



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 Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Padegaon, Golwadi Zalta Ward

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Azad Chowk to Siddharth Chowk R 400mm Main

12th RA BILL MEASUREMENTS Branch Sewer at Azad Chowk to Siddharth Chowk

Date	Particulars of work	DETAILS						Content of area	Last measurement		TOTAL TO DATE
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	400mm Dia Branch at Azad Chowk to Siddharth Chowk										
	Width of Trench - For Bottom Lift 0.00-1.50m- 0.4+0.15+0.15+0.5=1.2m										
	From Bottom Lift 1.50m-3.00m- 0.4+0.15+0.15+0.5+0.4=1.6m										
	From Bottom Lift 3.00m-4.50m- 0.4+0.15+0.15+0.5+0.4+0.4=2.0m										
12-Jul-16	AS 26 to AS 27										
	CH813.20	606.630	604.500	604.300			2.330	2.420			
	CH838.95	607.210	604.900	604.700			2.510				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			24.150	1.600	1.100	42.504		289.347	331.851
	(b) For Lift 1.5m to 3.0m	1			24.150	1.200	0.200	5.796		16.066	21.862
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			24.150	1.600	0.200	7.728		440.260	447.988
	(b) For Lift 1.5m to 3.0m	1			24.150	1.200	0.300	8.694		169.659	178.353
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			24.150	1.600	0.200	7.728		52.929	60.657
	(b) For Lift 1.5m to 3.0m	1			24.150	1.200	0.420	12.172		80.906	93.077
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			24.150	1.200	0.200	5.796		36.856	42.652
	Item No. 11 Transportation of earth Transportation charges including loading & unloading							11.531		73.636	85.167
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			25.000			25.000		0.000	25.000
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A							84.622			
	Deduction										
	pipe area	1		0.785	24.150	0.550	0.550	5.735			
	soling							0.000			
	PCC							0.000			
	Murum bedding							5.796			
	Total = B							11.531			
	Net Qty = A - B							73.091		1002.698	1075.789
14-Jul-16											
	CH838.95	607.210	604.900	604.700			2.510	2.510			
	CH854.70	607.300	604.990	604.790			2.510				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			14.150	1.600	1.100	24.904		331.851	356.755
	(b) For Lift 1.5m to 3.0m	1			14.150	1.200	0.610	10.358		21.862	32.220
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										



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Azad Chowk to Siddharth Chowk R 400mm Main

(a) For Lift 0 to 1.5m	1			14.150	1.600	0.200	4.528		447.988	452.516
(b) For Lift 1.5m to 3.0m	1			14.150	1.200	0.400	6.792		178.353	185.145
Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
(a) For Lift 0 to 1.5m	1			14.150	1.600	0.200	4.528		60.657	65.185
Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)										
	1			14.150	1.200	0.200	3.396		42.652	46.048
Item No. : 11 Transportation of earth Transportation charges including loading & unloading										
							6.756		85.167	91.923
Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia										
	1			15.000			15.000		25.000	40.000
Item No 30 :- Refilling the excavated trenches ...										
Total Excavation= A							51.110			
Deduction										
pipe area	1		0.785	14.150	0.550	0.550	3.360			
soling							0.000			
PCC							0.000			
Murum bedding							3.396			
Total = B							6.756			
Net Qty = A - B							44.354		1075.789	1120.143
18-Jul-16	AS 27 to AS 28									
CH854.70	607.300	605.190	604.990				2.310	2.510		
CH883.70	607.800	605.290	605.090				2.710			
Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc complete.										
(a) For Lift 0 to 1.5m	1			25.800	1.600	0.400	16.512		356.755	373.267
Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
(a) For Lift 0 to 1.5m	1			25.800	1.600	0.900	37.152		452.516	489.668
(b) For Lift 1.5m to 3.0m	1			25.800	1.200	0.100	3.096		185.145	188.241
Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
(a) For Lift 0 to 1.5m	1			25.800	1.600	0.200	8.256		65.185	73.441
(b) For Lift 1.5m to 3.0m	1			25.800	1.200	0.200	6.192		93.077	99.269
Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
(b) For Lift 1.5m to 3.0m	1			25.800	1.200	0.710	21.982		0.000	21.982
Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)										
	1			25.800	1.200	0.200	6.192		46.048	52.240
Item No. : 11 Transportation of earth Transportation charges including loading & unloading										
							12.319		91.923	104.242
Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia										
	1			27.500			27.500		40.000	67.500
Item No 30 :- Refilling the excavated trenches ...										
Total Excavation= A							93.190			
Deduction										
pipe area	1		0.785	25.800	0.550	0.550	6.127			
soling							0.000			
PCC							0.000			
Murum bedding							6.192			



