Archives I—10,006—16-8 77.

(1) Number of pages 50

(2) Date of repair Nov. 86

(3) Initials of the Referencer

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W.D. DEPARTMENT

G.O. No. / B.P. No. 2577. W

Press. / Mis.

Dated 11.10.1879 ~~197~~ .

Not to be folded or roughly handled

2577/1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

11th October 1879, No. 2,577 W.

Buildings and Roads.
Civil Works.

Read the following papers :—

No. 24.	From the Superintending Engineer, First Circle, dated 19th April 1879, No. 105 K. S.
No. 24-A.	From the Superintending Engineer, First Circle, dated 21st July 1879, No. 668 K. S.
No. 24-B.	From the Superintending Engineer, Fifth Circle, dated 18th July 1879, No. 844 T. J.

MEMORANDUM OF CONSTRUCTION AND COST OF BRIDGES EXCEEDING 50 FEET IN LENGTH.

Executive Division.	Name of Bridge or of River or Nullah and Situation.	Date of Completion.	Description of Bridge.	Kind and Depth of Foundation.	Number and Size of Spans.	Width of Roadway between Parapets or Railings.	Height of Roadway above Foundation or River Bed.	Total Length of Bridge.	Total Cost.	Cost per 100 Feet of Length.	Remarks.
						FT. IN.	FT. IN.	FEET.	RS.	RS.	
				FIRST CIRCLE.							
				KISTNA DISTRICT.							
	Anderson's bridge on Hyderabad road, 1st mile from Masulipatam fort.	1866 ...	Built on Suttannagaram swamp of brick plastered arches 3 centre, 1 foot 6 inches thick, 1 foot 6 inches rise. Flooring inverts under the arches 1 foot thick or 2 feet concrete, and extending 3½ feet beyond piers on either side with 5 feet retaining walls; piers prolong on lower side to carry iron conduit supplying Bander municipality.	Concrete and brick masonry on swamp 3 feet deep.	Twelve spans of 8 feet.	24 0	11 9	175	14,100	8,057·142	
	Bridge head, Ellore canal at Bezwada.	Not known.	Materials rubble with brick arch and parapets, no floor, arch 3 centre, 3 feet 2 inches thick at crown and 6 feet at springing rise 13 feet.	Rubble masonry on sand 6 feet deep.	Single span 60 feet.	20 6	25 0	152	...	...	Built in about 1853-54. The records here cannot show the total cost, but those in late District Engineer's Office might show it.
	Bridge at Munjulur ...	1867 ...	Built over swamp. Materials brick plastered, arches 3 centre, 1 foot 6 inches thick, 2 feet 6 inches rise. Flooring 2 feet thick, concrete and brick extending 17 feet beyond piers on lower side 6 inches on upper do.	Brick masonry on clay 5 feet 3 inches deep.	Five spans of 12 feet.	15 0	7 3	104	3,000	2,884·615	Cost includes Rupees 850 supposed cost of two arches and one abutment left standing after cyclone, to which three arches were added costing Rupees 2,150.
	Bridge over Ellore canal at Parikidu.	1876 ...	Materials rubble with cut stone facing. Brick arch and parapets cut stone coping and stringing course arch 5 centre, 2 feet 6 inches thick at crown, 3 feet 6 inches at springing, 14 feet 8 inches rise. No flooring approaches, 18 feet high guarded with iron rails in wooden posts. Wooden towpath on both sides on iron brackets.	Rubble masonry on hard gravelly soil 6 feet deep.	One span 50 feet.	17 0	24 0	112	14,178	12,658·93	
Western Delta.	Nandivalugu bridge ...	Feb. 1873 ...	Foundations of rubble over concrete coursed rubble. Superstructure with brick arch faced with cut stone and cut stone cornice, string course, parapets and dressings.	Rubble masonry 3 feet, concrete 5 feet, total 8 feet.	One span 40 feet.	18 0	14 0	113	8,507	7,525·32	
	Chabrole bridge ...	Aug. 1867 ...	Rubble foundations all round filled with concrete on a concrete foundation coursed rubble. Superstructure with brick arches and 6 inches pigeon holed parapets; cut stone floor over 1 foot 6 inches rough stone; cutstone cornice string courses, caps to piers, parapets and dressings.	Rubble masonry 5 feet on concrete 3 feet, total 8 feet.	Three arches, centre arch 33 feet, and shore arches 30 feet.	13 0	23 0	151	11,120	7,364·24	

MEMORANDUM OF CONSTRUCTION AND COST OF BRIDGES EXCEEDING 50 FEET IN LENGTH—*cont.*

Executive Division.	Name of Bridge or of River or Nullah and Situation.	Date of Completion.	Description of Bridge.	Kind and Depth of Foundation.	Number and Size of Spans.	Width of Roadway between Parapets or Railings.		Height of Roadway above Foundation or River Bed.		Total Length of Bridge.	Total Cost.	Cost per 100 Feet of Length.	Remarks.
						FT.	IN.	FT.	IN.	FEET.	RS.	RS.	
	FIRST CIRCLE—*cont.*												
	KISTNA DISTRICT—*cont.*												
Western Delta—*cont.*	Kolakolur bridge ...	Mar. 1874...	Rubble masonry foundations with footings on concrete, coursed with rubble. Superstructure, brick arches and 6 inches pigeon holed parapets 1 foot cut stone floor over 12 inches concrete, and cut stone cornice, string course, caps to cut waters and over parapets.	Rubble masonry footings 5 feet 6 inches, on concrete 6 inches, total 6 feet.	Three arches, centre arch 36 feet, and shore arches 32 feet.	13	0	20	0	250	15,880	6,352	
	FIFTH CIRCLE.												
	TANJORE DISTRICT.												
Tanjore.	Therumungalagudy bridge over Cauvery.	1877 ...	Brick masonry elliptical arches...	Not known ...	Three arches each 40 feet span.	18	0	19	3	192	10,200	5,312	
	Bridge over Vettaur in 1st mile of road No. 17.	April 1864.	Arched masonry of brick in chunam.	...	Five vents each 42 feet span.	16	0	24	6	321	16,386	5,105	
	Bridge over Mahimalayaur on road No. 73.	Aug. 1872.	Segmental arches	Brick in chunam.	Two spans each 15 feet.	15	0	9	0	69	1,470	2,130	
	Bridge over Veerasholen on road No. 73.	Do. ...	Do.	Do. ...	Three spans each 20 feet.	15	0	11	9	112½	3,470	3,084	
	Bridge over Nundalaur on road No. 73.	Do. ...	Do.	Do. ...	Three spans each 30 feet.	15	0	14	0	156	6,000	3,846	
Negapatam.	Bridge across Caduvayaur on road No. 65.	1872 ...	Brick masonry	Not known ...	Three arches of 30 feet span.	18	0	16	0	109 feet from wing to wing, 160 feet inclusive of wings.	8,200	5,756	
	Vellayaur bridge on road No. 65.	1872 ...	Do.	...	Three arches of 30 feet span.	18	0	16	0	Do.	8,200	5,756	
	Bridge across Pandavayar on road No. 65.	1872 ...	Do.	...	Three arches of 30 feet span.	18	0	16	0	Do.	8,200	5,756	
	Bridge across Poodoopandyaur on road No. 27.	Not known.	Brick masonry, segmental arches.	Brick in chunam.	One arch of 30 feet span.	15	0	11	6	152	5,250	3,453	
	Bridge across Palampandiyaur on road No. 27.	...	Do.	Do. 8 feet in depth.	Three arches, one centre arch 20 feet, and shore arches 15 feet.	15	0	11	0	132	4,100	3,106	
	Andamy bridge on road No. 15.	1872 ...	Brick masonry	Not known ...	One arch of 30 feet span.	15	0	13	6	70	3,500	5,000	
	Mulliyaur bridge on road No. 27.	1871 ..	Do.	...	Do. ...	16	0	14	0	644	3,695	5,728	
	Penukondan bridge on road No. 27.	1871 ...	Do.	...	Three arches of 20 feet span each.	16	0	11	6	99	4,100	4,141	
	Saloovanaur bridge on road No. 51.	1873 ...	Do.	...	One arch of 30 feet span.	14	0	13	6	63	2,410	3,825	

