/8	Cubic feet of Brick in Churn	2	50 11 11	
	Excavating foundation 1/2		1 8	
	Summed		2 12 1	53
5	Bridges No. 5, 6, 8, 9 & 10 the same as Bridge No. 4	53	275	275
	Bridge No. 7 the same as Bridge No. 2		68	68
	Bridge No. 11			
480 3/8	Cubic feet of Brick in Churn	2	60 1 6	
	Excavating foundation 1/2		1 46	
	Summed		3	65
	Bridge No. 12 the same as Bridge No. 11		65	65
	Extra Establishment		372	372

Notes Company Papers 4000.

District Engineer's Office
Malabar

Calcutt 24 June 1859

Example 12. 10. 1900. E. G. A.

Dear

District Engineer
Malabar

Abstract Estimate. N^o 14 of 1859/60.
District. Narayan

Work. Improving & repairing the road between Cherry Hill & Washington
& making new road between. From Monday to Wednesday.

Quantity	Description of Work	Rate	Amount	Total
362 1/2	Cubic Yards of Cast Soil @	1	2265 36	2265 36
11156 1/2	Do. of Yellow Soil @	1 1/2	1018 21	1048 12 1/2
85 1/2	Cubic Yards of Topsoil @	4	174 15	174 15
342	Cubic Yards of Common Rich Soil @	8	171	171
	Gravel @	5	183 49	183 11 1/2
	Bridge. P. 1			
192 1/2	Cubic feet of Lattice in Churnam	11	21 2	
183 1/2	Do. of Lattice in wrought Iron	8	9 3	
12	Iron. Bars 1/2 in	1	12	
	Excavating foundation		13	
	Gravel		1 8	33 8
11	Bridges. P. 2 to 12 the same as Bridge P. 1	33 8	368 8	368 8
	Bridge. P. 13			
99	Cubic feet of Lattice in Churnam	11	10 14	
60 1/2	Do. of 18 Granite Slabs for covering	46	17 1	
	Excavating foundation		9	
	Gravel		1 8	30
9	Bridges. P. 14 to 22 the same as Bridge P. 13	270	270	270
	Bridge. P. 23			
209 1/2	Cubic feet of Lattice in Churnam	11	23	
81	Cubic feet of 18 Granite Slabs for covering	46	22 12 6	
	Excavating foundation		1 11 6 1/2	
	Gravel		2 8	50
	Bridge. P. 24 the same as Bridge P. 23		50	50
	Extra Establishment		104	154

Total Companies Refused 3700 ..

District Eng. Office
Albany

Calicut 25th June 1859 } Compt^d W. P. Brown

Dean

District Engineer

68-8889-10000

Chamaecrista

628/2078-11

1000-1809/14.

• Distinctly at present
nothing more known of
some of the following
except that of *marginatus*.

Transmitted to Alfred Hill.

List of feeders to SW line of Rail-
way proposed, but not recommended
by Chief Engineer.

List of proposed feeders to SW
line of Railway which are recom-
mended for construction by the
Engineers.

N.3. Oambada to Shripuravalli.

4. Tiruvallur to Poduvail.

10. Arcot to Perai.

14. Gariahan to Chittoor.

15. " to Baredlypally.

16. " to Thacalagharipattal.

17. Shripuravalli to Salem.

20. Shripuravalli to Kishanganur.

21. Moorapoor to Arcot via Ryposth.

26. Salem to Archinapally.

31. Ennadu to Karur.

31. Perindarai to Sathimungalam.

34. Coimbatore to Arcot.

38. Coimbatore to Kishanganur.

42. Puthay to Wandoor.

43. " to Kallacott.

44. Lachady to Velancon.

46. Puthambay to Kallacott.

47. Amalavar to Kalyanapuram.

50. Perpanagaddi to Mullapooram.

1. Maday to Poonamallee.

5. Arcot to Chengam.

7. Chhalinghur to Chaurapatt.

11. Arcot to Arcot.

12. Villor to Arcot.

18. Shripuravalli to Mullapattal.

22. Shripuravalli to Moorapoor.

23. Adamarcottal to Mullapattal.

to Arcot.

24. Salem to Kadalar.

25. Salem to Saramungalam.

27. Salem to Sathimungalam.

29. Kishanganur to Salem.

33. Kishanganur to Kishanganur.

35. Coimbatore to Shripuravalli.

36. " to Poolachy.

37. " to Sathimungalam.

39. " to Sathimungalam.

40. Puthambay to Kallacott.

41. " to Kishanganur.

45. Mullapattal to Chhalinghur.

48. Karur to Mullapattal.

For South Coast 23
16th December 1854

H. L. S.
Chief Engineer.

Printed Order 2127 12875

to sent to 8891 on 16/5/54

For South Coast

172202/59

12.14 of 1859/60

For South Coast
172202/59
12.14 of 1859/60
For South Coast
172202/59
12.14 of 1859/60

Public (roads)

[New Work]

Abstract of Estimate No

of 185 / 5

Road No

District North Arcot

Work. Constructing Branch Road from Curriepakk to the Railway Station at Benavaram 7 Miles 7 Furlongs and 22 Yards.

