



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 Commissioning of Sewerage Collection System at Siddharth Garden, Padegaon, Golwadi, Zalta, Ward

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Bhusingpura 400mm

19th R A BILL MEASUREMENTS

A-Branch Sewer at Bhusingpura

Date	Particulars of work	DETAILS					Content of area	Last measurement		TOTAL TO DATE	
		No			L	B		D	Page		Qty.
		GL	IL	EX.L							
	400mm Dia A-Branch at Bhusingpura (Width of Trench -0.4+0.15+0.15+0.5=1.2m)										
For Width of Trench Calculation Outer dia of Pipe + 0.50 for Bottom and Add 0.4 for Subsequent upper Lifts.	For Depth	0.0m to 1.5m		0.0m to 3.0m		0.0m to 4.5m		0.0m to 6.0m			
	For Lift 0.0m to 1.5m	1.200		1.600		2.000		2.400			
	For Lift 1.5m to 3.0m			1.200		1.600		2.000			
	For Lift 3.0m to 4.5m					1.200		1.600			
	For Lift 4.5m to 6.0m							1.200			
25-May-16	A 30 to A 30.1 From Main Sewer A (CH, MH No. A 30)										
	CH0.00	558.470	557.335	557.135			1.335	1.508			
	CH33.70	558.880	557.400	557.200			1.680				
	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			30.800	1.200	0.200	7.392	0.000	7.392	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			30.800	1.200	0.300	11.088	0.000	11.088	
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(a) For Lift 0m to 1.5m	1			30.800	1.200	1.000	36.960	0.000	36.960	
	(b) For Lift 1.5m to 3.0m	1			30.800	1.200	0.008	0.296	0.000	0.296	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)										
	(a) For Lift 0 to 1.5m	1			30.800	1.200	0.200	7.392	0.000	7.392	
	Item No. 11 Transportation of earth Transportation charges including loading & unloading										
	(a) For Lift 0m to 1.5m	1						14.706	0.000	14.706	
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia										
	(a) For Lift 0 to 1.5m	1			32.500			32.500	0.000	32.500	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation = A										
	Deduction										
	pipe area	1		0.785	30.800	0.550	0.550	7.314			
	soling							0.000			
	PCC							0.000			
	Murum bedding							7.392			
	Total = B							14.706			
	Net Qty = A - B								41.030	0.000	41.030
2-Jun-16	A 30.1 to A 30.2										
	CH33.70	558.880	557.700	557.500			1.380	2.070			
	CH69.90	560.330	557.770	557.570			2.760				
	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			33.300	1.600	0.200	10.656	7.392	18.048	



B. K. Pardeshi
Sectional Engineer



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25-Jun-16 A 30.3 to A 30.4											
CH96.10	561.070	558.570	558.370				2.700				
CH142.30	561.470	558.870	558.670				2.800	2.750			
Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.											
(a) For Lift 0 to 1.5m	1			43.300	1.600	0.300	20.784			25.504	46.288
Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.											
(a) For Lift 0 to 1.5m	1			43.300	1.600	0.200	13.856			0.000	13.856
Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.											
(a) For Lift 0 to 1.5m	1			43.300	1.600	0.600	41.568			38.256	79.824
Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.											
(a) For Lift 0m to 1.5m	1			43.300	1.600	0.400	27.712			127.520	155.232
(b) For Lift 1.5m to 3.0m	1			43.300	1.200	1.250	64.950			56.066	121.016
Item No. 7 :- Filling in plinth and floors/ trenches etc complete (bedding)											
	1			43.300	1.200	0.200	10.392			20.976	31.368
Item No. : 11 Transportation of earth Transportation charges including loading & unloading											
							20.674			41.730	62.404
Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia											
	1			45.000			45.000			92.500	137.500
Item No 30 :- Refilling the excavated trenches ...											
Total Excavation= A								168.870			
Deduction											
pipe area	1		0.785	43.300	0.550	0.550	10.282				
soling							0.000				
PCC							0.000				
Murrum bedding							10.392				
Total = B								20.674			
Net Qty = A - B								148.196		205.615	353.811
1-Jul-16 A 30.4 to A 30.5											
CH142.30	561.470	559.070	558.870				2.600				
CH163.50	562.040	559.110	558.910				3.130	2.865			
Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.											
(a) For Lift 0 to 1.5m	1			18.300	1.600	0.500	14.640			46.288	60.928
Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.											
(a) For Lift 0 to 1.5m	1			18.300	1.600	0.400	11.712			13.856	25.568
Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.											
(a) For Lift 0 to 1.5m	1			18.300	1.600	0.600	17.568			79.824	97.392
(b) For Lift 1.5m to 3.0m	1			18.300	1.200	0.300	6.588			0.000	6.588
Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.											
(b) For Lift 1.5m to 3.0m	1			18.300	1.200	1.060	23.278			121.016	144.293
Item No. 7 :- Filling in plinth and floors/ trenches etc complete (bedding)											
	1			18.300	1.200	0.200	4.392			31.368	35.760



