



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction. Erection, Testing and Commission of Sewage-pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No 98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main

Book No. :- **185**
Page No. :-

11th C Main Sewer1 RCC 1.5m MH

11th R A BILL MEASUREMENTS SEWER "C"

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No		L	B	D		Page	Quantity	
			IL	EX.L							
	Excavation of Chamber - For RCC 1.50m dia Manhole - 1.50+0.2+0.2+0.5+0.5=2.90m										
	Breadth for Manhole=2.90*2.90=8.41m										
	C 95										
	CH4702.50										
		C-700mm Dia									
		574.095	571.140	570.790			3.305				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.300	1.981	0.000	1.981	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.500	3.301	0.000	3.301	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.400	2.641	0.000	2.641	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.300	1.981	0.000	1.981	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.000	6.602	0.000	6.602	
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.500	3.301	0.000	3.301	
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.305	2.014	0.000	2.014	
	Item No. : 11 Transportation of earth Transportation charges							9.903	0.000	9.903	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							21.819			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.955	8.374			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								9.903			
								11.916	0.000	11.916	
		Net Qty = A - B									
	C 96										
	CH4741.20										
		C-Junction of 700mm and 600mm Dia									
		574.210	571.200	570.850			3.360				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.700	4.621	1.981	6.602	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.200	1.320	3.301	4.621	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.600	3.961	2.641	6.602	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.100	0.660	0.000	0.660	



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Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport). Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main

Book No. :-

Page No. :- 18

3

1b C Main Sewer1 RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.650	4.291		11.223	15.514
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.400	2.641		5.942	8.582
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.450	2.971		10.563	13.534
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.200	1.320		1.320	2.641
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.600	3.961		14.524	18.485
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.700	4.621		13.864	18.485
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.530	3.499		8.285	11.784
	Item No. : 11 Transportation of earth Transportation charges							10.540		30.672	41.212
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							23.305			
	Deduction										
	Wall	1			0.785	1.900	1.900	3.180			
	Raft	1			0.785	2.300	2.300	0.250			
	PCC	1			0.785	2.500	2.500	0.100			
								10.540			
								12.764		37.030	49.794
	C 102										
	CH5041.00										
		577.345	574.155	573.805				3.540			
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.550	3.631		15.514	19.145
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.700	4.621		8.582	13.204
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.250	1.650		13.534	15.184
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.700	4.621		2.641	7.262
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.800	5.281		18.485	23.767
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.540	3.565		0.000	3.565
	Item No. : 11 Transportation of earth Transportation charges							10.569		41.212	51.781
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							23.371			



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AURANGABAD MUNICIPAL CORPORATION

(From No.52)

Measurement Book

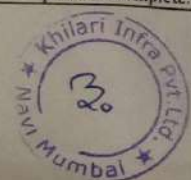
Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erection, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commissioning of Sewage Treatment Plant at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward

Book No. :- 188

Page No. :-

19th C Main Sewer1 RCC 1.5m MH

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity	
		GL	No		L	B		D	Page		Quantity
			IL	EX.L							
	Deduction										
	Wall	1		0.785	1.900	1.900	3.190	9.040			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								10.569			
								12.802	49.794	62.596	
	C 103										
	CH5077.20										
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.650	4.291	19.145	23.437	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.250	1.650	13.204	14.854	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.300	1.981	15.184	17.165	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.300	1.981	1.981	3.961	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.200	1.320	23.767	25.087	
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.300	8.582	18.485	27.068	
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.685	4.522	11.784	16.307	
	Item No. : 11 Transportation of earth Transportation charges							10.980	51.781	62.761	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							24.328			
	Deduction										
	Wall	1		0.785	1.900	1.900	3.335	9.451			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								10.980			
								13.348	62.596	75.944	
	C 104										
	CH5185.90										
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.650	4.291	23.437	27.728	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.250	1.650	14.854	16.505	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.600	3.961	17.165	21.126	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.300	1.981	7.262	9.243	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										



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Book No. :-

Page No. :-

189

5

1st C Main Sewer1 RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.750	4.951		25.087	30.038
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.450	2.971		27.068	30.038
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.650	4.291		16.307	20.598
	Item No. : 11 Transportation of earth Transportation charges							10.880		62.761	73.641
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							24.097			
	Deduction										
	Wall	1		0.785	1.900	1.900	3.300	9.352			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								10.880			
								13.216		75.944	89.160
	Net Qty = A - B										
	C 105										
	CH5242.10	578.370	575.870	575.520			2.850				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.600	3.961		27.728	31.689
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.700	4.621		16.505	21.126
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.200	1.320		21.126	22.446
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.950	6.272		9.243	15.514
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.400	2.641		30.038	32.679
	Item No. : 11 Transportation of earth Transportation charges							8.613		73.641	82.255
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							18.815			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.500	7.085			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								8.613			
								10.202		89.160	99.362
	Net Qty = A - B										
	C 106										
	CH5300.80	578.670	576.070	575.720			2.950				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.650	4.291		31.689	35.980
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.850	5.612		21.126	26.737



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AURANGABAD MUNICIPAL CORPORATION.