Quantities	Description of Work	Rate	Amount	Amount for each part
C. Yds		Rs. p. S. P.	Rupies	Rupies
12962	Earth Work ————— per bcpd.	" " 10	6750	
10411	Graveling ————— " " 4	" " 4	2603	
1250	Square Yards Turfing ————— per bcpd.	" " 1	78	
	Sundries —————		494	9925
	Bridge of 5 Arches of 24 feet span each			
770	Brickwork in Churnam ————— per bcpd.	2 4	1732	
192	Do Do ————— " " 8	2 8	480	
11134	Square feet Plastering in Do ————— per square	1 12	195	
1416	Earth Work ————— per bcpd.	" " 1	101	
	4 Guard Stones ————— each	1 8	6	
	Centerings —————	" " "	100	
	Baling —————	" " "	45	
	Sundries &c —————	" " "	271	2950
	Bridge of 3 Arches of 24 feet span each			
720	Brickwork in Churnam ————— per bcpd.	2 4	1662	
118	Do Do ————— " " 8	2 8	295	
746	Square feet Plastering in Do ————— per square	1 12	124	
1211	Earth Work ————— per bcpd.	" " 1	76	
	Grand Total		2137	12875

and by purchase from
to 500 line of Railway
showing how much are
undermined and more
at Benavaram for
construction by the
Engineering works

Est. 3 in a letter from the
Engineer to the Supt. & Co.
of P. W. under date 22/10/54
Pg. 228391

0773292/59

Quantities	Description of Work	Rate	Amount	Amount for each part
C. M. J. S.		Rs. 10. 00. 00	Rupies	Rupies
	Brought Over		2137	12875
1	Guard Stones each	1. 8	6	
	Centerings	"	72	
	Waling	"	30	
	Sundries &c.		156	2400
	Eleven Tunnels each of 4 1/2 feet			
34	Brickwork in Chunam per sq. ft.	2. 4.	77	
3	Do Do	2. 8.	8	
609	Square feet Plastering in D° per square	1. 12.	11	
103	Earth Work per cu. yd.	" 1.	7	
	Centering	"	4	
	Sundries at 5 per cent	"	8	
	For one Tunnel		115	
	For Eleven Tunnels		1265	
	Two Tunnels each of 4 1/2 feet			
40	Brickwork in Chunam per sq. ft.	2. 4.	90	
6	Do Do	2. 8.	12	
726	Square feet Plastering in D° per square	1. 12.	13	
117	Earthwork per cu. yd.	" 1.	7	
	Centerings	"	5	
	Sundries at 5 per cent	"	13	
	For one Tunnel		146	
	For two Tunnels		280	
	Tunnel of 2 vents of 4 1/2 feet			
61	Brickwork in Chunam per sq. ft.	2. 4.	138	
9	Do Do	2. 8.	23	
1448	Sq. ft. Plastering in D° per sq. ft.	1. 12.	25	
	Brought Over		186	16820

Quantities	Description of Work	Rate	Amount	Amount for each part
		Rs. 10. 00. 00	Rupies	Rupies
	Brought Over		186	16820
3	Earthwork per cu. yd.	" 1.	12	
	Centerings	"	8	
	Sundries &c.	"	14	220
	Two Tunnels each of 2 vents of 6 feet each			
3	Brickwork in Chunam per sq. ft.	2. 4.	165	
3	Do Do	2. 8.	32	
15	Square feet Plastering in D° per square	1. 12.	27	
85	Earth Work per cu. yd.	" 1.	12	
	Centerings	"	10	
	Sundries &c.	"	13	
	For one Tunnel		260	
	For two Tunnels		520	
	Tunnel of 2 vents of 4 feet each			
21	Brickwork in Chunam per sq. ft.	2. 4.	227	
9	Do Do	2. 8.	48	
6	Sq. ft. Plastering in D° per sq. ft.	1. 12.	34	
43	Earth Work per cu. yd.	" 1.	10	
	Centerings	"	16	
	Sundries &c.	"	6	360
	Two Tunnels each of 1 vent of 6 feet			
43	Brickwork in Chunam per sq. ft.	2. 4.	97	
6	Do Do	2. 8.	16	
15	Sq. ft. Plastering in D° per sq. ft.	1. 12.	16	
10	Earth Work per cu. yd.	" 1.	6	
	Centerings	"	6	
	Sundries	"	10	
	For one Tunnel		150	
	For five Tunnels		750	
	Brought Over			18670

