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MADRAS RECORD OFFICE.

Government of Madras.

Puducherry DEPARTMENT.
Can 27/11/38

G.O. No.	<u>282</u>	Press Mis.
Dated	<u>21-2-</u>	<u>18/38</u>

Not to be folded or roughly handled

Index for Budget N^o. 1.

District	Work	Amount of Amount, Rs. the estimated grant for the cost. expenditure of 1860/61.	
		Rs.	Rs.
Kistnah 3	I. Additional Locks for the Vizagapatam Channel...	34,600	34,000
Nellur 4	I. Connecting the Survapully with Jaffer Sahib's Channel....	59,980	48,580
Bellari 1	B. Artillery Barracks and out-offices at Bellari.	118,590	50,000
Madras 7	C. Junction Canal between the Adijar and Huam -	3,59,300	1,40,000
	2 B Presidency store yard & workshop.	76,390	45,220
Malabar	5 C Perambadi Chat road	56,000	"
	6 Cart road from Mullapuram to Ponnay -	61,800	20,000

Statement No. 1

The Budget

for the Madras Presidency

for the year 1860/61

Containing new projects of estimated cost exceeding 25000 Rupees each recommended for the sanction of the Govt. of India.

No.	Description of work	Estimated	Estimated time for completion	Estimated	Remarks
		Cost		expenditure for 1860/61	
		Rs.		Rs.	
I State					
A Military					
1	Artillery Barracks and out Offices at Bellary	118590	2 years	50000	
	Total accommodation for troops	118590		50000	
	Total Military	118590		50000	
	B Naval	None			
	C Judicial	None			
	D Revenue	None			
	E Ecclesiastical	None			
	F Educational	None			
	G General				
2	Building an Engineers stores for machinery &c with the carpenters and Smiths shops attached and suitable quarters for the warrant Officer in charge of the shops	76390	2 years	45220	
	Total Public Works	76390		45220	
	Total General	76390		45220	
	Total State	194980		95220	
II Public					
	II Municipal	None			
	I Marine	None			
	J Industrial	None			
	K Agricultural				
3	Additional Lock & Cabin gate in the Kizampattam channel between Pedda ravour & the terminal lock into the water near Kizampattam Kodnati	34600	1 year	34600	

No.	Description of work	Estimated cost	Estimated time for completion	Estimated expenditure for 1860/61
4	Connecting the Suroa fully channel with the Jaffer sails channel. <u>Nellore</u>	59,980	2 years	18,580
	Total Irrigation Canals	94,580	-	83,180
	Total agricultural	94,580	-	83,180
	<u>II. Public (contd.)</u>			
5	I. Communications			
	Supplemental estimate for metalling and gravelling district road No. 4 or Perambalur & that road Malabar	56,000	-	-
	Total metalled roads	56,000	-	-
6	Constructing a cart road from Mullaperram to Ponnany via Puttur & Puthyanga of Malabar	61,800	3 years	20,000
	Total unmetalled roads	61,800	-	20,000
7	Proposed Junction Canal between the Adigar and the Kumm Madras	359,300	2 years	-
	Total Navigable canals	359,300	-	-
	Total Communications	1,17,100	-	20,000
	M Railway	None		
	N Electric Telegraph	None		
	Total Public	5,71,680	-	1,03,180
	Grand total of State and Public	7,66,660		1,98,400
	Amount allowed for isolated works to be sanctioned during the year 1860/61 under Rules II & V Communicated by the Govt. of India in their Pro. of the 31 st March 1856 No. 1584			1,00,000

Remarks

Abstract

Class	Section	No. of works	Estimated cost	Estimated expenditure for 1860/61
I. State	A. Military	1	1,18,590	50,000
	B. Naval	"	"	"
	C. Judicial	"	"	"
	D. Revenue	"	"	"
	E. Ecclesiastical	"	"	"
	F. Educational	"	"	"
	G. General	1	76,390	145,220
Total state		2	1,94,980	95,220
II. Public	H. Municipal	"	"	"
	I. Marine	"	"	"
	J. Industrial	"	"	"
	K. Agricultural	2	94,580	83,180
	L. Communications	3	1,17,100	20,000
	M Railway	"	"	"
	N Electric Telegraph	"	"	"
Total Public		5	5,71,680	1,03,180
Grand Total of State & Public		7	7,66,660	1,98,400

Budget 660

Index for Budget No. 2.

Dist.	No. in the Budget	Work	Orders of Govt.		Amount of the estimated cost.	Amount required for the expenditure of 1856/57.
			No.	Date		
Ponnani.	130	C. Road from Chikākol to Kāringapattam.	3410	23 Dec 1856	24,000	8,415
	131	Road from Marasurupetta to Kalingapattam.	1118	31 Jan 1857	14,580	4,490
	132	Road from Maupāda salt pans to Tēkkāli.	2128	19 Nov 1857	5,330	2,330
	133	Road from Maupāda to Bannack.	1949	13 Aug 1859	10,500	3,500
	134	Road from Omavallu salt pans to Chikākol.	1949	13 Aug 1859	14,400	14,00
	135	Road from Tēkkāli to Mālapetta.	2167	9 Sep 1859	9,060	4,660
	137	Platform & bridge over the Pandiyādi.	2235	26 Sep 1859	2,200	1,700
			2675	16 Nov 1859	7,500	2,645
Vizagapatnam.	166	C. Road from Hōtūr to the Harris Valley.	204	30 Jan 1860	3000	300
	96	B. Three Overseers' Stores sheds with Nurseries.	1040	17 Jun 1859	850	74
	62	Police Kachhūri at Hōmadā.	2135	5 Sep 1859	820	600
	63	Police Kachhūri at Vizagapatnam.	2022	23 Aug 1859	2820	2830
	7	Small Alley for the Europeans.	228	25 Jan 1859	630	630
	78	District Munsiff's Court at Pēṭa magaram.	2332	28 Sep 1859	900	900
	8	Buildings in Harris Valley.	204	30 Jan 1860	1,030	50
	9	Two Leathered seats for the Europeans.	2925	15 Dec 1859	610	110
		Conduits at Marasurupetta.				
					10,570	9,910

Order of Govt No. Date	Amount of the estimated cost.	Amount required for the purpose. 1860/61.	Order of Govt No. Date	Amount of the estimated cost.	Amount required for the purpose. 1860/61.
189 187 I	Narasapur Lock	2125 21. 2. 1857	23500	12.181	
110 C	Kakinada Harbour, Light Kound Poyam & Slingstaff.	2078 20. 8. 1857	15,068	15,068	
109	Two beacons for the port of Masulipatam.	2215 10. 2. 1857	4,500	2,790	
114 I	High level channel from the Bidadair to Venkatapur.	1107 12. 1. 1857	310,000	60,000	
115	Channel from Pattem to the Dana Basin.	do do	2,57,107	60,000	
116	Drainage channel from Pattem to the Pulkharapuram.	177 53. 7. 1857	3350	1403	
117	Lock and ~~channel~~ from the Kupilli.	2123 19. 1. 1857	12660	6415	
118	Channel from a river to from the Krishna to Venkatapur to the Dandur & Vidana.	2570 11. 1. 1857	4240	1000	
122	to Allur Tank	1302 28. 2. 1857	1500	500	
123	to Bidam Tank	do do	1500	500	
124	to Kankalapuram	do do	1500	500	
136 C	Road from Ibrahimpatam to Nagam's franchise	1775 18. 6. 1857	44,170	29000	
79 B	Munsiff Court House at Bijapalle.	257 17. 2. 1857	1630	61	

Order of Govt No. Date	Amount of the estimated cost.	Amount required for the purpose. 1860/61.	Order of Govt No. Date	Amount of the estimated cost.	Amount required for the purpose. 1860/61.
119 I	Restoring the Amakhatta aeris the Penningair -	1988 19. 8. 1857	112,500	54,862	
174 172 C	Sixteen Bridges & nearly five Tunnels and Trunk Road No. 6	1405 12. 2. 1857	84,580	10,280	
175 173	Five Tunnels and Trunk Road No. 2163	24. 2. 1857	8930	50	
89 B	Additional road to the Chakapalli Salt Works.	1840 28. 7. 1857	360	180	
64	Prisoners' room at Venkatapur	1370 6. 2. 1857	250	250	
176 174 C	Dam aeris the Melavarankadon Trunk Road No. 11	2148 28. 2. 1857	1160	160	
167 165	Road from Qudupah to Pulivendula -	668 22. 2. 1857	8800	7,126	
168 166	Road from Venkatapur to Rajachoti	2077 30. 8. 1857	4,1300	20,000	
137	Quilings and Pillars on the Gilekuru Phat.	1923 11. 2. 1857	1500	500	
10 B	Assistant Apothecary's Quarters at Qudupah.	1527 22. 2. 1857	3240	3,000	
82	Salub Kach'hari at Kadri	50 6. 2. 1857	180	1,080	
97	Destroy Engineer's Office	2266 4. 2. 1857	4,232	2,515	
11 B	Hospital for European Infantry Regiment	1405 12. 2. 1857	82,330	11,439	
12	Married men's Quarters at Ballari.	1775 18. 2. 1857	116,700	26,000	
13	Out-houses to the European Regt at Ballari.	2207 28. 2. 1857	5650	5,650	
14	Phed for depositing Iron targets at Ballari.	2625 6. 2. 1857	325	325	
15	Quarters for the Garrison Sergeant Major at Ballari.	2625 6. 2. 1857	2770	2,438	

Dist.	the Budget	Work	Order of Govt. No. Date	Amount of the estimated cost.	Amount required for the estimated cost. 1860/61.
Ballari (Cant)	61	B Medical Warrant Officer's Quarters at Ballari	2429 12 Oct. 1859	13600	13600
	16	School room & buildings for Divine service attached to the European Barracks	2750 25 Nov. 1859	18080	18080
		~~at Hospet~~		~~200~~	~~200~~
Karnul	158	C Road from Karnul to Nandi Canamasra	64 10 Feb. 1855	107160	2500
	17	Bridge across the Kaidru River	321 10 July 1855 416 4 Jan. 1857 787 22 Apr. 1859	77516	5000
	76	Bridge on the road from Karnul to Nandicanama	2363 22 Dec. 1857	9700	4700
	139	Completing the Nandicanama Phat	2135 12 Oct. 1858	50000	15000
	17	B Assistant Apothecary's Quarters at Karnul	2172 9 Feb. 1859	2880	2880
	18	Lighting Conduits at Karnul	12 3 Jan. 1860	830	830
Chengalpat	140	C Road from Tiruvallur to the Karakaliyar river	443 22 Aug. 1855	6236	6000
	178	Tunnel on the road between De'Mambod to Tiruvallur	1949 22 Feb. 1858	650	650
	130	Road from Dugaraigalam to Kreshnapalam	2107 12 Nov. 1858	138665	100000
	139	Dispensing Cochran's Canal	28 5 Jan. 1860	12000	12000
	141	Small Road No. 8 between the 49 & 59 mile stones	2878 12 Dec. 1857	13400	13400
	58	B Commisariat Store room at Saint Thomas Mount	2638 6 Dec. 1858	2170	1157
	19	Eastern Range of Buildings to Artillery Depot at Saint Thomas Mount	850 1 Aug. 1859	22200	22200

Dist.	the Budget	Work	Order of Govt. No. Date	Amount of the estimated cost.	Amount required for the estimated cost. 1860/61.
Chengalpat (Cant)	20	B Army school room with outhouses at Saint Thomas Mount	1811 27 July 1859	15450	3995
		~~at Hospet~~		~~810~~	~~810~~
	93	Burial ground at Chinamalli	310 5 Feb. 1859	970	970
Chengalpat	100	Ward for Lepers in the Dispensary at Chengalpat	2330 16 Dec. 1857	940	157
	82	Completing the Dispensary at Chengalpat	147 20 Jan. 1860	5140	5140
	21	Wooden barandah in front of the Carthen Rooms at Saint Thomas Mount	837 9 Oct. 1859	1380	434
		Stutter Alley & an open drain in rear of the Royal Artillery Carthen at St Thomas Mount	do do	1930	
	112	Light House at Cilicat	1109 10 May 1859	3070	1789
				25201	16194
Chengalpat	142	C Road from Company pet to Panyivaram	2594 2 Dec. 1858	29100	15000
	143	R Road from Tholungar to Panyivaram	170 21 Jan. 1860	20400	10000
		~~Road from Panyivaram to Panyivaram~~		~~20000~~	~~20000~~
	180	Bridge over the Palur	868 6 Feb. 1858	11073	11755
	178		1661 18 Aug. 1858 98 18 Jan. 1860	23590	
	144	R Road from Wallajamgar to Panyivaram	329 18 Feb. 1857	12600	1216
	145	R Road from Cilicat to Arani	64 10 Feb. 1855	27260	3324
				224020	41775
	146	C Small Road No. 8 between Colundur pet and Solundur	1405 12 Aug. 1858	15050	10562
				15050	10562
	84	B Improvements to the Collector's Treasury at Tirunelveli	2841 7 Dec. 1857	467	467

