



# 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. :- 177

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

1 of 1

Azad Chowk to Central Naka R MANHOLE

### 1<sup>st</sup> R A BILL MEASUREMENTS Sewer at Azad Chowk to Central Naka

**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 5 M

Sr.No.	Chainage	MH No	MTL	IL	Depth	Depth Difference than 5 m	Total Difference	Rebate/Add for Excess height (per 50 cm)
1	CH 39.00	AC 8.1	592.350	588.790	3.560	-1.440	-11.865	-23.730
2	CH 70.20	AC 8.2	593.780	589.815	3.965	-1.035		
3	CH 99.20	AC 8.3	594.280	591.000	3.280	-1.720		
4	CH 135.70	AC 8.4	594.400	591.850	2.550	-2.450		
5	CH 166.90	AC 8.5	594.400	592.000	2.400	-2.600		
6	CH 231.80	AC 8.7	595.050	592.670	2.380	-2.620		
							<b>Total</b>	<b>-23.730</b>

**Item No. : 21** Providing and constructing on sewer BBM manhole 1.2 m dia at bottom and 0.5 m dia at top and up to a depth of 2 M

Sr.No.	Chainage	MH No	MTL	IL	Depth	Depth Difference than 2 m	Total Difference	Rebate/Add for Excess height (per 50 cm)
1	CH 198.10	AC 8.6	594.300	592.340	1.960	-0.040	-0.315	-0.630
2	CH 293.10	AC 8.8	595.750	593.575	2.175	0.175		
3	CH 324.30	AC 8.9	596.460	594.135	2.325	0.325		
4	CH 378.30	AC 8.10	596.680	594.485	2.195	0.195		
5	CH 411.05	AC 8.11	597.210	595.685	1.525	-0.475		
6	CH 429.85	AC 8.12	597.890	596.085	1.805	-0.195		
7	CH 438.65	AC 8.13	597.990	596.290	1.700	-0.300		
							<b>Total</b>	<b>-0.630</b>



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Azad Chowk to Central Naka R Quantity Note Abstract

### 17th R A BILL MEASUREMENTS

Branch Sewer - Azad Chowk to Central Naka

SR NO	Description	MB/PG	ITEM 1		ITEM 2		ITEM 4			ITEM 6			ITEM 7	ITEM 11	ITEM 17	ITEM 21	ITEM 21.1	ITEM 23	ITEM 23.1	ITEM 30	EURL 9.3	EURL 9.4	
			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	up to 2 m	Rebate	2-5 m	Rebate	400mm	Full Rate	0.630	6.00	Rebate	300mm	300mm
1	For Pipe		479.661	190.345	357.380	167.347	158.708	78.627	8.822	15.480	83.088	51.915	96.199	191.381	421.250	7.000	(0.630)	6.00	(23.730)	1,399.99	164.631	30.000	
2	For Manhole		62.305	38.022	45.366	25.917	19.468	13.896	1.608	2.412	15.035	18.930	78.927	270.308	421.250	7.000	(0.630)	6.00	(23.730)	1,564.82	30.000		
	<b>Total</b>		<b>541.966</b>	<b>228.367</b>	<b>402.746</b>	<b>193.264</b>	<b>178.176</b>	<b>92.524</b>	<b>10.429</b>	<b>17.892</b>	<b>98.723</b>	<b>70.846</b>	<b>96.199</b>	<b>270.308</b>	<b>421.250</b>	<b>7.000</b>	<b>(0.630)</b>	<b>6.00</b>	<b>(23.730)</b>				

