7. 10. 99 ✓

5/2/24 B III ✓

13-8-26 B III ✓

10-11-27 III ✓

Public Works (1896) Department.

G.O., No. 810

Dated 9—1—96

[Despatch Abstract]

Khapadi channel: Prov: L. and W.

Dep^tt returning with remarks, the estimates for improvements to the ——, North Arcot D^t, recorded with the remark that as the Vellore Municipality declines to contribute towards the Cost of the work, the plans and estimates must stand over.

BACK PAPERS.

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

FURTHER PAPERS.

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

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1896} Madras.

PUBLIC WORKS.

Dated January, 9th.

Recd. *Encl.*

G.O. No. 81 W., 9th Jan. 1896.

JANUARY.

Thorapadi Channel

Proceedings, Local and Municipal Department, returning with remarks the estimates for improvements to the —, North Arcot district, recorded with the remark that, as the Vellore municipality declines to contribute towards the cost of the work, the plans and estimates must stand over.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

G.O., Mis. No. 2382 L., dated 7th December 1895.

Read—the following :—

Endorsement of the Public Works Department, dated 6th December 1894, No. 3920 C., on G.O., No. 861 I., dated 8th November 1894.

Letter from the President, District Board, North Arcot, dated 8th April 1895, No. 155 In.

ABSTRACT.—Submitting a copy of the resolution in regard to the repair of the Thorapadi tank surplus channel.

Endorsement of the Public Works Department, dated 20th April 1895, No. 1592 C.

ABSTRACT.—Transferring letter from the Executive Engineer, North Arcot Division, requesting instructions with regard to the construction of a new sluice in the Thorapadi channel.

Endorsement of the Collector of North Arcot, dated 7th June 1895, Dis. No. 764 Eng.

ABSTRACT.—Submitting a copy of the letter from the Chairman, Municipal Council, Vellore, regarding the Thorapadi tank repairs.

Endorsement of the Public Works Department, dated 17th September 1895, No. 998 D.

ABSTRACT.—Transferring note by the Chief Engineer stating that the entire cost of the Vellore protective works should be borne by the municipality.

G.O., Mis. No. 1820 L., dated 3rd October 1895.

Endorsement of the Consulting Engineer for Railways, dated 1st November 1895, No. 3476.

ABSTRACT.—Forwarding copy of a communication from the Agent, South Indian Railway, Trichinopoly, regarding the incidence of the cost of repairing and improving the Thorapadi tank and supply channel at Vellore.

Order—Mis. No. 2382 L., dated 7th December 1895.

The plans and estimates forwarded with endorsement No. 3920 C., dated 6th December 1894, by the Public Works Department will be returned to that department with the following remarks :—

(1) The District Board, North Arcot, is willing to pay its fair share of the repairs and improvements provided for in the estimates, on condition that the Municipal Council, Vellore, will also pay a fair share, basing this condition on the ground that the works proposed are mainly protective of Vellore town. This the Municipal Council refuses to do. The South Indian Railway Company has refused to comply with a request to contribute.

(2) Under these circumstances the suggestion in paragraph 10 of the Chief Engineer's note, dated 11th March 1892, in G.O. No. 937 I., Public Works, dated 4th November 1893, cannot be carried out.

(True Extract.)

(Signed) W. W. PHILLIPS,
for Chief Secretary.

ORDER—No. 81 W., dated 9th January 1896.

Recorded with the remark that, as the proposed improvements to the Thorapadi channel are intended for the protection of the town of Vellore and as the Municipality declines to contribute towards the cost of the work, the plans and estimates must stand over.

(True Extract.)

Under Secy. to Govt., P.W.D.

To the Chief Engineer for Irrigation.
" Consulting Engineer for Railways.
" Superintending Engineer, IV Circle.
" Local and Municipal Department.
" Revenue Department.

Exd. T. K. Narayana Aiyangar.
Spare Copies

PUBLIC WORKS DEPARTMENT.

No 81 W dt 9th January 1896

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following

Proceedings of Govt., Local & Municipal Dept. No. 2382 L. Mis. d/7-12-95.

Recorded with the remark that as the proposed improvements to the Thorapadi channel are intended for the protection of the town of Vellore and as the Municipality declines to contribute towards the cost of the work the plans and estimates must stand over.

The Chief Engineer for Irrigation.
,, Consulting Engineer for Rys.
,, Suptg. Engineer IV Circle.
,, Local & Municipal Dept.
,, Revenue Department.

(40—4,000—2-11-95.)

Cw 9871

H.6

Improvements to Mangalore Channel, Ki Oya District

D.W

It has now been decided whether the estimate of Rs 16,500 for improvements to the Mangalore Channel shall be carried out from Provincial funds, or whether the matter is to be allowed to drop.

Engineer.

8/W Cw

13/12/95

As the matter is one entirely for the District Board and the Municipality it ought I think be allowed to drop.

CK 451

17/12/95

500—6-11-95

Local and Municipal Department.

CHIEF SECRETARIAT MADRAS.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ ~~the following paper~~ :—

Again Endorsement of the Public Works Department, No.3920 C d/ 6" December 1894 on G.O.No.861 I d/8" November 1894.

Letter from the President, District Board, North Arcot, d/8"April 1895 No.155/In., submitting a copy of the resolution in regard to the repair of the Thorapadi Tank surplus channel.

Endorsement of the Public Works Department, d/20"April 1895 No. 1592 C, transferring letter from the Executive Engineer North Arcot Division requesting instructions with regard to the construction of a New Sluice in the Thorapadi Channel.

Endorsement of the Collector of North Arcot, d/7" June 1895 Dis.No.764/Eng., submitting a copy of the letter from the Chairman, Municipal Council, Vellore, regarding the Thorapadi Tank repairs.

Endorsement of the Public Works Department, d/17" September 1895 No.998 D., transferring note by the Chief Engineer, stating that the entire cost of the Vellore protective works should be borne by the Municipality.

Again G.O.No.1820 L.Mis.d/ 3" October 1895.

Endorsement of the Consulting Engineer for Railways, d/1" Nov. 1895 No.3476, forwarding copy of a communication from the Agent, S.I.R., Trichinopoly, regarding the incidence of the cost of repairing and improving the Thorapadi Tank and supply channel at Vellore.

O R D E R, No.2382 L.Mis. dated 7" December 1895.