From the Budget	Work	Order of Govt No. Date	Amount of the Estimated Cost	Amount required for the completion of 1860/61
120	I Wezandam Channel	800. 28 th June 1858	5,500	5,500
121	I Peruvalai Channel	2148 28 th Nov. 1857	24,700	10,000
147	C Road from Trichinopoly to Coimbatore	2574 3 rd Decr 1858 2072 29 th Aug 1859	30,000 15,710	15,000
148	I Trunk Road between Colundurput & Samuzavaram	1405 12 th Aug 1858	19,263	13,020
212	B Hospital of the D. C. S. V.	673 23 rd Decr 1857	10,500	8,945
60	I Sick stable No 1 of the D. C. S. V.	2148 25 th Octr 1858	1,770	1,770
23	I Hospital at Pillur	2222 2 nd Octr 1858	2,390	2,390
187	C Bridge over the Chinnaravali river	94 27 th Feb 1855	10,983	5,625
149	I Repairing & high road No. 4	1224 30 th May 1857 1975 18 th August 1859	2,154 4,800	7,740
90	B Improving salt-Burn Chafferson	1779 18 th Aug 1857	8520	5520
85	I Additional Decans to the Collers			
	Each kar at Madura	817 1 st May 1858	480	35
III	I Boundary Pillars for the Court of Paimben	2491 22 nd Octr 1857	112	112
91	I Paimben Church	2065 27 th Aug 1857	261	261
			35,713	13,668

From the Budget	Work	Order of Govt No. Date	Amount of the Estimated Cost	Amount required for the completion of 1860/61
149	C Kapsanur Ghut	8140 1 st May 1857	5,600	3,204
150	I Road between Kinnir and Utukamand	2130 5 th Sept 1859	32,000	10,000
152	I Road from Peraiundur to the Railway station	2633 6 th Decr 1858	8,735	8,735
151	I Road from the Railway station at Shommanir to Trunk road No. 5	2633 8 th Decr 1858	4,260	4,260
193	B Privy to the Travellers' Bungalow at Sattimangalam	1873 5 th Aug 1859	110	110
			50,705	26,309

Coimbatore

153	C Road from Dharmapuri to Madhavaram	1568 27 th June 1859	16,800	15,400
154	C Road from Dharmapuri to Manganur	2148 23 rd Nov 1857	4,200	4,200
155	I Great bridge between Dharmapuri and Manganur	239 30 th June 1860	2,300	2,300
156	I Road to connect the above two railway stations	239 30 th June 1860	2,300	2,300
187	I Ferry boat at Manganur	2927 15 th Decr 1859	1,300	1,300
89	B Court Houses for the Civil and Subordinate Judges	1650 28 th May 1857 27 4 th June 1860	17,500 15,000	12,500
81	I New Jail at Salem	1158 16 th June 1857 1665 16 th Aug 1858 1532 20 th June 1860	45,000 35,170	20,170

Salem

North Canara

155	C Ghut & road from Yellapur to V. 358	25 th Aug 1854	5,000	4,383
156	I Road from Guesappah to Srey	524 11 th Decr 1854	20,426	4,184
157	I Yellapur Sirci Sea road circuit	321 10 th Feb 1855	34,996	10,000
158	I Road from Sirci to Sirci	1975 18 th Aug 1859	1,000	6,450
159	I Bridges on the Sirci and Padapur	651 19 th Mar 1859	6,000	5,804
157	I Rough stone revetments & terraces			
129	I Walls on the Parasappa Phat	2192 21 st Nov 1858	3820	602
129	I Clearing jungles at Guesappah	2618 7 th Decr 1858	300	197
186	I Floating bridge over the Mumbay fym	2403 30 th June 1860	1,360	4,360

Dist Budget	Work
67	B Constables Quarters at Chintadripetta
68	D ^o D ^o at Mourbooy's road
56	Building for a smy the hammer at Guncar nagl Manufactory
57	D ^o for Smithy at do
94	Office in the Central Museum
69	Remadarstannak S. Thome
86	Arack distillery
101	Foundling hospital at the Monagar Choultry
70	Constables Quarters and Pans lannak at Poshani Broadway
71	Wall at Kaigewi lannak at Brodie's road
72	Compound wall of the Rajapala Police Court
73	Inspector's Quarters in the Beach
59	Lightning Conductors to the Commissariat Stores
98	Enlargement of the Mint Buildings
102	Idist Asylum at the Monagar Choultry
74	Covered passage for Veterinary Police Court
75	Value of 2 Godowns for Police lannak
	Inspector's Quarters at the Beach
76	D ^o of Godown for D ^o
77	D ^o D ^o
95	East and west Upper rooms of the Dewar Khana at Chispaub

Civil Architect

Order of Govt	Amount of the required estimate	Amount of the required estimate
Date		
415 1 March 1857	3220	3220
do do do	570	570
291 14 Dec 1859	5920	5920
do do do	3900	3900
857 14 Dec 1859	500	500
415 1 March 1857	440	440
1742 27 Aug 1858	15400	4830
2024 30 Nov 1856	5390	3090
415 1 March 1857	2830	2830
do do do	550	550
1085 18 Sept 1857	4730	2000
139 9 July 1857	5730	5730
136 20 Jan 1857	4260	1000
374 9 July 1859	6270	2000
2333 28 Sept 1859	4100	1100
273 29 Jan 1859	796	796
2819 2 Dec 1859	2477	2477
do do do	880	880
do do do	568	568
102 13 Jan 1860	17640	17640

Dist	Amount of the required estimate	Amount of the required estimate
Date		
99	Foundry at the Mint	
108	Wharf and wood Depot at Chintadripetta	
109	New wing to the General Hospital	
127	Covered drain within the compound of the Legation in the Hospital	
2	Remodelling the sea front & rebuilding a portion of the Counterscarp wall	
	A portion of the North East Demi Circular Bastion	
3	Saint Thomas & Caproniere of the Fortifications	
4	Do Do Do	
5	South Point, of Saint Georges & Caproniere	
37	Police Cells, Cook rooms & Canteen in Fort St George	
106	Water & Turbine water wheel to drive the shafting of the Government Engineering Works	
38	Verandahs on the South East & part of West sides of the Barracks, Fort Saint George	
128	Drainage of Fort Saint George	
39	Alterations to the interior of the European Barracks, do	
40	Openings on the East & South sides of the Barrack Barracks & Duff's Cooking Range, do	
42	Verandah of the Canteen, do	

Medan (contd)

Order of Govt	Amount of the required estimate	Amount of the required estimate
Date		
243 20 Jan 1860	13220	13220
2110 2 Sept 1859	6442	2000
45 1 Jan 1860	66500	66500
2904 14 Dec 1859	500	500
748 30 Mar 1859		
1036 30 May 1859	25642	108329
2399 8 Oct 1859		
1616 13 Aug 1858	40630	26998
do do do	75000	56174
do do do	48630	38630
1862 2 Aug 1859	18100	5000
1763 22 July 1859	11670	3000
1466 15 Jan 1859	42220	12144
1258 25 Aug 1859	50000	39343
2975 22 Dec 1859	17930	4000
do do do	6500	1000
do do do	2530	2530

Garrison Engineer

66421

148341

74121

Dist.	Name to Budget	Work	Orders of Govt No. Date.	Amount - Amount of the original estimate of the cost - per Decr of 1860/61	
43	C	Road from the Artillery lines to the race course, Bangalore	2446 14 Feb 1859	1410	1410
6		Government roads, do. do. do.	do. do. do.	16000	7000
44	B	Foot Artillery Barracks, do.	1975 18 Aug 1859	106,600	50,000
45		Old Dragoon Barracks, do.	1299 29 July 1856	155,600	2,6156
			1405 12 Aug 1856	4800	
			1420 10 June 1859		
46		New Dragoon Barracks, do.	2136 20 Nov 1857	592,250	123,759
47		Quarters for Colon Sergeants	1403 3 May 1856	20,750	11,875
48		Married men's Quarters in the old Dragoon Barracks square	2054 5 Oct 1858 2694 2 Dec 1858	98,000	14,9000
49		Orderly room to the Horse Artillery Barracks	1449 13 Jan 1859	4,800	4,800
50		Married men's Quarters to the Horse Artillery Barracks	do. do. do.	16,100	16,100
51		Quarters for the Medical subordinates	1540 21 June 1859	6,400	6,400
				1,25,710	2,96,500

May 1859.

Dist.	Name to Budget	Work	Orders of Govt No. Date	Amount of the estimated cost	Amount required for the per Decr of 1860/61.
52	B.	European Infantry Barracks at Jachattallak	1599 18 Aug 1857 537 25 March 1858	134,960	2,59,750
53		Punishment shed	329 15 Feb 1857	3,270	3,270
54		Barrack Sergeants quarters	1570 10 Aug 1858	4,800	4,800
55		Military Prison	1846 1 Aug 1859	54,700	32,180
				1,40,670	3,00,000

Jachattallak

1/1

Statement No 2 25th March 1861
of
The Budget
for
The Madras Presidency
for the year 1860/61
Expenditure proposed to be made upon new works, other
than those included in Statement No 1.

Noted
Mr. Secy.

No.	Description of work	Estimated cost		Amount required		Remarks
		to 30th April 1860.		to 30th April 1861.		
I State.						
A. Military						
1	Making certain repairs to the Fort of Cannanore. Modular -	12300	10140	2160	Budget of 2 of 1855/59.	N ^o 1.
2	Alterations and repairs to works on the Sea Face of the Fortifications of Fort St. George.					
	(Amount expended up to 30th April 1859 on the works sanctioned by the Supreme Govt on the 19th February 1858. Rs 3,367)					
	Remodelling the Sea face -	180000				
	Building a portion of the Counterscarp wall -	8775				
	Rebuilding a further portion of the N.E. Demi-Ovillion Bastion	18500	238642	130313	108329	In line of items N ^o 1-2 & 3 of Budget N ^o 2 of 1857/60.
3	Rebuilding the Saint Thome Caponniere of the Fortifications of Fort St. George	40630	13632	26998	Budget N ^o 2 of 1857/60.	N ^o 1.
4	D ^o the Saint Thome Ravelin of the Fortifications of Fort St. George -	75000	18826	56174	D ^o D ^o N ^o 5.	
5	D ^o the South Lunette of Saint George's Ravelin of the Fortifications					

Fortifications.

Value of the item

Fortifications (continued)

Cantonments

No.	Description of work	Estimated cost		Computed Amount expended		Remarks
		1860.	1860/61	1860.	1860/61	
I State. (Continued)						
A. Military (Continued)						
1	Fortifications of Fort St. George	18,630	10,000	38,630	Budget No. 2 of 1859/60	
Total Fortifications		145,202	182,911	232,291		

6	Reconstructing 12 miles of the Cantonment roads at Bangalore. Mysore	16,000	9,000	7,000	Sanctioned on Emergency	
Total Cantonments		16,000	9,000	7,000		

Value of the item

Accommodation for Troops

No.	Description of work	Estimated cost		Computed Amount expended		Remarks
		1860.	1860/61	1860.	1860/61	
I State (Continued)						
A. Military (Continued)						
	~~Prepared Temporary Barracks~~					
	~~at Kothur. Vizagapatnam.~~	~~3,960~~		~~3,960~~		
2	Constructing of a Skittle alley for the use of the European Veterans. Vizagapatnam.	630		630		
9	Erecting buildings in Harris Valley at Galipuravaram - Vizagapatnam	10,330	10,000	30		
		4,000	"	3,400		
10	Erecting 2 Teakwood supports for Lightning Conductors to the Sibbundy Hospital and Barracks at Narsapuram Vizagapatnam	610		610		
11	Assistant Apothecary's Quarters in the Cuddapah Cantonment Cuddapah.	3,240		3,000		Sanctioned on Emergency Budget No. 2 of 1859/60
12	Constructing a Hospital for European Infantry Regiment	79,930				
	Buildings in connection with the above Ballari	2,400	82,330	70,891	11,439	Budget No. 2 of 1859/60
13	Constructing Married Quarters for the families of the European Infantry at Ballari. Ballari	116,700		25,000		Budget No. 1 of 1859/60
14	Constructing Out Houses to the European Hospital at Ballari. Ballari	5,650		5,650		Budget No. 2 of 1859/60

Nature of the Work

Accommodation for Troops (continued)

No.	Description of work.	Estimated cost.		Amount expended to 30th April 1860.		Remarks.
		1860.	1860/61.	1860.	1860/61.	
	I State (continued)					
14	A Military (continued)					
16	Building a Shed in the vicinity of the Butte of the 7th Regt depositing iron targets. Ballari	325		325		Budget No 2 of 1859/60
15	Constructing quarters for the Garrison Sergeant Major at Ballari - Ballari	2970	532	2438	6	to 1857
16	Constructing a School room and buildings in which Divine service can be performed to be attached to the new European Barracks. Puzos. 10,230					
	Sub amount required for the smaller room Ballari	7880	18080		18080	
	~~Repairing the building used as a school at the Butte Ballari.~~	~~200~~	~~200~~			
17	Constructing an Assistant Apothecary's Quarters at Karmil - Karmil	2880		2880		
18	Lightning Conductors at Karmil - Karmil	830		830		Sanctioned on emergency.
19	Rebuilding Eastern Range of Buildings to Artillery Depot at Saint Thomas Mount Chingleput.	22200		22200		
20	Constructing a new Army School room with out houses at Saint Thomas Mount Chingleput	15130	4455	3995		Sanctioned on emergency.