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

1 of 12

Aurangpura 600mm RCC - Aurangpura-600mm

### 14th R A BILL MEASUREMENTS BRANCH SEWER AT "AURANGPURA (Bhaji Mandi)"

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>Branch Sewer-600mm Dia - Juna Bazar</b>											
	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										
	<b>ABM 8 to ABM 9</b>										
	CH272.20	568.705	562.373	562.173			6.532				
	CH300.70	568.535	562.555	562.355			6.180	6.356			
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			25.450	3.040	1.500	116.052	0.000	116.052	
	(b) For Lift 1.5m to 3.0m	1			25.450	2.640	1.500	100.782	0.000	100.782	
	(c) For Lift 3.0m to 4.5m	1			25.450	2.240	1.500	85.512	0.000	85.512	
	(d) For Lift 4.5m to 6.0m	1			25.450	1.840	0.400	18.731	0.000	18.731	
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(d) For Lift 4.5m to 6.0m	1			25.450	1.840	0.900	42.145	0.000	42.145	
	<b>Item No. 4:-</b> Excavation for foundation/pipe trenches in soft rock etc complete.										
	(d) For Lift 4.5m to 6.0m	1			25.450	1.840	0.200	9.366	0.000	9.366	
	<b>Extra Item No. 5 (g):-</b> Excavation for foundation/pipe trenches in soft rock etc complete.										
	For Lift 6.0m to 7.5m	1			25.450	1.440	0.100	3.665	0.000	3.665	
	<b>Item No. 5 :-</b> Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(e) For Lift 6.0m to 7.5m	1			25.450	1.440	0.256	9.382	0.000	9.382	
	<b>Item No. 7 :-</b> Filling in plinth and floors/ trenches etc complete.(bedding)	1			25.450	1.440	0.200	7.330	0.000	7.330	
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading	1						19.175	0.000	19.175	
	<b>Item No 17 (d) :-</b> Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.500			27.500	0.000	27.500	
	<b>Item No 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							385.635			
	<b>Deduction</b>										
	pipe area	1.00		0.785	25.450	0.770	0.770	11.85			
	soiling							0.00			
	PCC							0.00			
	Murrum bedding							7.33			
	<b>Total = B</b>							19.17			



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

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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No IL	EX.L	L	B	D		Page	Quantity	
		Net Qty = A - B						366.46		0.000	366.46
	CH300.70	568.535	562.555	562.355							
	CH329.20	568.210	562.735	562.535			6.180	5.928			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			26.900	2.640	1.500	106.524		116.052	222.576
	(b) For Lift 1.5m to 3.0m	1			26.900	2.240	1.500	90.384		100.782	191.166
	(c) For Lift 3.0m to 4.5m	1			26.900	1.840	1.500	74.244		85.512	159.756
	(d) For Lift 4.5m to 6.0m	1			26.900	1.440	0.790	30.601		18.731	49.333
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(d) For Lift 4.5m to 6.0m	1			26.900	1.440	0.638	24.714		42.145	66.859
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			26.900	1.440	0.200	7.747		7.330	15.077
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						20.267		19.175	39.442
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.500			27.500		27.500	55.000
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							326.467			
	Deduction										
	pipe area	1.00		0.785	26.900	0.770	0.770	12.52			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							0.00			
	<b>Total = B</b>							7.75			
								20.27			
		Net Qty = A - B						306.20		366.460	672.66
	ABM 9 to ABM 10										
	CH329.20	568.210	562.735	562.535							
	CH354.85	567.765	562.815	562.615			5.675	5.413			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			24.050	2.640	1.500	95.238		222.576	317.814
	(b) For Lift 1.5m to 3.0m	1			24.050	2.240	0.800	43.098		191.166	234.264
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			24.050	2.240	0.700	37.710		0.000	37.710
	(c) For Lift 3.0m to 4.5m	1			24.050	1.840	1.500	66.378		0.000	66.378
	(d) For Lift 4.5m to 6.0m	1			24.050	1.440	0.460	15.931		66.859	82.789
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(d) For Lift 4.5m to 6.0m	1			24.050	1.440	0.453	15.688		0.000	15.688
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			24.050	1.440	0.200	6.926		15.077	22.003
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						18.120		39.442	57.562



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

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Aurangpura 600mm RCC - Aurangpura-600mm