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Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commissioning of Sewerage Treatment Plant at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward

Book No. :- 193
Page No. :-

6

11th C Main Sewer1 RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.600	3.961		15.514	19.475
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.850	5.612		32.679	38.291
	Item No. : 11 Transportation of earth Transportation charges							8.897		82.255	91.152
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							19.475			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.600	7.368			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								8.897			
								10.579		99.362	109.941
	C 107										
	CH5352.00	C- 600mm Dia	579.670	576.270	575.920			3.750			
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.500	3.301		35.980	39.281
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.000	6.602		26.737	33.339
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.400	2.641		0.000	2.641
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.200	1.320		19.475	20.796
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.700	4.621		38.291	42.912
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.200	1.320		30.038	31.359
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.750	4.951		20.598	25.549
	Item No. : 11 Transportation of earth Transportation charges							11.164		91.152	102.315
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							24.757			
	Deduction										
	Wall	1		0.785	1.900	1.900	3.400	9.635			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								11.164			
								13.593		109.941	123.534
	C 108										
	CH5438.20	C- 600mm Dia	579.900	576.600	576.250			3.650			
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										



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Measurement Book

Book No. :- 192

Page No. :-

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport). Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main GRP DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

8

11th C Main Sewer1 RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.600	3.961		47.203	51.164
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.900	5.942		45.223	51.164
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.200	1.320		8.582	9.903
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.250	8.252		34.660	42.912
	Item No. : 11 Transportation of earth Transportation charges							8.897		124.643	133.540
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							19.475			
	Deduction										
	Wall	1									
	Raft	1		0.785	1.900	1.900	2.600	7.368			
	PCC	1		0.785	2.300	2.300	0.250	1.038			
				0.785	2.500	2.500	0.100	0.491			
								8.897			
	C 111										
	CHS621.80										
	C- 600mm Dia	579.920	577.320	576.970				10.579		150.720	161.299
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1					2.950				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.550	3.631		51.164	54.795
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.950	6.272		51.164	57.436
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.									9.903	11.223
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.200	1.320			
	Item No. : 11 Transportation of earth Transportation charges							8.252		42.912	51.164
	Item No. 30 :- Refilling the excavated trenches ...							8.897		133.540	142.437
	Total Excavation=										
	Deduction										
	Wall							19.475			
	Raft	1									
	PCC	1		0.785	1.900	1.900	2.600	7.368			
		1		0.785	2.300	2.300	0.250	1.038			
				0.785	2.500	2.500	0.100	0.491			
								8.897			
	C 112										
	CHS668.00										
	C- 600mm Dia	580.200	577.500	577.150				10.579		161.299	171.877
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1									
					0.785	8.410	0.400	2.641		54.795	57.436



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(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport). Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward

Book No. :-
Page No. :- **193**

9

17b C Main Sewer1 RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.100	7.262			
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.100	0.660	57.436	64.698	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.								11.223	11.883	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.400	9.243	51.164	60.407	
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.050	0.330	2.311	2.641	
	Item No. : 11 Transportation of earth Transportation charges							9.180	142.437	151.617	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							20.136			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.700	7.651			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								9.180			
								10.955	171.877	182.833	
	C 113										
	CH5769.20										
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.200	1.320	57.436	58.756	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete..										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.100	0.660	22.446	23.106	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.200	7.922	3.961	11.883	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.100	0.660	42.912	43.572	
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.050	6.932	31.359	38.291	
	Item No. : 11 Transportation of earth Transportation charges							8.047	151.617	159.664	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							17.495			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.300	6.518			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								8.047			
								9.448	182.833	192.281	
	CKG 4										
	CH213.70										
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.550	3.631	58.756	62.387	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										



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AURANGABAD MUNICIPAL CORPORATION

(From No. 52)

