



# 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 DL nine line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to

Book No. :- **055**  
Page No. :-

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K-Sigma Hospital-600mm-MB

### 1st RA BILL MEASUREMENTS

#### Branch Of Sewer K at Cigma Hospital

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	K Branch 600mm Dia at Ulkanagri near Zaveri plot										
	Width of trench- For Bottom Lift 0.00-1.50m- 0.6+0.17+0.17+0.5=1.44m										
	From Bottom Lift 1.50-3.00m- 0.6+0.17+0.17+0.5+0.4=1.84m										
	From Bottom Lift 3.00-4.50m- 0.6+0.17+0.17+0.5+0.4+0.4 = 2.24m										
	From Bottom Lift 4.50-6.0m- 0.6+0.17+0.17+0.5+0.4+0.4+0.4 = 2.64m										
24/06/2016	CH517.20	573.170	569.120	568.920			4.250	4.255			
	CH542.80	573.230	569.170	568.970			4.260				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			24.00	2.240	1.500	80.640	0.000	80.640	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			24.00	1.840	1.500	66.240	0.000	66.240	
	(c) For Lift 3.0m to 4.5m	1			24.00	1.440	1.255	43.373	0.000	43.373	
	Item No. 7 :- Filling in plinth and floors/ trenches etc	1			24.50	1.440	0.200	7.056	0.000	7.056	
	Item No 17 ( d ) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.00			25.000	0.000	25.000	
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A</b>							<b>190.253</b>			
	<b>Deduction</b>										
	pipe area	1		0.785	24.00	0.770	0.770	11.17			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							7.06			
	<b>Total = B</b>							<b>18.23</b>			
	<b>Net Qty = A - B</b>							<b>172.03</b>	<b>0.000</b>	<b>172.027</b>	
26/06/2016	K 115.14										
	CH542.80	573.230	569.670	569.470			3.760	3.945			
	CH570.90	573.650	569.720	569.520			4.130				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			26.50	2.240	1.500	89.040	80.640	169.680	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			26.50	1.840	1.500	73.140	66.240	139.380	
	(c) For Lift 3.0m to 4.5m	1			26.50	1.440	0.945	36.061	43.373	79.434	
	Item No. 7 :- Filling in plinth and floors/ trenches etc	1			27.00	1.440	0.200	7.776	7.056	14.832	
	Item No 17 ( d ) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.50			27.500	25.000	52.500	



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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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K-Sigma Hospital-600mm-MB

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 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A</b>						<b>198.241</b>				
	<b>Deduction</b>										
	pipe area	1		0.785	26.50	0.770	0.770	12.33			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							7.78			
	<b>Total = B</b>							<b>20.11</b>			
		<b>Net Qty = A - B</b>						<b>178.13</b>	<b>172.027</b>	<b>350.158</b>	
28/06/2016	CH570.90	573.650	569.720	569.520			4.130	4.195			
	CH599.00	573.840	569.780	569.580			4.260				
	Item No. 1 :- Excavation for foundation/pipe trenches in all typesof soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			26.50	2.240	1.500	89.040	169.680	258.720	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			26.50	1.840	1.500	73.140	139.380	212.520	
	(c) For Lift 3.0m to 4.5m	1			26.50	1.440	1.195	45.601	79.434	125.035	
	Item No. 7 :- Filling in plinth and floors/ trenches etc	1			27.00	1.440	0.200	7.776	14.832	22.608	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.50			27.500	52.500	80.000	
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A</b>							<b>207.781</b>			
	<b>Deduction</b>										
	pipe area	1		0.785	26.50	0.770	0.770	12.33			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							7.78			
	<b>Total = B</b>							<b>20.11</b>			
		<b>Net Qty = A - B</b>						<b>187.67</b>	<b>350.158</b>	<b>537.829</b>	
30/06/2016	K 115.15										
	CH599.00	573.840	570.080	569.880			3.960	4.015			
	CH647.70	574.050	570.180	569.980			4.070				
	Item No. 1 :- Excavation for foundation/pipe trenches in all typesof soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			45.50	2.240	1.500	152.880	258.720	411.600	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			45.50	1.840	1.500	125.580	212.520	338.100	
	(c) For Lift 3.0m to 4.5m	1			45.50	1.440	1.015	66.503	125.035	191.530	
	Item No. 7 :- Filling in plinth and floors/ trenches etc	1			46.50	1.440	0.200	13.392	22.608	36.000	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			47.50			47.500	80.000	127.500	



