Public Works (1897) Department.

G.O., No. 519 I

DATED 3 June 1897

4/6/97

[Despatch Abstract.]

Bapatla channel. Endt. from S.E. II Circle requesting that the classified abstract estimates printed with G.Os No. 612 I of 12-7-93 and No. 166 I of 16-2-97 sanctioning estimates for excavating the — and branches be cancelled, and that a revised classified abstract estimate and comparative statement be substituted.

Comtd. to the officers concerned.

100/X.

P.W. 29.
1,500—20-11-96.

7 C 3/6/97

Indexed 4/6

BACK PAPERS.

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

FURTHER PAPERS.

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

IRRIGATION.

Government {1897} of Madras.

PUBLIC WORKS.

Recd. } 1897. Enclosures
Regd. } Spare copies

G.O., No. 519 I., 3rd June 1897.

JUNE.

Bapatla channel

Endorsement from Superintending Engineer, II Circle, requesting that the classified abstract estimates printed with G.Os., No. 612 I., dated 12th July 1893, and No. 166 I., dated 16th February 1897, sanctioning estimates for excavating the — and branches, be cancelled and that a revised classified abstract estimate and comparative statement be substituted, communicated to the officers concerned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

READ—the following paper :—

From W. C. LEWIS, Esq., Executive Engineer, Kistna Western Division, to the Superintending Engineer, II Circle, dated 15th May 1897, No. 67 S.

With reference to your No. 293 K.W., dated 27th April 1897, I have the honour to inform you that Rs. 615 were allowed for compensation for land required for Bapatla channel in the revised classified abstract of the whole project herewith sent.

2. The above classified abstract was forwarded to you with all other estimates sanctioned in G.O., No. 166 I., dated 16th February 1897 (*vide* paragraph 15 of the report printed with the same Government Order).

3. It will be seen from paragraph 2 of the G.O., No. 166 I., dated 16th February 1897, that there was a saving of Rs. 1,477 on completed works on items 1 to 5 and 12 to 32 printed with G.O., No. 612 I., dated 12th January 1893, which was utilized in sanctioning the new estimates.

4. As this revised classified abstract which shows actuals for completed works and revised provision for the works sanctioned in G.O., No. 166 I., dated 16th February 1897, was not printed, there has been confusion about the correct amounts of the items for completed works.

5. I have therefore the honour to request that you will be so good as to get the accompanying revised classified abstract and comparative statement communicated to the Examiner and the classified abstracts printed with G.O., No. 612 I., dated 12th January 1893, and No. 166 I., dated 16th February 1897, cancelled, so that there may be no further confusion on the subject.

ENCLOSURES.

Estimate Form—Abstract—Classified.

Sub-head.	Names of works.	Amount of estimate for individual work.	Total of sub-heads.	Total for each canal or distributary.	Total of each main head.	Remarks.
1	2	3	4	5	6	7
	CAPITAL EXPENDITURE NOT CHARGED TO REVENUE. 49. IRRIGATION. *Kistna delta system.* Western Section. I. Works—Commamur Canal. 3. Distributaries. Bapatla channel.	RS.	RS.	RS.		
2. Land ..	Compensation	615				Nearly completed.
			615			
3. Works ..	Head sluice	2,270				Completed.
			2,270			
4. Earthwork.	Excavating from head to 5 furlongs	1,801				Do.
	Do. from 5 furlongs to 2 miles and 250 feet.	2,383				Do.
			4,184			
5. Miscellaneous.	Demarcation stones	255				Do.
			255			
				7,324		
	East Branch					
3. Works.	Head sluice	1,020				Estimate herewith.
	Pipe sluice No. 1 at 0 mile 1 furlong	110				Do.
	Bridge at 0 mile 6½ furlongs ..	1,270				Do.
	Pipe sluice No. 2 at 1 mile ½ furlong.	95				Do.
	Bridge at 1 mile 3 furlongs and 580′.	1,170				Do.
	Pipe sluice No. 3 at 1 mile 4½ furlongs.	95				Do.
	Bridge at 1 mile 6 furlongs and 220.′	1,210				Do.
	Pipe sluice No. 4 at 1 mile 7½ furlongs.	110				Do.
	Spout (cement concrete pipes at 2 miles 5 furlongs.	50				Lump sum.
	Spout cement concrete pipes at 2 miles 6½ furlongs.	50				Do.
	Tail drop	400				Do.
			5,580			
4. Earthwork.	Excavating the branch channel and its distributaries.	7,400				Estimate herewith.
			7,400			
5. Miscellaneous.	Demarcation stone	470				Do.
			470			
				13,450		
	West Branch.					
3. Works.	Head sluice	1,050				Estimate herewith.
	Pipe sluice No. 1, at 0 mile 4 furlongs.	110				Do.
	Bridge at 0 mile 4½ furlongs ..	1,130				Do.
	Pipe sluice No. 2, at 1 mile ..	80				Do.
	Bridge at 1 mile 0 furlong and 290′.	1,100				Do.
	Pipe sluice No. 3, at 1 mile 3 furlongs.	95				Do.
	Bridge at 1 mile 5 furlongs and 20′.	1,070				Do.
	Pipe sluice No. 4, at 1 mile 6½ furlongs.	95				Do.
	Pipe sluice No. 5, at 2 miles 2½ furlongs.	115				Do.
	Pipe sluice No. 6, at 2 miles 7 furlongs.	95				Do.
	Tail drop	400				Lump sum.
			5,340			
4. Earthwork.	Excavating branch channel and its distributaries.	3,900				Estimate herewith.
			3,900			
5. Miscellaneous.	Demarcation stones	600				Do.
			600			
				9,840		