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 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000		55.000	80.000
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation = A =</b>							274.043			
	<b>Deduction</b>										
	pipe area	1.00		0.785	24.050	0.770	0.770	11.19			
	soling							0.00			
	PCC							0.00			
	Murum bedding							6.93			
	<b>Total = B</b>							18.12			
	<b>Net Qty = A - B</b>							255.92		672.660	928.58
	CH354.85	567.765	562.815	562.615			5.150				
	CH370.50	567.735	562.885	562.685			5.050	5.100			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			14.050	2.640	1.500	55.638		317.814	373.452
	(b) For Lift 1.5m to 3.0m	1			14.050	2.240	1.500	47.208		234.264	281.472
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(c) For Lift 3.0m to 4.5m	1			14.050	1.840	1.500	38.778		66.378	105.156
	(d) For Lift 4.5m to 6.0m	1			14.050	1.440	0.600	12.139		82.789	94.929
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			14.050	1.440	0.200	4.046		22.003	26.050
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						10.586		57.562	68.147
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			15.000			15.000		80.000	95.000
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation = A =</b>							153.763			
	<b>Deduction</b>										
	pipe area	1.00		0.785	14.050	0.770	0.770	6.54			
	soling							0.00			
	PCC							0.00			
	Murum bedding							4.05			
	<b>Total = B</b>							10.59			
	<b>Net Qty = A - B</b>							143.18		928.583	1071.76
	ABM 10 to ABM 11										
	CH370.50	567.735	562.885	562.685			5.050				
	CH414.30	566.900	562.900	562.700			4.200	4.625			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			40.600	2.640	1.200	128.621		373.452	502.073
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			40.600	2.640	0.300	32.155		0.000	32.155
	(b) For Lift 1.5m to 3.0m	1			40.600	2.400	0.500	45.472		37.710	83.182



*22/8/2017*





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**Name of Agency:-** M/s Khilari Infrastructures Pvt Ltd. & GEOM (Civil Measurement)

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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Up to Date Quantity
		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			40.600	2.240	1.000	90.944		0.000	90.944
	(c) For Lift 3.0m to 4.5m	1			40.600	1.840	0.400	29.882		0.000	29.882
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(c) For Lift 3.0m to 4.5m	1			40.600	1.840	1.100	82.174		0.000	82.174
	(d) For Lift 4.5m to 6.0m	1			40.600	1.440	0.125	7.308		15.688	22.996
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			40.600	1.440	0.200	11.693		26.050	37.742
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						30.589		68.147	98.737
	Item No 17 ( d ) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			42.500			42.500		95.000	137.500
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							<b>416.556</b>			
	<b>Deduction</b>										
	pipe area	1.00			0.785	40.600	0.770	0.770	18.90		
	soling							0.00			
	PCC							0.00			
	Murrum bedding							11.69			
	<b>Total = B</b>							<b>30.59</b>			
	<b>Net Qty = A - B</b>							<b>385.97</b>		<b>1071.760</b>	<b>1457.73</b>
	<b>ABM 11 to ABM 12</b>										
	CH414.30	566.900	562.900	562.700			4.200				
	CH443.10	566.350	562.950	562.750			3.600	3.900			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			25.600	2.240	1.200	68.813		502.073	570.886
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			25.600	2.240	0.300	17.203		32.155	49.358
	(b) For Lift 1.5m to 3.0m	1			25.600	1.840	0.600	28.262		83.182	111.445
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			25.600	1.840	0.900	42.394		90.944	133.338
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(c) For Lift 3.0m to 4.5m	1			25.600	1.440	0.900	33.178		82.174	115.352
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			25.600	1.440	0.200	7.373		37.742	45.115
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						19.288		98.737	118.024
	Item No 17 ( d ) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.500			27.500		137.500	165.000



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

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Aurangpura 600mm RCC - Aurangpura-600mm