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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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K-Sigma Hospital-600mm-MB

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 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A</b>						<b>344.963</b>				
	<b>Deduction</b>										
	pipe area	1		0.785	45.50	0.770	0.770	21.18			
	soling							0.00			
	PCC							0.00			
	Murum bedding							13.39			
	<b>Total = B</b>							<b>34.57</b>			
				<b>Net Qty = A - B</b>				<b>310.39</b>	537.829	848.223	
	<b>K 115.16</b>										
02/07/2016	CH647.70	574.050	570.680	570.480			3.570	3.615			
	CH662.70	574.170	570.710	570.510			3.660		Connected		
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			15.00	2.240	1.500	50.400	411.600	462.000	
	(b) For Lift 1.5m to 3.0m	1			15.00	1.840	0.200	5.520	0.000	5.520	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			15.00	1.840	1.300	35.880	338.100	373.980	
	(c) For Lift 3.0m to 4.5m	1			15.00	1.440	0.615	13.284	191.538	204.822	
	Item No. 7 :- Filling in plinth and floors/ trenches etc	1			15.00	1.440	0.200	4.320	36.000	40.320	
	Item No 17 ( d ) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			15.00			15.000	127.500	142.500	
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A</b>							<b>105.084</b>			
	<b>Deduction</b>										
	pipe area	1		0.785	15.00	0.770	0.770	6.98			
	soling							0.00			
	PCC							0.00			
	Murum bedding							4.32			
	<b>Total = B</b>							<b>11.30</b>			
				<b>Net Qty = A - B</b>				<b>93.78</b>	848.223	942.006	



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K-Sigma Hospital BBM 1.5m MH

### 11th R A BILL MEASUREMENTS Branch Of Sewer K at Cigma Hospital

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Excavation of Chamber - For 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										
	<b>K 115.14</b>	<b>K Branch 600mm Dia at Ulkanagri near Zaveri plot</b>									
	CH542.80	573.230	569.170	568.720			4.510				
	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	10.240	1.500	12.058	0.000	12.058	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.500	12.058	0.000	12.058	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	1.500	12.058	0.000	12.058	
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.010	0.080	0.000	0.080	
	Item No. : 11 Transportation of earth Transportation charges							14.481	0.000	14.481	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							<b>36.253</b>			
	<b>Deduction</b>										
	Brick work	1			0.785	2.280	2.280	2.060	8.406		
		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	0.200	1.045		
								<b>14.481</b>			
									0.000	21.772	
	<b>K 115.15</b>	<b>K Branch 600mm Dia at Ulkanagri near Zaveri plot</b>									
	CH599.00	573.840	569.780	569.330			4.510				
	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	10.240	1.500	12.058	12.058	24.115	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.500	12.058	12.058	24.115	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	1.500	12.058	12.058	24.115	
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.010	0.080	0.080	0.161	
	Item No. : 11 Transportation of earth Transportation charges							14.481	14.481	28.962	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							<b>36.253</b>			
	<b>Deduction</b>										
	Brick work	1			0.785	2.280	2.280	2.060	8.406		
		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	0.200	1.045		
								<b>14.481</b>			
									21.772	43.544	



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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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K-Sigma Hospital BBM 1.5m MH

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	K 115.16	K Branch 600mm Dia at Ulkanagri near Zaveri plot									
	CH647.70	574.050	570.180	569.730			4.320				
	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	1.500	12.058		24.115	36.173
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.500	12.058		24.115	36.173
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	1.320	10.611		24.115	34.726
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.000	0.000		0.161	0.161
	Item No. : 11 Transportation of earth Transportation charges							13.706		28.962	42.668
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							34.726			
	Deduction										
	Brick work	1		0.785	2.280	2.280	1.870	7.631			
		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	0.200	1.045			
								13.706			
	Net Qty = A - B							21.020		43.544	64.564





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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