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Bhusingpura 400mm

Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			22.500			22.500		195.000	217.500
Item No 30 :- Refilling the excavated trenches ...										
Total Excavation= A							148.365			
Deduction										
pipe area	1		0.785	22.500	0.550	0.550	5.343			
soling							0.000			
PCC							0.000			
Murum bedding							5.400			
Total = B							10.743			
							Net Qty = A - B		137.622	546.096 683.718
CH225.30	562.940	560.030	559.830				3.110	3.235		
CH245.90	563.240	560.080	559.880				3.360			
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			19.150	2.000	1.500	57.450		155.390	212.840
(b) For Lift 1.5m to 3.0m	1			19.150	1.600	0.400	12.256		0.000	12.256
Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
(b) For Lift 1.5m to 3.0m	1			19.150	1.600	0.700	21.448		27.192	48.640
Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
(b) For Lift 1.5m to 3.0m	1			19.150	1.600	0.400	12.256		53.562	65.818
Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
(c) For Lift 3.0m to 4.5m	1			19.150	1.200	0.235	5.400		28.123	33.524
Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			19.150	1.200	0.200	4.596		49.548	54.144
Item No. : 11 Transportation of earth Transportation charges including loading & unloading							9.143		98.572	107.716
Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			20.000			20.000		217.500	237.500
Item No 30 :- Refilling the excavated trenches ...										
Total Excavation= A							108.810			
Deduction										
pipe area	1		0.785	19.150	0.550	0.550	4.547			
soling							0.000			
PCC							0.000			
Murum bedding							4.596			
Total = B							9.143			
							Net Qty = A - B		99.667	683.718 783.385
A 30.7 to A 30.8										
CH245.90	563.240	560.480	560.280				2.960	3.080		
CH259.00	563.510	560.510	560.310				3.200			
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			11.650	2.000	1.500	34.950		212.840	247.790
Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										



Stamp



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Deduction											
pipe area	1			0.785	7.500	0.550	0.550		1.781		
soling									0.000		
PCC									0.000		
Murum bedding									1.800		
Total = B									3.581		
				Net Qty = A - B					48.709	841.851	890.560
CH266.50	563.810	560.530	560.330				3.480	3.525			
CH307.10	563.980	560.610	560.410				3.570				
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			39.150	2.000	1.500			117.450	265.790	383.240
Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.											
(b) For Lift 1.5m to 3.0m	1			39.150	1.600	0.800			50.112	62.096	112.208
Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.											
(b) For Lift 1.5m to 3.0m	1			39.150	1.600	0.700			43.848	77.002	120.850
Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.											
(c) For Lift 3.0m to 4.5m	1			39.150	1.200	0.525			24.665	41.032	65.696
Item No. 7 :- Filling in plinth and floors/ trenches etc complete (bedding)	1			39.150	1.200	0.200			9.396	58.740	68.136
Item No. 11 Transportation of earth Transportation charges including loading & unloading									18.693	116.859	135.552
Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			40.000					40.000	257.500	297.500
Item No 30 :- Refilling the excavated trenches ...											
Total Excavation= A									236.075		
Deduction											
pipe area	1			0.785	39.150	0.550	0.550		9.297		
soling									0.000		
PCC									0.000		
Murum bedding									9.396		
Total = B									18.693		
				Net Qty = A - B					217.382	890.560	1107.942
A 30.8 to A 30.9											
CH307.10	563.980	561.010	560.810				3.170	2.920			
CH333.30	563.530	561.060	560.860				2.670				
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			23.300	1.600	1.200			44.736	383.240	427.976
Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.											
(a) For Lift 0 to 1.5m	1			23.300	1.600	0.300			11.184	61.596	72.780
(b) For Lift 1.5m to 3.0m	1			23.300	1.200	0.400			11.184	112.208	123.392
Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.											
(b) For Lift 1.5m to 3.0m	1			23.300	1.200	0.300			8.388	120.850	129.238