Nature of the Work

Accommodation for Troops (continued)

No.	Description of work.	Estimated cost.		Amount expended to 30th April 1860.		Remarks.
		1860.	1860/61.	1860.	1860/61.	
	I State (continued)					
	A Military (continued)					
	~~Construction of a Soldiers' Shed near the Railway Station at Chingleput.~~	~~210~~	~~210~~			
21	Constructing 2 wooden Verandahs, one in front of the New Commissioned Officers Canteen, and the other in rear of the Mess Canteen Rooms at Saint Thomas Mount Chingleput	1380				
22	Constructing a Skittle alley in rear of the Royal Artillery Canteen and an open drain in rear of ditto Chingleput	1930				
		2876	136			Sanctioned on emergency
22	Improvements to the Hospital of the 2d E.L. Infy Trichinopoly	10500	1555	8945		Sanctioned on emergency
23	Alterations &c to the building used by the 21st Regt N. I as Hospital at Potoor, Trichinopoly	2390		2390		Budget No 2 of 1859/60
24	Constructing Quarters for the Medical warrant Officer at Potoor, South Canara	3210		3210		Sanctioned on emergency
25	Constructing Racket Court for the use of the European Detachment at Calicut. Puzos	2850				
	Do a Skittle Alley	980				
	Do a Quilt Shed Malabar	1470				
		5300				
	Deduct for Memo ob. - jected to in Ex No 6. 29 September 1858					
	No 2016 - Puzos	66	5234		5234	Budget No 2 of 1859/60

of accommodation for troops (continued)

No.	Description of work	Estimate			Remarks
		1860	1861	1862	
42	1. State (continued) A. Military (continued) Raising the roof of the Verandah of the Canton and adding a portion on the South side attached to the European Barracks in Fort St George Madras	2500	2500		Sanctioned on emergency.
43	Constructing a cross road from the Artillery line to join the road round the race course towards the Artillery Barracks at Bangalore Mysore	1100	1100		
44	Improvements to the Fort Artillery Barracks at Bangalore Mysore	10000	10000		Budget No 1 of 1859/60
45	Improving the Dragon Barracks at Bangalore intended for occupation by the European Infantry Mysore	153600	131244	26156	Budget No 2 of 1859/60 Sanctioned on Emergency
46	Construction of new Dragon Barracks at Bangalore Mysore	592230	126981	128739	Budget No 2 of 1859/60
47	Constructing 16 Quarters without houses for Color Sergeants in the old Dragon Barracks square Mysore	23750	11875	11875	
48	Constructing married men's quarters without houses in the old Dragon Barracks square Bangalore Mysore	98000	19000	19000	

of accommodation for troops (continued)

No.	Description of work	Estimate			Remarks
		1860	1861	1862	
50	1. State (continued) A. Military (continued) Constructing an orderly room to the Horse Artillery Barracks at Bangalore Mysore	1800		1800	
51	Constructing 18 married quarters to Horse Artillery Barracks at Bangalore Mysore	16100		16100	
52	Constructing 2 quarters for the Native Subordinates of 2 Native Infantry Regiments at Bangalore Mysore	6400		6400	
53	Constructing European Infantry Barracks at the Sulgheeris with subsidiary works at Jachattal as follows: Jachattal				
54	Range of Barracks with Staff Quarters wash houses and Privies	834922	745666	89256	Budget No 2 of 1859/60
	School and Library	58150	31264	27186	do
	Water Course N.E. or S.E.	4070		4070	do
	do do N.W. or S.W.	1020	2163	1857	do
	Stone drainage for the Barracks and Hospital	22610	7496	15144	do
	Permanent married quarters Supplemental for do	26000	238594	21406	do
	Bridge bunds and road	37550			Sanctioned on emergency.
	A small bund and Culvert South of the Barracks	8530	37027	9383	do

Accommodation for Troops (continued)

Ordnance

Description of work	Estimated cost	Comptrol. Account		Remarks
		1860.	1860/61	
I State/continued				
A Military (continued)				
Loainage of Barracks roof - - -	14,020	14,000	2000	Budget No 1 of 1859/60
Armourers Forge - - -	990	"	990	Ls 0
2 Gun sheds - - -	708			
New Magazine - - -	1130			
Store room for Camp & equipage -	13,370	27,708	12,000	B & C portion of Budget No 2 of 1859/60
Defensive Tower - - -	12,550			Discontinued on emergency 25 May 1859. 1066.
53 Punishment sheds - - -	3,270	"	3,270	Budget No 2 of 1859/60
54 Barracks for infants quarters - -	1,800	"	1,800	Ls 10 38
~~Supplementary Estimates for additions and improvements to Permanent Barracks quarters - 7,970~~				
55 Military Prison - - -	51,700	"	32,180	Ls
Total Accommodation for Troops	287,647	157,792	85,955	
56 Building at the Gun carriage for Nasmyth Hammer, Madras.	5,920	"	5,920	
57 Do for smithy - gladdons - -	3,900	"	3,900	
Total Ordnance	9,820	"	9,820	

Description of work	Estimated cost	Comptrol. Account		Remarks
		1860.	1860/61	
I State (continued)				
A Military (continued)				
58 Constructing Commissariat Store room at Saint Thomas Mount				
Chingleput - - -	2,170	711	1,459	Budget No 2 of 1859/60
59 Erecting Lightning Conductors for the protection of the commissariat stores at Black Town				
Madras - - -	4,260	3,260	1,000	Budget No 2 of 1859/60
Total Commissariat	6,430	3,971	2,459	

2 2 17 1/2

No.	Description of work.	Estimated Cost.	Completed by	Amount Required	Remarks
	I State (continued)				
	A Military (continued)				

No.	Description of work	Estimated Cost		Remarks
		1860.	1861.	
I	State Contd			
A	Military Contd			
61	Renewing the roof of the Sick Stable hos of the 2 ^d Regt. Light Cavalry - Tric. & chirophy.	1770	1770	Same as emergency.
	<u>Total Stud</u>	<u>1770</u>	<u>1770</u>	
62	Construction of 4 bar- edical Stores in Office at Bellary	13600	13600	
	<u>Total Staff</u>	<u>13600</u>	<u>13600</u>	
	<u>Total Military</u>	<u>3339239</u>	<u>1773774</u>	1052895

of Police Office

No. Description of work Estimated Cost. Completed 1850. Amount required 1850/51. Remarks

I State (Contd.)
 A. Military (Contd.)
 B. Naval. None.

No.	Description of work.	Estimated Cost.	Completed 1850.	Amount required 1850/51.	Remarks.
I State (Continued)					
C Judicial					
62	Making alterations and additions to the Police Cutcherry at Madras.	820	220	600	sanctioned in emergency
63	Constructing a new Police Cutcherry at Vizagapatam.	2830	"	2830	90
64	Forming a new road within the compound of the General Police Office at Payapettah between the Convent Pettah Gate and Triplicane Gate.	363	"	363	
65	Constructing Constables Quarters and Galliar Naiguers Tannah at the back of the down Street John Pereira.	3080	"	3080	Budget No. 2 of 1859/60
66	Constables quarters at the junction of Sawmy Naicker and Moona Chala Naicker road. Chintadrapettah.	3220	"	3220	D. No. 12 of 61
67	Constables quarters at the junction of opposite Sullivan's Garden.	570	"	570	D. No. 12 of 61 Exempted 2 Dec. 1858 No. 2594
68	Altering and improving the Samadai Tannah at Cutcherry road, Saint Thomas.	440	"	440	D. No. 12 of 61 Exempted 2 Dec. 1858 No. 2594
69	Constructing constables quarters and Peons Tannah at Pottam Broomway.	2830	"	2830	of 1858/59 D. No. 12 of 61 Exempted 16 Dec. 1858 No. 2416
70	Constables quarters and Peons Tannah at Pottam Broomway.	2830	"	2830	of 1858/59 D. No. 12 of 61 Exempted 16 Dec. 1858 No. 2416
71	Constables quarters and Peons Tannah at Pottam Broomway.	2830	"	2830	of 1858/59 D. No. 12 of 61 Exempted 16 Dec. 1858 No. 2416
72	Constables quarters and Peons Tannah at Pottam Broomway.	2830	"	2830	of 1858/59 D. No. 12 of 61 Exempted 16 Dec. 1858 No. 2416

Station	Description of work	Estimate cost	Remarks
	1 State (continued)		
	C Judicial (continued)		
	Creating a wall on the eastern and southern sides of the compound of the Nagapattinam Police Court. <i>Placed in</i>	2730	Budget No. 2 of 1885/86
	House and Architect	2730	Completed 1885/86
	Creating a building with apartments for married quarters and offices attached for the accommodation of the Police in the Black Town with quarters for residence of an Inspector. <i>Madras</i>	2730	Ex. No. 58
	Do a covered passage between the Nagapattinam Police Court and waiting shed. <i>Refers 218.</i>		
	Do a shed waiting shed for constables quarters. <i>200</i>		
	Sanitary scaffolding. <i>Refers 35</i>	796	
	Do a shed for two persons situated on the beach to be purchased for the site of the new beach. <i>Police Tannah and Inspector's quarters</i>	2177	
	Do a shed for one Godown. <i>for Do. Do. Architect</i>	880	
	Do a shed for one Godown adjoining Do on the east side for the Do. Do. Architect	568	

Station	Description of work	Cost	Remarks
	1 State (continued)		
	C Judicial (continued)		
	Constructing a New Prisoners Room at Vencatagerry, Vellore	250	
	Total Police	30134	2950 27184
	Alterations and additions to the District Munsiff's Court at Sottumagrum. <i>Vizagapatnam</i>	900	
	Munsiff's Court House at Bana. <i>petta</i>	1630	Budget No. 2 of 1885/86
	Completing Do. Do. <i>Kistna</i>	205	Sanctioned on emergency
	Constructing Court houses for the Civil and Subordinate Judges at Salem	17500	
	Supplemental -	15000	
	Total Court Houses	35435	21974 13461

Madras

A Description of work

Estimated cost - 1860. 1861/62

Remarks

I State (continued)
C Judicial (continued)

Constructing new Jail at Salem
Supplementary 55170
Budget 22 of 1857/58
1858/59
1859/60
1860/61
1861/62

Total Jail 80170 60000 20170

Total Judicial 115739 82924 60815

D Revenue

(Addition to the Collection)

Repairing Talook Cutcherry at Cuddalore Cuddalore 1080 1080

State

Land & Miscellaneous

Madras

A Description of work

Estimated cost - 1860. 1861/62

Remarks

Land and Miscellaneous (continued)

I State (continued) 1080 1080

D Revenue (continued)

Constructing a Talook Cutcherry at Kottamudgully Bellary 8760 8145 617

Repairing Talook Cutcherry at Tranquebar Tanjore 467 467

Constructing an additional room to Collector's Cutcherry at Madura 480 445 35 sanctioned out of one etc fund

Erecting an arrack distillery at Madurai 15400 10570 4830 Budget No 2 of 1859/60 No 102

Converting Homes' House at Sankupet into a Kuchabari for the Collector of Shinglepet 790

Constructing a record room in the compound of the house 3830

D a road from the house to the Mount Road - Shinglepet 520 511.0 511.0

Total Land & Miscellaneous 22567 11015 11552

Constructing a new sea custom house at Kulparg South Canara 470 55 415 sanctioned on emergency

Rebuilding the Sea Custom House at Anganotta in the Barcatalug South Canara Rs. 860

Deduct value of old materials Rs. 120 740 740

Total Customs 1210 55 1155

Customs

1860-61

A Description of work. Estimated cost. 1860. 1861. Remarks.

I State (Continued)
D. Revenue (Continued)

None.

90. Constructing an additional room to the clock tower fully salt catchery. Sellore — 360 180 180 Budget No 2 of 1860/61. Exempted 2^d Dec 1868 No 2594.

91. Repairing and improving the salt pan plant from Madura — 8880 3000 5880 sanctioned on emergency

Total Salt 8880 3180 5700

Total Revenue 22657 11250 12407

Salt

Spinners

1860-61

A Description of work. Estimated cost. 1860. 1861. Remarks.

I State Cont.
II. Ecclesiastical.

92. Completing the building & providing furniture for the Paum-ham Church - Madura - 470

Deduct amount to be contributed by the Residents — 170

Net cost of furniture 39 209 261

Sanctioned by Secy.

93. Erecting a building at Mullu for Divine service. 2920 867 2053 Budget No 2 of 1860/61. Exempted 2^d Dec 1868 No 2594.

Total Churches & other buildings 3181 867 2314

Churches and other buildings

94. Levelling and chaining the Burial ground at Ponnammal. Chengalpattu. 970 970

Total Burial grounds. 970 970

Total Ecclesiastical — 4151 867 3284

Burial grounds

Total Ecclesiastical

Educational & Technical

No.	Description of work.	Estimated cost.		Remarks
		1860.	1861.	
	I State Contd.			
	I Educational			
95	Improvements to the buildings in the park for the residence of the Principal of the Civil Engineering College. Madras.	19,500	2,500	17,000

Ad. V. S. S. S. S.