K-Sigma Hospital BBS

### 12th RA BILL MEASUREMENTS

Branch Of Sewer K at Cigma Hospital

Sr. No.	Description	Dia of Bar	Spacinq	Nos	No of members	Total Nos	cut length	Lap length	overall cutting length	8mm (MT)	10mm (MT)
<b>A</b>	<b>Slab</b>										
	Main Steel- 10mm # @ 130mm C/C at T/B	10.00	0.13	51.00	2.00	102.00	3.59	0.00	366.18	0.000	0.227
	Distribution Steel- 8mm # @ 150mm C/C at T/B	8.00	0.15	24.00	2.00	48.00	6.69	0.00	321.12	0.128	0.000
<b>B</b>	<b>Beam</b>										
	Main Steel- 10mm # @ 4 nos	10.00		4.00	2.00	8.00	6.72	0.00	53.76	0.000	0.033
	Stirrups-8mm # @ 200mm C/C	8.00	0.20	33.00	2.00	66.00	0.91	0.00	60.06	0.024	0.000
<b>Sub Total</b>										<b>0.152</b>	<b>0.260</b>
<b>Total</b>										<b>0.413</b>	



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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

K-Sigma Hospital MANHOLE

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### 1st R A BILL MEASURMENTS

**Branch Of Sewer K at Cigma Hospital**

**Item No. 23:-** Providing and constructing on sewer.BBM manhole 1.5 m dia at bottom and 0.5 m dia at top and up to a depth of 2 to 5.0 M

Sr.No.	MH No	Chainage	MTL	IL	Depth	Depth Difference than 5 m	Total Difference	Rebate/Add for Excess height (per 50 cm)
1	K 115.14	542.800	573.230	569.170	4.060	-0.940	-3.01	-6.02
2	K 115.15	599.000	573.840	569.780	4.060	-0.940		
3	K 115.16	647.700	574.050	570.180	3.870	-1.130		





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K-Sigma Hospital-Dewatering

### 12th R A BILL MEASUREMENTS Branch Of Sewer K at Cigma Hospital

Sr.No.	Date	Pump Capacity in Hp	No.of Pumps	Time		Total Hrs	Bhp/Hr
				From	To		
1	16/06/2016	15	1	6:30	9:00	2:30	37:30:00
		15	1	11:00	12:00	1:00	15:00:00
		15	1	14:00	15:30	1:30	22:30:00
		15	1	17:00	17:30	0:30	7:30:00
2	17/06/2016	15	1	8:00	9:30	1:30	22:30:00
		15	1	10:00	11:00	1:00	15:00:00
		15	1	14:00	16:30	2:30	37:30:00
		15	1	17:00	17:30	0:30	7:30:00
3	18/06/2016	15	1	7:00	8:00	1:00	15:00:00
		15	1	10:00	11:30	1:30	22:30:00
		15	1	14:30	15:30	1:00	15:00:00
		15	1	7:00	9:00	2:00	30:00:00
4	20/06/2016	15	1	11:00	12:30	1:30	22:30:00
		15	1	14:00	16:30	2:30	37:30:00
		15	1	7:00	8:00	1:00	15:00:00
		15	1	10:00	11:00	1:00	15:00:00
6	22/06/2016	15	1	7:30	9:30	2:00	30:00:00
		15	1	10:00	11:00	1:00	15:00:00
		15	1	14:00	16:00	2:00	30:00:00
		15	1	6:30	9:30	3:00	45:00:00
7	23/06/2016	15	1	11:00	12:00	1:00	15:00:00
		15	1	14:00	15:00	1:00	15:00:00
		15	1	7:00	11:00	4:00	60:00:00
		15	1	12:30	13:00	0:30	7:30:00
8	24/06/2016	15	1	14:00	14:30	0:30	7:30:00
		15	1	15:00	15:30	0:30	7:30:00
		15	1	7:00	11:00	4:00	60:00:00
		15	1	12:00	12:30	0:30	7:30:00
9	25/06/2016	15	1	14:00	15:00	1:00	15:00:00
		15	1	7:30	9:30	2:00	30:00:00
		15	1	10:00	11:30	1:30	22:30:00
		15	1	14:30	16:00	1:30	22:30:00
11	28/06/2016	15	1	7:00	9:30	2:30	37:30:00
		15	1	10:00	10:30	0:30	7:30:00
		15	1	12:00	12:30	0:30	7:30:00
		15	1	14:00	15:00	1:00	15:00:00
12	29/06/2016	15	1	7:30	10:30	3:00	45:00:00
		15	1	11:00	12:00	1:00	15:00:00
		15	1	13:00	15:00	2:00	30:00:00
		15	1	16:00	17:00	1:00	15:00:00