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>						189.850				
	<b>Deduction</b>										
	pipe area	1.00		0.785	25.600	0.770	0.770	11.91			
	soling							0.00			
	PCC							0.00			
	Murum bedding							7.37			
	<b>Total = B</b>							19.29			
								<b>Net Qty = A - B</b>	<b>170.56</b>	<b>1457.727</b>	<b>1628.29</b>
	<b>ABM 12 to ABM 13</b>										
	CH443.10	566.350	562.950	562.750			3.600	3.350			
	CH474.40	565.910	563.010	562.810			3.100				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			28.100	2.240	1.100	69.238	570.886	640.124	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			28.100	2.240	0.400	25.178	49.358	74.536	
	(b) For Lift 1.5m to 3.0m	1			28.100	1.840	0.900	46.534	111.445	157.978	
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			28.100	1.840	0.600	31.022	133.338	164.360	
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(c) For Lift 3.0m to 4.5m	1			28.100	1.440	0.350	14.162	115.352	129.514	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)										
		1			28.100	1.440	0.200	8.093	45.115	53.208	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading										
		1						21.171	118.024	139.196	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia										
		1			30.000			30.000	165.000	195.000	
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation = A =</b>							186.134			
	<b>Deduction</b>										
	pipe area	1.00		0.785	28.100	0.770	0.770	13.08			
	soling							0.00			
	PCC							0.00			
	Murum bedding							8.09			
	<b>Total = B</b>							21.17			
								<b>Net Qty = A - B</b>	<b>164.96</b>	<b>1628.289</b>	<b>1793.25</b>
	<b>ABM 13 to ABM 14</b>										
	CH474.40	565.910	563.010	562.810			3.100	2.980			
	CH505.05	565.730	563.070	562.870			2.860				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			29.050	1.840	1.000	53.452	640.124	693.576	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum 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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Page No. :-

Name of Contractor: M/s Khilari Infrastructures Pvt Ltd. & GECPI (Joint Venture)

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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	(a) For Lift 0 to 1.5m	1			29.050	1.840	0.350	18.708	74.536	93.244	
	(b) For Lift 1.5m to 3.0m	1			29.050	1.440	0.400	16.733	157.978	174.711	
	<b>Item No. 4:-</b> Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			29.050	1.840	0.150	8.018	0.000	8.018	
	(b) For Lift 1.5m to 3.0m*	1			29.050	1.440	0.600	25.099	164.360	189.459	
	<b>Item No. 5 :-</b> Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			29.050	1.440	0.480	20.079	0.000	20.079	
	<b>Item No. 7 :-</b> Filling in plinth and floors/ trenches etc complete.(bedding)	1			29.050	1.440	0.200	8.366	53.208	61.574	
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading	1						21.887	139.196	161.083	
	<b>Item No 17 ( d ) :-</b> Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			30.000			30.000	195.000	225.000	
	<b>Item No 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation = A =</b>							142.089			
	<b>Deduction</b>										
	pipe area	1.00		0.785	29.050	0.770	0.770	13.52			
	soling							0.00			
	PCC							0.00			
	Murum bedding							8.37			
	<b>Total = B</b>							21.89			
	<b>Net Qty = A - B</b>							120.20	1793.252	1913.45	
	<b>CH505.05</b>	565.730	563.070	562.870			2.860				
	<b>CH533.20</b>	565.130	563.130	562.930			2.200	2.530			
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			26.550	1.840	1.000	48.852	693.576	742.428	
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			26.550	1.840	0.350	17.098	93.244	110.342	
	(b) For Lift 1.5m to 3.0m	1			26.550	1.440	0.400	15.293	174.711	190.004	
	<b>Item No. 4:-</b> Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			26.550	1.840	0.150	7.328	8.018	15.346	
	(b) For Lift 1.5m to 3.0m	1			26.550	1.440	0.600	22.939	189.459	212.398	
	<b>Item No. 5 :-</b> Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			26.550	1.440	0.030	1.147	20.079	21.226	
	<b>Item No. 7 :-</b> Filling in plinth and floors/ trenches etc complete.(bedding)	1			26.550	1.440	0.200	7.646	61.574	69.221	
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading	1						20.003	161.083	181.086	



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

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Aurangpura 600mm RCC - Aurangpura-600mm