G. General.

Government

94	Converting a portion of the Central Museum for an office. Madras.	500	500	
95	Constructing east and west upper rooms of the Devanahalli at Chepauk for the occupation of Officers of the Central Office D. P. W. and Consulting Eng. of the Railway Dept. Madras.	17,640	17,640	
Total Govt.		18,140	18,140	

National

No.	Description of work.	Estimated cost.		Remarks.
		1860.	1861.	
I State (Continued)				
G. General.				
95	Constructing east and west upper rooms of the Devanahalli at Chepauk for the occupation of Officers of the Central Office D.P.W. and Consulting Engineers of the Railway Department. Madras.	17,640	17,640	Letter to the Govt. of India dated 1st Decr. 1857.
~~Constructing a range of upper story for the North side of the Devanahalli at Chepauk including two storeys.~~				
~~Improvements to buildings in Chepauk for the residence of the Principal of the Civil Engineering College. Madras.~~				
96	Construction of three sets of Overdoors and Store Sheds with Nurseries, Vizagapatnam.	850	103	747 Sanctioned on emergency.
	Constructing District Engineer's Office. Enchilapah.	4,232	1,717	2,515
Total Public Works.		5,082	1,820	3,262

Public Works

Post Office

1 2

No.	Description of work.	Estimated cost.	Amount expended in 1860.	Amount required for completion in 1861.	Remarks.
	I State (Continued) G. General (Continued)				
98	Enlargement and improvement of the Mint buildings. — Madras.	6270	1270	2000	Sanctioned on 15/11/60.
99	Stomachy at the Mint. Madras.	13220		13220	
	Total Mint —	19490	1270	15220	
100	Constructing a wall for separating the compound of the Dispensary at Chengulpat. Chengulpat.	740	783	157	Budget No. 2 of 1859/60. N° 158. Sanctioned on 26/11/60.
101	Building a Dispensing Hospital with out offices &c at the Mangay Chaully. Madras.	5390	2300	3090	Budget No. 2 of 1859/60. N° 160. The estimate for this work is Rs. 9100 of which Rs. 5390 is the contribution of Govt. & the remainder to be met from the Charity fund. Completed 2 nd Dec. 1858, at 2594.
102	Providing additional accommodation to the inmates of the Idiot Asylum at the Mangay Chaully. Madras.	4100		4100	Sanctioned on 15/11/60.
103	New wing to the General Hospital. Madras.	66500		66500	Sanctioned on 15/11/60. by the Govt. of Madras. N° 158.
	Total Charitable institutions.	76930	3083	73847	
	None				

No.	Description of work.	Estimated cost.	Amount expended in 1860.	Amount required for completion in 1861.	Remarks.
	I State (Continued) G. General (Continued)				
	None				
104	Strengthening Groynes N° 14, 15 & 16. Madras.	12010	10267	1743	Budget No. 2 of 1859/60. N° 166.
105	Constructing dwarf groynes between the Custom House and Olives Battery groynes to arrest the encroachment of the sea. Madras.	3600	1826	1774	D. D. N° 169.
106	Constructing a Cistern and Turbine water wheel to drive the shafting of the Government Printing Press in Fort St George. Madras.	11670	8670	3000	Sanctioned on 15/11/60.
107	Constructing two small intermediate groynes for the protection of the sea face of Fort St George. Madras.	4000	3000	1000	Budget No. 2 of 1859/60. N° 160.
	Total Miscellaneous.	31280	23963	7517	

No.	Description of work.	Estimated cost.	Amount expended up to 31st April 1860.		Remarks.
			1860.	1861.	
I State (continued.)					
	Total General.	150,722	32,736	117,986	
	Total State.	367,270	19,067	125,387	

No.	Description of work	Estimated Cost.	Amount expended up to 31st April 1860.		Remarks.
			1860.	1861.	
107	II Public				
	H Municipal				
	Building a revetment wall to the east side of the Town. Ditch from Cochin to Bridge to that of the Elephant gate & otherwise preparing the ground between the Ditch and Town wall for a wharf and Wood Depot. Charged with 20,000 1850 -				
	Done.				
108	Constructing a wharf and Wood Depot at Chintabre. Puttah. Madras - - - -	6,442	4,442	2,000	Sanctioned out of one lac fund.
Total Madras.		6,442	4,442	2,000	

No.	Description of work.	Estimated cost.		Remarks
		1860.	1860/61	
II Public (Contd.)				
I Marine				
109	Constructing 2 beacon buoys with moorings for the port of the vul. station.			Budget h. 2 of 1859/60 h. 173.
110	So dancy	1200	2010	2290
111	Works in connection with the (Canada Harbour) Godavary.			
	Light House Building.	1468		
	Graves.	1750		
	Flag Staff.	500		
	Superintendence & contingencies.	1050	18068	18068 Sanctioned emergency.
112	Constructing four boundary pillars for the port of Panthem. Madras.	112	"	112 Sanctioned emergency.
Total Harbours & Navigation		22480	20102	20170
112	Constructing a light House at Pulicat. Chingolpet.	3070	1281	1789 Sanit. out of the one? but small.
113	Constructing a House at Annamalai for a Superintendent North Canara.	800	"	800
Total Light Houses		3870	1281	2589
Total Marine		26350	3291	23059

Harbours & Navigation

Light Houses

No.	Description of work.	Estimated cost.		Remarks.
		1860.	1860/61.	
II Public (Contd.)				
~~I Marine Contd.~~				

Manufacture & Mine

Station
No.

No.	Description of work.	Estimated amount		Remarks
		cost.	to 30 th April 1860.	
II Public (Continued)				
K. Agricultural (continued)				
120 121	Completion of the Mysorewar channel in the Trichinopoly and Tanjore Districts Trichinopoly.	3,500	"	3,500 Sanctioned on emergency.
121	Deepening the Perovalay channel, widening and strengthening its banks. - - - - -	Rs 14,000		
	Making a new cut across the Perovalay channel. Trichinopoly - - -	10,700	24,700	1,775 10,000 Budget 12-1357/10 No 250. Expend 1862 22 May 1858 of 1776.

Irrigation Canals (Continued)

Station
No.

No.	Description of work.	Estimated cost.		Expenditure required for completion of the work.		Remarks.
		to 30 th April 1860.	to 30 th April 1861.	to 30 th April 1860.	to 30 th April 1861.	
II Public (Continued)						
K. Agricultural (continued)						
122	Constructing Calingulak to Ullor Tank. Krishna	1500	1000	500		Sanctioned out of one lac fund.
123	Calingulak to Boodam Tank. Krishna	1500	1000	500		D. D.
124	Calingulak to Kuntalamuruvu Tank. Krishna	1800	1000	800		Sanctioned on Emergency out of D. D.
125	Enlarging the Nijlafoot Tank Calingulak. Madras.	1745	"	1745		

Tanks.

Dykes.

Drainage.

None					
128	Constructing a covered drain for discharging the sewings from the Prison within the compound of the Lying in Hospital also making alterations for attaching 2 Locks to the Bridge on the road - Madras.	500	"	500	
129	Improving the drainage of Fort St. George. Madras.	50000	10657	39,343	Sanctd on emergency.
130	Constructing masonry drains for the preservation of the Ball-Cottages - Madras - - - - -	2,650	450	2,200	D. D.
Total Drainage.		53,150	11,107	42,043	

of the work

A. Description of work

Estimated cost, 1880. Proposed expenditure, 1880. Actual expenditure, 1880.

Remarks

II Public (Continued)
K. Agricultural (Continued)

120
121 Clearing jungles at the ruins of Guersupphah. North Canara.

300 103 197 Sanctioned out of Government fund.

Total Forests 300 103 197

Total Agricultural 675,545 277,856 244,955

of the work

A. Description of work

Estimated cost, 1880. Proposed expenditure, 1880. Actual expenditure, 1880.

Remarks

II Public (Continued)

I. Communications

130 ~~129~~ Completing the road from Chicacole to Calingapatam as a first class road - Ganjam 21,000 15,585 8,415 July 1859 A. 1677. Budget A. 2 of 1859-60 A. 322. Completed 11-4.

131 Road from Narsimhapettal to Calingapatam (substituted instead of the line to Chirapattam) Ganjam 11,580 10,090 4,490 Budget A. 2 of 1859-60 A. 323 excepted 13-4. Now 1858 A. 2393.

132 Constructing 2nd class road from the salt pans at Varipada to Nichally & on Trunk road 3-6 - Ganjam 5,330 3,000 2,330 13 August 1859 A. 449. De. A. 329. Completed.

133 ~~132~~ Road from Varipada to Bonacally on the Northern Trunk road - Ganjam 10,500 7,000 3,500 Sanctioned on emergency.

134 ~~133~~ Road from Umanan ally Salt pans to the road connecting the town of Chicacole with the port of Kalingapatam - Ganjam 11,100 3,000 1,100 do

135 ~~134~~ Making seven miles of road from Nichally to Malapettal - Ganjam 9,060 4,400 1,660 do

Road from Juddinghy to A. - Ganjam 4,200 4,544 569

136 ~~135~~ Road from Ibrahimpatam to Vizianagaram - Vizianagaram - 21,000 20,000 Budget A. 1 of 1859-60 A. 15. Original A. 12 sanctioned. Now A. 17 of Budget A. 2 of 1856-57 - 55,322 14,170 8,000 20,000 Budget A. 1 of 1859-60 A. 15.

137 ~~136~~ Railings and Pillars on the Gookcherri Ghut - Madapa 1,500 1,000 500 Sanctioned out of Government fund.

138 ~~137~~ Completing the following roads: Kapatil - Karmut to Kaudisancinar do to Kadamir do to Gity 10,716 10,460 2,500 Budget A. 1 of 1859-60 A. 356. Completed 21-4. San. 1858.

Metalled Roads

Nature of the work

Metalled Roads (continued)

No.	Description of work	Estimated Cost.		Remarks
		1860.	1861/62	
II Public (continued)				
I. Communications (continued)				
1137	Completing the Sandicannam ghāt from Gungaspet to Thiruvannamchettipatti. Rannul.	50,000	35,000	Budget No 2 of 1859-60 Rs 35,000
1140	Metalling the road from Tiruvannam to the Marthandam River. Chengalpat.	62,260	"	do. Rs 65,000. Budget No 2 of 1859-60
1141	Reinstating that portion of Trunk road No 2 between Chengalpat & Tiruvannam.	13,400	"	Budget No 2 of 1859-60 Rs 13,400
1142	Constructing a branch road from the Railway station at Coimbatore to Coimbatore North Creek.	27,100	16,000	Budget No 2 of 1859-60 Rs 27,100. Exempted 2 Dec 1858
1143	Proposed road from Tholigudi to Manchipalham. Rannul.	20,400	"	10,000
1144	do. from Coimbatore to Coimbatore North Creek.	28,000	"	22,000
1145	Constructing a branch road from Wallajahungger road near Perincoujer to the Railway station at Coimbatore.	12,600	11,381	Budget No 2 of 1859-60 Rs 12,600. Exempted 24 Sept 1858
1146	Road from Vellare to Arni North Creek.	27,260	23,936	33,241. do. Rs 35,000. Budget No 2 of 1859-60

37,151 228,675 111,735

Nature of the work

Metalled Roads (continued)

No.	Description of work	Estimated Cost.		Remarks.
		1860.	1861/62	
II Public (Contd.)				
I. Communications (Contd.)				
1147	Additional metalling on N. 2, Trunk Road between Coimbatore and Tholadoor (portion of Rs 37,313). South Creek.	15,050	4,488	Budget No 2 of 1859/60 Rs 37,313. Exempted 17 Feb 1859. The other portion viz 19,263 is taken in Trichinopoly. The difference of Rs 3,000 is explained opposite to No. 2 of 1859/60.
1148	Metalling and repairing the road from Trichinopoly to Coimbatore within the limits of the former district. Trichinopoly.	30,000	"	Budget No 2 of 1859/60 Rs 38,500. Exempted 2 Dec 1858
1149	Additional metalling to Trunk road N. 2 between Coimbatore & Tiruvannam. Portion of the estimate of Rs 37,313.	19,263	6,213	Budget No 2 of 1859/60 Rs 38,500. The other portion viz 15,050 is taken in South Creek. Exempted 17 Feb 1859
1149	Refining and improving High road No 2 from Coimbatore to Tiruvannam.	7,400	"	do. Rs 4,000. Exempted 11 June 1858
1150	Widening the Tholigudi ghāt and improving the drainage of the road surface.	5,000	2,396	Budget No 2 of 1859-60 Rs 5,000
1151	Metalling the road and constructing parapet walls to it between Coimbatore & Tholadoor. Rannul.	32,000	"	Budget No 2 of 1859-60 Rs 32,000
1152	Constructing a fish trap road from the Railway Station at Tholadoor to Trunk road N. 5 near Rannul.	4,260	"	do. No 2 of do. Rs 4,260

37,151 228,675 111,735

37,151 228,675 111,735

Malabar

Malabar roads (Contd.)

No.	Description of work	Estimated Cost	Conf. funds required	Remarks
II Public (Contd.)				
153	I. Communications (Contd.)			
152	Constructing a first class road from Parindorai to the Railway Station	8735	8735	Budget No 2 of 1857-60 No 1410.
	(Kottarsholli)			
	Constructing a first class road from the Railway Station at Pambolam to the Railway Station at Pambolam	16,000	16,000	Budget No 2 of 1857-60 No 1411.
	(Pambolam)			
154	Improving the road from Pambolam to the Railway Station at Pambolam	14,200	14,200	Budget No 2 of 1857-60 No 1412.
	(Pambolam)			
	Constructing a first class road from the Railway Station at Pambolam to the Railway Station at Pambolam	12,000	12,000	Budget No 2 of 1857-60 No 1413.
	(Pambolam)			
155	Making a new first class road from Pambolam to the South bank of the Malabar river - North Canara	5000	3617	Budget No 2 of 1857-60 No 1414.
156	Making a road from Pambolam to Siray - North Canara	20,126	16,242	Budget No 2 of 1857-60 No 1415.
157	Yellapur, Siray and Wallimidi Road - North Canara	21,776	21,000	Budget No 2 of 1857-60 No 1416.
158	Constructing a road from Pambolam to the Railway Station at Pambolam	12,600	26,000	Budget No 2 of 1857-60 No 1417.
159	Constructing rough stone road, mounds and terraced walls on the Guersupah hill - North Canara	3820	3218	Budget No 2 of 1857-60 No 1418.