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Azad Chowk to Siddharth Chowk R 400mm Main

Total = B		Net Qty = A - B						12.319		
								80.871	1120.143	1201.014
20-Jul-16	AS 28 to AS 29									
	CH883.70	607.800	605.890	605.690			2.110	2.135		
	CH894.45	607.890	605.930	605.730			2.160			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc complete.									
	(a) For Lift 0 to 1.5m	1			9.150	1.600	0.300	4.392	373.267	377.659
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.									
	(a) For Lift 0 to 1.5m	1			9.150	1.600	1.000	14.640	489.668	504.308
	(b) For Lift 1.5m to 3.0m	1			9.150	1.200	0.100	1.098	188.241	189.339
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.									
	(a) For Lift 0 to 1.5m	1			9.150	1.600	0.200	2.928	73.441	76.369
	(b) For Lift 1.5m to 3.0m	1			9.150	1.200	0.300	3.294	99.269	102.563
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.									
	(b) For Lift 1.5m to 3.0m	1			9.150	1.200	0.235	2.580	21.982	24.562
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)*	1			9.150	1.200	0.200	2.196	52.240	54.436
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							4.369	104.242	108.611
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1		10.000				10.000	67.500	77.500
	Item No 30 :- Refilling the excavated trenches ...									
	Total Excavation= A							28.932		
	Deduction									
	pipe area	1		0.785	9.150	0.550	0.550	2.173		
	soling							0.000		
	PCC							0.000		
	Murum bedding							2.196		
	Total = B							4.369		
		Net Qty = A - B						24.564	1201.014	1225.577
23-Jul-16										
	CH894.45	607.890	605.930	605.730			2.160	2.370		
	CH912.70	608.450	606.070	605.870			2.580			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc complete.									
	(a) For Lift 0 to 1.5m	1			16.650	1.600	0.200	5.328	377.659	382.987
	(b) For Lift 1.5m to 3.0m	1			16.650	1.200	0.000	0.000	32.220	32.220
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.									
	(a) For Lift 0 to 1.5m	1			16.650	1.600	0.700	18.648	504.308	522.956
	(b) For Lift 1.5m to 3.0m	1			16.650	1.200	0.000	0.000	189.339	189.339
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.									
	(a) For Lift 0 to 1.5m	1			16.650	1.600	0.400	10.656	76.369	87.025
	(b) For Lift 1.5m to 3.0m	1			16.650	1.200	0.000	0.000	102.563	102.563



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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