Estimate Form—Abstract—Classified—cont.

Sub-head. 1	Names of works. 2	Amount of estimate for individual work. 3	Total of sub-heads. 4	Total for each canal or distributary. 5	Total of each main head. 6	Remarks. 7
	Bapatla channel—*cont.*	RS.	RS.	RS.	RS.	
	Mulapalam Branch.					
3. Works ..	Head sluice	1,816				Completed.
	Drop at ⅔ mile and 410′	703	2,519			Do.
4. Earthwork.	Excavation	4,170	4,170			Do.
5. Miscellaneous.	No. 1 Cattle-crossing	484				Do.
Do. ..	No. 2 do.	497				Do.
Do. ..	No. 3 do. ..	507				Do.
Do. ..	Demarcation stones	526	2,014			Do.
	Minor Branch.					
3. Works ..	No. 1 sluice at 1 furlong and 66′.	590				Do.
Do. ..	No. 2 sluice at 1 mile 1 furlong 396′	577				Do.
Do. ..	No. 3 sluice at 2 miles 0 furlong 396′	579				Do.
Do. ..	No. 4 sluice at 2 miles 5 furlongs 396 feet.	630	2,376	11,079		Do.
	Kankatapalem Branch.					
3. Works ..	Head sluice	1,219	1,219			Completed.
4. Earthwork.	Excavation	3,096	3,096			Do.
5. Miscellaneous.	No. 1 cattle-crossing at 1 mile 5½ furlongs.	528				Do.
Do. ..	No. 2 cattle-crossing at 1 mile ¼ furlong.	542				Do.
Do. ..	No. 3 cattle-crossing at 1 mile 4 furlongs.	561				Do.
Do. ..	No. 4 cattle-crossing at 2 miles 4½ furlongs.	580				Do.
Do. ..	Demarcation stones	458	2,669			Do.
	Minor Branch.					
3. Works ..	No. 1 sluice at 0 mile 2 furlongs ..	300				Do.
Do. ..	No. 2 do. at 0 mile 6 do. ..	567				Do.
Do. ..	No. 3 do. at 1 mile 4½ do. ..	599	1,466	8,450		Do.
	Cherukur Branch.					
2. Land ..	Compensation	230	230			Original amounts retained.
3. Works ..	Head sluice	760	760			
4. Earthwork.	Excavation	150	150	1,140		
Do. ..	Constructing an iron trough aqueduct over drainage channel in Bapatla tank to carry Mulapalam branch channel.	3,217	3,217	3,217	54,500	Estimate herewith.

Kistna Delta, Western Section, Bapatla Channel of Commamur Canal.

Comparative Statement showing the difference.