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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. :- 064  
Page No. :-

**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

K-Sigma Hospital Work

Page 1 of 1

### 12th R A BILL MEASUREMENTS

#### Branch Of Sewer K at Cigma Hospital

Date	Particulars of work		DETAILS				Content of arrears	Last measurement		Total Upto Date Quantity
			No	L	B	D		Page	Quantity	
A	<b>Item No:6 :-</b> Providing and laying in situ Cement Concrete of trap/granite /quartzite/gneiss metal for RCC work in foundation like raft,grillage,strip foundation and footing of RCC columns and steel stanchions including normal dewatering ,form work ,bally,steel props,compaction finishing and curing etc.complete.(by weigh,batchingand mix design for M250 and M300 only.Use of L&T, ACC,Ambuja ,Birla gold etc. cement is permitted.									
	Slab	Cum	1	6.600	3.500	0.150	3.465		0.000	3.465
	Beam	Cum	2	6.600	0.230	0.120	0.364		3.465	3.829
B	<b>ITEM NO. 8 :-</b> Dismantling RCC Concrete work including brakingconcrete by chiselling, welding etc.including cutting the reinforcement, stacking the serviceable material and the debries separately upto a distance of 50 m or spreading the debries as directed ect. complete.									
	Slab	Cum	1	6.600	3.500	0.150	3.465		0.000	3.465
	Beam	Cum	2	6.600	0.230	0.120	0.364		3.465	3.829
C	<b>Item No. : 28 STEEL REINFORCEMENT</b> Providing and fixing in position steel bar reinforcement of various diameters for RCC piles caps ,footing foundations, slabs, beams, columns ,canopies, staircases, newels ,chajjas lintels, pardies, copings ,fins arches ,etc. as per detailed designs, drawings and schedules including cutting bending ,hooking the bars, binding with wires or tack welding and supporting as required etc. complete. (including cost of binding wire)	MT					0.413		0.00	0.413
D	<b>Extra Item No. 5 c) :-</b> Construction of UCR Masonry work in 1:6 CM	Cum	2	6.600	0.500	2.800	18.480		0.000	18.480



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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. :- **065**  
Page No. :-

**Name of Agency:-** M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venure)  
**Authority No.** AMC/Ward B&C/UIDSSMT/2014/184 **Date** 01.07.2014

SR NO	Description	MB/PG	ITEM 1			ITEM 2			ITEM 6	ITEM 7	ITEM 8	ITEM 10	ITEM 11	ITEM 17	ITEM 23	Date of Measurement		
			0-1.5		1.5-3.0		3.0-4.5										4.5-6	
			0-1.5	1.5-3.0	1.5-3.0	3.0-4.5	3.0-4.5	4.5-6									3.0-4.5	4.5-6
1	For Pipe		462.000	5.520	373.980	204.822		3.829	40.320	3.829	1,042.500		142.500					
2	For Manhole		36.173		36.173	34.726	0.161					42.668			3.00			
<b>Total</b>			<del>498.173</del>	<del>5.520</del>	<del>410.153</del>	<del>239.548</del>	<del>0.161</del>	<del>3.829</del>	<del>40.320</del>	<del>3.829</del>	<del>1042.500</del>	<del>42.668</del>	<del>142.500</del>	<del>3.000</del>				

SR



Total up to Date /  
fo



# 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. :-

Page No. :- 066

**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

Date of Measurement											to
1											
K-Sigma Hospital Quantity Node Abstract											
2 of 2											
<b>12th R A BILL MEASUREMENTS</b>											
Branch Of Sewer K at Cigma Hospital											
SR NO	Description	MB/PG	ITEM 23.1		ITEM 28	ITEM 30	EIRL 5				
			Rebate				c				
1	For Pipe					942.006		18.480			
2	For Manhole		(6.020)		0.413	64.564					
	<b>Total</b>		<b>-6.020</b>		<b>0.413</b>	<b>1006.570</b>		<b>18.480</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