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 17 ( d ) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.500			27.500		225.000	252.500
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							112.657			
	<b>Deduction</b>										
	pipe area	1.00		0.785	26.550	0.770	0.770	12.36			
	soling							0.00			
	PCC							0.00			
	Murum bedding							7.65			
	<b>Total = B</b>							20.00			
	<b>Net Qty = A - B</b>							92.65	1913.455	2006.11	
	<b>ABM 14 to ABM 15</b>										
	CH533.20	565.130	563.130	562.930			2.200	2.200			
	CH561.85	565.200	563.200	563.000			2.200	2.200			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			25.720	1.840	1.100	52.057		742.428	794.485
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			25.720	1.840	0.250	11.831		110.342	122.174
	(b) For Lift 1.5m to 3.0m	1			25.720	1.440	0.400	14.815		190.004	204.819
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			25.720	1.840	0.150	7.099		15.346	22.444
	(b) For Lift 1.5m to 3.0m	1			25.720	1.440	0.300	11.111		212.398	223.509
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			25.720	1.440	0.000	0.000		21.226	21.226
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			25.720	1.440	0.200	7.407		69.221	76.628
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						19.378		181.086	200.464
	Item No 17 ( d ) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.500			27.500		252.500	280.000
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							96.913			
	<b>Deduction</b>										
	pipe area	1.00		0.785	25.720	0.770	0.770	11.97			
	soling							0.00			
	PCC							0.00			
	Murum bedding							7.41			
	<b>Total = B</b>							19.38			
	<b>Net Qty = A - B</b>							77.53	2006.108	2083.64	
	<b>ABM 15 to ABM 16</b>										
	CH561.85	565.200	563.200	563.000			2.200	2.200			
	CH587.85	565.150	563.250	563.050			2.100	2.100			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										



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**AURANGABAD MUNICIPAL CORPORATION.**  
(From No.52)

**Measurement Book**

Book No. : **186**

Page No. :-

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

**Name of Agency:-** M/s Khilari Infrastructure Pvt. Ltd. & CECONI (Pune) Pvt. Ltd.

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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	(a) For Lift 0 to 1.5m	1			23.340	1.840	1.500	64.418		794.485	858.904
	(b) For Lift 1.5m to 3.0m	1			23.340	1.440	0.300	10.083		281.472	291.554
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			23.340	1.440	0.350	11.763		204.819	216.582
	<b>Item No. 7 :-</b> Filling in plinth and floors/ trenches etc complete.(bedding)	1			23.340	1.440	0.200	6.722		76.628	83.350
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading	1						17.585		200.464	218.049
	<b>Item No 17 ( d ) :-</b> Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000		280.000	305.000
	<b>Item No 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							86.265			
	<b>Deduction</b>										
	pipe area	1.00		0.785	23.340	0.770	0.770	10.86			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							6.72			
	<b>Total = B</b>							17.58			
	<b>Net Qty = A - B</b>							<b>68.68</b>		<b>2083.643</b>	<b>2152.32</b>
	<b>ABM 16 to ABM 17</b>										
	CH587.85	565.150	563.250	563.050				2.100	2.050		
	CH613.85	565.100	563.300	563.100				2.000			
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in all typesof soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			23.340	1.840	1.500	64.418		858.904	923.322
	(b) For Lift 1.5m to 3.0m	1			23.340	1.440	0.200	6.722		291.554	298.276
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			23.340	1.440	0.350	11.763		216.582	228.345
	<b>Item No. 7 :-</b> Filling in plinth and floors/ trenches etc complete.(bedding)	1			23.340	1.440	0.200	6.722		83.350	90.072
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading	1						17.585		218.049	235.634
	<b>Item No 17 ( d ) :-</b> Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000		305.000	330.000
	<b>Item No 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							82.904			
	<b>Deduction</b>										
	pipe area	1.00		0.785	23.340	0.770	0.770	10.86			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							6.72			
	<b>Total = B</b>							17.58			
	<b>Net Qty = A - B</b>							<b>65.32</b>		<b>2152.323</b>	<b>2217.64</b>
	<b>ABM 17 to ABM 18</b>										
	CH613.85	565.100	563.860	563.660				1.440	1.520		
	CH639.85	565.290	563.890	563.690				1.600			