Measurement Book

Name of work: Development of Underground Sewerage Collection system for Zone I to VI and Zone Nahr Ab. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Hahshiravadi (Lanchanvadi) Banewadi, Siddharth Garden, Zalta, Padegaon, CHCO (Airport). Construction, Erecting, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golsadi, Zalta, Ward No.9B and CHCO (Airport). Providing, lowering, laying, jointing and testing rising main

Book No. 194
Page No. 3

10

Dia C Main Sewer RCC 1.5m DIA

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	(a) For Lift 0 to 1.5m	1			0.785	0.410	0.950	6.272			
	(b) For Lift 1.5m to 3.0m	1			0.785	0.410	0.800	5.201	64.698	70.970	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.								11.883	17.165	
	(b) For Lift 1.5m to 3.0m	1			0.785	0.410	0.700	4.621		60.407	
	(c) For Lift 3.0m to 4.5m	1			0.785	0.410	0.100	0.660		2.641	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.									3.301	
	(c) For Lift 3.0m to 4.5m	1			0.785	0.410	1.050	6.932		11.157	
	Item No. 11 Transportation of earth Transportation charges							12.297	159.664	171.961	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=										
	Deduction							27.398			
	Wall										
	Raft	1		0.785	1.900	1.900	3.800	10.769			
	PCC	1		0.785	2.300	2.300	0.250	1.038			
		1		0.785	2.500	2.500	0.100	0.491			
								12.297			
	CKG 5										
	CH277.40							15.100	192.281	207.381	
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1					3.350				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.				0.785	0.410	0.400	2.641	62.387	65.028	
	(a) For Lift 0 to 1.5m	1			0.785	0.410	0.500	3.301		70.970	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.									74.271	
	(a) For Lift 0 to 1.5m	1			0.785	0.410	0.600	3.961		23.106	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.									27.068	
	(b) For Lift 1.5m to 3.0m	1			0.785	0.410	0.300	1.981		43.572	
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete									45.553	
	(b) For Lift 1.5m to 3.0m	1			0.785	0.410	1.200	7.922		38.291	
	(c) For Lift 3.0m to 4.5m	1			0.785	0.410	0.350	2.311		25.549	
	Item No. 11 Transportation of earth Transportation charges							10.030	171.961	181.991	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=										
	Deduction							22.116			
	Wall										
	Raft	1		0.785	1.900	1.900	3.000	8.502			
	PCC	1		0.785	2.300	2.300	0.250	1.038			
		1		0.785	2.500	2.500	0.100	0.491			
								10.030			
	CKG 6										
	CH328.60							12.086	207.381	219.467	
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	0.410	0.400	2.641		65.028	
										67.669	



Signature



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport). Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main C.P.D. line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to

Book No. :-

195

Page No. :-

11

11b C Main Sewer1 RCC 1.5m MH

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B		D	Page	
		GL	IL	EX.L						
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.300	1.981	74.271	76.251
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.300	1.981	27.068	29.048
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.500	3.301	11.883	15.184
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete									
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.500	9.903	46.213	56.116
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.150	0.990	27.860	28.850
	Item No. : 11 Transportation of earth Transportation charges							9.464	181.991	191.455
	Item No. 30 :- Refilling the excavated trenches ...									
	Total Excavation=							20.796		
	Deduction									
	Wall	1		0.785	1.900	1.900	2.800	7.935		
	Raft	1		0.785	2.300	2.300	0.250	1.038		
	PCC	1		0.785	2.500	2.500	0.100	0.491		
								9.464		
								11.332	219.467	230.799
	Net Qty = A - B									
	CKG 36	C-700mm Dia at Katkat Gate to Rahiman Colony								
	CH1180.90	585.674	582.629	582.279			3.395			
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.600	3.961	67.669	71.630
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.800	5.281	76.251	81.533
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.100	0.660	29.048	29.708
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.800	5.281	65.028	70.310
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.									
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.700	4.621	45.553	50.174
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.395	2.608	18.089	20.697
	Item No. : 11 Transportation of earth Transportation charges							10.158	191.455	201.613
	Item No. 30 :- Refilling the excavated trenches ...									
	Total Excavation=							22.413		
	Deduction									
	Wall	1		0.785	1.900	1.900	3.045	8.629		
	Raft	1		0.785	2.300	2.300	0.250	1.038		
	PCC	1		0.785	2.500	2.500	0.100	0.491		
								10.158		
								12.255	230.799	243.055
	Net Qty = A - B									
	CKG 37	C-700mm Dia at Katkat Gate to Rahiman Colony								
	CH1209.60	586.224	582.750	582.400			3.824			