Book No. :-

Page No. :-

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Hkheda, Measurement MB

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 of 315mm dia pipe										
	pipe area	1.00		0.785	21.00	0.315	0.315	1.64			
	soling							0.00			
	PCC							0.00			
	Murram bedding							1.71			
								3.35			
								21.43	81.37	102.79	
18/08/16	IT2 TO IT3										
	CH66.40	541.150	539.750	539.650			1.500	1.170			
	CH109.40	540.500	539.760	539.660			0.840				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc complete.										
	(a) For Lift 0 to 1.5m	1			40.7	0.815	1.170	38.809	100.771	139.580	
	Item No. 7 :- Filling in-plinth and floors/ trenches etc complete.(bedding)	1			41.3	0.815	0.100	3.366	5.135	8.500	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							6.583	10.042	16.625	
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			41.80			41.800	64.000	105.800	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							38.809			
	Deduction of 315mm dia pipe										
	pipe area	1.00		0.785	41.30	0.315	0.315	3.22			
	soling							0.00			
	PCC							0.00			
	Murram bedding							3.37			
								6.58			
								32.23	102.79	135.02	
18/08/16	IT3 TO IT4										
	CH109.40	540.500	539.760	539.660			0.840	1.065			
	CH132.60	540.960	539.770	539.670			1.290				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc complete.										
	(a) For Lift 0 to 1.5m	1			20.9	0.815	1.065	18.141	139.580	157.721	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			21.5	0.815	0.100	1.752	8.500	10.253	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.427	16.625	20.051	
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			22.00			22.000	105.800	127.800	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							18.141			
	Deduction of 315mm dia pipe										
	pipe area	1.00		0.785	21.50	0.315	0.315	1.67			
	soling							0.00			



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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

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Itkheda, Measurement MB

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B		D	Page	
		GL	IL	EX.L						
20/08/16	IT6 TO IT7									
	CH201.40	541.280	539.830	539.730			1.550			
	CH232.80	541.250	539.900	539.800			1.450			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			29.1	0.815	1.500	35.575	230.496	266.071
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			29.7	0.815	0.100	2.421	15.583	18.003
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							4.734	30.476	35.210
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			30.20			30.200	194.200	224.400
	Item No. 30 :- Refilling the excavated trenches ...									
	<b>Total Excavation=</b>							35.575		
	<b>Deduction of 315mm dia pipe</b>									
	pipe area	1.00		0.785	29.70	0.315	0.315	2.31		
	soling							0.00		
	PCC							0.00		
	Murrum bedding							2.42		
								4.73		
								<b>30.84</b>	<b>212.08</b>	<b>242.93</b>
20/08/16	IT7 TO IT8									
	CH232.80	541.250	539.900	539.800			1.450			
	CH282.40	541.000	540.000	539.900			1.100	1.275		
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			47.3	0.815	1.275	49.151	266.071	315.221
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			47.9	0.815	0.100	3.904	18.003	21.907
	Item No. : 11 Transportation of earth Transportation charges including loading & uploading							7.635	35.210	42.844
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			48.40			48.400	224.400	272.800
	Item No. 30 :- Refilling the excavated trenches ...									
	<b>Total Excavation=</b>							49.151		
	<b>Deduction of 315mm dia pipe</b>									
	pipe area	1.00		0.785	47.90	0.315	0.315	3.73		
	soling							0.00		
	PCC							0.00		
	Murrum bedding							3.90		
								7.63		
								<b>41.52</b>	<b>242.93</b>	<b>284.44</b>
22/08/16	IT8 TO IT9									
	CH282.40	541.000	540.000	539.900			1.100			
	CH328.60	540.990	540.090	539.990			1.000	1.050		



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

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**Page No.** 071

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Itkheda, Measurement MB

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EXL							
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			43.9	0.815	1.050	37.567		315.221	352.789
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			44.5	0.815	0.100	3.627		21.907	25.534
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			45.00			45.000		272.800	317.800
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							<b>37.567</b>			
	<b>Deduction of 315mm dia pipe</b>										
	pipe area	1.00		0.785	44.50	0.315	0.315	3.47			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							3.63			
								7.09			
	<b>Net Qty = A - B</b>							<b>30.47</b>		<b>284.44</b>	<b>314.92</b>
22/08/16	IT9 TO IT10										
	CH328.60	540.990	540.090	539.990			1.000				
	CH384.40	541.750	540.190	540.090			1.660	1.330			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			53.5	0.815	1.330	57.991		352.789	410.780
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			54.1	0.815	0.100	4.409		25.534	29.943
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			54.60			54.600		317.800	372.400
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							<b>57.991</b>			
	<b>Deduction of 315mm dia pipe</b>										
	pipe area	1.00		0.785	54.10	0.315	0.315	4.21			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							4.41			
								8.62			
	<b>Net Qty = A - B</b>							<b>49.37</b>		<b>314.92</b>	<b>364.28</b>
23/08/16	IT10 TO IT11										
	CH384.40	541.750	540.450	540.350			1.400				
	CH409.10	541.890	540.490	540.390			1.500	1.450			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			22.4	0.815	1.450	26.471		410.780	437.251
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			23.0	0.815	0.100	1.875		29.943	31.818