Azad Chowk to Siddharth Chowk R 900-MB

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12th RA BILL MEASUREMENTS

Mata Temple Chowk

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Mata Temple Chowk-900mm Dia (Strom Water Line)										
	Width of trench- For Bottom Lift 0.00-1.50m- 0.9+0.20+0.20+0.5=1.80m										
	From Bottom Lift 1.50-3.00m- 0.9+0.20+0.20+0.5+0.4=2.2m										
	From Bottom Lift 3.00-4.50m- 0.9+0.2+0.2+0.5+0.4+0.4= 2.6m										
	From Bottom Lift 4.50-6.0m- 0.9+0.20+0.20+0.5+0.4+0.4+0.4 = 3.0m										
	CH0.00	592.430	591.045	590.745			1.685	1.695			
	CH27.60	592.450	591.045	590.745			1.705				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			26.00	2.200	1.000	57.200	382.987	440.187	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			26.00	2.200	0.400	22.880	522.956	545.836	
	(b) For Lift 1.5m to 3.0m	1			26.00	1.800	0.195	9.126	189.339	198.465	
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock										
	(a) For Lift 0 to 1.5m	1			26.00	2.200	0.100	5.720	87.025	92.745	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			26.00	1.800	0.200	9.360	58.432	67.792	
	Item No. : 11 Transportation of earth Transportation charges including							34.056	116.560	150.616	
	Item No. 17 (g) :- Lowering & Laying RCC NP3 class pipe of 900mm Dia	1			27.00			27.000	0.000	27.000	
	Item No 30 :- Refilling the excavated trenches ...							94.926			
	Total Excavation= A										
	Deduction										
	pipe area	1		0.785	26.00	1.100	1.100	24.70			
	soiling							0.00			
	PCC							0.00			
	Murum bedding							9.36			
	Total = B							34.06			
								Net Qty = A - B			
								60.87	1274.970	1335.840	
	CH27.60	592.450	591.450	591.150			1.300				
	CH60.70	591.975	591.575	591.275			0.700	1.000			
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc										
	(a) For Lift 0 to 1.5m	1			31.50	1.800	1.000	56.700	0.000	56.700	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			31.50	1.800	0.200	11.340	67.792	79.132	
	Item No. : 11 Transportation of earth Transportation charges including							41.260	150.616	191.877	



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Azad Chowk to Siddharth Chowk R 900-MB

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity	
		GL	IL	EX.L	L	B		D	Page		Quantity
	Item No. 17 (g) :- Lowering & Laying RCC NP3 class pipe of 900mm Dia	1			32.50			32.500		27.000	59.500
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A							56.700			
	Deduction										
	pipe area	1		0.785	31.50	1.100	1.100	29.92			
	soling							0.00			
	PCC							0.00			
	Murum bedding							11.34			
	Total = B							41.26			
								15.44			
									1335.840		1351.280
	CH60.70	591.975	591.645	591.345			0.630	1.000			
	CH63.80	592.716	591.645	591.345			1.371				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc										
	(a) For Lift 0 to 1.5m	1			1.50	1.800	1.000	2.700		56.700	59.400
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			1.50	1.800	0.000	0.000		440.187	440.187
	(b) For Lift 1.5m to 3.0m	1			1.50	1.800	0.000	0.000		32.220	32.220
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			1.50	1.800	0.000	0.000		545.836	545.836
	(b) For Lift 1.5m to 3.0m	1			1.50	1.800	0.000	0.000		198.465	198.465
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock										
	(a) For Lift 0 to 1.5m	1			1.50	1.800	0.000	0.000		92.745	92.745
	(b) For Lift 1.5m to 3.0m	1			1.50	1.800	0.000	0.000		102.563	102.563
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock										
	(a) For Lift 0m to 1.5m	1			1.50	1.800	0.000	0.000		5.328	5.328
	(b) For Lift 1.5m to 3.0m	1			1.50	1.800	0.000	0.000		41.945	41.945
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			1.50	1.800	0.200	0.540		79.132	79.672
	Item No. : 11 Transportation of earth Transportation charges including							1.965		191.877	193.841
	Item No. 17 (g) :- Lowering & Laying RCC NP3 class pipe of 900mm Dia	1			2.50			2.500		59.500	62.000
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A							2.700			
	Deduction										
	pipe area	1		0.785	1.50	1.100	1.100	1.42			
	soling							0.00			
	PCC							0.00			
	Murum bedding							0.00			
	Total = B							0.54			
								1.96			
								0.74			
									1351.280		1352.015



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Azad Chowk to Siddharth Chowk R 1.2 MH Exc.