Finals



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CH353.90	563.580	561.300	561.100			2.480	2.480			
CH374.50	563.620	561.340	561.140			2.480				
Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.										
(a) For Lift 0 to 1.5m	1			19.150	1.600	1.000	30.640		467.808	498.448
Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
(a) For Lift 0 to 1.5m	1			19.150	1.600	0.500	15.320		78.908	94.228
(b) For Lift 1.5m to 3.0m	1			19.150	1.200	0.400	9.192		130.286	139.478
Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
(b) For Lift 1.5m to 3.0m	1			19.150	1.200	0.200	4.596		133.834	138.430
Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
(b) For Lift 1.5m to 3.0m	1			19.150	1.200	0.380	8.732		223.280	232.012
Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)										
	1			19.150	1.200	0.200	4.596		78.324	82.920
Item No. : 11 Transportation of earth Transportation charges including loading & unloading										
							9.143		155.820	164.963
Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia										
	1		20.000				20.000		342.500	362.500
Item No 30 :- Refilling the excavated trenches ...										
Total Excavation= A							68.480			
Deduction										
pipe area	1		0.785	19.150	0.550	0.550	4.547			
soling							0.000			
PCC							0.000			
Murrum bedding							4.596			
Total = B							9.143			
Net Qty = A - B							59.337		1251.662	1310.999
A 30.10 to A 30.11										
CH374.50	563.620	561.440	561.240			2.380	2.500			
CH398.20	563.910	561.490	561.290			2.620				
Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.										
(a) For Lift 0 to 1.5m	1			20.800	1.600	0.900	29.952		498.448	528.400
(b) For Lift 1.5m to 3.0m	1			20.800	1.200	0.000	0.000		24.256	24.256
Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
(a) For Lift 0 to 1.5m	1			20.800	1.600	0.600	19.968		94.228	114.196
(b) For Lift 1.5m to 3.0m	1			20.800	1.200	0.700	17.472		139.478	156.950
Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
(a) For Lift 0 to 1.5m	1			20.800	1.600	0.000	0.000		122.782	122.782
(b) For Lift 1.5m to 3.0m	1			20.800	1.200	0.300	7.488		138.430	145.918
(c) For Lift 3.0m to 4.5m	1			20.800	1.200	0.000	0.000		5.400	5.400
Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
(a) For Lift 0m to 1.5m	1			20.800	1.600	0.000	0.000		155.232	155.232
(b) For Lift 1.5m to 3.0m	1			20.800	1.200	0.000	0.000		232.012	232.012



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Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

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Bhusingpura 400mm

(c) For Lift 3.0m to 4.5m	1			20.800	1.200	0.000	0.000	65.696	65.696	
Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			20.800	1.200	0.200	4.992	82.920	87.912	
Item No. : 11 Transportation of earth Transportation charges including loading & unloading							9.931	164.963	174.895	
Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			22.500			22.500	362.500	385.000	
Item No 30 :- Refilling the excavated trenches ...										
Total Excavation= A							74.880			
Deduction										
pipe area	1		0.785	20.800	0.550	0.550	4.939			
soling							0.000			
PCC							0.000			
Murum bedding							4.992			
Total = B							9.931			
Net Qty = A - B								64.949	1310.999	1375.948