Malabar

Malabar roads (Contd.)

No.	Description of work	Estimated Cost	Conf. funds required	Remarks
II Public (Contd.)				
I. Communications (Contd.)				
158	Metalling the Sunpajighat South Canara	17,200	14,178	Budget No 2 of 1857-60 No 1419.
159	Completing and bridging the road from Pambolam to Palghat via Mundir Malabar	88,830	20,000	Budget No 2 of 1857-60 No 1420.
160	Improving the Pambolam Road and Road on Trunk Road - Malabar	11,000	22,237	Budget No 2 of 1857-60 No 1421.
161	Making a road to the Pambolam Railway Station Malabar	2060	45	Budget No 2 of 1857-60 No 1422.
162	Gravelling certain portions of Trunk Road between Palghat & Pambolam Malabar	71,770	71,770	Budget No 2 of 1857-60 No 1423.
163	Repairing and improving the road from Collingford to Poodoornagar and Palghat Malabar	14,000	14,000	Budget No 2 of 1857-60 No 1424.
Total metalled roads		95,903	34,370	Budget No 2 of 1857-60 No 1425.

Stationer's
Glen

A Description of work

Estimated
cost.
1850.
Amount
expended
to 31st Dec
1850.
Amount
required
to complete
the work
to 31st Dec
1850.

Remarks

II Public (Cont.)

173 I. Communications (Cont.)

173 Platform Bridge over the
Bendigoda to complete
the road from Kinnedy to
Idi -

Sanctioned
1700 500 1700 on emergency

174 Masonry wall consisting
of 16 Bridges and 65 tunnels
on trunk road No. 6 Waller 81,580 37,608 10,000

Budget No 2 of
1859/60 No 1460
Sanctioned 12 June 1859
No 112

175 Constructing 10 tunnels
on trunk road No. 6 Waller 8,730 8,820 50

do do 1859/60
No 1147 Sanctioned
10 Aug 1859 No 1568

176 Constructing a road dam
across the Mucavunda on
Trunk Road No 11 and com-
pleting the west approach
to the Bridge over the
Nadipra

do do 1859/60
No 1165
Sanctioned 29 July
1859 No 1277

177 Bridge across the Kinnedy
river near Kinnedy
Supplementary

do do 1859/60 No 1151
Sanctioned on
280/72

178 Constructing 3 Bridges
on the road from Kinnedy
to Vendi Canara near Kinnedy

do do 1859/60 No 1174
Sanctioned 21 June 1859
No 1518

180 Bridge over the Pular
river near Waller North
Canal

do do 1859/60 No 1174
Sanctioned 21 June 1859
No 1518

Supplementary

1110/73 12,708
23,570 18,747 18,747

Stationer's
Glen

A Description of work

Estimated
cost.
1850.
Amount
expended
to 31st Dec
1850.
Amount
required
to complete
the work
to 31st Dec
1850.

Remarks

II Public (Cont.)

181 I. Communications (Cont.)

181 Bridge over the Ambavutti
river on the road from Kinnedy
station to Dindigul - Ma-
dura -
Supplementary

Budget No 2 of
1859/60 No 554
Sanctioned on
emergency

182 Completion of the Bridge
on the Tiney & Suddapin
road - North Canara -

6,000 196 5,804 Sanctioned on
emergency

183 Pulputty bridge near
Palghat - Malabar 23,000

10,000 536 in Budget No
2 of 1859/60

184 Reconstructing the Nagam
pulli bridge on Trunk road
No 5 between Palghat and
Waller Malabar
Completing - do -

7,240 4,370 6,440 5,170 Sanctioned on
the one last

185 Reconstructing the Bridge
over the Pokatode River on
Trunk road No 4 Malabar

5,660 5,300 360 Ditto

186 Constructing a tunnel Road Dam
on that portion of the Cuddapin
road which lies between the
railway station at Duenmboda
and Trivellore - Chennalpatt -

650 650 Budget No 2 of 1859/60
No 476

And of Canals

No Description of work. Estimated cost. Compared with amount actually expended. Remarks.

II Public (Contd)
I. Communications (Contd)

186 Improvement to Saint Mary's Bridge near the Bungal ground
Chudras Rs 1750 1750 1750
Deduct for Establishment 538 1212 1212

Total Bridges - 396221 278948 67581

And Bridges & Ferries

187 Constructing a ferry boat at Kelleganur on the Cavery
Salcedo 1300 1300

188 Constructing a floating bridge over monkey ferry North of Kelleganur 4360 4360

Total Boat Bridges & Ferries 5660 5660

And of Canals

No Description of work. Estimated cost. Compared with amount actually expended. Remarks.

II Public (Contd)
I. Communications (Contd)

189 Completing the Narasapur Lock - Godavari - 23500 11319 12181 San. Roumery

190 Extension of Canal from Dugurazpatam to Kothicopatam backwash
Chengalpat 139665 1847 140500 1 Budget in 2 of 1857/58 by 557

191 Widening the Canal at the rock cutting at Salcedo
Chengalpat - Deepening Cocharane's Canal - Chengalpat 12000 11479 723 1857/58

Total navigable Canals 175165 13166 124181

River Improvement

Station
Name

N ^o .	Description of work	Estimated Cost	Conf. to 1860	Actual 1860	Remarks
------------------	---------------------	----------------	------------------	----------------	---------

II Public (Contd.)
I. Communications (Contd.)
Restoring the banks
of the river near the
mouth of the river

1860 4580 4580 1860 4580

Total River improvement 8380 4580 4580

Staging Bengal & Karachi

N ^o .	Description of work	Estimated Cost	Actual Cost	Remarks
------------------	---------------------	----------------	-------------	---------

II Public (Contd.)
I. Communications (Contd.)
Constructing a wharf
in the Compound of the
Bengal at
Sattamangalam
Kaimbar

110 110 emergency

Total Staging Bengal & Karachi 110 110

Total Communications 1633812 553750

Manuscript

N^o Description of work Remarks
Estimated cost. 1860. 1861.

II Public - Cont^d
~~III Communications Cont^d~~
 IV Railway - cont

N Electric Telegraph - cont

Total Public 823,764
 2,441,549 91,665 779,164

Grand Total of State & Public 1,077,151
 6,014,857 581,423 285,408 2,032,551

Abstract

Clas.	Section.	N ^o of works	Estimated cost.	Computed expenditure up to 30 th April 1860.	Estimated expenditure for 1860/61.
I. State.	A. Military	61	33,39,239	17,73,714	10,52,895
	B. Naval	"	"	"	"
	C. Judicial	20	1,15,739	81,924	60,815
	D. Revenue	9	32,657	14,250	18,407
	E. Ecclesiastical	3	4,151	867	3,284
	F. Educational	"	"	"	"
	G. General	14	1,50,922	32,936	1,17,986
Total State		107	36,72,708	19,06,751	12,53,387
II Public	H. Municipal	1	6,442	4,442	2,000
	I. Marine	5	26,350	3,291	23,059
	J. Industrial	"	"	"	"
	K. Agricultural	16	6,75,545	2,77,856	2,14,955
	L. Communications	62	11,33,212	6,61,068	5,09,150
	M. Railway	"	"	"	"
	N. Electric Telegraph	"	"	"	"
Total Public		86	21,41,549	9,46,657	7,79,164
Grand Total of State & Public		193	58,14,257	28,53,408	20,32,551
			6,014,857		4,077,151

Budget No-2

more and more to office

I State.

Abstract. ^{of Expenditure} for 1864-67

A	Military ^{small Cap.}	
	1 Fortifications	12,000
	2 Cantonments	29,644
	3 Accommodation for Troops	89,144
	4 Ordnance	8,700
	5 Commissariat	7,050
B	6 Fleet	38,436
	7 Staff	800
	Naval	9,200
C	Judicial	9,410
	1 Police	9,410
	2 Court Houses	9,910
	3 Jails	
D	Revenue	
	1 Land and Miscellaneous	27,000
	2 Customs	4,050
	3 Opium	"
	4 Salt	29,797
E	Ecclesiastical	
	1 Churches and other Buildings	797 0 1
	2 Burial Grounds	2,540
F	Educational	2,280
	General	
G	1 Government	19,500
	2 Public Works	8,150
	3 Post Office	10,800
	4 Mint	2,500
	5 Charitable Institutions	2,890
	6 Scientific Institutions	1,000
	7 Monuments and Antiquities	200
	8 Miscellaneous	4,995
H	~~Public~~ Municipal	32,740
	1 Town Buildings	"
	2 Markets	500
	3 Paving and Streets	"
	4 Lighting	"
		<u>32,740</u>
		Total State

Abstract of No. 3

I	5.	Water Supply	2500
	6	Seawage	500.
		Marine	
J	1	Harbours and Navigation	120587
	2	Lighthouse	1300
		Industrial	
K	1	Minerals	
	2	Manufactures	
		Agricultural	
L	1	Irrigation Canals	
	2	Sarais	615400
	3	Dykes	878,996
M	4	Drainage	245000
	5	Forests	24,534
		Communications	12,555
N	1	Metalled Roads	
	2	Unmetalled Roads	858,088
	3	Bridges	106,570
O	4	Boat Bridges and Ferries	5540
	5	Navigation Canals	4144
	6	River Improvements	6,106
P	7.	Staging Bungalows and Services	26,716
		Railways, Local Public -	19,902
		Electric Telegraph State & Public -	282,200
Q		Military Contingencies	9149,449
		Furniture	
		Conservancy and Service	

Class	Section	Estimated expenditure for 1860/61
I State	A Military	184,068
	B Naval	800.
	C Judicial	28,620.
	D Revenue	60,847.
	E Ecclesiastical	10,670.
	F Educational	2180
	G General	40,315
Total State		3,27,440.
II Public	H Municipal	3,000.
	I Marine	13,358
	J Industrial	"
	K Agricultural	17,16,491
	L Communications	10,89,100
	M Railway	"
	N Electric Telegraph	"
Total Public		28,22,009
Grand total of State and Public		31,19,449.

Budget No. 3

Copy
Pip 2
25

To

Colonel H. Yule

Secretary to the Government of India.

Sir,

I am directed by the Honble the Governor in Council to forward for the consideration and orders of the Government of India the Budget of Public Works proposed to be undertaken in this Presidency during the official year 1860/61, comprising statements Nos. 1, 2, 3 and 4, and other papers forming annexures to that document.

In submitting this Budget, I am desired to state that the Honble Government have strictly confined themselves within the amount prescribed by the Government of India in their recent letter of the 5th December. The list has been very carefully determined. It contains only the most necessary works; and many works of great importance, promising to be highly remunerative

Ly

WV

WV

From Capt. J. D. Dickson 5th December 1859. No. 8349.
The Honble Government have strictly confined themselves within the amount prescribed by the Government of India in their recent letter of the 5th December. The list has been very carefully determined. It contains only the most necessary works; and many works of great importance, promising to be highly remunerative

remuneration which had been long ago estimated in detail and fully approved and sanctioned by Government, have been again postponed. The Government trust, however, that under the explanation about to be given, respecting the few projects in the Budget Statement No. 1, the Government of India will not refuse to accord their sanction to the works coming within their competency, nor authorize, or to support the recommendation of this Government to in favor of those projects which will need the previous sanction of the Home Government.

3 This Statement contains no provision for improving the navigation of the Upper Godavari, a work of such special character and of such vast public importance, that this Government are anxious as they are forward its progress, find themselves unable to provide adequately for it in the Budget under the strict limitation as to amount fixed by the Government.

Government of India. They have therefore considered it better to reserve the work to be dealt with specially, and will address the Government of India separately on the subject.

4 Referring to the remark in para 2 of your letter of the 30th July 1859, No. 5136, this Government desires to explain that the Budget of 1860/61 has been prepared on the same principle as that of its predecessor, and that the changes of form introduced in the "Classification Report" have not been adopted at this Presidency, inasmuch as the Government have not yet received the Rules, based on that report, which it was stated in your letter of the 30th June 1858, No. 3110, would be drawn out and sent as soon as ready.

5 Statement No. 1 of the Budget contains seven works, the estimated cost of each of which exceeds 25,000 Rupees the limit of expenditure assigned to this Government. The estimated amount

From Home Govt to Govt of India 20th Sept 1859 No. 26 F.D.

amount in the aggregate to Rupees 7,66,660 and the proposed expenditure to Rupees 1,98,400.

6 Statement No. 2 includes only those works which it is proposed to be carried on during the year. It brings forward for the most part works the estimates of which have already been sanctioned and partly worked out, and works partly executed on an emergency, besides a few new works within the competency of this Government to sanction. The aggregate amount of the estimates in this statement is Rs. 28,53,408, and that proposed to be laid out in 1860/61 Rupees = 22,75,557.

7 The estimates amount to the aggregate amount to Rupees 67,81,577, the expenditure already incurred to Rupees 28,53,408, and that proposed to be laid out in 1860/61 Rupees = 22,75,557.

	Amount of Estimate.	Computed expenditure to 30 April 1860.	Amount required for expenditure in 1860-61.
Statement No. 1	7,66,660.	"	1,98,400.
Statement No. 2	60,14,857.	28,53,408.	20,77,157.
Total	67,81,517	28,53,408.	22,75,557

8 Statement No. 3 represents the sums intended to be set apart on account of repairs. In conformity with the directions contained in paragraph of

amount of the estimates in this statement is Rs. 28,53,408, which the expenditure to 30 April 1860 is Rs. 28,53,408, and that proposed to be laid out in 1860/61 is Rs. 20,77,157.

of ~~claimed~~ Major Strachey's letter of the 23rd September 1858, No. 2606, then I am to observe that the expenditure in this statement is

subdivided on the same system as that of expenditure on the works in our Statements No. 1 and 2.