Quantities	Description of Work	Rate		Amount	Amount of each part.
		Rs	pais	(Rupees)	Rupias
	Brought Over				18670
	Unwind of 11 inch of 2 1/2 feet				
32	Spindle work in Churnam 1000	2	4	72	
3	Do Do Do	2	8	7	
538	Sp. Plastering in 2 1/2 feet square	1	12	9	
86	Earth work per cu yd	"	1	5	
	Centerings	"	"	3	
	Sundries	"	"	4	100
	For 10 tunnels each of 11 inch of 2 1/2 feet				
21	Spindle work in Churnam 1000	2	4	47	
2	Do Do Do	2	8	5	
487	Sp. Plastering in 2 1/2 feet square	1	12	9	
72	Earth work per cu yd	"	1	4	
	Centerings	"	"	3	
	Sundries	"	"	2	
	For one tunnel			70	
	For ten tunnels			700	
				19470	
	Cost of different dimensions			118	
	Settle Stones Complete	4	"	32	
	Extra Establishment			780	
	Total Rupees			20400	

Central Office of P.W.
 Fort St. George
 16th Dec 1864

J. M. L. S. S. S.
 Chief Engineer P.W.

In a letter

Home

The Chief Engineer

To the Secretary of Post. Dr. 10/11

100329247

Date 16th Dec 1859

Received

No 8391

Abstract Estimate
for Constructing Branch
Road from Cannerypakk
to the Railway Station at
Bunavarum 7 Mi. 7 1/2 and
22 Yards in the District
of North Arcot amounting
to Rupees 20,400

Public Roads

(New York)

Abstract of Estimate No. of 185 / 5

District Salem

Roud No.

Work completing a rough Cart Track between Sooramangalam
(Salom) Railway Station & the town of Tangipilly at Wundulive.

Quantities.	Description of Work.	Rate.	Amount.	Amount of cash paid.
C.Yards.		No. A. P.	Pieces.	Pieces.
23	Miles cutting small side Ditches, sloping the banks of a few small rallies and clearing a track 10 feet wide per mile	100 " "	2300	
			Total Pieces — 2300	

Central Office of P.M.
Fort Saint George
16th Dec 1859

R. K. Lenth Colonel
Chief Engineer D. D. W.

Enclosure 2

In a letter

From
The Chief Engineer
D. D. H.

To
The Secretary to Govt.
D. D. H.
No 3292/89

Date 16th Dec 1889
Received

No 8391
Abstract Estimate of Construct-
ing a Rough Cart track between
Socranungulion / Salan Railway
Station and the town of Nungupilly
in the talook of Nomanalio in the
District of Salan.
Amounting to Rspees 2300-0-0

Central Office of the
Public Works Department
16th December 1889

8391

From
The Chief Engineer
To
The Secretary to Government
Public Works Department

Enclosure
No 3292/89

With reference to the Board
of Government of the District of Salan
returning for reconsideration a list of roads re-
-ferred as Railway feeders with remarks thereon
now the honor after communication with the
District Engineer, a further reference to the
Consulting Engineer and a consideration of the
Collector's opinion as far as they have been re-
-ferred by me to forward a revised list and
a list of roads which I would recommend for
construction, and in the preparation of which the
Deputy Chief Engineer of the Central and
the District Engineer have also been consulted.
One.

The list contains all the Pools as before proposed, and opposite each is noted the opinions of the Consulting Engineer, the District Engineer, and the Collector, with any remarks there are put in Pool with.

Another sample list of the latter, and another of those which I recommended, being omitted, is also appended.

37. Tholingor to Cannery amount of Estimate Rs 20400
 38. Calcutta to Purnanagalingam --- do --- of --- do --- 2350
 39. Canjibhat to Cuttack --- do --- of --- do --- 4000
 40. Mattapollam to Cherpulcheri --- do --- of --- do --- 5100
 41. Canjibhat to Pundrapuram via Sivaco --- do --- 61800
 Should the Government approve of their con-

construction I would recommend, disbursements
being estimated to the expenditure of
\$10,000 in 1847 and the coming year
of 1848 and the full amount
of the Estimate in 1845, 40 and 45.

H. C. Jones
Superintendent of the Pacific Coast

A. K. Allen
Chief Engineer

Mr Secretary to Government
Public Works Department

W. H. Gray

27th Dec. 3:10 p.m. 20. 31. 55.
 From Chief Engineer of the
 C.M. 184.

From the Chief Engineer
 of 26 Jan 1860
 On 26 Jan 1860
 31 Jan 1860
 From Chief Engineer 2662
 25:10 p.m. 20. 31. 55.
 From Chief Engineer 2662
 20. 31. 55.

20. 31. 55.

27th Dec. 3:10 p.m. 20. 31. 55.
 From Chief Engineer of the
 C.M. 184.

From the Chief Engineer
 of 26 Jan 1860
 On 26 Jan 1860
 31 Jan 1860
 From Chief Engineer 2662
 25:10 p.m. 20. 31. 55.
 From Chief Engineer 2662
 20. 31. 55.

20. 31. 55.

27th Dec. 3:10 p.m. 20. 31. 55.
 From Chief Engineer of the
 C.M. 184.

It is to be noted that of the
 from the Chief Engineer of the
 C.M. 184.

20. 31. 55.