14th RA BILL MEASUREMENTS OF CHEMBERS Azad Chowk to Siddharth Chowk

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Sewer at Azad Chowk to Siddharth Chowk										
	Excavation of Chamber - For 1.20 dia chamber (upto 2.0m depth)- 1.20+0.25+0.25+0.5+0.5=2.66m										
	Bredth for chember upto 2m=2.66*2.66=7.075m										
	AS 29.1										
	CH9.70	608.580	606.760	606.510			2.070				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.200	1.11		0.00	1.11
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.200	6.66		0.00	6.66
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.100	0.56		0.00	0.56
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.570	3.17		0.00	3.17
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated							3.206		0.00	3.21
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							11.497			
	Deduction										
	Brick work	1			0.785	1.31	1.31	1.820	2.45		
	Brick work								0.00		
	PCC	1			0.785	1.96	1.96	0.250	0.75		
	Murrum bedding								0.00		
	Total (B)							3.21			
	Net Qty = A - B							8.29		0.00	8.29
	AS 29.8										
	CH202.10	611.000	609.100	608.850			2.150				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.100	6.11		1.11	7.22
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.500	2.78		0.00	2.78
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.300	1.67		6.66	8.33
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.150	0.83		0.00	0.83
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.100	0.56		0.56	1.11
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated							3.313		3.21	6.52
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							11.941			
	Deduction										
	Brick work	1			0.785	1.31	1.31	1.900	2.56		



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Azad Chowk to Siddharth Chowk R 1.2 MH Exc.

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No IL	EX.L	L	B	D		Page	Quantity	
	Brick work							0.00			
	PCC	1		0.785	1.96	1.96	0.250	0.75			
	Murram bedding							0.00			
	Total (B)							3.31			
				Net Qty = A - B				8.63	8.29	16.92	
	AS 29.9										
	CH236.20	611.350	609.600	609.350			2.000				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.100	6.11	7.22	13.33	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murram etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.300	1.67	8.33	10.00	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.500	2.78	0.83	3.61	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.100	0.56	1.11	1.67	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated							3.111	6.52	9.63	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							11.108			
	Deduction										
	Brick work	1		0.785	1.31	1.31	1.750	2.36			
	Brick work							0.00			
	PCC	1		0.785	1.96	1.96	0.250	0.75			
	Murram bedding							0.00			
	Total (B)							3.11			
				Net Qty = A - B				8.00	16.92	24.91	
	AS 29.10										
	CH266.50	611.650	609.880	609.630			2.020				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.200	6.66	13.33	19.99	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murram etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.200	1.11	10.00	11.11	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.520	2.89	3.61	6.50	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.100	0.56	1.67	2.23	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated							3.138	9.63	12.77	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							11.219			
	Deduction										
	Brick work	1		0.785	1.31	1.31	1.770	2.38			
	Brick work							0.00			
	PCC	1		0.785	1.96	1.96	0.250	0.75			
	Murram bedding							0.00			
	Total (B)							3.14			
				Net Qty = A - B				8.08	24.91	32.99	



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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, 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.08 and CIDCO (Airport). Description: Excavation, Laying, Joining and Testing of Sewer

Book No. :-

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Azad Chowk to Siddharth Chowk R 1.2 MH Exc.

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity	
		GL	No		L	B		D	Page		Quantity
			IL	EX.L							
AS 29.11											
CH304.30		611.790	610.300	610.050			1.740				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.200	6.66	19.99	26.66	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.240	1.33	2.78	4.11	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.200	1.11	11.11	12.22	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.000	0.00	6.50	6.50	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.100	0.56	2.22	2.78	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.000	0.00	3.17	3.17	
	Item No. 11 Transportation of earth Transportation charges including loading & unloading excavated							2.761	12.77	15.53	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							9.664			
	Deduction										
	Brick work	1			0.785	1.31	1.31	1.490	2.01		
	Brick work							0.00			
	PCC	1			0.785	1.96	1.96	0.250	0.75		
	Murrum bedding							0.00			
								2.76			
	Total (B)							6.90	32.99	39.90	
					Net Qty = A - B						



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

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Azad Chowk to Siddharth Chowk R 1.5m MH Excavation