The plans and estimates forwarded with Endorsement No.3920 C dated 6" December 1894 by the Public Works Department will be returned

returned to that Department with the following remarks:-

(1)The District Board,North Arcot,is willing to pay its fair share of the repairs and improvements provided for in the estimates,on condition that the Municipal Council,Vellore,will also pay a fair share,basing this condition on the ground that the works proposed are mainly protective of Vellore town. This the Municipal Council refuses to do. The South Indian Railway Co. has refused to comply with a request to contribute.

(2)Under these circumstances the suggestion in para.10 of the Chief Engineer's note dated 11" March 1892 in G.O.No.937 I, Pub.Works,dated 4" November 1893,cannot be carried out.

(True extract)

B B Phillips
Ag.Asst.Secretary,
for Chief Secretary.

To

The Public Works Department,

with 25 enclosures returned.

ESTIMATE FORM—Calculation Sheet.

TREASURY COLLECTOR 9-FEB 93 NORTH ARCOT

Number of Section.	Area of present Section.	Area of proposed Section.	Difference.	Mean Area.	Length.	Cubical Contents.	Remarks.
1	2	3	4	5	6	7	8
			Torapadi Channel				
			Repairing the Channel bank (vide Sheet No 2)				
From bank to C.S.No 1	"	"	18·00	18·00	800	14400	
C.S 1 to 1500	"	"	60·00	39·00	100	3900	
1500 to 2100	"	"	60·00	60·00	600	36000	✓
2100 to C.S 2	"	"	49·00	54·50	200	10900	✓
at 2400	"	"	12·37	6·18	100	618	✓
C.S No 3	"	"	"	"	"	"	✓
4	"	"	"	"	"	"	✓
5	"	"	78·37	39·18	25	980	✓
6	"	"	35·34	56·85	50	2843	✓
C.S 6 to 3100	"	"	90·00	62·67	50	3134	✓
3100 to C.S 7	"	"	78·37	84·18	650	54717	✓
C.S. 7 to 4300	"	"	175·50	126·93	550	69812	✓
4300 to C.S 8	"	"	122·30	148·90	100	14890	✓
C.S-8 to 9	"	"	115·50	118·90	300	35670	✓
9 to 10	"	"	136·50	126·00	300	37800	✓
10 to 11	"	"	144·00	140·20	50	7010	✓
11 to 12	"	"	21·08	82·64	100	8254	✓
13	"	"	"	"	"	"	Earth to be utilized from cutting
14	"	"	175·50	87·75	150	13163	✓
15	"	"	62·34	118·92	750	89190	-
16	"	"	62·34	31·17	10	312	312
17	"	"	"	"	"	"	"
18	"	"	"	"	"	"	"
19	"	"	"	"	"	"	"
20	"	"	"	"	"	"	"
21	"	"	"	"	"	"	"
22	"	"	78·37	39·78	100	3918	3918
23	"	"	102·37	90·37	300	27111	27111
						434622	31341

To be employed for all earth-work (Tank and Channel) estimates when sectional measurements are used and when the quantities are not taken out direct.

Estimate Form.

Calculation Sheet of Cross Sectional Areas and Contents of Earth-work.

To accompany the Detailed Estimate No. of 189 –9 , for *

* Here enter the name and description of work in full.

ESTIMATE FORM—Calculation Sheet.

Number of Section.	Area of present Section.	Area of proposed Section.	Difference.	Mean Area.	Length.	Cubical Contents.	Remarks.
1	2	3	4	5	6	7	8
						434622	31341
			102·37				
24	"	"	78·37	90·37	300	27111	27111
25	"	"	48·00	63·18	300	18954	18954
26	"	"	31·50	39·75	300	11925	11925
27	"	"	18·00	24·75	300	7425	7425
28	"	"	"	9·00	10	90	90
29	"	"	48·00	24·00	200	4800	4800
30	"	"	62·32	55·16	300	16548	16548
31	"	"	57·37	59·84	300	17952	17952
C.S. 31 to 11100	"	"	18·00	37·68	100	3768	3768
11100 to C.S 32	"	"	129·37	73·68	200	14736	14736
33	"	"	"	86·25	300	25875	25875
34	"	"	28·56	14·28	50	714	714
35	"	"	39·37	33·96	300	10188	10188
35 to meet the S.I.R.			culvert say			20000	20000
			Total of Earthwork			614708	211427
			Earth required for raising the channel banks				403281

STATION _____

Dated _____ 189 .

_____

Executive Engineer,

_____ Division.

ESTIMATE FORM—Calculation Sheet.

Number of Section.	Area of present Section.	Area of proposed Section.	Difference.	Mean Area.	Length.	Cubical Contents.	Remarks.
1	2	3	4	5	6	7	8
			Torapadi Channel				
			Clearing silt in the channel (Vide Sheet No 8)				
0 to 860	"	"	"	"	860	"	
860 to 4A	"	"	90·00	45·00	300	13500	Rocky soil
5A	"	"	"	"	690	"	✓
6A	"	"	"	"	300	"	✓
7A	"	"	15·00	7·50	300	2250	✓
8A	"	"	"	"	300	"	✓
9A	"	"	"	"	300	"	✓
10A	"	"	"	"	300	"	✓
11A	"	"	"	"	300	"	✓
12A	"	"	"	"	300	"	✓
13A	"	"	"	"	300	"	✓
14A	"	"	"	"	350	"	✓
15A	"	"	20·00	10·00	250	2500	✓
16A	"	"	25·00	22·50	267	6008	Rocky soil ✓
17A	"	"	"	12·50	83	1038	✓
18A	"	"	"	"	300	"	✓
19A	"	"	"	"	300	"	✓
20A	"	"	"	"	300	"	✓
21A	"	"	"	"	300	"	✓
22A	"	"	"	"	300	"	
23A	"	"	375·00	"	350	"	✓
24A	"	"	380·00	377·50	300	113250	✓
25A	"	"	250·00	315·00	300	94500	✓
26A	"	"	144·00	197·00	300	59100	✓
27A	"	"	92·67	118·34	300	35502	✓
28A	"	"	104·00	98·34	300	29502	✓
29A	"	"	66·69	85·34	300	25602	✓
						382752	

P. W. D. Form, No. M 205.

5,000—21-3-92.