Stadp
B. K. Pardeshi
Sectional Engineer



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Bhusingpura RCC 1.5m MH

12th R A BILL MEASUREMENTS A-Branch Sewer at Bhusingpura

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date
		No			L	B	D		Page	Quantity	
		GL	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										
	A 30.1										
	CH33.70	558.880	557.400	557.050			1.830				
	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		0.000	1.320
	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
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.000	6.602		0.000	6.602
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.330	2.179		0.000	2.179
	Item No. : 11 Transportation of earth Transportation charges							5.723		0.000	5.723
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							12.081			
	Deduction										
	Wall	1		0.785	1.900	1.900	1.480	4.194			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								5.723			
	Net Qty = A - B							6.358		0.000	6.358
	A 30.2										
	CH69.90	560.330	557.770	557.420			2.910				
	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		1.320	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		1.981	3.961
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.000	6.602		6.602	13.204
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.410	9.309		2.179	11.487
	Item No. : 11 Transportation of earth Transportation charges							8.783		5.723	14.506
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							19.211			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.560	7.255			



Bade
B. K. Pardeshi
Sectional Engineer



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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 No. 08 and CIDCO (Airport). Providing, lowering, laying, jointing and testing rising main

Book No. :- **72**
Page No. :-

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Bhusingpura RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								8.783			
								10.428	6.358	16.786	
	A 30.3										
	CH96.10	561.070	558.270	557.920			3.150				
	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		2.641	3.961
	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		3.961	5.942
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.000	6.602		13.204	19.806
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.500	9.903		11.487	21.390
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.150	0.990		0.000	0.990
	Item No. : 11 Transportation of earth Transportation charges							9.464		14.506	23.970
	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	16.786	28.119	
	A 30.4										
	CH142.30	561.470	558.870	558.520			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	0.300	1.981		3.961	5.942
	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		0.000	1.320
	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	0.600	3.961		5.942	9.903
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.400	2.641		19.806	22.446
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.450	9.573		21.390	30.963
	Item No. : 11 Transportation of earth Transportation charges							8.897		23.970	32.867
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							19.475			
	Deduction										



Spudh



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). Providing, lowering, laying, jointing and testing rising main

Book No. :- 73

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Bhusingpura RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	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			
		Net Qty = A - B						10.579		28.119	38.697
	A 30.5										
	CH163.50	562.040	559.110	558.760			3.280				
	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		5.942	9.243
	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		1.320	3.961
	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	0.600	3.961		9.903	13.864
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.300	1.981		0.000	1.981
	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	1.200	7.922		30.963	38.885
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.280	1.849		0.990	2.839
	Item No. : 11 Transportation of earth Transportation charges							9.832		32.867	42.699
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							21.654			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.930	8.303			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								9.832			
		Net Qty = A - B						11.822		38.697	50.519
	A 30.6										
	CH189.70	562.320	559.360	559.010			3.310				
	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	0.600	3.961		9.243	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	0.400	2.641		3.961	6.602
	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		13.864	17.165
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.500	3.301		1.981	5.281
	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	1.000	6.602		38.885	45.487
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.310	2.047		2.839	4.885



Spadip



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 Commissioning 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. :- 74

Page No. :-

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Bhusingpura RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. : 11 Transportation of earth Transportation charges							9.917		42.699	52.616
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							21.852			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.960	8.388			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								9.917			
								11.935	50.519	62.455	
	A 30.7										
	CH245.90	563.240	560.080	559.730			3.510				
	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	1.500	9.903		13.204	23.106
	(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	0.700	4.621		0.000	4.621
	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		5.281	7.922
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.510	3.367		4.885	8.252
	Item No. : 11 Transportation of earth Transportation charges							10.484		52.616	63.099
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							23.172			
	Deduction										
	Wall	1		0.785	1.900	1.900	3.160	8.955			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								10.484			
								12.689	62.455	75.143	
	A 30.8										
	CH307.10	563.980	560.610	560.260			3.720				
	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	8.410	1.500	9.903		23.106	33.009
	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	0.800	5.281		4.621	9.903
	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		7.922	12.544