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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. :-

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Itkheda, Measurement MB

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. 13 :- (d) Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			23.50			23.500		372.400	395.900
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							<b>26.471</b>			
	<b>Deduction of 315mm dia pipe</b>										
	pipe area	1.00		0.785	23.00	0.315	0.315	1.79			
	soling							0.00			
	PCC							0.00			
	Murum bedding							1.87			
								3.67			
								<b>Net Qty = A - B</b>	<b>22.81</b>	<b>364.28</b>	<b>387.09</b>
	<b>DWC - 250mm Dia</b>										
	<b>Width of Trench -</b>										
	For Lift 0 to 1.50m- 0.250+0.5=0.750m										
	For Lift 1.5 to 3.00m- 0.250+0.5+0.4=1.150m										
	For Lift 3.0 to 4.5m- 0.250+0.5+0.4+0.4=1.550m										
29/08/16	<b>IT5 To IT5.1</b>										
	CH0.00	541.050	540.000	539.900			1.150	1.175			
	CH31.00	541.190	540.090	539.990			1.200				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			29.0	0.750	1.175	25.556		437.251	462.807
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			29.3	0.750	0.100	2.198		31.818	34.015
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.635		42.844	46.480
	Item No. 13 :- (c) Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			29.80			29.800		0.000	29.800
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							<b>25.556</b>			
	<b>Deduction of 250mm dia pipe</b>										
	pipe area	1.000		0.785	29.300	0.250	0.250	1.438			
	soling							0.000			
	PCC							0.000			
	Murum bedding							2.198			
								3.635			
								<b>Net Qty = A - B</b>	<b>21.921</b>	<b>387.089</b>	<b>409.011</b>
29/08/16	<b>IT5.1 To IT5.2</b>										
	CH31.00	541.190	540.090	539.990			1.200	1.200			
	CH73.00	541.290	540.190	540.090			1.200				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			39.7	0.750	1.200	35.730		462.807	498.537



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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 Nakhshrawadi (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

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Itkheda, Measurement MB

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. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			40.3	0.750	0.100	3.023		34.015	37.038
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							5.000		46.480	51.479
	Item No. 13 :- (c)Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			40.80			40.800		29.800	70.600
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							<b>35.730</b>			
	<b>Deduction of 250mm dia pipe</b>										
	pipe area	1.000		0.785	40.300	0.250	0.250	1.977			
	soling							0.000			
	PCC							0.000			
	Murum bedding							3.023			
								5.000			
								<b>Net Qty = A - B</b>		<b>409.011</b>	<b>439.741</b>
29/08/16	IT5.2 To IT5.3							<b>30.730</b>			
	CH73.00	541.290	540.190	540.090				1.200			
	CH103.00	541.200	540.270	540.170				1.030			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			27.7	0.750	1.115	23.164		498.537	521.701
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			28.3	0.750	0.100	2.123		37.038	39.160
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.511		51.479	54.990
	Item No. 13 :- (c)Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			28.80			28.800		70.600	99.400
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							<b>23.164</b>			
	<b>Deduction of 250mm dia pipe</b>										
	pipe area	1.000		0.785	28.300	0.250	0.250	1.388			
	soling							0.000			
	PCC							0.000			
	Murum bedding							2.123			
								3.511			
								<b>Net Qty = A - B</b>		<b>439.741</b>	<b>459.394</b>
07/01/16	IT8 To IT8.1							<b>19.653</b>			
	CH0.00	540.515	540.115	540.015				0.500			
	CH42.00	540.515	540.115	540.015				0.500			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			40.0	0.750	0.500	15.000		521.701	536.701
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			40.6	0.750	0.100	3.045		39.160	42.205