Sub-head.	Original sanctioned estimates (*vide* G.O., No. 577 I., dated 1st October 1888).		Revised estimates sanctioned in G.O., No 612 I., dated 12th July 1893.		Revised estimates now submitted.		Difference between 1st and 2nd revised estimates.		Remarks.
	Items.	Amount.	Items.	Amount.	Items.	Amount.	Increase.	Decrease.	
		RS.		RS.		RS.	RS.	RS.	
2. Land ..	Item No. 1056, Bapatla channel.	500	Bapatla Channel	500	Bapatla channel	615	115	..	Excess trifling.
	Do. 1057, Valu channel ..	1,500	....	..	....	..	..	..	
	Do. 1058, 1st East branch.	600	1st East branch	600	Bapatla tank, East branch ..	..	..	600	The land belongs to Government; hence saving.
	Do. 1059, 1st West branch.	700	1st West branch	700	Do. West branch ..	..	..	700	
	Do. 1060, 2nd East branch.	965	....	..	....	..	..	..	
	Do. 1061, 2nd West branch.	1,140	....	..	....	..	..	..	
	Do. 1062, 2nd Kankatapalem.	230	....	..	....	..	..	..	
	...	..	Cherukúr channel	230	Cherukur channel	230	..	..	
3. Works ..	Item No. 1116, Bapatla channel head sluice.	2,500	Bapatla channel head sluice ..	2,500	Bapatla channel head sluice ..	2,270	..	230	
					Bapatla tank, East branch.				
					Head sluice	1,020			
					Pipe sluice No. 1 at 0 mile 1 fur.	110			
					Bridge at 0 mile 6½ furlongs ..	1,270			
					Pipe sluice No. 2 at 1 mile ½ fur.	95			
					Bridge at 1 mile 3 fur. and 580 ft.	1,170			
					Pipe sluice No. 3 at 1 mile 4½ fur.	95			
					Bridge at 1 mile 6 fur. 220 feet.	1,210			
					Pipe sluice No. 4 at 1 mile 7½ fur.	110			
					Spout cement concrete pipes at 2 miles 5 furlongs.	50			
					Spout cement concrete pipes at 2 miles 6½ furlongs.	50			
	Item No. 1117, Dividing sluice for 1st East and West branches.	2,950	Dividing sluice for 1st East and West branches.	2,950	Tail drop.	400			
	Item No. 1120, Bapatla 1st West branch tail escape weir.	440	Bapatla 1st West branch tail escape weir.	440	*Bapatla tank, West branch.*		7,530	..	Pipe sluices with masonry heads are necessary for all the distributary channels for the better regulation of water. Bridges are found to be necessary (*vide* paragraph 13 of the report accompanying).
					Head sluice	1,050			
					Pipe sluice No. 1 at 0 mile 4 furlongs.	110			
					Bridge at 0 mile 4½ furlongs ..	1,130			
					Pipe sluice No. 2 at 1 mile ..	80			
					Bridge at 1 mile 0 furlong 290 ft.	1,100			
					Pipe sluice No. 3 at 1 mile 3 fur.	95			
					Bridge at 1 mile 5 furlongs 20 feet	1,070			
					Pipe sluice No. 4 at 1 mile 6½ fur.	95			
					Pipe sluice No. 5 at 2 miles 2½ fur.	115			
					Pipe Sluice No. 6 at 2 miles 7 fur.	95			
					Tail drop	400			

Comparative Statement showing the difference—cont.