Part A



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

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Book No. :-

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Page No. :-

5

Bhusingpura RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.720	4.753	8.252	13.006	
	Item No. : 11 Transportation of earth Transportation charges							11.079	63.099	74.178	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							24.559			
	Deduction										
	Wall	1		0.785	1.900	1.900	3.370	9.550			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								11.079			
								Net Qty = A - B	75.143	88.623	
	A 30.9										
	CH333.30	563.530	561.060	560.710			2.820				
	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	1.200	7.922	33.009	40.931	
	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	6.602	8.582	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.400	2.641	9.903	12.544	
	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	0.300	1.981	12.544	14.524	
	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	0.620	4.093	45.487	49.580	
	Item No. : 11 Transportation of earth Transportation charges							8.528	74.178	82.707	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							18.617			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.470	7.000			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								8.528			
								Net Qty = A - B	88.623	98.712	
	A 30.10										
	CH374.50	563.620	561.340	560.990			2.630				
	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	1.000	6.602	40.931	47.533	
	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	0.500	3.301	8.582	11.883	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.400	2.641	12.544	15.184	



Start



AURANGABAD MUNICIPAL CORPORATION.

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Page No. :-

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Bhusingpura RCC 1.5m MH

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date	
		No			L	B		D	Page		Quantity
		GL	IL	EX.L							
	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	0.200	1.320		14.524	15.844
	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	0.530	3.499		49.580	53.079
	Item No. : 11 Transportation of earth Transportation charges							7.990		82.707	90.697
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							17.363			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.280	6.461			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								7.990			
								9.373		98.712	108.085
	Net Qty = A - B										
	A 30.11										
	CH398.20	563.910	561.490	561.140			2.770				
	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		47.533	53.475
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.000	0.000		2.641	2.641
	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		11.883	15.844
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.700	4.621		15.184	19.806
	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		17.165	17.165
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.570	3.763		15.844	19.607
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.000	0.000		22.446	22.446
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.000	0.000		53.079	53.079
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.000	0.000		13.006	13.006
	Item No. : 11 Transportation of earth Transportation charges							8.387		90.697	99.083
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							18.287			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.420	6.858			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								8.387			
								9.900		108.085	117.985
	Net Qty = A - B										



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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.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.

Book No. :- 77
Page No. :-

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Veneture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

1

Bhusingpura Manhole

14th R A BILL MEASURMENTS A-Branch Sewer at Bhusingpura

Extra Item No. 1: Construction of RCC circular Manhole of 1.5m dia & 3.5m depth

Sr.No.	Reference (MB no. & Page no.)	Chainage	MH No	MTL	IL	Depth	Depth Difference than 3.5 m	Total Difference	Rebate/Add for Excess height (per 50 cm)
1		CH33.70	A 30.1	562.070	557.400	4.670	1.170	3.390	6.780
2		CH69.90	A 30.2	562.340	557.770	4.570	1.070		
3		CH96.10	A 30.3	562.870	558.270	4.600	1.100		
4		CH142.30	A 30.4	562.220	558.870	3.350	-0.150		
5		CH163.50	A 30.5	562.260	559.110	3.150	-0.350		
6		CH189.70	A 30.6	562.410	559.360	3.050	-0.450		
7		CH245.90	A 30.7	564.080	560.080	4.000	0.500		
8		CH307.10	A 30.8	564.810	560.610	4.200	0.700		
9		CH333.30	A 30.9	564.860	561.060	3.800	0.300		
10		CH374.50	A 30.10	564.540	561.340	3.200	-0.300		
11		CH398.20	A 30.11	564.790	561.490	3.300	-0.200		



B.K. Pardeshi
B. K. Pardeshi
Sectional Engineer



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

78

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Book No. :-
Page No. :-

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GIECPL (Joint Vencture)