11th RA BILL MEASUREMENTS

BRANCH SEWER AT Azad Chowk to Siddharth Chowk

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	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										
	AS 27										
	CH854.70	607.300	604.990	604.740			2.560				
	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	26.659	35.501	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.610	4.903	4.110	9.013	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.200	1.608	12.219	13.826	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.450	3.617	6.498	10.115	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.200	1.608	2.777	4.385	
	Item No. : 11 Transportation of earth Transportation charges							6.295	15.530	21.825	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							20.578			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.310	1.265			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								6.295			
								14.284	39.898	54.181	
	AS 28										
	CH883.70	607.800	605.290	605.040			2.760				
	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	0.400	3.215	35.501	38.716	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.900	7.235	13.826	21.061	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.100	0.804	10.115	10.919	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.200	1.608	4.385	5.992	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.200	1.608	3.166	4.773	
	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	10.240	0.960	7.717	0.000	7.717	
	Item No. : 11 Transportation of earth Transportation charges							7.111	21.825	28.936	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							22.186			



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

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Azad Chowk to Siddharth Chowk R 1.5m MH Excavation

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Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity	
		No			L	B	D		Page	Quantity		
		GL	IL	EX.L								
	Deduction			0.785	2.280	2.280	0.510			2.081		
	Brick work	1		0.785	1.540	1.540	2.000			3.723		
				0.785	2.580	2.580	0.250			1.306		
	PCC	1		0.785	2.580	2.580	0.000			0.000		
	Soling	1								7.111		
				Net Qty = A - B						15.075	54.181	69.256
	AS 29	608.450	606.070	605.820			2.630					
	CH912.70											
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.				0.785	10.240	0.200	1.608		38.716	40.324	
	(a) For Lift 0 to 1.5m	1										
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.				0.785	10.240	0.700	5.627		21.061	26.688	
	(a) For Lift 0 to 1.5m	1										
	Item No. 4 :- Excavation for foundation/pipe trenches in soft				0.785	10.240	0.400	3.215		5.992	9.208	
	(a) For Lift 0 to 1.5m	1										
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete				0.785	10.240	0.200	1.608		0.000	1.608	
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.130	9.083		7.717	16.800	
	(b) For Lift 1.5m to 3.0m	1						6.580		28.936	35.516	
	Item No. : 11 Transportation of earth Transportation charges											
	Item No. 30 :- Refilling the excavated trenches ...							21.141				
	Total Excavation=											
	Deduction			0.785	2.280	2.280	0.380	1.551				
	Brick work	1		0.785	1.540	1.540	2.000	3.723				
				0.785	2.580	2.580	0.250	1.306				
	PCC	1		0.785	2.580	2.580	0.000	0.000				
	Soling	1						6.580				
				Net Qty = A - B				14.561		69.256	83.817	
	AS 29.2	609.790	607.190	606.940			2.850					
	CH33.70											
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.				0.785	10.240	0.200	1.608		40.324	41.932	
	(a) For Lift 0 to 1.5m	1										
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.				0.785	10.240	1.200	9.646		26.688	36.334	
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.500	4.019		10.919	14.938	
	(b) For Lift 1.5m to 3.0m	1										
	Item No. 4 :- Excavation for foundation/pipe trenches in soft				0.785	10.240	0.100	0.804		9.208	10.011	
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.850	6.833		4.773	11.606	
	(b) For Lift 1.5m to 3.0m	1						7.478		35.516	42.994	
	Item No. : 11 Transportation of earth Transportation charges											
	Item No. 30 :- Refilling the excavated trenches ...							22.909				
	Total Excavation=											
	Deduction			0.785	2.280	2.280	0.600	2.448				
	Brick work	1		0.785	1.540	1.540	2.000	3.723				
				0.785	2.580	2.580	0.250	1.306				
	PCC	1										



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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, 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

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Azad Chowk to Siddharth Chowk R 1.5m MH Excavation