To be employed for all earth-work (Tank and Channel) estimates when sectional measurements are used and when the quantities are not taken out direct.

Estimate Form.

Calculation Sheet of Cross Sectional Areas and Contents of Earth-work.

To accompany the Detailed Estimate No. of 189 –9 , for *

* Here enter the name and description of work in full.

ESTIMATE FORM—Calculation Sheet.

Number of Section.	Area of present Section.	Area of proposed Section.	Difference.	Mean Area.	Length.	Cubical Contents.	Remarks.
1	2	3	4	5	6	7	8
						382752	
30 A	"	"	61·44	63·96	300	19188	
31 A	"	"	45·81	53·62	300	16086	
32 A	"	"	38·00	41·90	300	12570	
33 A	"	"	103·50	70·75	300	21225	
34 A	"	"	140·00	121·75	300	36525	
35 A	"	"	126·00	133·00	300	39900	
36 A	"	"	65·00	95·50	300	28650	
37 A	"	"	35·00	50·00	300	15000	
38 A	"	"	61·50	48·25	300	14475	
39 A	"	"	50·00	55·75	600	33450	
40 A	"	"	430·00	"	"	"	
41 A	"	"	230·00	330·00	300	99000	
42 A	"	"	265·00	247·50	300	74250	
42A to end	"	"	"	132·50	1200	159000	
		Total of b of Cutting				952071	

Station _____

Dated _____ 189 .

_____

Executive Engineer,

_____ *Division.*

ESTIMATE FORM—Calculation Sheet.

TANK RESTORATION & IRR. CENTRAL OFFICE
Rs No. 1-2-0
28 MAR 01

Number of Section.	Area of present Section.	Area of proposed Section.	Difference.	Mean Area.	Length.	Cubical Contents.	Remarks.
1	2	3	4	5	6	7	

Thorapadi Channel

Land required including Margin of left or either side of—

C.S No. 1	0					area	
2	34	34	900	"	"	30600	
3	34	34	300	"	"	10200	
4	32	33	300	"	"	9900	
		34	100	"	"	3400	
5	36						
		34	50			1700	
6	32						
		32	700			22400	
7	32						
		32	600			19200	
8	4						
9 to 14	0						
14 to Bridge	50	50	800			40000	

Total area of new flood bank B 137400

Below area Road

16	80						
		75	300			22500	
17	70						
		35	300			10500	
18	Nil						
		15	300			4500	
19	30						
		15	300			4500	
20	0		carried Over			42000	

P. W. D. Form, No. M 205.
5,000—21-3-93.

To be employed for all earth-work (Tank and Channel) estimates when sectional measurements are used and when the quantities are not taken out direct.

Estimate Form.

Calculation Sheet of Cross Sectional Areas and Contents of Earth-work.

To accompany the Detailed Estimate No. of 189 -9 , for *

* Here enter the name and description of work in full.

ESTIMATE FORM—Calculation Sheet.

Number of Section.	Area of present Section.	Area of proposed Section.	Difference.	Mean Area.	Length.	Cubical Contents.	Remarks.
1	2	3	4	5	6	7	8
			Brought forward			42000	
20	"						
		5	300			1500	
21	10	10	300			3000	
22 to 24	"	"	"				
		20	100			2000	
25	20						
		30	300			9000	
26	40						
		35	300			10500	
27	30						
		30	300			9000	
28	30						
		33	300			9900	
29	35						
		23	300			6900	
30	10						
		10	300			3000	
31	"						
		15	300			4500	
32	30						
		40	600			24000	
34	50						
		67	300			20100	
35	85						
			Brought forward			137400	as per page I
			Total			145400	
			add for sundry portions			65680	
			Grand total			348480 cu ft. or 8 acres	

TANK RESTORATION SCHEME
Rate 4-5-0
28 MAR. 91
CENTRAL OFFICE.

Station Vellore
Dated 23rd March 1894.

Unauthorised
Supervisor
Executive Engineer,
No V Party T.B. Division.

ESTIMATE FORM—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet. Length.	Breadth.	Depth.	Area or Contents.	Total Quantity of each description of Work.
1	2	3	4	5	6	7
Torapadi Channel						
Providing revetment to the Channel bank						
Dry Stone work						
0 to 2000		"	"	"	"	
2000 to 3050		1050	1½	8	12600	
Total cft of Dry Stone work						12600
Caracai plantation on both slopes of the flood bank above Ariani Road leaving 3 feet from top measured on Slope and also at toe on average say 5000×20						100,000 Sqft

[P. W. D. Code, Edition of 1886—Paras. 921, 931.]

P. W. D. Form No. M 204.

ESTIMATE FORM.—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet.			Area or Contents.	Total Quantity of each description of Work.
		Length.	Breadth.	Depth.		
1	2	3	4	5	6	7

10,000—25-9-90.

ESTIMATE FORM—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet.			Area or Contents.	Total Quantity of each description of Work.
		Length.	Breadth.	Depth.		
1	2	3	4	5	6	7
Yorapadi Channel						
Providing additional archway to the existing road culvert No 1 across Arani Road						
Concrete work						
Under abutment	1	21	7	4	616	✓
—Do— wings	2	16	6½	4	832	✓
—Do— cutwaters	2	7	1½	4	84	✓
Total cft of concrete work						1532 ✓
Brick work in mortar						
Wing walls	2	13	3¾	8¾	871	✓
Abutment	1	24½	5	4·15	508	✓
Skewback to arch work	1	25	4½	1¼	141	✓
Backing to arch work rectangular portion	1	25	4	1¾	175	✓
Do — do — over the existing pier	1	26	2	1¾	91	✓
Spandrils	2	26	6	1	312	✓
Face walls	2	19½	3	4½	81	✓
Blocking Course	2	38	3	1½	342	✓
Parapet walls	2	38	2	2½	380	✓
Cornices	2	40	1	1	80	✓
Cut water	2	2½	2	4·15	42	✓
Caps to cutwaters	2	2½	2	1½	15	✓
Retaining walls	2	19	2	3	228	✓
					3266	✓
Deduct for archway	2	6·7 (area)	×3		414	✓
Net Total cft of Brick work in Mortar						2852
Arch work						
over pier and abutment	1	22	32	1½	1056	
Total cft of arch work						1056 ✓

[P. W. D. Code, Edition of 1886—Paras. 921, 931.]