Page 1 of 1

Bhusingpura-Dewatering

11th R A BILL MEASUREMENTS A-Branch Sewer at Bhusingpura

Sr.No.	Date	Pump Capacity in Hp	No.of Pumps	Time		Total Hrs	Bhp/Hr
				From	To		
A-Branch Sewer at Bhusingpura							
1	23/05/2016	5	1	8:30	9:45	1:15	6:15:00
		5	1	14:00	15:00	1:00	5:00:00
2	24/05/2016	5	1	8:15	9:45	1:30	7:30:00
		5	1	14:15	15:00	0:45	3:45:00
3	25/05/2016	5	1	8:30	9:30	1:00	5:00:00
		5	1	14:30	15:30	1:00	5:00:00
4	26/05/2016	5	1	8:20	9:20	1:00	5:00:00
		5	1	15:10	16:10	1:00	5:00:00
5	27/05/2016	5	1	9:00	10:00	1:00	5:00:00
		5	1	14:30	15:30	1:00	5:00:00
6	28/05/2016	5	1	9:15	10:15	1:00	5:00:00
		5	1	14:30	15:30	1:00	5:00:00
7	30/05/2016	5	1	8:15	9:45	1:30	7:30:00
		5	1	13:45	14:30	0:45	3:45:00
8	31/05/2016	5	1	8:05	9:05	1:00	5:00:00
		5	1	14:30	15:30	1:00	5:00:00
9	11/07/2016	15	1	9:10	11:10	2:00	30:00:00
		15	1	14:00	15:00	1:00	15:00:00
		15	1	15:15	15:30	0:15	3:45:00
10	12/07/2016	15	1	9:00	11:15	2:15	33:45:00
		15	1	13:45	14:45	1:00	15:00:00
		15	1	15:00	15:30	0:30	7:30:00
11	13/07/2016	15	1	10:00	12:00	2:00	30:00:00
		15	1	14:00	15:00	1:00	15:00:00
12	14/07/2016	15	1	9:45	12:00	2:15	33:45:00
13	15/07/2016	15	1	9:30	10:30	1:00	15:00:00
		15	1	11:15	12:15	1:00	15:00:00
Sub Total						31:00:00	297:30:00
							297.300



Jondip
B. K. Pardeshi
Sectional Engineer



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 GRP DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

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Name of Author

Date of Measurement

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up to Date

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Bhusingpura Quantity Note Abstract

14th R A BILL MEASUREMENTS

A-Branch Sewer at Bhusingpura

SR NO	Description	MB/PG	ITEM 1		ITEM 2		ITEM 4			ITEM 5			ITEM 7	ITEM 10	ITEM 11	ITEM 15	ITEM 17	ITEM 30	EIRL 1	EIRL 1.a	
			0-1.5	1.5-3.0	0-1.5	1.5-3.0	0-1.5	1.5-3.0	3.0-4.5	0-1.5	1.5-3.0	3-4.5								3.5m	Rebate
1	For Pipe		528.400	24.256	114.196	156.950	145.918	5.400	155.232	232.012	65.696	87.912	174.895	297.300	99.083	385.000	385.000	1,375.95	11.000		6.780
2	For Manhole		53.475	2.641	15.844	19.806	19.607		22.446	53.079	13.006		99.083	297.300				117.985	11.000		
	Total		581.875	26.897	130.040	176.756	165.525	5.400	177.678	285.091	78.702	87.912	273.978	297.300	273.978	385.000	385.000	1,493.93	11.000		6.780

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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

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RA 12 Padegaon to Anssar Colony-Murg 400mm Dia

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14th RA BILL MEASUREMENTS Sewer at Padegaon to Anssar Colony

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 (Width of Trench -0.4+0.15+0.15+0.5=1.2m)										
	For Depth	0.0m to 1.5m		0.0m to 3.0m	0.0m to 4.5m						
	For Width of Trench Calculation Outer dia of Pipe + 0.50 for Bottom and Add 0.4 for Subsequent upper Lifts.	1.200		1.600	2.000						
	For Lift 0.0m to 1.5m			1.200	1.600						
	For Lift 1.5m to 3.0m				1.200						
	For Lift 3.0m to 4.5m										
	A 2	Started from Main Sewer A (Manhole A2)									
25/08/2016	CH0.00	550.715	548.795	548.595			2.120	2.033			
	CH18.38	550.700	548.955	548.755			1.945				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			17.430	1.600	0.300	8.366	0.000	8.366	
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			17.430	1.600	1.200	33.466	0.000	33.466	
	(b) For Lift 1.5m to 3.0m	1			17.430	1.200	0.200	4.183	0.000	4.183	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			17.430	1.200	0.333	6.965	0.000	6.965	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete (bedding)	1			17.930	1.200	0.200	4.303	0.000	4.303	
	Item No. : 11 Transportation of earth Transportation charges							8.561	0.000	8.561	
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			18.305			18.305	0.000	18.305	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation = A							52.980			
	Deduction										
	pipe area	1		0.785	17.930	0.550	0.550	4.258			
	Murrum bedding							4.303			
	Total = B							8.561			
								Net Qty = A - B			
								44.419	0.000	44.419	
09/09/2016	CH18.38	550.700	548.955	548.755			1.945	1.930			
	CH39.25	550.840	549.125	548.925			1.915				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			19.420	1.600	0.350	10.875	8.366	19.242	
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			19.420	1.600	0.400	12.429	33.466	45.894	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			19.420	1.600	0.750	23.304	0.000	23.304	
	(b) For Lift 1.5m to 3.0m	1			19.420	1.200	0.430	10.021	6.965	16.986	