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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. :- **187**  
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Name of Contractor: M/s. K. K. Infrastructures Pvt. Ltd. & C/EC/DE (Civil) (Signature)

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Aurangpura 600mm RCC - Aurangpura-600mm

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>Item No. 1 :-</b> Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			23.340	1.040	1.300	55.029		923.322	979.151
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			23.340	1.040	0.200	8.509		122.174	130.763
	(b) For Lift 1.5m to 3.0m	1			23.340	1.440	0.020	0.672		228.345	229.018
	<b>Item No. 7 :-</b> Filling in plinth and floors/ trenches etc complete.(bedding)	1			23.340	1.440	0.200	6.722		90.072	96.794
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading	1						17.505		235.634	253.219
	<b>Item No 17 ( d ) :-</b> Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000		330.000	355.000
	<b>Item No 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							65.091			
	<b>Deduction</b>										
	pipe area	1.00		0.785	23.340	0.770	0.770	10.86			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							6.72			
	<b>Total = B</b>							17.50			
	<b>Net Qty = A - B</b>							47.51		2217.641	2265.15
	<b>ABM 18 to ABM 19</b>										
	CH639.85	565.290	563.090	563.690			1.600				
	CH680.85	565.520	563.920	563.720			1.800	1.700			
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			38.340	1.840	1.300	91.709		979.151	1070.861
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			38.340	1.840	0.200	14.109		130.763	144.872
	(b) For Lift 1.5m to 3.0m	1			38.340	1.440	0.200	11.042		229.018	240.060
	<b>Item No. 7 :-</b> Filling in plinth and floors/ trenches etc complete.(bedding)	1			38.340	1.440	0.200	11.042		96.794	107.836
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading	1						28.886		253.219	282.105
	<b>Item No 17 ( d ) :-</b> Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			40.000			40.000		355.000	395.000
	<b>Item No 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							116.860			
	<b>Deduction</b>										
	pipe area	1.00		0.785	38.340	0.770	0.770	17.84			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							11.04			
	<b>Total = B</b>							28.89			
	<b>Net Qty = A - B</b>							87.97		2265.147	2353.12



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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. **188**

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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	IL	EX.L	L	B	D		Page	Quantity	
	<b>ABM 19 to ABM 20</b>										
	CH680.85	565.520	563.920	563.720			1.800				
	CH706.35	565.840	563.940	563.740			2.100	1.950			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			24.170	1.840	1.500	66.709			
	(b) For Lift 1.5m to 3.0m	1			24.170	1.440	0.200	6.961	1070.861	1137.570	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.								298.276	305.237	
	(b) For Lift 1.5m to 3.0m	1			24.170	1.440	0.250	8.701	240.060	248.761	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			24.170	1.440	0.200	6.961	107.836	114.797	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						18.210	282.105	300.316	
	Item No 17 ( d ) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000	395.000	420.000	
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							82.371			
	<b>Deduction</b>										
	pipe area	1.00		0.785	24.170	0.770	0.770	11.25			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							6.96			
	<b>Total = B</b>							18.21			
	<b>Net Qty = A - B</b>							64.16	2353.121	2417.28	
	CH706.35	565.840	563.940	563.740			2.100				
	CH731.85	566.110	563.960	563.760			2.350	2.225			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			24.170	1.840	1.500	66.709	1137.570	1204.279	
	(b) For Lift 1.5m to 3.0m	1			24.170	1.440	0.500	17.402	305.237	322.640	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			24.170	1.440	0.225	7.831	248.761	256.592	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			24.170	1.440	0.200	6.961	114.797	121.758	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						18.210	300.316	318.526	
	Item No 17 ( d ) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000	420.000	445.000	
	Item No 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation= A=</b>							91.943			
	<b>Deduction</b>										
	pipe area	1.00		0.785	24.170	0.770	0.770	11.25			
	soling							0.00			
	PCC							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 GRP/DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :-