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MEMORANDUM OF CONSTRUCTION AND COST OF BRIDGES EXCEEDING 50 FEET IN LENGTH—*cont.*

FIFTH CIRCLE—*cont.*

TANJORE DISTRICT—*cont.*

Executive Division.	Name of Bridge or of River or Nullah and Situation.	Date of Completion.	Description of Bridge.	Kind and Depth of Foundation.	Number and Size of Spans.	Width of Roadway between Parapets or Railings. FT. IN.	Height of Roadway above Foundations or River Bed. FT. IN.	Total Length of Bridge. FEET.	Total Cost. RS.	Cost per 100 Feet of Length. RS.	Remarks.
Negapatam—*cont.*	Pandavayaur bridge and regulators.	1874 ...	Brick masonry	...	Four arches of 22 feet span each.	18 0	17 0	164	33,960	10,353	
	Vennar bridge do ...	1874 ...	Do.	...	Do. ...	18 0	17 0	164			
	Mulliyaur bridge on road No. 51.	1873 ...	Do.	...	Two arches of 15½ span each.	15 0	10 9	64	2,287	3,573	
	Vellayaur bridge and regulators.	1874 ...	Do.	...	Three arches of 22 feet span each.	18 0	15 0	132	27,326	9,350	
	Vennar bridge and regulators.	1874 ...	Do.	...	Four arches of 22 feet span each.	18 0	15 0	160			

COMPARATIVE COST OF CERTAIN SELECTED BUILDINGS.

ABBREVIATIONS.—R.S.M.—Denotes rough stone in mud. R.S.C.—Rough stone in chunam. P.B.M.—Pacca bricks in mud. P.B.C.—Pacca brick in chunam. T.—Terraced. H.T.—Hip tiled. C.S.P.—Cutstone paving. E.R.—Earthen rammed. C.—Concrete. C.P.—Plastering with chunam.