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Sectional Engineer



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 GRP/DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

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Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

RA 14, Padegaon to Anssar Colony-Murgan 400mm Dia

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Date	Particulars of work	DETAILS						Content of area	Last measurement		TOTAL TO DATE
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			19.920	1.200	0.200	4.781		4.303	9.084
	Item No. : 11 Transportation of earth Transportation charges							9.511		8.561	18.072
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			20.295			20.295		18.305	38.600
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A							56.629			
	Deduction										
	pipe area	1		0.785	19.920	0.550	0.550	4.730			
	Murum bedding							4.781			
	Total = B							9.511			
					Net Qty = A - B			47.118		44.419	91.537
	PAC 1										
14/09/2016	CH39.25	550.840	549.195	548.995			1.845	1.875			
	CH57.45	550.970	549.265	549.065			1.905				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			16.750	1.600	0.400	10.720		19.242	29.962
	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			16.750	1.600	1.100	29.480		45.894	75.374
	(b) For Lift 1.5m to 3.0m	1			16.750	1.200	0.100	2.010		4.183	6.193
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			16.750	1.200	0.275	5.528		16.986	22.513
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			17.250	1.200	0.200	4.140		9.084	13.224
	Item No. : 11 Transportation of earth Transportation charges							8.236		18.072	26.308
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			17.625			17.625		38.600	56.225
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A							47.738			
	Deduction										
	pipe area	1		0.785	17.250	0.550	0.550	4.096			
	Murum bedding							4.140			
	Total = B							8.236			
					Net Qty = A - B			39.501		91.537	131.038
	CH57.45	550.970	549.265	549.065			1.905	1.920			
16/09/2016	CH74.95	551.040	549.305	549.105			1.935				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			17.500	1.600	0.450	12.600		29.962	42.562



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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 Nakshirawadi (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 Nakshirawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

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Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Vencture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

RA 12, Padegaon to Ansar Colony-Murgan 400mm Dia

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Date	Particulars of work	DETAILS						Content of area	Last measurement		TOTAL TO DATE
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			17.500	1.600	1.050	29.400		75.374	104.774
	(b) For Lift 1.5m to 3.0m	1			17.500	1.200	0.120	2.520		6.193	8.713
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			17.500	1.200	0.300	6.300		22.513	28.813
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			17.500	1.200	0.200	4.200		13.224	17.424
	Item No. : 11 Transportation of earth Transportation charges							8.356		26.308	34.664
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			17.500			17.500		56.225	73.725
	Item No 30 :- Refilling the excavated trenches ...							50.820			
	Total Excavation= A										
	Deduction										
	pipe area	1		0.785	17.500	0.550	0.550	4.156			
	Murrum bedding							4.200			
								8.356			
	Total = B							42.464		131.038	173.503
					Net Qty = A - B						
19/09/2016	CH74.95	551.040	549.305	549.105				1.935	1.918		
	CH95.65	551.040	549.340	549.140				1.900			
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			19.250	1.600	0.400	12.320		42.562	54.882
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			19.250	1.600	1.100	33.880		104.774	138.654
	(b) For Lift 1.5m to 3.0m	1			19.250	1.200	0.200	4.620		8.713	13.333
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			19.250	1.200	0.218	5.036		28.813	33.849
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete (bedding)	1			19.750	1.200	0.200	4.740		17.424	22.164
	Item No. : 11 Transportation of earth Transportation charges							9.430		34.664	44.094
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			20.125			20.125		73.725	93.850
	Item No 30 :- Refilling the excavated trenches ...							55.856			
	Total Excavation= A										
	Deduction										
	pipe area	1		0.785	19.750	0.550	0.550	4.690			
	Murrum bedding							4.740			
								9.430			
	Total = B							46.426		173.503	219.929
					Net Qty = A - B						