Sub-head.	Original sanctioned estimates (*vide* G.O., No. 577 I., dated 1st October 1888).		Revised estimates sanctioned in G.O., No. 612 I., dated 12th July 1893.		Revised estimates now submitted.		Difference between 1st and 2nd revised estimates.		Remarks.
	Items.	Amount.	Items.	Amount.	Items.	Amount.	Increase.	Decrease.	
		RS.	*Mulapalam Branch.*	RS.	*Mulapalam Branch.*	RS.	RS.	RS.	
3. Works—*cont.* ..	....	..	Head sluice ..	1,790	Head sluice	1,816	26	..	Excess very little.
	....	..	Drop at 2 miles 5 furlongs 410 feet.	720	Drop at 2 miles 5 furlongs 410 feet.	703	..	17	
	....	..	No. 1 Sluice at 0 mile 1 furlong 66 feet.	560	No. 1 Sluice at 0 mile 1 furlong 66 feet.	590	30	..	Excess very little.
	....	..	No. 2 Sluice at 1 mile 1 furlong 396 feet.	590	No. 2 Sluice at 1 mile 1 furlong 396 feet.	577	..	13	
	....	..	No. 3 Sluice at 2 miles 0 furlong 396 feet	620	No. 3 Sluice at 2 miles 0 furlong 396 feet.	579	..	41	
	....	..	No. 4 Sluice at 2 miles 5 furlongs 396 feet.	650	No. 4 Sluice at 2 miles 5 furlongs 396 feet.	630	..	20	
			Kankatapalam Branch.		*Kankatapalam Branch.*				
	....	..	Head sluice	1,330	Head sluice	1,219	..	111	
	Item No. 1118, Dividing sluice for 2nd East and West branches.	2,360	No. 1 Sluice at 0 mile 2 furlongs.	360	No. 1 Sluice at 0 mile 2 furlongs.	300	..	60	
	Item No. 1119, Minor channels.	2,000	No. 2 Sluice at 0 mile 6 furlongs.	590	No. 2 do. at 0 mile 6 furlongs.	567	..	23	
	Do. 1121, Bapatla 2nd East branch tail escape weir.	460	No. 3 Sluice at 1 mile 4½ furlongs.	620	No. 3 do. at 1 mile 4½ furlongs.	599	..	21	
	Item No. 1122, Bapatla 2nd West branch tail escape weir.	440	Cherukur channel head sluice.	760	Cherukur channel head sluice ..	760	..	..	
	Item No. 1123. Kankatapalem branch head sluice.	300	....	..	....	..	..	..	
	Item No. 1124, tail escape weir.	470	....	..	....	..	..	..	
4. Earthwork ..	Do. 1155, Bapatla channel.	16,700	Excavating Bapatla channel from head to 5 furlongs.	1,960	Excavating Bapatla channel from head to 5 furlongs.	1,801	..	159	
		..	Excavating Bapatla channel from 5 furlongs to 2 miles 250 feet.	1,630	Excavating Bapatla channel from 5 furlongs to 2 miles 250 feet.	2,383	753	..	Excess was due to deviation of alignment to save heads. The excess was sanctioned in G.O., No. 634 I., dated 1st August 1896.
	Do. 1158, 1st East branch.	2,880	First East branch	2,880	Excavating Bapatla tank east branch and its distributaries.	7,400	..	440	
	Do. 1159, 1st West branch.	2,860	Do. West branch	2 860	Excavating Bapatla tank west branch and its distributaries.	3,900			
	Do. 1156, Minor channels.	6,000	Minor channels	6,000					
	Do. 1160, 2nd East branch.	8,230	Mulapalam branch	5,080	Excavating Mulapalam branch ..	4,170	..	910	
	Do. 1161, 2nd West branch.	5,500	Kankatapalem branch ..	3,140	Do. Kankatapalem branch.	3,096	..	44	
	....	..	Cherukur channel	150	Do. Cherukur branch ..	150	..	..	
	Item No. 1157, Valu channel ..	10,850	....	..	....	..	..	..	
	Do. 1162, Kankatapalem Minor channel.	1,430	....	..	....	..	..	..	
5. Miscellaneous.	....	..	Demarcation stones to Bapatla channel.	170	Demarcation stones to Bapatla channel.	255	85	..	The excess was due to the insufficient rate provided in the estimate for each stone. The stones collected for these works were not 6 inches square (as originally estimated for) but about 9 inches and so concrete 2 feet cube was considered necessary instead of 1 foot 6 inches.
	....	..	....	..	Demarcation stones to Bapatla tank East branch.	470	470	..	
	....	..	....	..	Demarcation stones to Bapatla tank West branch.	600	600	..	
	....	..	No. 1 cattle-crossing at 2 miles 6 fur. of Malapalam branch.	910	No. 1 cattle-crossing at 2 miles 6 furlongs of Malapalam branch	484	..	426	
	....	..	No. 2 cattle-crossing at 4 miles ½ furlong of Malapalam branch.	960	No. 2 cattle-crossing at 4 miles ½ furlong of Malapalam branch.	497	..	463	
	....	..	No. 2 cattle-crossing at 4 miles 5 furlongs of Malapalam branch	1,010	No. 3 cattle-crossing at 4 miles 5 furlongs of Malapalam branch.	507	..	503	
	....	..	Demarcation stones to Malapalam branch.	270	Demarcation stones to Malapalam branch.	526	256	..	The excess was due to the insufficient rate provided in the estimate for each stone. The stones collected for these works were not 6 inches square in section (as originally estimated for), but about 9 inches and so concrete 2 feet cube was considered necessary instead of 1 foot 6 inches.
	....	..	No 1 cattle-crossing at 5½ fur. of Kankatapalem branch.	500	No. 1 cattle-crossing at 5½ furlongs of Kankatapalem branch.	528	28	..	Excess very little.
	....	..	No. 2 at 1 mile ¼ furlong ..	480	No. 2 cattle-crossing at 1 mile ¼ furlong of Kankatapalem branch	542	62	..	
	....	..	No. 3 at 1 mile 4 furlongs ..	520	No. 3 cattle-crossing at 1 mile 4 furlongs of Kankatapalem branch	561	41	..	
	....	..	No. 4 at 2 miles 4½ furlongs ..	540	No. 4 cattle-crossing at 2 miles 4½ fur. of Kankatapalem branch.	580	40	..	
	....	..	Demarcation stones to Kankatapalem branch.	330	Demarcation stones to Kankatapalam branch.	458	128	..	
	....	..	....	..	Constructing an iron trough aqueduct over the drainage channel in Bapatla tank to carry Malapalem branch channel.	3,217	3,217	..	This was not provided for in the original estimates.
		71,995		45,900	Excess to be sanctioned ..	54,500	13,381 8,600	4,781	

(Signed) W. C. LEWIS,
Ex. Engineer, Kistna Western Dn.

No. 519 I., 3rd June 1897.

No. 544 K.W.

Forwarded to the Chief Engineer for Irrigation, with reference to G.O., No. 166 I., dated 16th February 1897, for favour of sanction of Government being obtained to cancel the classified abstracts printed with G.Os., No. 612 I., dated 12th July 1893 and No. 166 I., dated 16th February 1897, and to communicate to the Examiner the revised classified abstract and comparative statement sent herewith.

22nd May 1897.

(Signed) W. M. ELLIS,
for Suptg. Engr., II Circle.

Order—No. 519 I., dated 3rd June 1897.

Communicated to the officers concerned for information, with reference to G.O., No. 166 I., dated 16th February 1897.

(True Extract.)

Under Secretary to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Superintending Engineer, II Circle.
" Examiner, Public Works Accounts.

Exd. T. K. Narayana Aiyangar.

9

Public Works (1897) Department.

CURRENT No. ~~1814~~ 5406

A/ List 9P Irrigtn

From

Major W. L. C. Baddeley R.E.
Supg. Engr. 2nd Circle

Order No. 519 I. of 3. 6. 97

Communicated to the officers concerned for information with reference to G.O. No. 166. I. of 16th Feby/97.

No. 544 K.W.