Page No. :- **189**

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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement Page	Total Upto Date Quantity
		No			L	B	D			
		GL	IL	EX.L				Quantity		
	Murum bedding						6.96			
	<b>Total = B</b>						18.21			
							73.73	2417.282	2491.01	
	<b>ABM 20 to ABM 21</b>									
	CH731.85	566.110	563.960	563.760			2.350			
	CH757.43	566.530	563.990	563.790			2.740			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc									
	(a) For Lift 0 to 1.5m	1			24.110	1.840	1.500	66.544	1204.279	1270.823
	(b) For Lift 1.5m to 3.0m	1			24.110	1.440	0.500	17.359	322.640	339.999
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.									
	(b) For Lift 1.5m to 3.0m	1			24.110	1.440	0.545	18.922	256.592	275.513
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			24.110	1.440	0.200	6.944	121.758	128.701
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						18.165	318.526	336.691
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000	445.000	470.000
	Item No 30 :- Refilling the excavated trenches ...									
	<b>Total Excavation= A=</b>						102.824			
	<b>Deduction</b>									
	pipe area	1.00		0.785	24.110	0.770	0.770	11.22		
	soling							0.00		
	PCC							0.00		
	Murum bedding							6.94		
	<b>Total = B</b>						18.17			
								84.66	2491.014	2575.67
	<b>Net Qty = A - B</b>									
	CH757.43	566.530	563.990	563.790			2.740			
	CH780.50	566.910	564.010	563.810			3.100	2.920		
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc									
	(a) For Lift 0 to 1.5m	1			21.610	1.840	1.500	59.644	1270.823	1330.466
	(b) For Lift 1.5m to 3.0m	1			21.610	1.440	1.100	34.230	339.999	374.229
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.									
	(b) For Lift 1.5m to 3.0m	1			21.610	1.440	0.320	9.958	275.513	285.471
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			21.610	1.440	0.200	6.224	128.701	134.925
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						16.282	336.691	352.973
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			22.500			22.500	470.000	492.500
	Item No 30 :- Refilling the excavated trenches ...									
	<b>Total Excavation= A=</b>						103.832			
	<b>Deduction</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. :-  
Page No. :- **191**

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Aurangpura 600mm RCC 1.5m MH Excavation

### 12<sup>th</sup> RA BILL MEASUREMENTS

#### BRANCH SEWER AT "AURANGPURA (Bhaji Mandi)"

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Up to Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EXL							
	<b>Excavation of Chamber -</b> 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>ABM 9</b>										
	<b>CH329.20</b>	568.210	562.735	562.485			5.725				
	<b>Item No. 1 :-</b> 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	
	(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	0.790	6.350	0.000	6.350	
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.435	3.497	0.000	3.497	
	<b>Item No. : 11</b> Transportation of earth Transportation charges							19.210	0.000	19.210	
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							46.020			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	3.475	14.181			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								19.210			
	<b>Net Qty = A - B</b>							26.810	0.000	26.810	
	<b>ABM 10</b>										
	<b>CH370.50</b>	567.735	562.885	562.635			5.100				
	<b>Item No. 1 :-</b> 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	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.500	12.058	12.058	24.115	
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(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	0.600	4.823	3.497	8.320	
	<b>Item No. : 11</b> Transportation of earth Transportation charges							16.660	19.210	35.870	
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							40.996			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	2.850	11.630			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								16.660			
	<b>Net Qty = A - B</b>							24.336	26.810	51.146	
	<b>ABM 11</b>										
	<b>CH414.30</b>	566.900	562.900	562.650			4.250				



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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. :-

Page No. :- 192

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Aurangpura 600mm RCC 1.5m MH Excavation