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

Book No. : 074  
Page No. : 074

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

**Authority No.** AMC/Ward B&C/UIDSSM/2014/181 **Date** 01.07.2014

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Bkgheda, Measurement MB

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. : 11 Transportation of earth Transportation charges including loading & unloading							5.037		54.990	60.027
	Item No. 13 :- (c) Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			41.10			41.100		99.400	140.500
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							15.000			
	<b>Deduction of 250mm dia pipe</b>										
	pipe area	1.000		0.785	40.600	0.250	0.250	1.992			
	soling							0.000			
	PCC							0.000			
	Murum bedding							3.045			
								5.037			
								<b>Net Qty = A - B</b>		459.394	469.357
07/10/16	<b>IT8.1 To IT8.2</b>										
	CH42.00	540.515	540.115	540.015			0.500				
	CH78.00	540.615	540.115	540.015			0.600	0.550			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			33.7	1.200	0.000	0.000		536.701	536.701
	(b) For Lift 1.5m to 3.0m	1			33.7	1.200	0.000	0.000		12.065	12.065
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			34.3	1.200	0.000	0.000		42.205	42.205
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.000		60.027	60.027
	Item No. 13 :- (c) Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			34.80			34.800		140.500	175.300
	Item No. 13 :- (d) Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1									395.900
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Volume of Refilling=</b>				33.700	1.200	1.000	40.440			
	<b>Deduction of 250mm dia pipe</b>										
	pipe area	1.000		0.785	34.300	0.550	0.550	8.145			
	soling							0.000			
	PCC							0.000			
	Murum bedding							0.000			
								8.145			
								<b>Net Qty = A - B</b>		469.357	501.652



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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

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Itkheda, Chamber Measurement

### 12th RA BILL MEASUREMENTS OF CHAMBERS ITKHEDA

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 0.9 dia chamber up to 1.5 mt depth - 0.9+0.5+0.3+0.3=2m										
	Bredth for chamber up to 1.5m=2 X 2=4m										
	IT1										
	CH43.70	541.120	539.740	539.490			1.630				
	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	4.000	1.500	4.710	0.000	4.710	
	(b) For Lift 1.5 to 3.0m	1			0.785	4.000	0.130	0.408	0.000	0.408	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.935	0.000	1.935	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=						5.118				
	Deduction										
	Brick work	1.00		0.785	1.16	1.16	1.380	1.46			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murrum bedding							0.00			
	Total (B)							1.94			
	Net Qty = A - B							3.18	0.00	3.18	
	IT2										
	CH66.40	541.150	539.750	539.500			1.650				
	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	4.000	1.500	4.710	4.710	9.420	
	(b) For Lift 1.5 to 3.0m	1			0.785	4.000	0.150	0.471	0.408	0.879	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.956	1.935	3.892	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=						5.181				
	Deduction										
	Brick work	1.00		0.785	1.16	1.16	1.400	1.48			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murrum bedding							0.00			
	Total (B)							1.96			
	Net Qty = A - B							3.22	3.18	6.41	
	IT3										
	CH109.40	540.500	539.760	539.510			0.990				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										



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# AURANGABAD MUNICIPAL CORPORATION.

(From No.52)



## Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone 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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Itkheda, Chamber Measurement

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No		L	B	D		Page	Quantity	
			IL	EX.L							
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.990	3.109		9.420	12.529
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.259		3.892	5.151
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>3.109</b>			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	0.740	0.78			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murum bedding							0.00			
	<b>Total (B)</b>							<b>1.26</b>			
								<b>Net Qty = A - B</b>		<b>6.41</b>	<b>8.26</b>
	IT4										
	CH132.60	540.960	539.770	539.520			1.440				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.440	4.522		12.529	17.050
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.735		5.151	6.886
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>4.522</b>			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	1.190	1.26			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murum bedding							0.00			
	<b>Total (B)</b>							<b>1.73</b>			
								<b>Net Qty = A - B</b>		<b>8.26</b>	<b>11.04</b>
	IT5										
	CH164.10	541.050	539.800	539.550			1.500				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.500	4.710		17.050	21.760
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.798		6.886	8.683
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>4.710</b>			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	1.250	1.32			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murum bedding							0.00			
	<b>Total (B)</b>							<b>1.80</b>			
								<b>Net Qty = A - B</b>		<b>11.04</b>	<b>13.96</b>
	IT6										
	CH201.40	541.280	539.830	539.580			1.700				



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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.