Division.	Locality.	Name of Building.	Description and Height of Walls, &c.									Cost.	Area, Superficial Foot.	Rate per Superficial Foot.	Remarks.
			Single or Double Storied.	Foundation.		Plinth.		Walls (to top of Wall Plate).		Roof.	Floor.				
					FT. IN.		FT. IN.		FT. IN.			RS.			
FIRST CIRCLE.															
Eastern Delta.	Bezwada ..	Range Office, Eastern Delta.	Single ..	R.S.C. ..	3 6	R.S.C. ..	2 6	R.S.C. ..	14 6	H.T. ..	C.S.P. ..	7,350	4,695	1·565	These are the only two works of which the cost is correctly known; all the others are the book values, which may be correct or not, but are probably only estimated values.
	Do. ..	Workshop, Department Public Works.	Do. ..	R.S.M. ..	2 6	None ..	..	" ..	12 6	" ..	E.R. ..	5,290	14,139	·375	
	Do. ..	Travellers' bungalow ..	Do. ..	R.S.C. ..	3 0	R.S.C ..	2 9	" ..	14 2	T. ..	C.P. ..	2,260	3,657	·617	
	Do. ..	Telegraph office	Do. ..	" ..	2 6	" ..	1 2	" ..	14 6	" ..	" ..	1,130	2,279	·500	
	Gunnavaram	Travellers' bungalow ..	Do. ..	P.B.M. ..	2 0	P.B.M ..	1 6	P.B.M. ..	15 6	H.T. ..	" ..	5,300	3,192	1·66	
	Kankipadu ..	Do. do. ..	Do. ..	" ..	2 0	" ..	2 6	" ..	12 6	" ..	" ..	5,060	2,512	1·99	
	Parikid ..	Converted into Department Public Works rest-house.	Do. ..	" ..	2 0	" ..	3 0	" ..	12 6	" ..	" ..	4,250	2,638	1·611	
	Weyoor ..	Travellers' bungalow converted into Department Public Works rest-house.	Do. ..	" ..	2 0	" ..	2 6	" ..	12 6	" ..	" ..	3,000	3,315	·904	
	Gudivada ..	Department Public Works rest-house.	Do. ..	" ..	2 0	" ..	2 0	" ..	13 0	" ..	" ..	*2,670	3,640	·733	* Built by private party many years ago; bought by department in 1874 for Rs. 2,000. Rupees 670 were actually spent for improvements.
Western Delta.	Repalle ..	Taluk cutcherry	Do. ..	Pacca ..	3 0	Pacca ..	3 0	Pacca ..	13 0	Tiled roof with rafters and reepers.	Masonry with brick and plaster.	2,000	3,953	·505	Value of buildings are entered as per the annual building return, but not from actual valuation nor from proper authority.
	Bapatla ..	Travellers' bungalow ..	Do. ..	" ..	Unknown.	" ..	3 0	" ..	13 0	Do. ..	With brick jelly and chunam plastered over it.	3,000	4,620·75	·641	
FIFTH CIRCLE.															
Tanjore.	Tanjore ..	Tahsildar's cutcherry ..	Single ..	P. B ..	..	P. B. ..	2 0	P. B. ..	12 0	P. T. ¼ acre P. T. T.	Ver. C. S. I. N. A. B. J. ½ acre B. F.	29,358	6,730	4·360	
	Thoovoor limit.	Inspection bungalow ..	Do. ..	P. ..	5 0	..	..	P. ..	12 0	Pantiled bungalow rafters.	P. ..	1,400	1,782	0·785	
	Grand anicut.	Soldiers' rest-house ..	Do. ..	" ..	5 0	..	..	" ..	12 0	Flat and pan-tiles.	" ..	1,200	838	1·437	
	Poodoochuttram.	Do. do. ..	Do. ..	" ..	5 0	..	..	" ..	12 0	Do ..	" ..	1,200	838	1·437	
	Combaconum.	Small Cause Court ..	Double ..	" ..	9 0	P. ..	3 6	" ..	13 0	P. T. ..	B. F. ..	19,000	6,072	3·129	
	Do. ..	Taluk Cutcherry ..	Do. ..	" ..	9 0	" ..	3 6	" ..	13 0	" ..	" ..	19,000	6,072	3·129	
	Do. ..	District Munsif's Court ..	Single ..	K. ..	4 0	K. ..	3 0	K. ..	11 0	" ..	" ..	2,700	1,795	1·504	
	Do. ..	Assistant Collector's Office	Do. ..	P. ..	5 0	P. ..	3 0	P. ..	13 6	" ..	" ..	4,400	1,995	2·205	
	Valangaman.	Munsif's Court ..	Do. ..	" ..	5 0	" ..	4 0	" ..	14 0	" ..	" ..	3,800	1,920	1·979	
	Cabistalem ..	Bungalow	Do. ..	K. ..	3 0	K. ..	2 3	K. ..	13 0	" ..	P. ..	2,860	2,560	1·117	
	Do. ..	Stable and Kitchen ..	Do. ..	" ..	3 0	" ..	12 0	" ..	12 0	" ..	B. M. ..	1,300	1,485	0·875	
	Combaconum.	Store-shed	Do. ..	" ..	3 0	" ..	2 0	" ..	11 6	" ..	B. F. ..	730	1,036	0·704	
	Lower anicut.	Bungalow	Do. ..	" ..	1 6	" ..	1 6	" ..	9 9	" ..	" ..	1,250	3,287	0·380	
	Do. ..	Choultry	Do. ..	" ..	2 3	P. ..	2 3	P. ..	9 9	" ..	" ..	1,584	5,146	0·307	
	Do. ..	Store-shed	Do. ..	" ..	1 9	" ..	1 3	" ..	11 3	" ..	C. ..	576	1,629	0·353	

Abbreviations.—P.—denotes Pacca. K.P.—Kacha Pacca. K.—Kacha. F.M.—Flat mud. T.—Terraced. Pl.—Planked. P.T.—Pent Tiled. P.S.—Pent stated. P.Sh.—Pent shingled. P. Sp. Sh.—Pent split shingled. R.—Rubble. D.S.—Dry stone. C.—Concrete. B.F.—Brick Flat. Fl.—Flagged. Dhj.—Dhajji, *i.e.*, timber frame work filled in with mud and stone masonry. C.I.—22° corrugated iron 22.—B.W.G. In.—Inner. O.—Outer. Up.—Upper. Gr.—Ground.

FIFTH CIRCLE—*cont.*

Division.	Locality.	Name of Building.	Description and Height of Walls, &c.									Cost.	Area, Superficial feet.	Rate per Superficial Foot.	Remarks.
			Single or Double Storied.	Foundation.		Plinth.		Walls (to top of wall plate).		Roof.	Floor.				
					FT. IN.		FT. IN.		FT. IN.						
Tanjore—*cont.*	Tranquebar Fort.	Police huts	Single	K.	2 6	..	1 0	..	8 4	Tiled	Brick	2,700	4,891	0·532	
	Poraiyar	New Deputy Tahsildar's Cutcherry, Subsidiary Jail and Sub-Registrar's Office.	Do.	P.	3 0	P.	1 6	P.	12 6	Do.	Brick (but Jail floor asphalte).	11,054	5,348	2·066	
	..	Do. Hospital shed	Do.	..	2 6	..	1 6	..	7 3	Do.	Asphalte	1,191	574	2·078	
	..	Do. Ryots' shed	Do.	..	2 6	..	..	..	..	Do.	Brick	1,258	858	1·464	
	..	Do. Public latrine	Do.	..	2 0	..	0 9	..	9 0	Do.	Asphalte	987	670	1·473	
	..	Do. Jail latrine	Do.	..	2 6	..	0 9	..	7 0	Do.	Do.	476	363	1·311	
	..	Do. Cook-room	Do.	..	1 6	..	..	..	6 6	Do.	Brick	298	275	1·083	
	Tirumalavasal.	Sea Custom-house	Do.	P.	5 0	P.	2 0	P.	13 0	P. T.	Do.	2,041	1,930	1·057	
	Nanilum	Sub-Registrar's Office	Do.	"	4 0	"	2 0	"	12 0	Tiled	Do.	2,100	954	2·201	
	..	Do. Cook-room	Do.	K.	1 6	..	..	K.	6 6	Do.	Do.	350	260	1·346	
	..	Do. Latrine	Do.	"	3 0	K.	0 9	"	9 0	Do.	Asphalte	460	340	1·352	
Negapatam.	Negapatam	Telegraph Office	Do.	P.	3 0	P.	4 6	P.	16 6	T.	Brick	12,520	4,216	2·972	
	Do.	Executive Engineer's Office.	Double	"	3 0	"	1 6	"	14 6	Tiled	6 Inches, three courses of flat tiles and pan tiles.	3,500	1,207½	2·899	
	Vedarniem	Vedarniem Cutcherry	Single	"	4 0	"	3 9	"	13 0	Do.	Brick in chunam.	13,092	4,285	3·055	
	Mannargudi.	Hospital	Do.	"	1 6	"	1 9	"	8 3	Do.	B. F.	1,090	610½	1·783	
	Do.	Cook-room	Do.	"	2 0	"	..	"	7 3	Do.	"	490	251¼	1·952	
	Do.	Jail Latrine	Do.	"	1 6	"	..	"	5 6	Do.	"	540	185½	2·918	
	Nedamangalam.	Police Station	Do.	"	3 9	"	1 6	"	13 9	Do.	"	1,562	702⅝	2·225	
	Do.	Hospital	Do.	"	1 6	"	1 9	"	8 9	Do.	"	1,103	607½	1·815	
	Do.	Cook-room	Do.	"	2 0	"	..	"	6 6	Do.	"	492	310¾	1·582	
	Do.	Jail Latrine	Do.	"	1 6	"	..	"	5 6	Do.	"	556	378	1·470	
	Kotoor	Kotoor Police Station	Do.	"	4 3	"	1 6	"	9 0	Semi-circular dome.	"	1,220	768¾	1·586	
	Mannargudi.	Police Hospital	Do.	"	3 0	"	2 0	"	14 0	Tiled	"	1,009	748	1·348	
	Puttukotai	Taluk Cutcherry	Double	"	4 6	"	2 0	"	11 6	Terraced and P. T.	"	24,088	12,776¾	1·880	
	Do.	Munsif's Court	Single	"	4 0	"	1 6	"	15 0	Flat and P. T.	"	2,500	3,519	0·710	