Printed with classified abstract & comparative statement

Dated 22 May 1897

Received 25. 5. 97

Registered 2-6-97

Enclosures 2.

Spare copies

JJ 27/5/97.

WH

Issue

WH

27.5.97

To The C.E.
S.E. II Circle
Exr. P.W.A.

LCS 25/5/97

A

LCS 31/5/97

LCS 24/5/97

SUBJECT.

Compensation for land
for Bapatla Chan: 97
Requesting to cance 77
the Classified Abst 65
printed in G.O. Nos: 12 I
and Communicate
to Exam: the revised in
&c. ates.
-ified
tract

BACK PAPERS.

No.	Date.
N138 I of	16.2.97
N1656 W of	12-8-97

FURTHER PAPERS.

No.	Date.

Letter from W. C. Lewis Esquire Exe. Engineer, Kistna Western Dn. to the Supg Engineer, 2nd Circle, d/ 15.5.97, No. 67 S.

With reference to your no 293 K.W. d/ 27.4.97, I have the honour to inform you that Rs 615 were allowed for Compensation for land required for Bapatla Channel in the revised classified abstract of the whole project herewith sent.

2. The above classified abstract was forwarded to you with all other estimates, Sanctioned in G.O. no 166 I d/ 16.2.97 – Vide para 15 of the report printed with the same G.O.

3. It will be seen from para 2 of the Government Order no 166 I d/ 16.2.97 that there was a saving of Rs 1477 on completed works on item 1 to 5 & 12 to 32 printed with G.O. no 612 I d/ 12.1.93 which was utilized in Sanctioning the new estimates.

4. As this revised classified

abstract

abstract which shows actuals for completed works and revised provision for the works sanctioned in G.O. no 166 I d/ 16.2.97, was not printed, there has been confusion about the correct amounts of the items for completed works.

CHIEF ENGINEER FOR IRRIGATION.
25 MAY. 1897
2181ks

5. I have, therefore, the honour to request that you will be so good as to get the accompanying revised classified abstract & comparative statement communicated to the Examiner and the classified abstracts printed with G.O. no 612 I d/ 12.1.93 & 166 I d/ 16.2.97, cancelled; so that there may be no further confusion on the subject.

No. 544 KW / 22.5.97

Encls: 2

Forwarded to the Chief Engineer for Irrigation with reference to G.O. no 166 I d/ 16.2.97 for favour of sanction of Government being obtained to cancel the classified abstracts printed with G.O.s nos 612 I / 12.1.93 & 166 I / 16.2.97 and to communicate to the Examiner the revised classified abstract and comparative statement sent herewith.

& 612 I / 12/7/93

21.5.97 Exec. Engineer
for Supdg Engr 2nd Circle

ESTIMATE FORM—Abstract—Classified.

2

Sub-head.	Names of Works.	Amount of Estimate for individual Works.	Total of Sub-heads.	Total for each Canal or Distributary.	Total of each Main head.	REMARKS.
1	2	3	4	5	6	7
	Capital expenditure not charged to Revenue 49 Irrigation Kistna Delta System Western section 1 works Commamur Canal 3 Distributaries					
	Bapatla Channel.					
2 Land—	Compensation	615	615			Nearly completed
3 Works—	Head sluice	2270				completed.
			2270			
4 Earthwork	Excavating from head to 5 furlongs	1801				D°
	D° from 5 furlongs to 2 miles & 250 feet	2383				D°
			4184			
5 Miscellaneous	Demarcation stones	255				D°
			255			
				7,324		
	East Branch.					
3 Works—	Head sluice	1020				Estimate herewith
	Pipe sluice No. 1 at 0m 1 fur	110				D°
	Bridge at 0m 6½ furlongs	1270				D°
	Pipe sluice No. 2 at 1m 0½ fur	95				D°
	Bridge at 1m 3 fur & 580'	1170				D°
	Pipe sluice No. 3 at 1m 4½ fur	95				D°
	Bridge at 1m 6 fur & 220'	1210				D°
	Pipe sluice No. 4 @ 1m 7½ fur	110				D°
	Carried over	5080		7,324		

STATION——
Dated——

Executive Engineer.

2,000—15-5-95.

(E. No. 126.)

———CIRCLE.

DIVISION—

U 2356/47

DISTRICT

ESTIMATE FORM—Abstract—Classified.

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

* Here enter the Name and Description of work in full.

for [illegible]

ESTIMATE FORM—Abstract—Classified.