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	HL	EX.L							
				0.785	2.580	2.580	0.000	0.000			
	Soling	1						7.478			
								15.431	83.817	99.248	
				Net Qty = A - B							
	AS 29.3										
	CH67.40	610.200	607.300	607.050			3.150				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.				0.785	10.240	0.300	2.412	41.932	44.343	
	(a) For Lift 0 to 1.5m	1									
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.				0.785	10.240	1.100	8.842	36.334	45.176	
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.100	8.842	14.938	23.781	
	(b) For Lift 1.5m to 3.0m	1									
	Item No. 4 :- Excavation for foundation/pipe trenches in soft				0.785	10.240	0.100	0.804	10.011	10.815	
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.400	3.215	11.606	14.821	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.150	1.206	0.000	1.206	
	(c) For Lift 3.0m to 4.5m	1						8.702	42.994	51.697	
	Item No. : 11 Transportation of earth Transportation charges										
	Item No. 30 :- Refilling the excavated trenches ...							25.321			
	Total Excavation=										
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.900	3.673			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								8.702			
				Net Qty = A - B					16.619	99.248	115.867
	AS 29.4										
	CH105.00	610.300	607.750	607.500			2.800				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.				0.785	10.240	0.300	2.412	44.343	46.755	
	(a) For Lift 0 to 1.5m	1									
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.				0.785	10.240	1.100	8.842	45.176	54.018	
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.900	7.235	23.781	31.015	
	(b) For Lift 1.5m to 3.0m	1									
	Item No. 4 :- Excavation for foundation/pipe trenches in soft				0.785	10.240	0.100	0.804	10.815	11.619	
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.400	3.215	14.821	18.037	
	(b) For Lift 1.5m to 3.0m	1									
	Item No. : 11 Transportation of earth Transportation charges							7.274	51.697	58.971	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							22.508			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.550	2.244			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								7.274			
				Net Qty = A - B					15.233	115.867	131.100
	AS 29.5										
	CH116.90	610.250	607.860	607.610			2.640				



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

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Azad Chowk to Siddharth Chowk R 1.5m MH Excavation

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	10.240	0.400	3.215		46.755	49.970
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.000	8.038		54.018	62.057
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.500	4.019		31.015	35.034
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.100	0.804		11.619	12.423
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.640	5.145		18.037	23.181
	Item No. : 11 Transportation of earth Transportation charges							6.621		58.971	65.592
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							21.221			
	Deduction										
	Brick work	1			0.785	2.280	2.280	0.390	1.591		
		1			0.785	1.540	1.540	2.000	3.723		
	PCC	1			0.785	2.580	2.580	0.250	1.306		
	Soling	1			0.785	2.580	2.580	0.000	0.000		
								6.621			
	Net Qty = A - B							14.600		131.100	145.700
	AS 29.6										
	CH141.70	610.330	608.030	607.780				2.550			
	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	0.300	2.412		49.970	52.381
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.100	8.842		62.057	70.899
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.600	4.823		35.034	39.857
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.100	0.804		12.423	13.227
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.450	3.617		23.181	26.799
	Item No. : 11 Transportation of earth Transportation charges							6.254		65.592	71.846
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							20.498			
	Deduction										
	Brick work	1			0.785	2.280	2.280	0.300	1.224		
		1			0.785	1.540	1.540	2.000	3.723		
	PCC	1			0.785	2.580	2.580	0.250	1.306		
	Soling	1			0.785	2.580	2.580	0.000	0.000		
								6.254			
	Net Qty = A - B							14.244		145.700	159.944
	AS 29.7										
	CH174.90	611.610	608.700	608.450				3.160			
	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	0.300	2.412		52.381	54.793
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

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Azad Chowk to Siddharth Chowk R 1.5m MH Excavation

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No		L	B	D		Page	Quantity	
			IL	EXL							
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.100	8.842		70.899	79.741
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.700	5.627		39.857	45.484
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.100	0.804		13.227	14.031
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.800	6.431		26.799	33.229
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.160	1.286		1.206	2.492
	Item No. : 11 Transportation of earth Transportation charges							8.743		71.846	80.589
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							25.401			
	Deduction										
	Brick work	1			0.785	2.280	2.280	0.910	3.713		
	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	0.000	0.000		
								8.743			
	AS 19.1							Net Qty = A - B		16.658	159.944
	CH23.80	605.420	602.950	602.700				2.720			
	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	0.200	1.608		54.793	56.401
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.200	9.646		79.741	89.387
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.200	1.608		45.484	47.092
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.100	0.804		14.031	14.835
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.020	8.199		33.229	41.428
	Item No. : 11 Transportation of earth Transportation charges							6.948		80.589	87.537
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=										
	Deduction							21.864			
	Brick work	1			0.785	2.280	2.280	0.470	1.918		
	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	0.000	0.000		
								6.948			
	AS 19.2							Net Qty = A - B		14.917	176.602
	CH45.25	606.850	603.620	603.370				3.480			191.519
	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	0.100	0.804		56.401	57.205
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.300	10.450		89.387	99.837
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.300	2.412		47.092	49.503
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.100	0.804		14.835	15.638
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.600	4.823		41.428	46.252