No. 25. ORDER THEREON, 11th October 1879, No. 2,576 W.

ORDERED to be forwarded to the Government of India in continuation of docket No. 5 W., dated 3rd January 1879.

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers,
To the Consulting Architect,
" Chief Engineer for Irrigation,
" Consulting Engineer for Railways,
" Examiner of Public Works Accounts,
} for information.

No. 26. (DOCKET No. 2,577 W., dated 11th October 1879.)

FORWARDED accordingly.

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

Exd. E. C. Shunker.
Spare Copies

822/9

IRRIGATION.

Govt. of {1879} Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated October 11th.

Issued

Recd. Encl.

G. O., 11th October 1879, No. 2,577 W.

OCTOBER.
Nos. 24-26.

STATEMENT of Areas and Cost of Buildings and Memorandum of Construction and Cost of Bridges.

No. 2927.

Supdg. Engrs' Office
Bellary 9th October/79.

88/8

From
The Supdg. Engineer
2nd Circle

To
The Chief Engineer
P.W.D.
Madras.

Sir,

With reference to your Memo of the 1st Instant No. 1841, I have the honour to report that a return of selected buildings in the Bellary District was sent to you by the District Engineer on the 25th September 1878. The return did not include any bridges, and the Executive Engineer states that bridges were built so long ago, that their records cannot be traced, and that from the rise in rates, the particulars if obtainable, would be of no use to exemplify the present cost of bridge works.

I have the honour to be
Sir
Your most obedt. servant
Supdg. Engineer 2nd Circle

P.W.D.
11 OCT 79
No. [illegible]

From
The Supg. Engr.
2nd Circle

To
The Chief Engineer
P.W.D.
Madras

In G.O. No. 2579 dt/ 11-10-79

Dated 9th October 1879
Recd.

No. 2927

Return of selected Buildings
Bellary District
for

Reporting that a — was
sent on the 23d. Septr. 1879

Complete

Memorandum of Construction and Cost of selected Bridges exceeding 50 feet in length in Western Delta Division Kistna District.

Prepared Vide Superintending Engineer's Office No 546 of 8th July 1878

Executive Division	Name of Bridges	Date of Completion	Description of bridges	Kind & depth of foundations	Number & size of Spans	Width of roadway between parapets or Railings	Height of foundation above foundations or River bed	Total length of bridges	Total Cost	Cost per 100 feet of length	Remark.
Western Delta	Nandi-Valugu Bridge	February 1873	Foundations of rubble over Concrete coursed rubble. Superstructure with brick arch faced with Cut stone & Cut stone Cornice, string Course. parapets & dressings.	Rubble Masonry 3-5 feet Concrete 5 ft Total 8 feet	one span 40 feet	18 ft	14 ft	118 ft	8,507 Rs	7525.32	
-Do-	Chabrole Bridge	August 1867	Rubble foundations all round filled with Concrete on a Concrete foundation Coursed rubble. Superstructure with brick arches & 6" pigeon holed parapets; cut stone floor over 1'-6" rough stone; Cutstone Cornice, string Courses, Copes to piers, parapets & dressings.	Rubble Masonry on Concrete 3 feet Total 8 feet	Three arches Centre arch 33 ft & shore arches 30 ft	13 ft	23 ft	151 ft	11,120 Rs	7364.24	
-Do-	Kolakaloor Bridge	March 1874	Rubble masonry foundations with footings on concrete, Coursed footings with rubble superstructure, brick arches & 6" pigeon holed parapets 1 foot cut stone floor over 12" Concrete. & Cut stone Cornice, string Course. Copes to Cutwaters & over parapets.	Rubble masonry Coursed footings 5' on Concrete 6" Total 6 feet	Three arches Centre arch 36 ft and shore arches 32 ft	13 ft	20 ft	250 ft	15,880 Rs	6,352	

(Sd) W. R. Norris C.E.
Exe: Engr W. Delta Dn

(True Copy)
C. Marlep

W. Delta [illegible] Office }
9th September 1878 }

A. A. James
Asst Engr in ch Kistna
Western Delta

Kistna W. D. Dn Office }
25th June 1879 }

[illegible] with others
JM 30-6-79

Kistna Western Delta
Dated 25th June 1879
Received

Memorandum of
Construction & cost
of selected Bridges
exceeding 60 feet in
length in Kistna
Western Delta.

Offices

Comparative Cost of certain selected Buildings in Western Delta Division Kistna D^t.
Prepared Vide Superintending Engineer's Office No 546 of 8th July 1878.

98/12

Division	Locality	Name of Building	Single or Double storeyed	Description and height of walls &c Foundations	Plinth	Walls to top of walls plate	Roof	Floor	Cost	Area	Rate for Superficial foot	Remark.
Western Delta	Repally	Tahsil Cutcherry	Single	Pucca 3-0	Pucca 3-0	Pucca 13-0	Tiled roof with rafters & reepers	Masonry with Brick & plastered	2,000	3953	Rs .505	Value of Buildings are entered as per the annual building return but not from actual Valuation nor from proper authority.
W. Delta	Baupatla	Traveller's Bungalow	Single	Pucca [illegible]	Pucca 3-0	Pucca 13-0	Tiled roof with rafters & reepers	With brick Jelly & Chunam plastered Dumits	3,000	4620.75	.641	

W. Delta Division Office }
9th September /78 }

(Signed) W. R. Norris C.E.
Exe Engr. W. Delta D^n.