Sub-head.	Names of Works.	Amount of Estimate for individual Works.	Total of Sub-heads.	Total for each Canal or Distributary.	Total of each Main head.	REMARKS.
1	2	3	4	5	6	7
	East branch (contd)					
	Brought forward	5080		7,324		
3 Works	Spout (cement concrete pipes) at 2 miles 5 furlongs	50				Lump sum
	Spout (cement concrete pipes) at 2 miles 6½ furlongs	50				do
	Tail drop	400				do
			5,580			
4 Earthwork	Excavating the branch channel & its distributaries	7,400				Estimate herewith
			7,400			
5 Miscellaneous	Demarcation stones	470				do
			470			
				13,450		
	West branch					
3 Works	Head sluice	1050				Do
	Pipe sluice No 1 at 0 m 4 fur	110				Do
	Bridge at 0 m 2½ fur	1130				Do
	Pipe sluice No 2 at 1 mile	80				Do
	Bridge at 1 m 0 fur & 290′	1100				Do
	Pipe sluice No 3 at 1 m 3 fur	95				Do
	Bridge at 1 m 5 fur: 220′	1070				Do
	Pipe sluice No 4 at 1 m 6½ fur	95				Do
	Do No 5 at 2 m 2½ fur	115				Do
	Do No 6 at 2 m 7 fur	95				Do
	Tail drop	400				Lump sum.
			5,340			
	Carried over		5,340	20,774		

STATION—
Dated
2,000—15-5-95.

Executive Engineer.

(E. No. [illegible])

Subhead

____________CIRCLE.

DIVISION—

DISTRICT

ESTIMATE FORM—Abstract—Classified.

To accompany the Detailed Estimate No.

of 189 -9 for*

---

* Here enter the Name and Description of work in full.

ESTIMATE FORM—Abstract—Classified.

Sub-head.	Names of Works.	Amount of Estimate for individual Works.	Total of Sub-heads.	Total for each Canal or Distributary.	Total of each Main head.	REMARKS.
1	2	3	4	5	6	7
	West branch (Continued)					
	Brought forward	.	5,340	20774		
4 Earthwork	Excavating branch ch & its Distributaries	3900				Estimate herewith
			3900			
5 Miscellaneous.	Demarcation Stones	600				Do
			600			
				9,840		
	Mulapalem branch.					
3 works	Head Sluice	1816				completed
	Drop at 2/5 miles & 410 feet	703				Do
			2,519			
4 Earthwork	Excavation	4,170				Do
			4,170			
5 Miscellaneous	No 1 Cattle crossing	484				Do
	No 2 Do	497				Do
	No 3 Do	507				Do
	Demarcation Stones	526				Do
			2,014			
	Minor Branch.					
3 works	No 1 Sluice at 0-1 fur 366	590				Do
	No 2-do-at 1m-1f-396 ft	577				Do
	No 3-do at 2-0-396 ft	579				Do
	No 4 do at 2.5-396 ft	630				Do
			2,376			
				11,079		
	Carried over			41,693		

STATION——}
Dated——}

Executive Engineer.

2,000—15-5-95.

(E. N. 126.)

______CIRCLE.

DIVISION—

DISTRICT

ESTIMATE FORM—Abstract—Classified.

To accompany the Detailed Estimate No.

of 189 -9 for*

* Here enter the Name and Description of work in full.

ESTIMATE FORM—Abstract—Classified.

Sub-head.	Names of Works.	Amount of Estimate for individual Works.	Total of Sub-heads.	Total for each Canal or Distributary.	Total of each Main head.	REMARKS.
1	2	3	4	5	6	7
	Brought forward			41,693		
	Kankatapalem branch.					
3 works	Head Sluice	1219				Completed
			1219			
4 Earthwork	Excavation	3096				Do.
			3096			
5 Miscellaneous	No. 1 cattle crossing at 1 m 5½ fur	528				Do.
	No. 2 do at 1 mile 0¼ fur	542				Do.
	No. 3 do at 1 mile 4 furlongs	561				Do.
	No. 4 do at 2 m 4½ do	580				Do.
	Demarcation stones	458				Do.
			2669			
	Minor branch.					
3 works	No. 1 Sluice at 0 m 2 fur	300				Do.
	No. 2 do at 0 m 6 fur	567				Do.
	No. 3 do at 1 m 4½ fur	599				Do.
			1466			
				8,450		
	Cherukur branch.					
2 Land	Compensation	230	230			Original
3 Works	Head Sluice	760	760			amounts
4 Earthwork	Excavation	150	150			retained
				1140		
	Constructing an Iron trough Aqueduct over Drainage chl in Bapatla tank to carry Mulapalem branch chl.	3,217 ~~3100~~	3,217 ~~3100~~	3,217 ~~3100~~	54,508 ~~54,383~~	Estimate herewith

W. W. Baddeley Major R.E.

Supg. Engineer II Circle

STATION______

Dated 13 June /96

compd

2,000—15-5-95.

R.E.

Executive Engineer,

Kistna Western Dn.

FOR IRRIGATION
No. 15 VCS
58

SUPG. ENGINEER'S OFFICE
No. 27/64 ttkw
15 JUN. 96
P. W. D.
SECOND CIRCLE

CHIEF ENGINEER
FOR IRRIGATION.
25 MAY. 1897
No. R181 Ks

SUPG. ENGINEER'S OFFICE
No. 3/2166
17 DEC. 96
P. W. D.
SECOND CIRCLE

14

CHIEF ENGINEER
FOR IRRIGATION.
31 JULY 96
No. 235 Ks
6

(E. No. 126.)