P. W. D. Form, No. M 204.

ESTIMATE FORM.—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet. Length.	Breadth.	Depth.	Area or Contents.	Total Quantity of each description of Work.
1	2	3	4	5	6	7
Plastering to exposed faces Sq yds						1800
Dry Stone Work						
Floor	1	18	28	2	1008	
Total cft of Dry Stone Work						1008
Earth work for excavating foundations for the proposed work and Removing & reforming the road way with Metalling						Lumpsum 30 Rs
Demolishing the old work wherever necessary and connecting old work with new						Lumpsum 20 Rs

16,000—26-9-90.

ESTIMATE FORM—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet. Length.	Breadth.	Depth.	Area or Contents.	Total Quantity of each description of Work.
1	2	3	4	5	6	7
Torapady Channel						
Providing an additional archway to the existing culvert across jail road.						
Concrete work						
Under abutment	1	20	7	4	560	
—do— wing walls	2	28	6	4	1344	
—do— cutwaters	2	7	1½	4	84	
—do— do— in front end	1	6½	1¼	4	33	
—do— do— in rear end	1	3½	1¾	4	25	
Total cft of concrete work						2046
Brick in mortar						
Wing walls	2	26	3¼	9¾	1648	
Abutment	1	23½	5	4	470	
Skew backs to arch work	1	24	4½	1	108	
Backing to arch work rectangular portion	1	25	4	3¼	325	
do— do— over the existing pier	1	25	2	3¼	163	
Spandrils	2	25	8	1½	600	
Face walls	2	22	2½	5¾	633	
Blocking course	2	48	2½	1	240	
Parapet walls	2	48	2	2	384	
Cornice	2	50	1	1	100	
Cutwaters	2	5	1	4	40	
Half cutwater in front	1	4½	¾	4	14	
do— in rear	1	3	1	4	12	
Capes to cutwater	2	5	1	¼	3	
do— do— in front	1	4½	¾	¼	1	
do— do— in rear	1	3	1¼	¼	1	
Retaining walls	2	21½	2	3	258	
					5000	

[P. W. D. Code, Edition of 1886—Paras. 921, 931.]

P. W. D. Form, No. M 204.

ESTIMATE FORM.—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet. Length.	Breadth.	Depth.	Area or Contents.	Total Quantity of each description of Work.
1	2	3	4	5	6	7
					5000	
Deduct for archway	2	8½ area	2½		445	
Net Total cft of Brick in Mortar						4555
Arch work						
over pier and abutment	1	26	30	1½	1170	
Total cft of arch work						1170
Plastering to exposed faces Say Sqft						2000
Dry Stone work						
Floor	1	20½	26	2	1066	
Total cft of Dry Stone work						1066
Earth work for excavating foundations for the proposed works & removing & reforming the roadway with metalling						Lump Sum Rs30
Demolishing old work wherever necessary and connecting old work with new						Do Rs20

16,000—25-9-90.

ESTIMATE FORM.—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet. Length.	Breadth.	Depth.	Area or Contents.	Total Quantity of each description of Work.
1	2	3	4	5	6	7
Torapadi Channel						
Constructing Drop No I (above the Aranis road culvert)						
Concrete stone jelly in mortar						
Under body wall	1	68	8	3½	1904	
— Do — front returns	2	10	5¾	3½	403	
— Do — front wings sloped portion	2	3½	5⅞	3½	144	
— Do — Do — straight portion	2	6	6	3½	252	
— Do — rear wings sloped portion	2	9½	5⅜	3½	354	
— Do — rear returns	2	9½	4¾	3½	316	
Retaining wall	1	74	2	3	444	
Apron	1	71	10½	2	1491	
					5308	
Deduct for cement concrete floor	1	73	13½	¾	739	
Net Total cft of Concrete Stone jelly in Mortar						4569
Cement concrete work						
over apron	1	73	13½	¾	739	
Total cft of Cement concrete work						739
Brick work in Mortar						
Body wall	1	70	4½	5 7/10	1796	
Front returns	2	10½	2 7/8	10 7/10	646	
Front wings sloped portion	2	4½	3	11 7/20	316	
— Do — straight portion	2	6	3	12 7/10	457	
Rear wings sloped portion	2	11	2 3/8	8 7/8	513	
Rear returns	2	7¼	2⅜	5	172	
Total cft of Brick in Mortar						3900
Plastering to exposed faces Say Sqft						3000
Dry Stone work						
Apron	1	82	11	1½	1353	
Revetments in front including foundation	1	100	9.1	1½	1365	
Revetments in rear including foundation	1	80	9.1	1½	1092	
Total cft of Dry Stone work						3810

[P. W. D. Code, Edition of 1886—Paras. 921, 931.]

P. W. D. Form, No. M 204.

ESTIMATE FORM.—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet. Length.	Breadth.	Depth.	Area or Contents.	Total Quantity of each description of Work.
1	2	3	4	5	6	7
Removing repacking stones at site	1	54	4	1½	324	324
Gravel backing to revetment 2457/3						819
Earthwork for excavating foundations &c and forming banks as per Site Sundry of Drop No 1						L.S. Rs 100
Baling water 3 Picottahs day and night for 10 days including Sundry expenses						L.S Rs 50

10,000—25-9-90.

[P. W. D. Code, Edition of 1886—Paras. 921, 931.]

P. W. D. Form, No. M 204.

ESTIMATE FORM.—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet. Length.	Breadth.	Depth.	Area or Contents.	Total Quantity of each description of Work.
1	2	3	4	5	6	7
Torapadi Channel						
Constructing Drop No II 50' above the jail road culvert						
Concrete (Stone jelly in mortar)						
Under body wall	1	58	5	3½	1015	✓
— do — front returns	2	7	5 3/4	3½	282	✓
— do — front wings Sloped portion	2	3¾	5 7/8	3½	154	✓
— do — do — Straight portion	2	6	3	3½	126	✓
do — rear wings, Sloped portion	2	8¾	5 3/8	3½	326	✓
do — rear returns	2	9½	4¾	3½	316	✓
Retaining wall	1	64	2	3	384	✓
Apron	1	61	11	2	1342	✓
					3945	
deduct for cement concrete floor	1	63	14	¾	662	✓
Net Total cft of concrete Stone jelly in mortar						3283 ✓
Cement concrete work						
Over apron	1	63	14	¾	662	✓
Total cft of Cement concrete work						662 ✓
Brick work in mortar						
Body wall	1	60	3½	4	840	✓
Front returns	2	11½	2 7/8	10	661	✓
Front wings Sloped portion	2	4	3	11	264	✓
— do — Straight portion	2	6	3	12	432	✓
Rear wings Sloped portion	2	10½	2 5/8	8½	467	✓
Rear returns	2	7¼	2 3/8	5	172	✓
Total cft of Brick work in mortar						2836 ✓
plastering to exposed faces say 5 sq ft						2000 ✓
Dry stone work						
Apron	1	70	12	1½	1260	✓
Revetments in front and rear including foundation	1	166	9·1	1½	2266	✓
Total cft of dry stone work						3526

16,000—25-9-90.