(True Copy)

Kistna W. Delta D^n Office }
25th June 1879 }

G. Harley

A. T. James
Asst. Engr. in ch.
W. Delta Kistna

G.O. No. 2577th ~~[illegible]~~ 79

Kistna Western Delta
dated 25th June 1879
Revised
Comparative Cost of certain
selected Buildings
in Kistna Western
Delta.

NO. 668 Ks. **Roads and Buildings.**

G.O. 77/13

FROM,

THE OFFG. SUPERINTENDING ENGINEER

~~GODAVERY DISTRICT.~~

TO,

THE CHIEF ENGINEER

FOR ROADS AND BUILDINGS.

Encls. 2
Statements of W. D. and Bridges

~~CAMP~~ DOWLAISHVA~~WE~~RAM, 21st June 1879

SIR,

Referring to para 1 of your Memorandum No. 1841 of 16th May 1879, I have the honor to forward herewith the Statement of areas and Cost of Buildings and Memo of Construction and Cost of Bridges for the Western Delta Division Kistna.

2nd The Divisional Officer states that the value of the Buildings entered in the Statement is not actual but taken from the Buildings return. There is no other old record in this Circle Office to show the actual values of each building.

3 The further information called for in your memo, under reference regarding the Nedumole Travellers Bungalow will be submitted on its receipt from the Officer

Roads and Buildings

P.W.D.
28 JUL 79
No. 5531

Officer in charge Kistna Eastern
Delta Division.

I have the honor to be
Sir
Your most Obedient Servant
(By order)
C. M. Carlyle
Assistant Engr.
Assistant to Supg Engr 1st Circle

FROM,

THE ~~OFFG~~. SUPERINTENDING ENGINEER
1st Circle
~~GODAVERY DISTRICT.~~

TO,

THE CHIEF ENGINEER

FOR ROADS AND BUILDINGS,

DATED 21st } July 1879.
RECEIVED }

Comply Rd.

No. 668 K.S.

ENCLOSURE. 2

Cost of buildings and statement of areas &c.

Submits the — for the Kistna Western Delta division —

G.O. No. 2577 dt 11-10-77

Comply

21st

Ej
2/7

W.
1/8

Kistna Western se

succession—

Complete

24ct

	11	1	13	8	7	5	6	5	4	5
Tanjore D:	Theroomungalagoody Bridge over Cavery	1877	Brick masonry elliptical arches	not Known	3 arches each 40' Span	18'	19¼'	192'	10,200	5312
	Bridge over Vettaur in 1st mile of Road No. 17	April 1864	Arched Masonry of Brick in Chunam	"	5 Vents each 42' Span	16'	24½'	321'	16,386	5,105
	Bridge over Mahimalayaur on Road No. 73	August 1872	Segmental arches	Brick in chunam	2 Spans each 15'	15'	9'	69'	1470	2130
	Bridge over Veerasholen on Road No. 73	Do.	Do.	Do	3 Spans each 20'	15'	11¾'	112½	3470	3084
	Bridge over Nundalaur on Road No. 73	Do.	Do.	Do.	3 Spans each 30'	15'	14'	156	6,000	3,846
Negapatam Division	Bridge across Caduvayaur on Road No. 65	1872	Brick Masonry	not Known	3 arches of 30 span	18'	16'	109' from wing to wing - 160' inclusive of wings	8200	5756.
	Vellayaur Bridge on Road No. 65	1872	Do.	"	3 arches of 30' Span	18'	16'	Do.	8200	5756.
	Bridge across Pandavayaur on Road No. 65	1872	Do.	"	3 arches of 30' Span	18'	16'	Do.	8200,	5756.
	Bridge across Poodoo pandy aur on Road No. 27	not Known	Brick masonry Segmental arches	Brick in Chunam	1 arch of 30' Span	15'	11½'	152'	5250	3453
	Bridge across Palampandi yaur on Road No. 27	"	Do.	Do 8 ft. in depth.	3 arches 1 centre arch 20' and Shore arches 15 feet.	15'	11'	132'	4100.	3106
	10	6	14	8	7	5	6	5	4	5

Memorandum of Construction and Cost of Bridges Exceeding 50 feet in length in the Tanjore District

S.E. Circle

9577/14

9577/19 3

Executive Division	Name of Bridge or of river or Nallah and situation	Date of Completion	Description of Bridge	Kind & Depth of Foundation	Number and size of Spans	idth of Road way between Parapets or Railings	ight of Roadway above Foundations or River beds	tal length of Bridge	Total Cost	Cost per 100 feet of Length	Remarks
Negapatam Division	Andamy Bridge on Road No. 15	1872	Brick masonry	Not known	1 arch of 30' Span	15'	13½'	70'	3500	5000	9577/17
	Mulliyaur Bridge on Road No. 27	1871	Do.	"	Do.	16'	14'	64½'	3695	5728	
	Ponnookondan Bridge on Road No. 27	1871	Do.	"	3 arches of 20' Span each.	16'	11½	99'	4100	4141	
	Valoovanaur Bridge on Road No. 51	1873	Do.	"	1 arch of 30' Span	14'	13½'	63'	2410	3825	
	Pandavayaur Bridge and Regulators	1874	Do.	"	4 arches of 22' Span each	18'	17'	164'	33960	10353	
	Vennaur Bridge Do.	1874	Do.	"	Do.	18'	17'	164'			
	Mulliyaur Bridge on Road No. 51	1873	Do.	"	2 arches of 15¼ Span each	15'	10¾'	64'	2287	3573	

Memorandum of Construction and Cost of Bridges Exceeding 50 feet in length in the Tanjore District

S.E. 5 Circle

9577/14

9577/19

3

1

Executive Division	Name of Bridge or of river or Nallah and situation	Date of Completion	Description of Bridge	Kind & Depth of Foundation	Number and size of Spans	Width of Road way between Parapets or Railings	Height of Roadway above Foundations or River bed.	Total length of Bridge	Total Cost	Cost per 100 feet of Length	Remarks.
Negapatam D^n	Vellayaur Bridge & Regulators	1874	Brick masonry.	—— " ——	3 arches of 22' Span each	18'	15'	132'	27,326	9350	9577/18
	Vennaur Bridge & Do	1874	—— Do ——	—— " ——	4 arches of 22' Span each	18'	15'	160'			