9 Statement No. 4 exhibits at one view in an abstract form, the expenditure proposed to be incurred under all heads, in the year 1860/61.

	Proposed expenditure on			
	Irrigation works.	Communications.	Buildings.	Total.
Statement No. 1	83,180.	20,000	95,220.	198,400.
Statement No. 2	2,14,896.	6,11,304	12,50,957.	20,77,157.
Total	2,98,076.	6,31,304	13,46,177.	22,75,557.
Statement No. 3	17,16,491	10,89,160	3,43,798	31,49,449
Total	20,14,567	17,20,464	16,89,975	54,25,000

State.	Statement No. 1	Statement No. 2	Statement No. 3 Repairs	Total.
Military	50,000	10,52,825	1,84,068	12,86,963
Naval			800	800
Judicial		60,815	28,620	89,435
Revenues		18,407	60,847	79,254
Ecclesiastical		3,284	10,610	13,894
Educational			2,180	2,180
General	45,220	1,17,986	40,315	203,521
Total	95,220	12,53,387	3,27,440	16,76,047
Public.				
Municipal		2,000	3,000	5,000
Marine		23,050	13,358	36,417
Agricultural	83,180	2,44,955	17,16,491	20,44,626
Communications	20,000	5,53,700	10,89,160	16,62,910
Total	103,180	8,23,764	28,24,009	37,48,953
Grand Total	198,400	20,77,157	31,49,449	54,25,000

11 The property of magnitude included in the works proposed in Statement

Statement No. 1, are few in number
Sixteen of which ^{two are state works} ~~are state works~~
and for public, the last being for
the improvement of the
canal. The ~~improvement of the~~
canal is the ~~improvement of the~~
canal. These will
now be noticed in the order in
which they stand on the list.

No. 1 Barracks and Out offices
for two Companies of European
Artillery at Bellari. Rs. 1,18,590.

12 The first project which
appears in the Budget List No. 1,
is the construction of Barracks
for the European Artillery at
Bellari. This is one of the several
measures suggested by His
Excellency, Sir Patrick Grant Com-
mander in Chief for the security
and defence of the Chief Sta-
tions of this Presidency in a
Minute dated 11th March 1858, and
written after an inspection of
some of the Military Stations
and Posts, of which Bellari
was one. A copy of this and
other Minutes on the same sub-
ject was transmitted to the
Secretary to the Government of
India in the Military Department
in a letter dated 5th July 1859.

Military Letter to Govt. of India
5th July 1859 No. 2388.

28

No. 2388 but for ~~any~~ refer-
in connection with this report
-ence a further copy of these
papers accompanied with
report is transmitted.

14. It will be seen from
these papers that the prin-
ciple which ~~which~~ His Ex-
cellency would earnestly
inculcate in providing for
the defence of Chief Stations,
is to place in security, under
sure military protection, all
munitions of war and mili-
tary stores, and material, all
large Treasuries, all Central
Jails, and to dismantle and
destroy all native forts, and
defensible posts which ~~are~~
not garrisoned with troops.

15. As regards Bellari
His Excellency represented
the citadel on the top of the
Rock as of no strength, in
every respect a wretched place,
and as a defensive work, ut-
terly useless. The lower fort,
which

which stands on one side of the base of the Rock on which the citadel stands, and in which the present Artillery barracks is situated, he described as of no strength and in a state of disrepair, and he was of opinion that ~~or even~~ ^{if} put in the best possible order it would be of little use, as the citadel was easily accessible from any point. Amongst the military arrangements suggested by Sir Patrick Grant for this station, those which need to be noticed in this report are,
First, the construction of barracks for the Artillery, with a magazine of sufficient size close to the European Infantry barracks outside the Fort, where ample space could be provided for them.
Secondly, the establishment of a convalescent depot at

91
at Ramandrog a place situated 38 miles from Bellari and which as a Sanatorium for Europeans has proved eminently successful.
16. Fully concurring with the principles laid down in His Excellency's Minute for providing for the security and defence of the Chief Stations of this Presidency, this Government called on the Chief Engineer to prepare plans and Estimates for carrying out the several measures recommended in that document. The Chief Engineer's letter of the 29th November ^{covered} ~~gave cover~~ to the required plans and Estimates for ^{both the} new Artillery barracks and buildings connected therewith at Bellari, and as well as for the building required to form a Convalescent depot at Ramandrog, the

the former ^{was} ~~being~~ estimated to
cost Rs 1,18,590, and the latter
Rs 95,840. Referring however
to the present financial circum-
stances this Government up-
on further consideration
deemed it advisable to select
for entry in the ^{present} Budget ^{such of} the
Estimates ^{as} which provided for
the construction of the Ar-
tillery Barracks and anti-
air offices ^{as} of greater im-
portance than the buildings
proposed for Ramandrag.

17. The Chief Engineer
describes the plan of ^{the proposed} ~~the~~
Artillery barracks
~~building~~ in the following
words.

"The plan for the Artillery
Barracks at Bellary is
based on the Standard plan
for European Infantry. It
is for one floor raised 10½ feet
above the ground on grained
arches which portion it
is"

* From Gt. Lt. Genl. 21st March
1859 No. 711.

91
"is proposed to use as Store
rooms and Gun sheds. The
Plan provides accommoda-
tion for 4 Hon Commissioned
Officers and 104 men in each
building. It contains be-
sides the rooms for the Hon.
Commissioned officers, a Dor-
mitory 160 feet long by 22
feet wide; inner Verandahs
12 feet wide; and outer Ver-
andahs 10 feet wide; a
reading room 50 feet by 16,
and 4 water rooms are in-
cluded. Each man is allow-
ed 63 square feet, and 1500
cubic feet for air in the cen-
tre portion; and those in the
Verandahs considerably more,
and the building is thoroughly
ventilated. At the Command-
er-in-Chief's desire, a para-
pet wall 4 feet high is pro-
vided on the roof, from
which a Rifle fire to de-
fend the Barracks can
be

be brought. The roof is reached by two wooden staircases in the reading room (which do not appear in the plan) with a trap door at their heads, in order to prevent the men going there when not requisite, as the weight of a large number of men on the roof at any or all times would add greatly to the load the beams are intended to bear.

P.6. The Plans and Estimates provide for 2 such Barracks with out-offices at a cost of Rupees 55,980 each or total Rupees 111,960 with one expense Magazine, and a building for a Guard room. Cook-house rooms and offices bring the total proposed expenditure up to Rupees 118,590. The Plans have been approved by the Commander-in-Chief. Those for the Magazine and Privies are agreeably to Standard designs.

*From Gt. Br. Genl 30th July 1859 No 1745.

"designs, and those for Guard room, Officer and cook rooms are suitable."

18 The Estimates accordingly provide for

Two ranges of Barracks	Rs. 104,160
Cook rooms	2,260
Privies	2,380
Supplemental Estimate for raising the walls of the Artillery barracks	3,160
	111,960
A Guard room, and a Prison room with Offices for Artillery barracks	6,200
An expense powder magazine for one company of Artillery	430
	Total 118,590

19. As the estimated cost exceeds a lac of Rupees, this Government would not in the ordinary course of things, have proposed any expenditure; but regarding the work as of a peculiar character, an important,

important military undertak-
-ing, which as a step towards
those measures so strongly
recommended in the minutes
of His Excellency the Com-
mander in Chief and
fully concurred in by this
Government it is desirable
should have an early
commencement, the Govt.
trust that the Govern-
-ment of India will
attach the same importance
to the work, and in the
discretionary powers vested
in them, which they have
exercised in the case of two
other military works
inverted in the Budget
of last year, that they
will permit this Govern-
-ment the work now
recommended to be pro-
-ceeded with at once.

This

Married have quarters for the
European Infantry Regiment
at Bellary - Estimate Rs. 116,700
allowing for improving the fort, artillery
barracks at Bangalore - Estab-
-lishment Rs. 106,000.
Sanctioned on 16th 13th letter
dated 30 July 1874 No. 1136.

I find that these barracks
at Bellary have not been
sanctioned - while all
the provisions for the
work have been sanctioned
I am sure that the
Government will sanction
the work at once.
A letter has been sent
to the Government of India
on the subject of the
work at Bellary - I
am sure that the
Government will sanction
the work at once.
I am sure that the
Government will sanction
the work at once.

This Government have
proposed an expenditure
of 50000 Rupees in the
coming year and as the
construction of these
buildings it is calculated
will occupy two full
years it is desirable
that they should be
commenced on without
delay. They therefore
solicit sanction for the
proposed expenditure.

JP

N^o 2 Revised Estimate for an Engineer's
Store yard and work shop at the
Presidency - Rupees 7,390.

20 The necessity for a
separate Engineer store and work
shop for the custody of stores of
the Public Works department has
been fully recognized by the

From Gov^t of India 4th June 1859. Government of India, and in
N^o 3744.

their letter of the 4th June 1859 they
sanctioned an expenditure of
Rupees 6,000 for the construction
of the necessary buildings. Since
then the correspondence with the
Chief Engineer recorded in the
proceedings of this Government

Dec: 29th July 1859 N^o 17-18
10th December " " 2-14
10th January 1860 " 1-2.

noted in the Margin has taken
place in which ^{after referring to}
~~the unsufficiency of the estimate~~
~~that after stating that at existing~~
~~and to the existing~~
rates of labor and materials
the sanctioned estimate was
found to be insufficient, the
Chief Engineer submitted with
his recommendation a revised
estimate for Rupees 7,390. as

more

more correctly representing the probable cost of the Buildings. Under the circumstances stated this Government approved the revised estimate, and ordered its entry in the Budget in substitution of the former one.

21. This estimate provides for the following buildings:
Building for machinery, and
entrenching tools, with carpenter and smiths shops Rs 51,985.

Building for Scientific Instruments
Upper Story - 11,803.
Lower Story - 5,986.
17,789.

Guard room and gateway - 3,033.
Erecting shop - 3,583.
Rupees 76,390.

22. The buildings are to be erected at the lake front palace now the property of Government, and the sum proposed to be laid out in 1860/61 is Rupees 5,220...

No 3 Additional Lock and Calingulash for the Nizampatnam Canal near Guntur, between Peddabavur and Nizampatnam in the Guntur District. Rs. 34,000.

23. The estimate amounts to Rupees 2,20,417 for widening and deepening the Loonga: Andhra channel and cutting a new channel in continuation as far as Nizampatnam, found a place in the Statement No 2 of the Budget of 1856/57 as forming a part of the unfinished subsidiary works connected with the Ristna annicut project, previously sanctioned by the late Court of Directors. That estimate provided for three locks and calingulashes, but the ultimate necessity for a fourth was foreseen at the time and was soon afterwards pointed out by the District Engineer to the late Chief Engineer in

in a letter dated 31st July 1857,
wherein after describing the
progress made in the excava-
-tion of the channel and in
the construction of the locks
and Culingulake^{at} Dooga:
-rallah and Peddaravur,
he advised that further
operations should not be
undertaken on the original
plan of design, but so
that provision should
be made for the addi-
-tional lock to be placed
about midway between
the one near Peddar-
-avur and that into
tidewater near Nizamu-
-patnam-

The

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24. The District Engineer
also pointed out that the
Channel as far as Peda-
-ravur having a fall of
only 3 inches per mile,
by means of the Locks
and Culingulake there,
and at Doogarallah, the
water was maintained
at a sufficient level to
command for irrigation,
all the lands on either
side, and to afford suffi-
-cient depth for naviga-
-tion thus far, at all
seasons of the year.

From Col. Baker 14 Sept 1857
Ch 3676.

25. The late Chief En-
-gineer in submitting the
plan and Estimate for this
work observed as follows.

"For the 18 miles
below Peddaravur,
the

the slope of the Channel is $9\frac{2}{3}$ inches per mile, giving a total fall of $14\frac{1}{2}$ feet, and showing the necessity of an intermediate Lock and Calingulab both for the purposes of irrigation, and navigation."

"The site chosen for these works is near Yintoor, some 10 miles below Peddalaravur, and by breaking the fall between that place and the terminal Lock, will raise the water in the channel for irrigation, and give a minimum depth of 3 feet on the lower sill of the Peddalaravoor Lock at the driest season."

"A depth of 3 feet of water will also be kept on the lower sill at Yintoor by

by the terminal Lock at Njarnapattam, and thus complete the Channel throughout as a first class line of navigation!"

26. The Estimate for the additional lock and Calingulab was submitted for entry in the Budget of 1858/59, but from the number of projects then before Government of comparatively greater importance, it was deferred for a more fitting time.

27. The District Engineer has now entered the work in his Budget Statement for 1860/61, and on a perusal of the papers connected with

with it, the ^{present} Chief Engineer regards the work as "one of considerable importance both for the purposes of Irrigation and Navigation". This Govt hold the same opinion. As represented by the late Chief Engineer in the passages quoted above, the slope of the Canal between the second and third lock, a distance of eighteen miles, is so great, viz 9 7/8 inches per mile, as to require intermediately the construction of a further lock and Calingulak in order to lessen the fall and command sufficient water for navigation and the irrigation of the

the surrounding lands. The necessity of the work being thus clearly apparent the Govt recommend the work for favorable consideration.