ESTIMATE FORM—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet. Length.	Breadth.	Depth.	Area or Contents.	Total Quantity of each description of Work.
1	2	3	4	5	6	7
Gravel backing to revetment $\frac{2265}{3}$ = 756 cft						
Earth work for excavating foundations &c and forming banks &c as per Sile Survey of 30 plan II						L. S Rs 100
Baling water, 3 Picottalis, day and night for 10 days including Sundry expenses						L. S Rs 50

No. III. **ESTIMATE.—Detail Measurements.**

Detail of Work.	Number.	Measurements in Feet. Length.	Breadth.	Depth.	Area or Contents.	Total Quantity of each description of Work.
1	2	3	4	5	6	7
— Thoraipadi Channel — Tank.						
CONSTRUCTING AN EARTHENWARE PIPE SLUICE AT CROSS SECTION No. 2 and 5.						
CONCRETE. with brick jelly in mortar.						
Under retaining walls in front and rear	2	5½	3	1½	50	
Do. pipes	1	21½	2	1	~~43~~ 38	
Along sides of pipes	2	23	¾	½	~~17~~ 15	
Binders over pipes	2	2⅝	1½	½	4	
Total					107 ~~114~~	
Deductions.						
Deduct for brick on edge in front and rear	2	2	1½	¾	5	
Total Concrete, less deductions, Cubic feet						102 ~~100~~
MASONRY. Brick in mortar.						
Retaining walls in front and rear	2	4	1½	1¾	21	
Brick on edge in front and rear	2	2	1½	¾	5	
Total Masonry, Cubic feet						26
PLASTERING ~~OR POINTING~~.						
Top and faces of retaining walls in front and rear ..	2	6	4	..	48	
Total Plastering ~~or Pointing~~, Square feet						48
CUTSTONE WORK.						
Plug stone	1	2	2	½	2	
Total Cutstone work, Cubic feet						2
Earthwork for excavating foundations, opening and closing the bund, &c.						2500 cft
Earthenware pipes (each 2 feet long and 6" dr.)						12.
Fitting the pipes with Cement						L. S.

ESTIMATE FORM.—Abstract.

Quantity.	Description of Work.	Rate.	Per	Amount.	Total.
1	2	3	4	5	6
		Rs.		Rs.	Rs.
	CONSTRUCTING AN EARTHENWARE PIPE SLUICE AT CROSS SECTION No. 2 and 5.				
1·02					
1·09	Units of Concrete with Stone jelly in mortar	9-8-0	100 C.ft.	10	
·26	Do. of Masonry Brick work in mortar	13-4-0	"	3	
·48	Do. of Plastering ~~or Pointing~~	2-8-0	100 S.ft.	1	
2	Do. of Cutstone work	0-12-0	C. ft.	2	
2·50	Do. of Earthwork	3-0-0	1,000 C.ft	2	
12	Earthenware pipes (each 2 feet long and 6" dr.) ..	1-12-0	each.	21	
	Fitting the pipes with cement		L. S.	1	
				47	
	Contingencies ..			1	
	Supervision ..			2	
Cost of Similar Sluice at C.S. 5	Total Rupees ..				50
					50
	Grand Total of Estimate, Rs.				100

Station _____

Dated _____ 189 .

Supervisor,

No. _____ *Party, T. R. Scheme.*

No. III.

ESTIMATE.—Detail Measurements.

Detail of Work.	Number.	Measurements in Feet. Length.	Breadth.	Depth.	Area or Contents.	Total Quantity of each description of Work.
1	2	3	4	5	6	7
— Thorahadi Channel — Tank.						
CONSTRUCTING AN EARTHENWARE PIPE SLUICE AT CROSS SECTION No. 3, 4. and at 6200 feet						
Concrete. with brick jelly in mortar						
Under retaining walls in front and rear	2	5½	3	1½	50	
Do. pipes	1	~~21½~~ 22	2	1	~~43~~ 41	
Along sides of pipes	2	~~28~~	¾	½	17	
Binders over pipes	2	2⅝	1½	½	4	
Total					~~112~~ 114	
Deductions.						
Deduct for brick on edge in front and rear	2	2	1½	¾	5	
Total Concrete, less deductions, Cubic feet						~~109~~ 107
Masonry. Brick in mortar						
Retaining walls in front and rear	2	4	1½	1⅜ ¾	21	
Brick on edge in front and rear	2	2	1½	¾	5	
Total Masonry, Cubic feet						26
Plastering ~~or Pointing~~.						
Top and faces of retaining walls in front and rear ..	2	6	4	..	48	
Total Plastering ~~or Pointing~~, Square feet						48
Cutstone work.						
Plug stone	1	2	2	½	2	
Total Cutstone work, Cubic feet						2
Earthwork for excavating foundations, opening and closing the bund, &c.						3000
Earthenware pipes (each 2 feet long and 6" dr.)						13.
Fitting the pipes with Cement						L. S.

ESTIMATE FORM.—Abstract.

Quantity.	Description of Work.	Rate.	Per	Amount	Total.
1	2	3	4	5	6
		Rs.		Rs.	Rs.
	CONSTRUCTING AN EARTHENWARE PIPE SLUICE AT CROSS SECTION No. 7.14 on a.t. 6200 feet				
1·07 ~~1·09~~	Units of Concrete with stone jelly in bottom	9-8-0	100 C.ft.	10	
·26	Do. of Masonry Rubble in mortar	13-4-0	"	3	
·48	Do. of Plastering ~~or Pointing~~	2-8-0	100 S.ft.	1	
2	Do. of Cutstone work	0-12-0	C. ft.	2	
3.000	Do. of Earthwork	3-0-0	1,000 C.ft	9	
12	Earthenware pipes (each 2 feet long and 6" dr.)	1-12-0	each.	23	
	Fitting the pipes with cement		L.S.	3	
				51	
	Contingencies			3	
	Supervision			3	
	Total Rupees				57
	The cost of similar Sluice at R.S. 14				57
	— 50 — 0-0 — Cusec at 6200 feet				56
	Grand Total of Estimate, Rs				170

STATION _____

Dated _____ 189 .