Superintending Engineer's Office
5th Circle
Trichinopoly 18th July 1879

G. E. Manson.
for Ag Superintending Engineer
5th Circle

Memorandum of con-
-struction and Cost of
Bridges exceeding 50
feet in length -

5th Circle

D. 4. 0. 11. 10. 77. No 25778

Tanjore District

1 E Fifth [illegible] 6

Tanjore Dstrict

Comparative Cost of certain selected Buildings

Abbreviations P. denotes Pacca; K P Kacha Pacca; K Kacha, F.M Flat mud T. Terraced, P.L. Planked, P.T. Pent Tiled, P.S. Pent slated, P.S.H. Pent Shingled, P.S.P. SH. Pent Split Shingled; R. Rubble; D.S. Dry Stone, C. Concrete, B.F. Brick Flat; F.L Flagged, D.HJ Dhajji, ie, Timber frame work filled in with mud & stone masonry, C.I. 22° Corrugated Iron 22 B. W. G. I N Inner; O Outer U.P. Upper, G.R. Ground.

9877/90 9877/98

Division	Locality	Name of Building 3	Single or Double Storyed 4	Description & height of walls &c. Foundation 5		Plinth 6		Walls to top of wall plate 7		Roof 8	Floor 9	Cost 10	Area 11	Rate per superficial foot 12
					ft.		ft.		ft.				Supl. ft.	
Tanjore Division	Lower anicut	Bungalow	Single	K	1½	K	1½	K	9¾	PT	BF	1,250	3,287	0·380
	Do.	Choultry	Do.	K	2¼	P	2¼	P	9¾	PT	B.F	1,584	5,146	0·307
	Do.	Store Shed	Do.	K	1¾	P	1¼	P	11¼	PT	C	576	1,629	0·353
	Tranquebar Fort	Police Huts	Do.	K	2½	"	1	"	8⅓	Tiled	Brick	2,700	4,891	0·532
	Porayaur	New Dy. Tahsildar's Cutchery subsidiary jail and sub. Registrar's Office	Do.	P	3	P	1½	P	12½	Tiled	Brick (but jail floor asphalt)	11,054	5,348	2·066
		Do. Hospital Shed	Do.	"	2½	"	1½	"	7¼	Tiled	Asphalt	1191	574	2·078
		Do. Ryots Shed	Do.	"	2½	"	"	"	"	Tiled	Brick	1,258	858	1·464
		Do. Public latrine	Do.	"	2	"	¾	"	9	Tiled	Asphalt	987	670	1·473
		Do. jail Latrine	Do.	"	2½	"	¾	"	7	Tiled	Asphalt	476	363	1·311
		Do. Cook room	Do.	"	1½	"	"	"	6½	do	Brick	298	275	1·083
	Tirumulavasal	Sea custom house	Do.	P	5	P	2	P	13	PT	Brick	2,041	1,930	1·057
	Nanilam	Sub Registrar's Office	Do.	P	4	P	2	P	12	Tiled	Brick	2,100	954	2·201
		Do Cook room	Do.	K	1½	"	"	K	6½	do	do	350	260	1·346
		Do. Latrine	Do.	K	3	K	¾	K	9	do	Asphalt	460	340	1·352
Negapatam	Negapatam	Telegraph Office	Do.	P	3	P	4½	P	16½	T	Brick	12,520	4,216	2·972
	Do.	Executive Engineer's Office	Double	P	3	P	1½	P	14½	Tiled	6" Three courses of flat tiles & pan tiles	3,500	1,207½	2·899

9877/93

S E Fifth circle 6

Tanjore District

Comparative Cost of certain selected Buildings

Abbreviations P. denotes Pacca; K.P. Kacha Pacca; K. Kacha, F.M. Flat mud T. Terraced, P.L. Planked, P.T. Pent Tiled, P.S. Pent slated, P.S.H. Pent Shingled, P.S.P. SH. Pent Split Shingled; R. Rubble, D.S. Dry Stone, C. Concrete, B.F. Brick Flat; F.L. Flagged, D.HJ. Dhajji, ie, Timber frame work filled in with mud & stone masonry, C.I. 22" Corrugated Iron 22 B. W. G. I.N. Inner; O. outer U.P. Upper, G.R. Ground.

9577/80

Division	Locality	Name of Building	Single or Double Storyed	Description & height of walls &c. Foundation		Plinth		Walls to top of wall plate		Roof	Floor	Cost	Area	Rate per superficial foot
		3	4	5		6		7		8	9	10	11	12
					ft.		ft.		ft.				Supl. ft.	
Negapatam	Vedarnium	Vedarnium Cutcherry	Single	P	4	P	3¾	P	13	Tiled	Brick in Chunam	12,092	4,285	3·055
	Munnargudy	Hospital	Do.	P	1½	P	1¾	P	8¼	do	BF	1,090	610 7/8	1·783
	Do.	Cookroom	Do	P	2	P	"	P	7¼	do.	BF	490	251¼	1·952
	Do.	Jail Latrine	Do.	P	1½	P	"	P	5½	do	BF	540	185½	2·918
	Needamungalum	Police Station	Do.	P	3¾	P	1½	P	13¾	do	BF	1,562	702 5/8	2·225
	Do.	Hospital	Do	P	1½	P	1¾	P	8¾	do	BF	1,103	607½	1·815
	Do	Cookroom	Do	P	2	P	"	P	6½	do	BF	492	310¾	1·582
	Do	Jail Latrine	Do	P	1½	P	"	P	5½	do	BF	556	378	1·470
	Kotoor	Kotoor Police Station	Do	P	4¼	P	1½	P	9	Semi circular dome	BF	1,220	768¾	1·586
	Munnargoody	Police Hospital	Do	P	3	P	2	P	14	Tiled	BF	1,009	748	1·348
	Puttucotta	Talug Cutcherry	Double	P	4½	P	2	P	11½	Terraced & PT	BF	24,088	12,776¾	1·880
	Do	Munsiffs Court	Single	P	4	P	1½	P	15	Flat & PT	BF	2,500	3,519	0·710

9577/84

Superintending Engineer's Office
5th Circle
Trichinopoly 18th July 1879

G. J. Manson.
For Ag Superintending Engineer

6

Tanjore District

Comparative Cost of Certain selected Buildings

Abreviations P. denotes Pucca; K P Kacha Pucca, K Kacha, F.M Flat mud T. Terraced, P.L. Planked, P.T. Pent Tiled, P.S. Pent slated, P.S.H. Pent Shingled, P.S.P. SH. Pent Split Shingled; R. Rubble, D.S. Dry Stone, C. Concrete, B.F. Brick Flat; F.L Flagged, D.HJ Dhajji, ie, Timber frame work filled in with mud & stone masonry, C.I 22" Corrugated Iron 22 B.W.G. IN Inner; O outer U.P. Upper, GR. Ground.