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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, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanehanwadi), 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. 09 and CIDCO (Airport). Detailed drawings, bills of material and testing data are

Book No. :-

Page No. :- 055

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Azad Chowk to Siddharth Chowk R 1.5m MH Excavation

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. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.600	4.823	16.800	21.623	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.480	3.858	0.000	3.858	
	Item No. : 11 Transportation of earth Transportation charges							10.049	87.537	97.586	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							27.974			
	Deduction										
	Brick work	1		0.785	2.280	2.280	1.230	5.019			
		1		0.785	1.540	1.540	2.000	3.723			
		1		0.785	2.580	2.580	0.250	1.306			
	PCC	1		0.785	2.580	2.580	0.000	0.000			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								10.049			
	Net Qty = A - B								191.519	209.444	
	AS 19.3										
	CH59.25	607.200	604.430	604.180			3.020				
	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	0.100	0.804	57.205	58.008	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.300	10.450	99.837	110.287	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.300	2.412	49.503	51.915	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.100	0.804	15.638	16.442	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.700	5.627	46.252	51.878	
	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	10.240	0.500	4.019	21.623	25.642	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.020	0.161	3.858	4.019	
	Item No. : 11 Transportation of earth Transportation charges							8.172	97.586	105.758	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							24.276			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.770	3.142			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								8.172			
	Net Qty = A - B							16.104	209.444	225.548	
	AS 19.4										
	CH80.75	607.850	605.220	604.970			2.880				
	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	0.200	1.608	58.008	59.616	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.200	9.646	110.287	119.933	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										



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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, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshrawadi (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

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Azad Chowk to Siddharth Chowk R 1.5m MH Excavation

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	IL	EX.L	L	B	D		Page	Quantity	
	(a) For Lift 0 to 1.5m	1									
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.100	0.804			
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete				0.785	10.240	0.800	6.431		16.442	17.246
	(b) For Lift 1.5m to 3.0m	1								51.878	58.309
	Item No. : 11 Transportation of earth Transportation charges				0.785	10.240	0.580	4.662		25.642	30.305
	Item No. 30 :- Refilling the excavated trenches ...							7.601		105.758	113.359
	Total Excavation=										
	Deduction							23.151			
	Brick work	1									
	PCC	1		0.785	2.280	2.280	0.630	2.571			
	Soling	1		0.785	1.540	1.540	2.000	3.723			
		1		0.785	2.580	2.580	0.250	1.306			
				0.785	2.580	2.580	0.000	0.000			
	AS 19.5							7.601			
	CH102.25							15.550		225.548	241.098
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.	608.350	605.980	605.730				2.620			
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.300	2.412		59.616	62.028
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.000	8.038		119.933	127.971
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.200	1.608		17.246	18.854
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.500	4.019		58.309	62.329
	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	10.240	0.620	4.984		30.305	35.289
	Item No. : 11 Transportation of earth Transportation charges							6.540		113.359	119.898
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=										
	Deduction							21.061			
	Brick work	1									
	PCC	1		0.785	2.280	2.280	0.370	1.510			
	Soling	1		0.785	1.540	1.540	2.000	3.723			
		1		0.785	2.580	2.580	0.250	1.306			
				0.785	2.580	2.580	0.000	0.000			
	AS 19.6							6.540			
	CH138.75							14.521		241.098	255.619
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.	609.470	606.975	606.725				2.745			
	(a) For Lift 0 to 1.5m	1									
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.400	3.215		62.028	65.243
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.				0.785	10.240	0.000	0.000		9.013	9.013
	(a) For Lift 0 to 1.5m	1									
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.000	8.038		127.971	136.010
					0.785	10.240	1.245	10.008		51.915	61.923



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