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

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Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

		Details	Last
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RA 12-Padegaon to Ansar Colony-Murgan 400mm Dia

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Date	Particulars of work	DETAILS					Content of area	Last measurement		TOTAL TO DATE
		No	L	B	D	Page		Quantity		
		GL	IL	EX.L						
	PAC 2									
22/09/2016	CH95.65	551.040	549.340	549.140		1.900	1.920			
	CH119.95	551.170	549.430	549.230		1.940				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.									
	(a) For Lift 0 to 1.5m	1			22.850	1.600	0.350	12.796	54.882	67.678
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			22.850	1.600	1.150	42.044	138.654	180.698
	(b) For Lift 1.5m to 3.0m	1			22.850	1.200	0.150	4.113	13.333	17.446
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.									
	(b) For Lift 1.5m to 3.0m	1			22.850	1.200	0.270	7.403	33.849	41.252
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete (bedding)	1			23.350	1.200	0.200	5.604	22.164	27.768
	Item No. : 11 Transportation of earth Transportation charges							11.149	44.094	55.242
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			23.725			23.725	93.850	117.575
	Item No 30 :- Refilling the excavated trenches ...									
	Total Excavation = A							66.356		
	Deduction									
	pipe area	1		0.785	23.350	0.550	0.550	5.545		
	Murrum bedding							5.604		
	Total = B							11.149		
								Net Qty = A - B		
								55.208	219.929	275.136
24/09/2016	CH119.95	551.170	549.430	549.230		1.940	1.820			
	CH142.45	551.020	549.520	549.320		1.700				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.									
	(a) For Lift 0 to 1.5m	1			22.500	1.600	0.400	14.400	67.678	82.078
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			22.500	1.600	1.100	39.600	180.698	220.298
	(b) For Lift 1.5m to 3.0m	1			22.500	1.200	0.100	2.700	17.446	20.146
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.									
	(b) For Lift 1.5m to 3.0m	1			22.500	1.200	0.220	5.940	41.252	47.192
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete (bedding)	1			22.500	1.200	0.200	5.400	27.768	33.168
	Item No. : 11 Transportation of earth Transportation charges							10.743	55.242	65.985



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

84

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.

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Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

Details		Last
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RA 1 Padegaon to Ansar Colony-Murgan 400mm Dia

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Date	Particulars of work	DETAILS						Content of area	Last measurement		TOTAL TO DATE
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			22.500			22.500		117.575	140.075
	Item No 30 :- Refilling the excavated trenches ...							62.640			
	Total Excavation= A										
	Deduction										
	pipe area	1		0.785	22.500	0.550	0.550	5.343			
	Murrum bedding							5.400			
	Total = B							10.743			
								Net Qty = A - B		275.136	327.033
								51.897			
26/09/2016	CH142.45	551.020	549.520	549.320			1.700	1.995			
	CH164.25	551.715	549.625	549.425			2.290				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			20.350	1.600	0.450	14.652		82.078	96.730
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			20.350	1.600	0.650	21.164		220.298	241.462
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			20.350	1.600	0.400	13.024		23.304	36.328
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			20.350	1.200	0.495	12.088		0.000	12.088
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			20.850	1.200	0.200	5.004		33.168	38.172
	Item No. : 11 Transportation of earth Transportation charges							9.955		65.985	75.940
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			21.225			21.225		140.075	161.300
	Item No 30 :- Refilling the excavated trenches ...							60.928			
	Total Excavation= A										
	Deduction										
	pipe area	1		0.785	20.850	0.550	0.550	4.951			
	Murrum bedding							5.004			
	Total = B							9.955			
								Net Qty = A - B		327.033	378.006
								50.973			
27/09/2016	PAC 3						2.280	2.065			
	CH164.25	551.715	549.635	549.435			1.850				
	CH182.70	551.305	549.655	549.455							
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			17.000	1.600	0.400	10.880		96.730	107.610



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