Division	Locality	Name of Building	Single or Double Storyed	Description & height of walls &c					Cost	Area	Rate per superficial foot
				Foundation	Plinth	Walls to top of wall plate	Roof	Floor			
		3	4	5	6	7	8	9	10	11	12

Statement showing the Comparative cost of Certain selected Buildings

in the

I have the honor to be
Sir
Your Most Obdt. Servt

G J Manson
for Supg Engineer
5th Circle

5th Circle

G.O. 11-10-77 No. 3577 Tr

Tanjore District

atement showing
the Comparative cost o
Certain selected Build

No. 844 T.J. Supg Engrs Office 5th Circle
Trichinopoly 18th July 1879

From

The Supg Engineer [illegible]
5th Circle

To

The Chief Engineer
P. W. Department
Madras.

Roads & Buildings

Enclo - 2 -

Sir,

With reference to G. O. No. 179W dated 1st June 1877 and to your Reminder No. 1841 of the 16th May 1879 calling for the Statement of the cost of selected Buildings and Bridges in the Tanjore District, I have the honor to forward herewith the Statements in question, and to inform you that only the Buildings &c for which the requisite information is available have been included in the Statement -

I have the honor to be
Sir
Your Most Obdt Servt

G. J. Manson
for Supg Engineer
5th Circle

Roads & Buildings

From
The Supg Engineer
5th Circle

To
The Chief Engineer
P. W. Deptt
Madras

G. 11-10-79 No 2577 ½

No 844 T. J

Dated 18th July 1879.

Enclo - 2 -

Selected Buildings and Bridges -

Forwarding State=
=ments showing the cost of the —— in Tanjore District -

Complete

21/7.

2 | -

24 B

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arch 5 Centre, 2'-6"
thick at Crown
3'-6" at Springing
14'-8" Rise)
No flooring ..
Approache
18' high guarded
with iron rails
in Wooden posts.
Wooden tow path.
on both sides
on Iron brackets.

31st March 1879.

2577

Form
D.S. 1 Circle

1

Public works Department

Memorandum of Construction and Cost of bridges exceeding 50 feet in length in the Kistnah District

Executive Division	Names of bridge over River or Nullah and situation	Date of Completion	Description of bridge	Kind and depth of foundation	Number and size of spans	Width of Roadway between parapets or Railings	Height of Roadway above foundation or River bed	Total length of bridge	Total Cost Rs.	Cost per 100 feet of length Rs.	Remarks
2	10 P	6	14 8	8	7	5	6	5	4	5	7
	Anderson's Bridge on Hyderabad Road 1st mile from Masulipatam Fort.	1866	Built on Sultanagar am swamp of brick plastered arches 3 centre 1'-6" thick 1-6" rise. Flooring inverts under the arches 1ft thick or 2ft concrete & extending 8 feet beyond piers on either side with 5 retaining walls, Piers prolong on lower side to carry Iron Conduit supplying Bunder Municipality	Concrete 1' and Brick Masonry on swampy 3' deep	12 spans of 8 feet	24'-0"	11-9	175-0	14100	8057.142	
	Bridge head of Ellore Canal at Bezwadah	not known	Materials rubble with brick arch and parapets, no floor. Arch 3 centre, 3'-2" thick at crown & 6'-0" at springing rise 13'-0"	Rubble masonry on sand 6' deep	Single span 60' feet	20'-6"	25'-0"	152'-0"			Built in about 1853/54 The records here cannot show the total cost. but those in late District Engr's office might show it.
	Bridge at Munjuluru	1867	Built over swamp materials brick plastered, arches 3 centre, 1'-6" thick 2'-6" rise. Flooring 2' thick concrete & brick extending 17' beyond piers on lower side 6" on upper do.	Brick masonry on clay 6'-3" deep	5 spans of 12 feet	15'-0"	7'-3"	104'-0"	3000	2884.615	Cost includes Rs 850 supposed cost of two arches and one abutment left standing after cyclone to which 3 arches were added costing Rs. 2150.
	Bridge over Ellore Canal at Parikiow	1876	Materials rubble with cut stone facing. brick arch & parapets Cut stone Coping & Stringing Course	Rubble masonry on hard gravelly soil 6' deep	One span 50 feet	17'-0"	24'-0"	112'-0"	14178	12658.93	
	14 . 6		141								

McGonegal Asst Engr.
Asst to Sup Engr 1st Circle

C J Potter
Ex Engr E Delta division

Enm B. 1. 24 f/11-10-79

9577
99

Public works Department Kistna,

Comparative Cost of Certain Selected buildings

Abbreviations R.S.M. denotes Roughstone in mud; R.S.C. Roughstone in Chunam; P.B.M. Pacca Bricks in mud; P.B.C. Pacca brick in Chunam; T. Terraced; H.T. Hip Tiled; C.S.P. Cutstone paving; E.R. Earthen rammed; C. Concrete; C.P. Plastering with Chunam.