Supervisor,

No. _____ *Party, T. R. Scheme.*

P.W. Cir No 2 6874/95 5877

ESTIMATE FORM.—Abstract.

Quantity.	Description of Work.	Rate.	Per	Amount	Total.
1	2	3	4	5	6
		Rs.		Rs.	Rs.
	Torapadi Channel Repairs				
403.281	Units of Earthwork of raising channel bank (vide sheet 22)	3-0-0	1000 ft	4066	
952.071	Units of Earthwork of clearing silt in the channel				
126.00	Units of Revetment (dry stones) to two chain Bank from 2000 ft to 3050 ft	4-8-0	100 ft	567	
1000.00	Units of Coracai grass planting on both sides of the ~~flood~~ bank above Arani Road including watering & watching for 3 months	0-2-0	100 sft	125	
	Clearing prickly-pear below Arani road	L. S		30	
	Removing rock obstructing the waterway at cs Nos 4A & 16A.	L. S		100	
	Removing and repacking revetment now existing below Arani road where necessary	- Do -		160	
				5048	
	Contingencies			200	
	Supervision			212	
	Total				5460
	carried over Grand Total of Estimate ..				5,460

STATION _____

Date _____ 189 .

10,000—23-6-94.

Executive Engineer.

(E. No. 123.)

CIRCLE—

DIVISION—

DISTRICT—

TALUK (OR ESTATE IN CASE OF ESTATE WORKS)—

ESTIMATE FORM.—Abstract.

Financial Head—

Budget Head—

Departmental Head—

Main Head—

Sub-Head—

Project of which the work forms part—

Section—

Name of Work—

Amount of Estimate, Rs.—

To be carried out by—

REFERENCES.

ESTIMATE FORM.—Abstract.

Quantity.	Description of Work.	Rate.	Per	Amount	Total.
1	2	3	4	5	6
		Rs.		Rs.	Rs.
	B. Forward				5460
	Fixing demarcation stones along the channel banks to prevent encroachment of the banks by the ryots	L. S.		100	100
	Extending the existing Culvert No 1 across Arani road.				
15.32	Units of Concrete work (stone Jelly in mortar)	9-8-0	100 cft	146	
28.62	do Brick in mortar	13-4-0	do	378	
10.56	do Arch work	15-8-0	do	164	
18.00	do Plastering	2-8-0	100 sft	45	
10.08	do Dry stone work	4-8-0	100 cft	45	
	Earthwork for excavating foundations & reforming roads	L. S		30	
	Demolishing old work where necessary & connecting old work to with new	do		20	
				828	
	Contingencies			31	
	Supervision			41	
	Total				900
				Carried over Grand Total of Estimate ..	6460

STATION _____

Date _____ 189 .

10,000—23-6-94.

Executive Engineer.

(E. No. 123.)

CIRCLE—

DIVISION—

DISTRICT—

TALUK (OR ESTATE IN CASE OF ESTATE WORKS)—

ESTIMATE FORM.—Abstract.

Financial Head—

Budget Head—

Departmental Head—

Main Head—

Sub-Head—

Project of which the work forms part—

Section—

Name of Work—

Amount of Estimate, Rs.—

To be carried out by—

REFERENCES.

ESTIMATE FORM.—Abstract.

Quantity	Description of Work.	Rate.	Per	Amount	Total.
1	2	3	4	5	6
		Rs.		Rs.	Rs.
	B. Forward do				6460
	Extending the Existing Culvert at No 2 across Jail road				
20.46	Units of Concrete work (stone jelly in mortar)	9-8-0	100 cft	194	
45.55	do Brick in mortar	13-4-0	Do	604	
11.70	do Arch work	15-8-0	Do	181	
2.00	do Plastering	2-8-0	100 sft	50	
10.66	do Dry stone work	4-8-0	100 cft	48	
	Earthwork for excavating foundations and reforming the road	L. S		30	
	Demolishing the old work where necessary & connecting old work with the new	L. S.		20	
				1127	
	Contingencies			30	
	Supervision			43	
	Total				1200
	Constructing drop No 1 (50 ft. above the Arani road Culvert				
45.69	Units of Concrete (with stone jelly in mortar)	9-8-0	100 cft	434	
7.39	do Cement Concrete work	60-0-0	Do	443	
39.00	do Brick in mortar	13-4-0	Do	517	
				1394	
			Carried over Grand ~~Total of~~ Estimate ..		7660

STATION _____

Date _____ 189 .

40,000—23-6-94.

Executive Engineer.

(E. No. 123.)

CIRCLE—

DIVISION—

DISTRICT—

TALUK (OR ESTATE IN CASE OF ESTATE WORKS)—

ESTIMATE FORM.—Abstract.

Financial Head—

Budget Head—

Departmental Head—

Main Head—

Sub-Head—

Project of which the work forms part—

Section—

Name of Work—

Amount of Estimate, Rs.—

To be carried out by—

REFERENCES.

ESTIMATE FORM.—Abstract.

Quantity.	Description of Work.	Rate.	Per	Amount	Total.
1	2	3	4	5	6
		Rs.		Rs.	Rs.
	B. F. onward			1394	7660
30.00	Units of Plastering	2-8-0	100sft	75	
38.10	do dry stone work	4-8-0	100cft	171	
3.24	do Old stone packing	1-8-0	do	5	
8.19	do Gravel backing	1-4-0	do	10	
	Earthwork for excavating foundations and forming banks &c as per site Survey	Lump Sum		100	
	Barking water	L. S		50	
	Coracai planting for alignment of banks in front & rear	L. S.		20	
				1825	
	Contingencies			65	
	Supervision			80	
	Total				1970
	Constructing Drop No 2. (50) above the Jail road Culvert				
32.83	Units of concrete work with stone jelly in mortar	9-8-0	100cft	312	
6.62	do Cement concrete work	60-0-0	do	397	
28.36	do Brick in mortar	13-4-0	do	376	
20.00	do Plastering	2-8-0	100sft	50	
35.26	do dry stone work	4-8-0	100cft	159	
7.56	do Gravel backing	1-4-0	100cft	9	
				1303	
			Carried over Grand Total of Estimate ..		9630

STATION _____

Date _____ 189 .