28. The Estimated Compendium of the work is as follows:
Constructing a Lock with a bridge over it Rs 9680.
Constructing Calingulaks 3,997.
Contingencies 1686.
Total Rs 34,600.

The full amount will be paid out in 1860/61.

No 4 Connecting the Sarwapalli Channel with Jafar Sahib's Channel, two main ducts of irrigation from the Pennair river - Belore Rs 5778

29. The improvement of the Pennair Channels has been laid before Government under various forms; but it is not necessary to refer to particulars in this place, beyond noticing that the work reported to be most required is that particularized above. The proposal is to close the present head of the Sarwapalli Channel, the most important branch Channel under the Pennair Anicut, and give it a new source of supply lower down the river, by connecting it by means of a cut with the main or Jafar ^{Sahib's} Channel, as also to widen the last mentioned channel. The Project is of a — simple character consisting entirely of cuts

cuts to carry the water to the
Sawapalli Channel, and va-
rious tanks; and is complete
in itself, provision being made
for the necessary masonry works
for regulating and crossing the
channels; viz a dividing dam
at the point where the new Sar-
wapalli cut diverges, two
bridges of three arches each
across the new channel for
the convenience of the traffic
on the Kawabpet and Nist-
napatam roads, and three
syphon sluices at the places
where it is intersected by the
irrigating channels from the
Kellore tanks. As to the neces-
sity of the work, it was pointed
out by Col^d Lawford, Deputy
Chief Engineer, that Japur Sa-
hibs channel has a head sluice,
while the Sawapalli chan-
nel has not; that in heavy
floods, the latter receives an
unlimited supply of water,
which, from there being no
means of controlling it, nec-
essarily causes the tanks and
channels to suffer most se-
rious injuries, and that this
evil, always pressing, has be-
come still more apparent.

Col^d

Memo from Col. Lawford dated
22^d January in P. 2^d of J. P.
8 March 1887 No 760 J. P.

Col^d Lawford was opposed
to adopting the cheaper me-
thod of building a separate
head sluice to the Sawapalli
Channel at a cost of three
or four thousand rupees,
because the situation was
very unfavorable; secondly
because the object of connect-
ing the two channels, viz to
afford to the Sawapalli
the advantage of the fine
head sluice built close to
the Anicut would be lost
to that channel; and third-
ly because the present po-
sition of the head of the
Channel will always be
prejudicial to the safety
of the Anicut inasmuch as
it forces the current to take
a curve which acts again
obliquely on the dam. The
widening of Japur Sahib
Channel which has its com-
mencement immediately
close to the Anicut is an es-
sential work; for without it,
the flow of water into the Sa-
wapalli channel by the new
cut will be very limited. Col^d
Lawford's opinion as to the
head

had position of the Saravalli
Channel head, and his views as
to the proper mode of treat-
ing both that channel and
Jafar Sahib's Channel were
confirmed by Col. Cotton's
judgment. That officer after
visiting the locality wrote
as follows.

"The arrangement about the
Saravalli Channel appears
to me a very simple question:
1st It must have a head sluice;
the destination without it
is intolerable. 2nd The pre-
sent head is, as has been
shown in other papers, in
a very bad position, and it
is very desirable, on many
accounts, to close it. 3rd The
water for it can be admitted
by the ancient head sluice." x x
I would therefore certainly
close the present head of the
Saravalli Channel and make
a cut connecting it with the
Jafar Sahib's channel; —
the present head sluice having a
great capacity sufficient for a

Memo
Jafar Sahib's Channel
dated ~~March~~ ^{April} 29 April
in P. P. of 1859
1859 A.D. 1050 B.S.

"much larger extent of
"cultivation." x x The present
"head of the Saravalli
"channel is situated at the
"bottom of a deep bight
"from which the water
"is thrown very obliquely
"on the ancient which was
"one of the objections to the
"site. When the head is
"closed, by the formation
"of one or two groynes above,
"this bight may be a
"great measure filled up,
"which will be an advance
"stage." The necessity of
the work having thus
been affirmed by Colonel
Cotton the highest
authority on such matters,
the Govt. in April 1859
authorized an advance
of Rs. 10,000 for immediate
expenditure, a proceeding
which

which was duly reported
to the Government of
India and approved
by that Govt in endorse-
ment dated 6 August
1859 A 5326. The urgency
of the work has again
been brought to the no-
tice of Govt consequent on
a report from Colonel
Lawford who had re-
cently visited Vellore.
That Officer stated that
the open head of the Sar-
vapalli Channel had
again caused bad inun-
dation, and he urged
the adoption of immedi-
ate and vigorous mea-
sures for remedying the
evil. He remarked, in
support of the urgency
of the work, that it is
"possible if not probable
that there may not this
year be another such
flood in the Pennair
as those of the few past
seasons, but the matter
should not depend on
probability, and if any
work can be truly styled
"necessary", it is the alter-
ation of the head of the
"Sarvapalli Channel".
Both the Chief Engineer
as well as Colonel Cotton
who had been consulted
on the matter, concurred
with Colonel Lawford
that the work ought
no longer to be delayed.
In respect to the funds
for carrying on the work
it was represented that
the advance of Rs 10,000
previously sanctioned
and referred to above,
was reduced by the
retrenchment

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year be another such
flood in the Pennair
as those of the few past
seasons, but the matter
should not depend on
probability, and if any
work can be truly styled
"necessary", it is the alter-
ation of the head of the
"Sarvapalli Channel".
Both the Chief Engineer
as well as Colonel Cotton
who had been consulted
on the matter, concurred
with Colonel Lawford
that the work ought
no longer to be delayed.
In respect to the funds
for carrying on the work
it was represented that
the advance of Rs 10,000
previously sanctioned
and referred to above,
was reduced by the
retrenchment

retrenchment of the Budget
and by the difficulty of
procuring labor to Rupees
4,300; that of the sum
Rs. 3,500 has been allotted
as compensation for land,
and that but little was
inconsequence left for the
channel cutting. Under
these circumstances, and
in consideration of the
urgency of the case, the
Govt., on the Chief En-
gineers' recommenda-
tion, sanctioned in an-
ticipation of the Budget
an advance of Rs. 25,000
out of the sum of Ru-
pees 48,580 entered therein
as the contemplated
expenditure in the next
year, and reported
the proceeding to the
Government of India.

in ^{their} letter dated
30. The work be-
sides being required to en-
sure the stability of the
Ancient and protect the
country from inunda-
tion, will have a ^{direct} bene-
ficial effect upon the
revenue, for the improved
supply which will re-
sult from the Sarva-
palli channel being
brought under the in-
fluence of the Damodar
Ancient will be the means
of bringing a large extent
of land under the plough.

Detached by
Letter from Col. of India 7/11/81
in Prose of Govt. 11 Dec. 1858 Nov 81
C. J. J. J. J.

The Collector of the Dis-
trict computes the land
capable of being cultiva-
ted as 1095 square bear-
ing an assessment of
Rupees 20,000 or a reduced
assessment.

* Aputa equal to 3/8 Rupee

assessment of Rs 17057 as
shown below.

	Bettam land		Muzam		Pasture land		Total		Reduced assessment
	Extent	Assessment	Extent	Assessment	Extent	Assessment	Extent	Assessment	
Villages now under Scarva palli channel	359	5,629	134	2,612	25	1,900	518	2,731	7,625
Villages now under D.	212	3,104	305	4,665	60	1,590	577	11,359	9,426
Total	571	8,733	439	7,277	85	2,080	1,095	20,090	17,051

Presuming however that the whole of the lands will not be fully supplied with water and that every year the collector assumes two thirds of the amount of the reduced assessment or Rupees 11367 as the expected increase from the undertaking, and this will give an annual return of about 17 3/4 per cent on the estimated outlay.

outlay.
31. The estimate comprises the following items

Widening Jaifar Sahib's Channel from the head sluice to the first dividing dam and turping. ————— Rs 14,608
Dividing dam for Jaifar Sahib's and Sarvapalli channels ————— 3,090
New cut from Jaifar Sahib's Channel to the old Sarvapalli Channel, and embanking and turping. ————— 33,959
Bridge of three arches across the new channel on the Kowabpet road ————— 1,000
Do — Do on the Krishnaapatam road ————— 3,000
Three syphon sluices in the new channel at the places where it is intersected by irrigating channels ————— 3,540
Superintendence and Sundries ————— 2,100
————— 64,300
Deduct amount available out of the sanctioned advance of Rs 10,000 ———— 4,320

Total Rupees 59,980.

32. The Project has received the fullest consideration of the Engineer Authorities, and as it appears to be of an urgent and important character, the Government recommends

recommended the ~~plan~~
~~and estimate~~ for the early
sanction of the Government
of India.

JP

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No 5. Supplemental Estimate for
Metalling and completing Trunk
Road No 4 from Cannanur into Mysur,
including the Perambadi ghat. Supple-
-mental Estimate Rupees 56,000.

33 The Perambadi ghat
is on the line of road from
Cannanur into Mysur; the
length of the ghat is six miles
and the whole road to the Mysur
frontier sixty eight miles. Be-
-sides the heavy general traffic
which it carries, it is extremely
important as a military line
of communication. The Pass was
opened and the road made between
the years 1848 and 1853 and both
appear to have been left by Capt.
Francis / who superintended the
work in an efficient and com-
-plete state, except that they were
not metalled. The sum allowed
for the annual maintenance of
this line was originally Rs 50 per
mile, and altho' the grant was
subsequently increased to Rs 100 per
mile

miles, or Rspees 6,800 for the entire length, yet, owing to the heavy traffic now passing on it, the increased amount does not appear to be at all adequate to meet the object. The correspondence in that has taken place during the last few years respecting this piece of road and especially in respecting the Pass shows that it has been neglected by the local Engineer officers; that the persons immediately charged with the expenditure of the funds allowed for its repair have been inefficient; and that the work has been abominably done.

¶ In the budget of 1858/59 wherein the previous history of the work was given at length, the Government of India will have observed that of an estimate for Rspees 72,700 prepared by Major Lampford "for placing the road in a proper and useful condition" this Government had already sanctioned at two different times the expenditure of Rspees 12,700 from funds

Pro: 1st June 1859 No 1342-

funds allowed for repairs, and that the remaining sum of Rspees 61,000 was entered in the Budget of that year to be expended in two years. The Government of India sanctioned an expenditure of Rspees 20,000 in 1858/59, in their letter of the 23rd Sept. 1858 No 4606, but it did not appear to this Government from the report of the District Engineer dated in March 1859 that the management of the expenditure was much improved, or that the mode of performing the work as therein described was otherwise than very primitive. They nevertheless noticed that many difficulties stood in the way of the proper performance of the work, arising partly from the ghat and a large portion of the road being in the hilly country, while the work is under the superintendence of the District Engineer in Malabar, but chiefly from the unhealthiness of the ghat.

¶ This Government were quite satisfied that a change

was

was urgently and immediately
called for. They foresaw that
a large outlay, probably much
larger than that already ~~was~~
estimated for, would be requir-
ed for metalling the whole ~~was~~
length; and it was evident ~~was~~
that the road required, and
ought to have, better and ~~was~~
more energetic superintendence.

36. This Government ~~was~~
therefore directed the Chief
Engineer to make immediate
arrangements for carrying
on the repair of the ghāt
efficiently, and called upon
him to report whether the
sanctioned estimate was
sufficient to put the road
in really good order, and
if not, to state how much
would be necessary for
that purpose. The corres-
pondence that has ensued
is noted in the margin,
from

Pro: 4 - October 1857 22-170-171
1st December - 20-21
2nd January 1860 - 48-49.

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from which it will be seen
that Colonel Bell considered
that the unexpended bal-
-ance of the last estimate
was sufficient to repair
the road, but that to
put it in thoroughly ~~was~~
good order and in an
efficient state to stand
the heavy general traf-
-fic to which it is ~~was~~
exposed, a further grant
of Rupees 56,000 was ~~was~~
absolutely necessary.

The expenditure would
give a metalling of one
~~was~~ ~~was~~ foot in depth
to the ghāt as far ~~was~~
as the stony river

at

at its foot distance of
the miles, and an average
of 6 inches from
the top of the Pass to
the Brit river 29 miles
from Cannanore
The remaining por-
tion of the com-
munication in
Coorg and Malabar
with a view
the

To J. P. de la 31 Aug 1889
at 2089.

the exception of three miles
^{being} ~~the~~ good soil generally
^{was represented} and does not require
metalling.
37. With regard to the
funds necessary for keep-
ing up the road, the Govt. as
the Govt of India are already
aware, see no reason why
it should not be self-
supporting, and have
resolved to impose a toll
under Act ~~III~~ of 1857
on the various kinds of
vehicle and on pack
bullocks &c using
the road. The Lt. Govt.
has been called upon
to submit, in concert
with the Board of Rev.,
details of the arrange-
ments for carrying this
resolution into effect
together with a scale
of

of tolls. No toll will, however, be established till the road has been put into good order throughout. It has been calculated that by this arrangement a maintenance allowance of at least Rs 370 per mile will be obtained at the outset which will allow of an annual cost of 7 kulis Maistries with gangs of 50 kulis each with a European Supt. & a bricklayer Maistry. No toll will, however, be established on the road till it has been put into good order throughout.