II CIRCLE.

Division— Kistna Western

District Kistna.

ESTIMATE FORM—Abstract—Classified.

To accompany the Detailed Estimate No.

of 189 -9 for* Excavating Bapatla channel & its branches 28 miles $6\frac{1}{2}$ furlongs of Commamur canal.

Revised abstract to take the place of the abstract printed in GO No 612 I of 12-7-93

---

* Here enter the Name and Description of work in full.

SUPG. ENGINEER'S OFFICE
31/3596 KW
P. W. D.
SECOND CIRCLE

~~32~~ 1

~~OWE 7~~

~~1084/86~~

~~1214/97~~ 5406/97

SUPG. ENGINEER'S OFFICE
No. 3/2166
17 MAY. 97
P. W. D.
SECOND CIRCLE

Bapatla Channel of Commamur Canal

6

…oned …93	Revised estimates now submitted		Difference between 1st & 2nd revised estimates		Remarks
…ount	Items	amount	Increase	Decrease	
	16	5	5	5	13
00	Bapatla Channel	615	115	-	Excess trifling.
-	-	-	-	-	
00	Bapatla Tank East branch	-	-	600	The land belongs to Government; hence saving
00	do West do	-	-	700	
	-	-	-	-	
	-	-	-	-	
	-	-	-	-	
0	Cherukur Channel	230	-	-	
00	Bapatla Channel Hd Sluice	2270	-	230	
	Bapatla Tank East branch				
	Head Sluice	1020			
	Pipe Sluice no 1 at 0m. 1 fur.	110			
	Bridge at 0m $6\frac{1}{2}$ furlongs	1270			
	Pipe Sluice no 2 at 1m $0\frac{1}{2}$ fur.	95			
	Bridge at 1m. 3 fur. & 580 feet	1170			Pipe Sluices with masonry heads are necessary for all the distributary channels for the better regulation of water. Bridges are found to be necessary Vide para 13 of the report accompanying
	Pipe Sluice no 3 at 1m $4\frac{1}{2}$ fur.	95			
	Bridge at 1m 6 fur. 220 ft.	1210			
	Pipe Sluice no 4 at 1m $7\frac{1}{2}$ fur.	110			
50	Spout Cement concrete pipes at 2m 5 fur.	50			
	do. do at 2m $6\frac{1}{2}$ fur.	50	7530		
	Tail drop	400			
40	Bapatla Tank West branch				
	Head Sluice	1050			
	Pipe Sluice no 1 at 0m 4 fur.	110			

Excavating Mulapalem branch	4170	"	910	
do. Kankatapalem do	3096	"	44	
do. Cherukur branch	150	"	"	
"	"	"	"	
"	"	"	"	
Demarcation stones to Bapatla Channel	255	85	"	The excess was due to the insufficient rate provided in the Estimate for each Stone. The Stones collected for these works were not 6" Square (as originally estimated for) but about 9" & so concrete 2' cube was considered necessary instead of 1'-6".
do. Bapatla Tank East branch	470	470	"	
do. do. West branch	600	600		
No 1 Cattle crossing at 2m 6 fur of Mulapalem branch	484	-	426	
No 2 do 4m ½ fur do.	497	"	463	
No 3 do 4m 5 fur do	507	"	503	
Demarcation Stones to Mulapalem branch	526	256	"	The excess was due to the insufficient rate provided in the estimate for each Stone. The Stones collected for these works were not 6" square in section (as originally estimated for) but about 9" & so concrete 2' cube was considered necessary instead of 1-6".
No 1 Cattle crossing at 1m 5½ fur. of Kankapalem branch	528	28	"	Excess very little
No 2 do. at 1m ¼ fur. do	542	62	"	
No 3 do. at 1m 4 fur do	561	41	"	
No 4 do at 2m 4½ fur do	580	40	"	
Demarcation Stones to Kankatapalem branch	458	128	"	
Constructing an Iron trough aqueduct over the drainage Channel in Bapatla Tank to carry Mulapalem branch Channel	3217	3217		This was not provided for in the original estimate
	54,500	13,381 4,781	4781	

Excess to be Sanctioned Rs 8,600

SUPG. ENGINEER'S OFFICE
No. 11291
15 JAN 97
P. W. D.
SECOND CIRCLE.

M. Lewis

Executive Engineer
Kistna Western Div.