40,000—23-6.94.

Executive Engineer.

(E. No. 123.)

CIRCLE—

DIVISION—

DISTRICT—

TALUK (OR ESTATE IN CASE OF ESTATE WORKS)—

ESTIMATE FORM.—Abstract.

Financial Head—

Budget Head—

Departmental Head—

Main Head—

Sub-Head—

Project of which the work forms part—

Section—

Name of Work—

Amount of Estimate, Rs.—

To be carried out by—

REFERENCES.

ESTIMATE FORM.—Abstract.

Quantity.	Description of Work.	Rate.	Per	Amount	Total.
1	2	3	4	5	6
		Rs.		Rs.	Rs.
	B. Forward			1303	9630
	Earthworks for excavating foundations and forming bankoal per site Lumpsum	Lumpsum		100	
	Bailing water	L. S		50	
	Coracai planting for alignment of banks in front rear	L. S.		20	
				1473	
	Contingencies			57	
	Supervision			70	
	Total				1600
2	Constructing stone wall pipe sluices at C's Nos 2 + 5 as per printed plan + estimate attached	each	50	100	100
2	do do at Bd No 7 + 14	each	57	114	114
1	do do at 6200 feet			56	56
	Compensation for land to be taken up for banks				2056
	add repairs already carried out and expenditure incurred as per G O No 604 I dated 22nd August 1894				2944
				Grand Total of Estimate Rs.	16500

STATION Chepauk

Date 1894

10,000—23-6-94.

F W Lushington
17/10/94
For chief ~~Executive~~ Engineer.
for Irrigation

(E. No. 123.)

CIRCLE— IV

DIVISION— North Arcot

DISTRICT — North Arcot

TALUK (OR ESTATE IN CASE OF ESTATE WORKS)—
Vellore

ESTIMATE FORM.—Abstract.

Financial Head— 43 Minor works & Ag[ri]

Budget Head— Irrt works for which C 4/8 A.15

Departmental Head— Original works

main Head—

Sub-Head—

Project of which the work forms part— Vellore Minor Basin

Section—

Name of Work— Tocapadi channel

Amount of Estimate, Rs.— 16588

To be carried out by— P. W. D

REFERENCES.

25 / 17/2 1/95.
26 / 167 1/95

CHIEF SECRETARIAT'S
9. APR. 1895
GOVERNMENT OF MADRAS

Surplus Channel from Vinjampalli pursan tunnel back in North Arcot District

Reaches	Distance from	Distance to	Fall in Cruity	Bottom width	Depth of water	Area	Wetted perimeter	Hydraulic mean depth	Coefficient	Velocity	Discharge proposed	Discharge expected	Remarks.
1	0	860	1/80	70	3.5	257.25	79.9	3.22	71.57	14.3	3678	3000	The existing section of the channel is inadequate.
2	1160	3950	1/120	70	3.5	257.25	79.9	3.22	71.90	13.07	3362	"	Area is required.
3	3950	6650	1/140	70	4	296	81.3	3.64	73.56	11.66	3448	"	Do.
4	6650	7900	1/400	70	5	375	84.14	4.45	76.35	8.05	3020	"	To dep[th] ha[l]f or 50 ft above the Arcot Road Culvert
5	7900	11800	1/200	50	5	275	64.14	4.28	75.84	11.1	3052	"	To dep[th] ha[l]f or 50 ft above the fair & main Culverts
6	11800	13300	1/480	76	5	405	89.14	4.5	76.50	7.4	3000	"	

Executive Engineer
for Chief Engineer for Irrigation

NORTH ARCOT ..... DISTRICT
VELLORE ..... TALUK

(II)

PLAN & SECTIONS
OF
PROPOSED ~~EARTHEN~~ STONE WARE PIPE SLUICE AT C.S.Nos 7, 14 and at 6200
TO
THORAPADI CHANNE ~~TANK~~
SCALE 1/100

..... M[illegible] BASIN
..... GROUP

SLUICE AT C.S.No 7

AREA TO BE IRRIGATED ... 24 ACRES
DISCHARGE REQUIRED .. 0·36 CF³ PER SEC[illegible]
AREA OF VENT. .. 4"×3" INCHES
DIAMETER OF PIPE .. 6"
SOIL. } CLAY MIXED WITH SAND
SUB-SOIL }
AMOUNT OF ESTIMATE Rs 57

ELEVATION

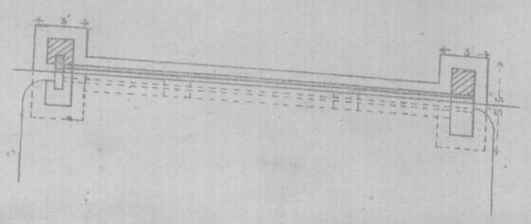
SLUICE AT C.S.No 14

AREA TO BE IRRIGATED ... 69 ... ACRES
DISCHARGE REQUIRED ... 1·03 CF³ PER SEC[illegible]
AREA OF ~~PLUG HOLE~~ VENT PIPE ... 6×5 INCHES
DIAMETER OF ~~PLUG HOLE~~ .. 9" INCHES
SOIL ..... } CLAY MIXED WITH SAND ..... TO+
SUB-SOIL } ..... AT+
AMOUNT OF ESTIMATE 57 RUPEES

SLUICE AT 6200

AREA TO BE IRRIGATED 18 ACRES
DISCHARGE REQUIRED .27 CF³ PER SEC
AREA OF VENT. ... 4"×3" INCHES
DIAMETER OF PIPE ... 6"
SOIL. } CLAY MIXED WITH SAND
SUB-SOIL }
AMOUNT OF ESTIMATE Rs 56

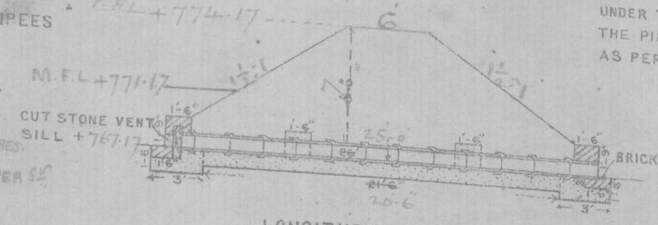
REG: No. 1097 — COPIES 500+1000



CROSS SECTION

Note. Figures dimensions only to be [illegible]

NOTE
IF THE SOIL IS HARD THE CONCRETE UNDER THE PIPES MAY BE OMITTED AND THE PIPES LAID IN 9 INCHES PUDDLE AS PER SECTION (No 2)



LONGITUDINAL SECTION

APPROVED
CHIEF ENGINEER
25 OCT 1894
FOR IRRIGATION

EX: ENGINEER
N[illegible] PARTY T.R.S.