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Book No. :- 196

Page No. :-

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main GRP DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

12

1st C Main Sewer1 RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.500	3.301		71.630	74.931
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.000	6.602		81.533	88.135
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.800	5.281		17.165	22.446
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.000	0.000		29.708	29.708
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.700	4.621		70.310	74.931
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.200	1.320		3.301	4.621
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.000	0.000		15.184	15.184
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.000	0.000		50.174	50.174
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.624	4.120		20.697	24.816
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.000	0.000		56.116	56.116
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.000	0.000		28.850	28.850
	Item No. : 11 Transportation of earth Transportation charges							11.374		201.613	212.986
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							25.245			
	Deduction										
	Wall	1			0.785	1.900	1.900	3.474	9.845		
	Raft	1			0.785	2.300	2.300	0.250	1.038		
	PCC	1			0.785	2.500	2.500	0.100	0.491		
										11.374	
	Net Qty = A - B							13.872		243.055	256.927



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Up to e



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward 30 and CIDCO (Airport). Provision, lowering, laying, joining and testing rising main

Book No. :-

Page No. :- 197

1 of 3

12h C Main Sewer1 BBM 1.5m MH

12th R A BILL MEASUREMENTS SEWER "C"

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Excavation of Chamber - For 2.00m dia Manhole (upto a depth of 2.0m to 5.0m)- 2.00+0.45+0.45+0.5+0.5=3.90m										
	Breadth for Manhole=3.90*3.90=15.21m										
	Excavation of Chamber - For 1.50m dia Manhole (upto a depth of 2.0m to 5.0m)- 1.50+0.35+0.35+0.5+0.5=3.20m										
	Breadth for Manhole=3.2*3.2=10.24m										
	Excavation of Chamber - For 1.20 dia chamber (upto 2.0m depth)- 1.20+0.50+0.5+0.5=2.70m										
	Area for chamber upto 2m=2.70 X 2.70=7.29m										
	Excavation of Chamber - For 0.9 dia chamber up to 1.5 mt depth -0.9+0.5+0.5+0.5=2.40m										
	Breadth for chamber up to 1.5m=2.40 X 2.40=5.76m										
	CKG 38	C-700mm Dia at Kattkat Gate to Rahiman Colony									
	CH1260.80	587.159	582.950	582.500			4.659				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.400	3.215		74.931	78.146
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.100	8.842		88.135	96.977
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.900	7.235		22.446	29.681
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.600	4.823		74.931	79.754
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.900	7.235		4.621	11.856
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.759	6.101		24.816	30.917
	Item No. : 11 Transportation of earth Transportation charges							15.089		212.986	228.075
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							34.236			
	Deduction										
	Brick work	1			0.785	2.280	2.280	2.209	9.014		



Signature

AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Sahm Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchamwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main

Book No. :- 198

Page No. :-

2 of 3

17th C Main Sewer 1.5m MH

Date	Particulars of work	DETAILS						Content of area	Last measurement Page	Total Upto Date Quantity
		No			L	B	D			
		GL	IL	EX.L						
	PCC	1		0.785	1.540	1.540	2.000	3.723		
	Soling	1		0.785	2.580	2.580	0.250	1.306		
				0.785	2.580	2.580	0.200	1.045		
								15.089		
								19.146		
	CKG 39									
	CH1317.00									
		587.944	583.560	583.110			4.834		256.927	276.073
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.450	3.617	78.146	81.764
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.050	8.440	96.977	105.417
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.300	10.450	29.681	40.131
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.									
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.200	1.608	79.754	81.362
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	1.200	9.646	11.856	21.502
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.									
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.634	5.096	30.917	36.014
	Item No. : 11 Transportation of earth Transportation charges							15.803	228.075	243.879
	Item No. 30 :- Refilling the excavated trenches ...									
	Total Excavation=									
	Deduction							35.240		
	Brick work	1		0.785	2.280	2.280	2.384	9.728		
	PCC	1		0.785	1.540	1.540	2.000	3.723		
	Soling	1		0.785	2.580	2.580	0.250	1.306		
				0.785	2.580	2.580	0.200	1.045		
								15.803		
	CKG 40									
	CH1348.20									
		588.390	584.190	583.740			4.650		276.073	295.510
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.350	2.813	81.764	84.577
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.150	9.244	105.417	114.661
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.200	9.646	40.131	49.777
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.									
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.300	2.412	81.362	83.773
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	1.000	8.038	21.502	29.540



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