Division	Locality	Name of building	Single or double storied	Description and height of walls &ca Foundation		Plinth		Walls to top of wall plate		Roof	Floor	Cost Rs.	Area S.P.Ft Feet	Rate per Superficial foot	Remarks
					Feet		Feet		Feet						
Eastern Delta Division	Bezawadah	Range Office Eastern Delta	Single	R.S.C	3-6	R.S.C	2-6	R.S.C	14-6	H.T.	C.S.P.	7350	4695	1.565	These are the only two works of which the Cost is correctly known all the others are the book values, which may be correct or not but are probably only estimated values.
	Do.	Workshop D.P.W.	Do.	R.S.M.	2-6	None	..	R.S.C	12-6	H.T.	E.R.	5290	14139	.375	
	Do.	Travellers Bunglow	Do.	R.S.C	3-0	R.S.C.	2-9	R.S.C	14-2	T.	C.P.	2260	3657	.617	
	Do.	Telegraph office	Do.	R.S.C	2-6	R.S.C.	1-2	R.S.C	14-6	T.	C.P.	1130	2270	.500	
	Gannavaram	Travellers Bunglow	Do.	P.B.M	2-0	P.B.M.	1-6	P.B.M.	15-6	H.T.	C.P.	5300	3192	1.66	
	Kaukipadu	Do.	Do.	P.B.M.	2-0	P.B.M	2-6	P.B.M	12-6	H.T.	C.P.	5000	2512	1.99	
	Parikeed	Converted into D.P.W. Resthouse	Do.	P.B.M.	2-0	P.B.M.	3-0	P.B.M	12-6	H.T.	C.P.	4250	2638	1.611	
	Weyoor	Traveller's Bunglow Converted into D.P.W. Rest house	Do.	P.B.M	2-0	P.B.M.	2-6	P.B.M.	12-6	H.T.	C.P.	3000	3315	.904	
	Gudivadah	D.P.W. Resthouse	Do.	P.B.M	2-0	P.B.M	2-0	P.B.M.	13-0	H.T.	C.P.	2670×	3640	.733	× Built by private party many years ago bought by Depmt. in 1874 for Rs. 2000 Rs. 670 was actually spent for Improvements

31st March 1879

M Young Asst Engr.
Asst. to Sup. Engr. 1st Circle

C J P [illegible]
Executive Engr. E D Dn.

Enclosures in a letter No 105 H.S. dated 19th April from ~~the~~ Ag Supg Engr 1st Circle

[illegible] 54 9 11-10 79.

NO. 105 H.S. **Roads and Buildings.**

FROM,

THE ~~OFFG.~~ Ag SUPERINTENDING ENGINEER
First Circle
GODAVERY DISTRICT.

9877/31

TO,

THE CHIEF ENGINEER

FOR ROADS AND BUILDINGS.

Enclo. 7

2 Statements of Selected Buildings & Bridges in the Kistna Eastern Delta division

CAMP DOWLAISHWERAM, 19th April 1879.
Despd 21st

SIR,

As promised in the latter part of para 2 of letter No 83 dated 19th July 1878, from the late Superintending Engineer Kistna District, I have the honor to forward herewith, 2 Statements of Selected Buildings and Bridges, in the Kistna Eastern Delta Division.

2 Besides the works, included in the above statements, it appears, Colonel Hasted selected also the District Court House at Masulipatam and Nedumole Traveller's Bangalow, which Mr Peters says have been omitted for want of information as to the cost of their construction which not being ascertainable from the office records, the Collector Kistna has been asked for the same

3

I have the honor &c

Sir

your most obedient servant

Ag Supg Engineer 1° Circle

Campd

Kedu

Roads and Buildings.

FROM,

THE ~~OFFG.~~ ag SUPERINTENDING ENGINEER
1st Circle
~~GODAVERY DISTRICT.~~

TO, G.O. 11-10-77 No. 2577 &c

THE CHIEF ENGINEER

FOR ROADS AND BUILDINGS.

DATED
RECEIVED 19th April 1879.

No. 105 H.S.

ENCLOSURE. 3

Buildings & Bridges selected. Statements 3 — Forwards two — in the Kristna Eastern Delta Division

Recd

Complete

Compiled 18/4/ ...

24

12 9577/33

D.E. Ganjam (Buildings)
+ " Kistna
+ " Nellore
. Cuddapah
+ . Salem (Bridges)
+ " Tanjore
. Nilgiris

3 Remdr. Sent. 12-4-78.
4 + ——— 9-7-78.

To Reply

Kistna – (Delta Divns) both
Tanjore. (Both)
Bellary (Bridges)

+ Kistna – (~~Krishna~~ Delta Divns.) both
~~Salem~~ – (Bridges)
⊕ Tanjore : (Both)
× ~~Nellore (Bridges) for the [illegible]~~
Bellary (Bridges)

Kistna (Delta Divn)
Tanjore (Both)
Bellary (Bridges)

T.O.

~~Frany~~

The Superintg. Engl.
[illegible] Dept.

Sir,

~~[illegible]~~

~~[illegible] copies of [illegible]~~

~~[illegible]~~

A Portion of the Report [illegible] by the [illegible] were [illegible] & circulated [illegible]
G.O. No. 4 W. 3-1-79.

Others now under compilation

Kistna - C. No. 3390. 28-4-79.

Reminders sent to—
Memo. 1841. 16-5-79.

S. E. Kistna. (Memo. sent on C. No. 3390 of 28-4-79. for the W. Delta Divn.
(C. No. 5531. 28-7-79.)

S. E. 5th Circle - for Tanjore - Buildings and bridges.
(Reply to C. No. 5489 - 28-7-79)

S. E. 2nd Circle - Bellary - for bridges

on the 15 May '79.

18/5/79

[illegible]

11/8.

Remd. sent. No. 1841/1 - 19-8-79.
— — — " 1841/2, 1-10-79.

1 Part disposed of in G.O. No. 4 W. 3-1-79.

Suppl. sent to Mess. 11-10-79.

Await - [illegible]

11/8

Put this up with G.O. No. 2577 W. 11-10-79.

No. 2576 W. P. W. Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the 11th October 1879, ~~No.~~

READ the following papers:—

From the S. E., First Circle, dd 19th Apl. '79, No. 105 K.S.
——— Do ———, dd 21st July '79, " 668 K.S.
——— S. E., Fifth Circle, dd 18th ———, " 844 T.J.

Ordered to be forwarded to the Govt. of India, in continuation of Docket No. 5 W, dd 3rd January 1879

To Supg. Engineers
" Cons. Architect
" Chief Engr. for Irrign.
" Cons. Engr. for Rys.
" Exr. of R.W.A.
} for information

Docket No. 2577 W., dd 11th Oct. /79

Forwarded accordingly.

11/10

11/10

Despd
1-11-79

Docketed to Simla
1-11-79

13/14/7

1381/34

Clos 5409 &

Govt. of (1879) Madras.

PUBLIC WORKS.

13-10-79

To

Dated

Issued

Recd. Encl.

G. O., 11 Octr 1879, Nos. 2576 &/2577

Nos. 24-26

Statement of areas and cost of buildings and memorandum of construction and cost of bridges forwarded to the Eng I.

Statement of areas and cost of buildings and memorandum of construction & cost of bridges.

6-11-79

C