FOR CHIEF ENGINEER 17/10
FOR IRRIGATION

PHOTO-ZINCO., SURVEY OFFICE, MADRAS.
1894

Govt. of { 1895 } Madras.

Local and Municipal Department.

9877

Encls 2 + 93 plans
Recd: 11.12.95

To

The Public Works Department

21 plans
rctd with memo
No 5147C 14-12-95
2.5.9 IV

No. 2752 R a/17-11-91 ✓
" 2753 R - 17-11-91. ✓
" 9379 - 4-11-93 ✓
" 8613 - 8-11-94 ✓
" 3920C - 6-12-94 ✓
" 1592C - 20-4-95 ✓
" 997-8.D - 17-9-95 ✓

Proceedings, dated 7th December 1895,
No. 2382 L. Mis.

Subject.

Shorapadi Tank and Supply Channel

Returning, with remarks, to the P.W.D, the plans and estimates in connection with the _____, and stating that the Chief Engineer's suggestion that the Vellore Municipality and the District Board, North Arcot, should pay for the repairs, cannot be carried out.

I

Government of Madras
Public Works Department.
Buildings and Roads Branch.

Revised Estimate of Revenue and Expenditure for 1895-96 compared with the budget estimate of the year.

Revenue.					Expenditure.				
Fund and Major Heads	Budget Estimate, 1895-96	Revised Estimate, 1895-96	Revised Estimate more (+) or less (−) than Budget Estimate	Brief explanation of important differences	Fund and Major Heads	Budget Estimate 1895-96.	Revised Estimate, 1895-96.	Revised Estimate more (+) or less (−) than Budget Estimate	Brief explanation of important differences
	Rs	Rs	Rs			Rs	Rs	Rs	
XXXII Civil Works — Imperial	"	"	"		45 Civil Works — Imperial	80,000	52,870	−27,130 (a)	(a) Due chiefly to the surrender of grants for Meteorological Works.
XXXII Civil Works — Provincial	1,25,000	1,25,000	"		45 Civil Works — Provincial	30,20,000	26,97,000	−3,23,000 (b)	(b) Surrendered to the Finance Department from (1) Detention Hospital (2) Reserve. (3) Grants for works not likely to be executed during the current year under the control of the P.W.D.
XXXII Civil Works — Local & Incorporated	7,000	5,300	−1,700		45 Civil Works — Local & Incorporated	78,000	78,275	+375	

II

Government of Madras
Public Works Department.
Buildings and Roads Branch.

Budget Estimate of Revenue and Expenditure for 1896-97 compared with the Revised Estimate for 1895-96.

Revenue					Expenditure				
Fund and Major Heads	Revised Estimate, 1895-96	Budget Estimate, 1896-97	Budget Estimate more (+) or less (−) than Revised Estimate	Brief explanation of important differences	Fund and Major Heads	Revised Estimate, 1895-96	Budget Estimate, 1896-97	Revised Budget Estimate more (+) or less (−) than Budget Estimate	Brief explanation of important differences
	Rs	Rs	Rs			Rs	Rs	Rs.	
XXXII Civil Works — Imperial	"	"	"		45 Civil Works — Imperial	52,870	Not yet fixed	by India	The budget estimate is less than the revised estimate, as no larger sum has been proposed for execution during 1896-97
XXXII Civil Works — Provincial	1,25,000	1,25,000	"		45 Civil Works — Provincial	26,97,000	27,00,000	+3,000	
XXXII Civil Works — Local & Incorporated	5,300	5,300	"		45 Civil Works — Local & Incorporated	78,275	65,043	−13,332	

No 834 dy 9th January 1896

Public Works Department.

Madras, January 1896

To

The Secy. to the Govt. of India

P. W. Department.

Sir,

With adverteence to the Resolution of the Govt. of India No: 132 A. – G. dated 13th December 1895, I am directed to forward herewith an abstract of Revised and Budget Estimates of Revenue and Expenditure for 1895-96 and 1896-97 respectively, under Imperial, Provincial and Incorporated Local Funds.

I have &c.

DESPATCHED
9 JAN. 96

W

CHARD
3/1/96

N.S.
Mad

P. W. COMMITTEE No. 141

Urgent

28.12.95 No 3282 W

Recd 8.1.96

No 83 W 29th January 1896

Done to date 9/1/96

B

No 84 W 29th January 1896

Communicated to the Examiner Public Works Accounts.

Comms 8/1/96

9/1/96

DESPATCHED
9 JAN 96

The Engineer-in-Chief to note

R.S.

Urgent

26.12.95 No 3282 W

No 83 W dtd 9th January 1896

Bill

Done 9/1/96

Je 4/1

All communications should be addressed to the Secretary.

No. 10 G.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

GENERAL.

To

The Secretary to the Government of Madras

Public Works Department.

Calcutta, the 3rd January 1896.

Hgf 8

Sir,

In reply to your letter No. 2907 W dated the 14th November 1895, I am directed to communicate the sanction of the Government of India to the grant of a personal allowance of Rs. 50/- per mensem to Mr. C.S. Simpson, 2nd Assistant in the Public Works Department Secretariat, with effect from the 1st November 1895, as recommended.

2. This allowance is sanctioned on the understanding that it is absorbed on the re-arrangement of salaries consequent on the retirement in October 1896 of the clerk on 250/- referred to in paragraph 2 of your letter.

I have the honour to be,

Sir,

Your most obedient servant,

G Walker

Under Secy. to the Govt. of India.

Documents accompanying.

S.S.S.