38. His Govt have recently recd; thro' the Com^r in Chief, a report from the Off^r Com^r the Provinces of Malabar and

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and famine on the distresses of the native troops and inhabitants consequent on the scarcity and famine price of rice at Mannar & in both Malabar generally during the late S.W. Western monsoon. Brigadier Fitz Gerald thus writes on the subject

"I should beguily of neglect of duty and of the responsibilities attached to my position as Brigadier Com^r these provinces, if I failed, after a period of such distress, as affecting the native troops, their families and followers, as well as the population of the country generally in this part of Malabar, to bring the same to notice, in the hopes that means may

may be adopted by Govt
to prevent a recurrence
of such a dangerous, I
may say, disastrous, state
of things as has occurred
here during the months
of August & Sept. but
not only on account of
rice, the staple article
of food being at famine
price, but at times
not even procurable
at all" "It would be
quite superfluous, &
in fact presumptuous,
in my attempt to
describe the peculiar
position of North Malabar
as regards the supply
of rice, the staple and
almost only cereal in
use as food to any extent
in the face of the able
reports I am aware have
at

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at various times been made
to Govt. particularly from
Mr. Robinson Esq. late
acting Collector; suffice
it to say that during at
the least six months of
the S.W. Monsoon, North
Malabar is, I may say,
entirely cut off from all
communication with the
rice producing countries,
viz., the interior of Mysore
and Mercara by St. George's
Road and the Perambra
ghat and with South
Canara by Sea. The former
line of communication has
I believe been much im-
proved this last monsoon
as regards the passage
of the ghat itself. I
understand the principal
obstacles to have occurred
for

for some distance both
immediately above &
below the ghat, he shall
as it may, the result
has been that at the
periods of the greatest
scarcity, little help
has been received from
inland, and ^{during} that time
I know of many bandies
for this place being de-
tained from the state of
the roads. "I must also
state that * * * * * under
the most favorable cir-
cumstances, i.e., the
staple food of the country,
is much dearer than
it ought to or might be.
There is no such thing ex-
isting among the grain
merchants as healthy
competition. Combination
is the rule. In the best
of seasons it is notorious

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that the wealthy grain mer-
chants will not, and do not
long in the full supply, they
ought, because by combining
together and raising the price
they realize the same or a larger
profit on the lesser quantity,
than they would on the larger,
besides saving themselves so
much trouble and a heavy
original outlay. I do not pre-
tend to suggest a remedy for
this unsatisfactory state of
things; that will rest with the
Government, but I may men-
tion the execution of the pro-
posed inland water communi-
cation from Bannu to
Mungahie which is now open
by boat water to Fozad, about
40 miles, leaving about
45 miles to Mungahie already
partly open here and there
by boat water, and the
efficient completion of the

N^o 4. Brunk road and the
Perambadi ghats so as to
be passable at all seasons.

39. This report shows
how urgent is the necessity
of immediately improving
and completing the com-
munication under notice.

The Honorable the Governor
in Council strongly recom-
mends therefore that the
accompanying supplemental
estimate of Rupees 26,000
may receive the sanction
of the Government of India.

The estimate provides for:-

27280 cubic yards
of Metalling Rs 24,100.

Tunnels 2500.

Contingencies 5720.

Ghat Establishment 13680.

Total Rs 56,000.

40. In reference to the large
sum for metalling the Chief
Engineer states that if the metat-
ling as allowed in the revised
estimate is not sanctioned, it
will be impossible from the
heavy traffic on the road to keep
it in any order, the surface soil
being composed of a very loose
description of earth, working
up into a depth of two feet of
mud, during the monsoon; un-
less therefore, the metalling be
thrown on in some depth, it
will be worked up with it, and
a useless expenditure will have
been incurred.

41. The ghat establishment
comprises a European officer on
Rs. 320, ie. including travelling &
allowances, 1 Bricklayer Ministry,
7 Bricklayers, a store keeper &
an establishment of carts
and bullocks which at a
monthly

7. 1 European Officer - 320
1 Bricklayer Ministry 20.
1 Ministry on - 20
1 do do - 15
5 do do - 50
1 Store Keeper - 5
7 Cart Bullocks @ 20. 140
For one month 570.
For two years or
twenty four months 13,680.

Monthly cost of Rupees 27000
amounts for two years to Rupees
126800.

42. The work on the
ghat is being proceeded with
on the balance of the previous
estimate and no expenditure is
therefore proposed ^{on the present estimate} for the
year 1860/61; but the Government
have entered the work in the
Budget in view to its receiving
the sanction of the Government
of India, so that timely arrange-
ments may be made for the
commencement of operations
early in the following season.

+ the Headquarters of
the Malabar Police Corps
and in the centre of
the locality which has
been noted as a scene
of Moplah outrages

N^o 6 - Construction
of a Cart road from Mal-
lappuram to Ponnani - Rs. 61,800.

43. This estimate
is for an entirely new
road of 20 miles and
199 yards in the dist.
of Malabar. Starting
from Mallapuram, it
will take a south-
western direction to
the railway station at
Sirur and thence to
Ponnani on the coast.
The communication has
been proposed by
the Comd. Engr.
for railways as an im-
portant railway feeder,
and both the Col. and
Engineers of the dist. have
also the Dy. Ch. Engr. of
the Circle and the Ch.
Engr. have strongly
supported

supported his recom-
mendation. The
proposed line will
open a part of the
country at present
shut out from wheels
or water carriage, ^{and}
will ^{highly} be ^{very}
useful. The im-
portance and necessity
of roads to connect
the Railway with the
country having already
been fully recognized
by the Home and Indian
Govts., there is no
occasion in this
place to do more
than to remark that
as the railway itself
is in an advanced
state and its com-
pletion

both in a military &
political as well as
commercial point
of view -

may be expected
within the course of
next year -

pletion from coast to coast
within a reasonable
time may now be
looked for with some
degree of certainty.
The necessity of at
once undertaking &
vigorously prosecuting
communications such
as that now under
consideration, becomes daily
^{apparent} ~~more pressing~~. The
Hon. the Secy. of State,
therefore, that this
road, which will
connect the railway
station at Sirsah with
an important town on
either side of it will
receive the sanction
of the Govt. of India
as a work to be
commenced immediately
and

and completed as to
be open to traffic by
the time the railway
is extended to Sisir.
or as soon after as
practicable. ⁴⁴The
Estimate now recom-
mended provides for

Earthwork — Rs 15394
Metalling — " 11202
139 Tunnels — " 14158
4 Bridges — " 15098
Amidies & other
Establishment — 4948
Land — " 1000

Total Rs 61,800

The expenditure proposed
on this work in 1868/69
is Rs. 20,000.-

Project is recommended

Estimate of Rs 61,800
Sketch

No 7: Formation of a canal between
the rivers Narmada and Tapi with sub-
sidiary works. Madras Rs 3,50,300

15. This is a Project
for the formation of a
canal to unite the line of
navigation, north of Madras,
extending from the river
Narmada to Durgurajpatana
beyond the Pulicat lake,
with that south of Madras,
extending from the river
Tapi to Madras.

16. This Project has
already formed the sub-
ject of correspondence
with the Govt of India,
who have ^{admitted} its great importance
has been admitted by that
Govt, and expressed the
opinion that it is a work
which "ought to be execu-
ted at the earliest time
at which funds can be
made

Letter dated 11 Dec 1859
No 7868

"made available for it."
They deferred however to
recommending the Project for
the sanction of the Secre-
tary of State, only on the
ground that
detailed plans and esti-
mates were not before
them. These plans and
estimates amounting in the
aggregate to Rs 3,59,300,
are now submitted, together
with the reports of the En-
gineer Authorities on the
Project.

47. The plans have been
prepared by Mr Kennedy,
1st Lt. Dist. Eng. in
charge of the Coast Canal.
The proposed canal, as
shown in the sketch hereto,
starts from the Adyar
at Pugh's gardens opposite
the

the Sadras branch, and
enters the stream at the
west of the P. Co. Station. It
crosses the P. Co. Station,
St. Thomas and Triplicane
and passing through
Mirsabitpet and Pidiyankar
In reference to this line,
the Chief Eng. remarks
that it appears to be
"by far the best line, and
"avoiding as it does, nearly
"all interference with per-
"manent residences, and
"keeping a course which
"involves the least possible
"loss of any kind." The
value of the landed
property to be taken
up for the Canal is roughly
computed at Rs 7,000.
48. The length of the
Canal

Canal is 3 miles and 1097
yards. It will have
a breadth
of sixty one feet surface
level, with a depth of
four feet below mean tide.
There will be six bridges
at places where the
crop traffic needs such
accommodation, fine landing
places with stairs for
goods at suitable points,
a wharf at the Ruam
junction, and a granite
groin at the Adigar
entrance. The bridges
will be built of two
arches each of 35 feet span
instead of a single arch
to avoid the roadway being
necessarily raised, and each
arch will be provided
with a seven and half
feet towing path upon
the

151
the landward side. The
landing platforms will en-
circle bays 150 feet long
and 20 feet wide each, which
will admit of boats being
discharged and loaded
without obstructing the
passing traffic. They will
be placed near five of the
bridges on each side of
the Canal. The wharf
will be built between the
sixth bridge, viz the Ruam
road bridge and the Ruam,
the surface breadth of
the water will there be
eighty feet, and the breadth
of the wharf on each
side fifty feet, thus offer-
ing ample space for
vessels of all kinds
to load or unload. The
groin near the Adigar en-
-trance is necessary to prevent
the

the canal being filled
by the soil swept down
from the adjacent plain
by the numerous floods. There
will also be four under-
tunnels and one hundred
and twenty two Water-sheds,
the former for irrigation,
and the latter for drainage
purposes. ~~See attachment~~
~~for the Corral and river~~
~~from approaching the~~
scheme also provides for
forming metalled roads
on the banks with a
double row of trees on
either side; an improvement
which would render the
locality an agreeable
drive in the city of Madrid,
and greatly increase
the facilities of road traffic.

49. The Chief Eng^r
considers

considers the estimates to
be prepared at
proper rates of labor and
materials, and their amount
as fairly representing
the full cost of the Project.
The item of compensation
however, he remarks, is
^{only an}
~~a mere~~ approximation, and
can only be exactly de-
termined hereafter. Col
Bell is of opinion that
^{some of} the plans ^{may} require
modification in their
details, but he considers
the general arrangement
to be quite correct and
satisfactory. - The Gov^t
regard this Project as one
that does not yield in
importance to any that
could be proposed; they now
recommend the plans
and

and estimates for the favorable consideration

of the Govt of India, and solicit that the sanction of the Home Govt may be obtained for the project. This Govt. have ~~early sanction for the project~~ ^{been applied to the Home Govt.} for permission to begin operations 1860/61.
To Home Govt. 12 Dec 1859/60.

50. The estimates comprise the following particulars.

Excavating Canal	Rs.
Removing soil from excavations between Broom road and the main (This item anticipates the removal of soil at other places, also)	72,781
Constructing Wharf	10,000
Protecting Grou, near Adyar.	13,958
5 Landing platforms and stairs at Rs. 5,200 each	1,842
11 Under tunnels for irrigation at " 1,500 each	26,450
122 Water shoots for drainage at " 62.6.4. each	6,172
Putting banks in section	7,612
Surfing	6,300
Planting trees and fencing	7,473
Superintendence and sundries for the above	1,756
1 Bridges at Rs. 11,700 each	6,650
1 do.	46,800
1 do.	12,500
Roads	18,000
	45,000
	2,83,300
Compensation for lands	11,000
do. to owners of Companies	20,000
do. for Native houses	15,000
	76,000
Total Rs.	3,59,300

57. Having thus noticed the few projects proposed in our Statement No. 1, the Government have but little to add regarding the Budget of 1860/61. It will have been seen from para 10 that the estimate of the total expenditure is given at Rupees 54,25,000, this somewhat exceeds that proposed for 1859/60. allowing 7 lacs for establishment, and 3 lacs for emergent and isolated works not estimated, the total amount is brought within the limits assigned by the Government of India for expenditure in 1860/61 vizt.

1859/60 — Rs. 52,36,966.
1860/61 — 54,25,000.

Expenditure on new projects —	1,98,400
do. on sanctioned projects brought forward —	20,77,157
do. on Repairs —	31,49,449
	54,25,000
Isolated and emergent works not so estimated —	3,75,000
Establishments —	17,00,000

It is the one lac fund at the end of the year not available for the next year. The weekly kept account of the fund available in the year 1859/60.

Total Rupees 75,00,000.

52. In conclusion Lord
desired to express the regret of
the Honorable the Governor in
Council for the unavoidable
delay that has occurred in the
submission of the present Bud-
get. The detailed lists from
the Chief Engineer's office which
were to form the basis of the
Report from this Government
were received on the 1st December
1859 and the progress made in
the preparation of the Budget
led this Government to hope
that it would have been sent
up within the period at which
its predecessor was forwarded.
~~noted~~ But the instructions
communicated in Captain
Dickens' letter of the 5th December,
which reached this Presidency
on the 17th idem, to limit the
expenditure to a sum not ex-
ceeding 75 lacs ^{which} necessitated
the reconstruction of the whole
scheme and involved much
correspondence, as to the projects
which

which should be worked out
within that limit. As already
stated a very careful selection
has been made of works of more
immediate urgency, to the exclu-
sion of others equally important
but admitting of delay. The
Government trust that the Bud-
get in its present shape will
prove satisfactory and be approved

Fort St George
21st Feb/60

J.P.

Public Works 1860 Dept.
Pro: of Govt. 29 February

No. 382.

To the Secretary to the
Govt. of India.

Df 21st February/60.

From D^r. D^r. 2. May/60 C. No. 1135
in.

From L^r. D^r. 3rd May 1860 C. No. 1137.

Forwarding Budget
of Public Works for 1860-61.

109.