SUPG. ENGINEER'S OFFICE
No. 2/1610
17 MAY 97
P.W.D.
SECOND CIRCLE

No 1 Cattle Crossing at 5½ fur. of Kankatapalem branch	5
No 2 at 1m ¼ furlong	48
No 3 at 1m 4 furlongs	52
No 4 at 2m 4½ do.	54
Demarcation Stones to Kankatapalem branch	33
71,995	45,1

SUPG. ENGINEER'S OFFICE
No. 6/3537
9 MAR. 97
P.W.D.
SECOND CIRCLE

P.W. E.3
1574/97

CHIEF ENGR FOR IRRIGATION
No. 1515

Bridge at 0m. 4½ fur.	1130			
Pipe Sluice no 2 at 1 mile	80			
Bridge at 1m 0 fur. 290 ft.	1100			
Pipe Sluice no 3 at 1m. 3 fur.	95			
Bridge at 1m 5 fur. 20 ft.	1070			
Pipe Sluice no 4 at 1m 6½ fur	95			
Pipe Sluice no 5 at 2m. 2½ fur	115			
do. no 6 at 2m. 7 fur	95			
Tail drop	400			
Mulapalem branch				
Head Sluice	1816	26	-	Excess, very little
Drop at 2m 5 fur. 418 ft.	703	-	17	
no 1 Sluice at 0m 1 fur. 66 ft.	590	30	-	Excess, very little
no 2 do. at 1m 1 fur. 396 ft.	577	-	13	
no 3 do. at 2m. 0 fur. 396 ft.	579	-	41	
no 4 do at 2m. 5 fur. 396 ft.	630	-	20	
Kankatapalem branch				
Head Sluice	1219	-	111	
no 1 Sluice at 0m 2 fur.	300	-	60	
no 2 do. at 0m 6 fur.	567	-	23	
no 3 do. at 1m. 4½ fur	599	-	21	
Chenkin Channel Hd Sluice	760		-	
"	"	"	"	
"	"	"	"	
Excavating Bapatla Chl. from head to 5 furlongs	1801	-	159	
do. from 5 fur. to 2m 250 ft.	2383	753	-	Excess was due to deviation of alignment to save lands. The excess was sanctioned in G.O. no 634 I dated 1-8-96
do. Bapatla Tank East branch & its distributaries	7400	-	440	
do. do. West branch & its distributaries	3900			

Kistna Delta Western Section:

Comparative Statement showing the diff

Sub head	Original Sanctioned Estimates Vide G. O. no 577 I dated 1-10-88		Revised Estimates Sancti in G. O. no 612 I dated 12-7-1	
	Items	amount	Items	am
7#	15	6	15	
2 Land	Item no 1056 Bapatla Chl	500	Bapatla Channel	5
	" 1057 Vale channel	1500	–	
	" 1058 1st East branch	600	1st East branch	6
	" 1059 1st West branch	700	1st West branch	7
	" 1060 2nd East branch	965	–	
	" 1061 2nd West branch	1140	–	
	" 1062 2nd Kankatapalem	230	–	
			Cherukur Channel	25
3 Works	" 1116 Bapatla Channel Head Sluice	2500	Bapatla Channel Hd Sluice	2
	" 1117 Dividing Sluice for 1st East & West branches	2950	Dividing Sluices for 1st East & West branches	29
	" 1120 Bapatla 1st West branch tail escape weir	440	Bapatla first West branch tail escape weir	4
			Malapalem branch	
			Head Sluice	1
			Drop at 2m 5 fur. 410 ft.	7
			No 1 Sluice at 0m. 1 fur. 66 ft.	5
			No 2 do. at 1m 1 fur 396 ft.	5
			No 3 do. at 2m. 0 fur. 396 ft.	6
			No 4 do. at 2m 5 fur. 396 ft.	6
			Kankatapalem branch	
			Head Sluice	13
	" 1118 Dividing Sluice for 2nd East & West branches	2360	No 1 Sluice at 0m 2 fur	3
	" 1119 Minor Channels	2000	No 2 do. at 0m 6 fur.	5
	" 1121 Bapatla 2nd east branch Tail escape weir	460	No 3 do at 1m 4½ fur.	6
	" 1122 do. 2nd West branch do.	440	Cherukur Channel Hd Sluice	7
	" 1123 Kankatapalem branch Hd Sluice	300	"	
	" 1124 Tail escape Weir	470	"	
4 Earthwork	" 1155 Bapatla Channel	16,700	Excavating Bapatla Chl from head to 5 furlongs	19
			do. from 5 fur. to 2m 250 ft.	16
	" 1158 1st East branch	2880	First East branch	2
	" 1159 1st West do.	2860	do. west branch	2
	" 1156 Minor Channels	6000	Minor Channels	6

CHIEF ENGINEER
FOR IRRIGATION.
25 MAY 1897
No 2181/60

P.W. E.2
5406/97

4 Earthwork	Items no 1160 2nd East branch	8220	Mulapalem branch	.50
	„ 1161 do West do	5500	Kaukatapalem do	31
			Chemkur Channel	15
	„ 1157 Vala Channel	10,850		
	„ 1162 Kaukatapalem Minor Channel	1430	„	
5 Miscellaneous			Demarcation Stones to Bapatla Channel	17
			No 1 Cattle Crossing at 2 m. 6 fur of Mulapalem branch	91
			No 2 do. 4 m ½ fur do.	96
			No 3 do 4 m 5 fur. do	1,0
			Demarcation Stones to Mulapalem branch	27