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Itkheda, Chamber Measurement

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	4.000	1.500	4.710	21.760	26.470	
	(b) For Lift 1.5 to 3.0m	1			0.785	4.000	0.200	0.628	0.879	1.507	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.009	8.683	10.693	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>5.338</b>			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	1.450	1.53			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murrum bedding							0.00			
	<b>Total (B)</b>							<b>2.01</b>			
	<b>Net Qty = A - B</b>							<b>3.33</b>	<b>13.96</b>	<b>17.28</b>	
	IT7										
	CH232.80	541.250	539.900	539.650			1.600				
	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	4.000	1.500	4.710	26.470	31.180	
	(b) For Lift 1.5 to 3.0m	1			0.785	4.000	0.100	0.314	1.507	1.821	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.904	10.693	12.596	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>5.024</b>			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	1.350	1.43			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murrum bedding							0.00			
	<b>Total (B)</b>							<b>1.90</b>			
	<b>Net Qty = A - B</b>							<b>3.12</b>	<b>17.28</b>	<b>20.41</b>	
	IT8										
	CH282.40	541.000	540.000	539.750			1.250				
	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	4.000	1.250	3.925	31.180	35.105	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.534	12.596	14.130	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>3.925</b>			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	1.000	1.06			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			



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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 AH. 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

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Itkheda, Chamber Measurement

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date	
		No			L	B		D	Page		Quantity
		GL	IL	EX.L							
	Murum bedding						0.00				
	<b>Total (B)</b>						<b>1.53</b>				
		<b>Net Qty = A - B</b>					<b>2.39</b>	<b>20.41</b>	<b>22.80</b>		
	<b>IT9</b>										
	<b>CH328.60</b>	540.990	540.090	539.840			1.150				
	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	4.000	1.150	3.611	35.105	38.716	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.428	14.130	15.558	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>						<b>3.611</b>				
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	0.900	0.95			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murum bedding							0.00			
	<b>Total (B)</b>						<b>1.43</b>				
		<b>Net Qty = A - B</b>					<b>2.18</b>	<b>22.80</b>	<b>24.98</b>		
	<b>IT10</b>										
	<b>CH384.40</b>	541.750	540.190	539.940			1.810				
	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	4.000	1.500	4.710	38.716	43.426	
	(b) For Lift 1.5 to 3.0m	1			0.785	4.000	0.310	0.973	1.821	2.795	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.125	15.558	17.684	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>						<b>5.683</b>				
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	1.560	1.65			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murum bedding							0.00			
	<b>Total (B)</b>						<b>2.13</b>				
		<b>Net Qty = A - B</b>					<b>3.56</b>	<b>24.98</b>	<b>28.54</b>		
	<b>IT11</b>										
	<b>CH409.10</b>	541.890	540.490	540.240			1.650				
	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	4.000	1.500	4.710	43.426	48.136	
	(b) For Lift 1.5 to 3.0m	1			0.785	4.000	0.150	0.471	2.795	3.266	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.956	17.684	19.640	
	Item No. 30 :- Refilling the excavated trenches ...										



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# AURANGABAD MUNICIPAL CORP

(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)

A

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Itkheda, Chamber Measurement

D  
V  
n

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	<b>Total Excavation(A)=</b>							5.181			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	1.400	1.48			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murum bedding							0.00			
	<b>Total (B)</b>							1.96			
		<b>Net Qty = A - B</b>								28.54	31.76
	<b>IT5.1</b>										
	<b>CH31.00</b>	541.190	540.090	539.840			1.350				
	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	4.000	1.350	4.239	48.136	52.375	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.640	19.640	21.280	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							4.239			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	1.100	1.16			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murum bedding							0.00			
	<b>Total (B)</b>							1.64			
		<b>Net Qty = A - B</b>								31.76	34.36
	<b>IT5.2</b>										
	<b>CH73.00</b>	541.290	540.190	539.940			1.350				
	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	4.000	1.350	4.239	52.375	56.614	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.640	21.280	22.919	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							4.239			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.16	1.16	1.100	1.16			
	soling							0.00			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Murum bedding							0.00			
	<b>Total (B)</b>							1.64			
		<b>Net Qty = A - B</b>								34.36	36.96
	<b>IT5.3</b>										
	<b>CH103.00</b>	541.200	540.270	540.020			1.180				
	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	4.000	1.180	3.705	56.614	60.319	



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