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No		L	B	D		Page	Quantity	
			IL	EX.L							
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.200	9.646		24.115	33.761
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.300	2.412		0.000	2.412
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.500	4.019		0.000	4.019
	<b>Item No. 4 :-</b> Excavation for foundation/pipe trenches in soft										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.000	8.038		0.000	8.038
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.400	3.215		0.000	3.215
	<b>ITEM No. 5 :-</b> Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.850	6.833		0.000	6.833
	<b>Item No. : 11</b> Transportation of earth Transportation charges							13.191		35.870	49.061
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							34.163			
	<b>Deduction</b>										
	Brick work	1			0.785	2.280	2.280	2.000	8.161		
		1			0.785	1.540	1.540	2.000	3.723		
	PCC	1			0.785	2.580	2.580	0.250	1.306		
	Soling	1			0.785	2.580	2.580	0.000	0.000		
								13.191			
	<b>Net Qty = A - B</b>							20.972		51.146	72.117
	<b>ABM 12</b>										
	<b>CH443.10</b>	566.350	562.950	562.700				3.650			
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.200	9.646		33.761	43.407
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.300	2.412		2.412	4.823
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.600	4.823		4.019	8.842
	<b>Item No. 4 :-</b> Excavation for foundation/pipe trenches in soft										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.900	7.235		8.038	15.273
	<b>ITEM No. 5 :-</b> Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.650	5.225		6.833	12.058
	<b>Item No. : 11</b> Transportation of earth Transportation charges							10.743		49.061	59.804
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							29.340			
	<b>Deduction</b>										
	Brick work	1			0.785	2.280	2.280	1.400	5.713		
		1			0.785	1.540	1.540	2.000	3.723		
	PCC	1			0.785	2.580	2.580	0.250	1.306		
	Soling	1			0.785	2.580	2.580	0.000	0.000		
								10.743			
	<b>Net Qty = A - B</b>							18.597		72.117	90.715
	<b>ABM 13</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 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.

Book No. :-

Page No. :- 193

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

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Aurangpura 600mm RCC 1.5m MH Excavation

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	IL	EX.L	L	B	D		Page	Quantity	
	CH474.40	565.910	563.010	562.760			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	10.240	1.100	8.842		43.407	52.250
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.400	3.215		4.823	8.038
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.900	7.235		8.842	16.077
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.600	4.823		15.273	20.096
	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	10.240	0.150	1.206		12.058	13.263
	Item No. : 11 Transportation of earth Transportation charges							8.702		59.804	68.507
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							25.321			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.900	3.673			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								8.702			
	<b>Net Qty = A - B</b>							16.619		90.715	107.333
	ABM 14										
	CH533.20	565.130	563.130	562.880			2.250				
	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	10.240	1.000	8.038		52.250	60.288
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.350	2.813		8.038	10.852
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.400	3.215		16.077	19.292
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.150	1.206		0.000	1.206
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.350	2.813		20.096	22.909
	Item No. : 11 Transportation of earth Transportation charges							5.030		68.507	73.536
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							18.086			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.000	0.000			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								5.030			
	<b>Net Qty = A - B</b>							13.057		107.333	120.390
	ABM 21										
	CH780.50	566.910	564.010	563.760			3.150				



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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 Sahm Ah, 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.

Book No. :- **194**  
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**Name of Agency:-** M's Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venture)

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Aurangpura 600mm RCC 1.5m MH Excavation

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No IL	EX.L	L	B	D		Page	Quantity	
	<b>Item No. 1 :-</b> 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	60.288	72.346	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.100	8.842	24.115	32.957	
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.400	3.215	19.292	22.508	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.150	1.206	12.058	13.263	
	<b>Item No. : 11</b> Transportation of earth Transportation charges							8.702	73.536	82.239	
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							25.321			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.900	3.673			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								8.702			
	<b>Net Qty = A - B</b>							16.619	120.390	137.009	
	<b>ABM 22</b>										
	<b>CH809.30</b>	566.830	564.030	563.780			3.050				
	<b>Item No. 1 :-</b> 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	72.346	84.403	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.800	6.431	32.957	39.388	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.000	0.000	12.058	12.058	
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.000	0.000	6.350	6.350	
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.000	0.000	10.852	10.852	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.500	4.019	22.508	26.527	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.000	0.000	13.263	13.263	
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.000	0.000	8.320	8.320	
	<b>Item No. 4 :-</b> Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.000	0.000	1.206	1.206	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.200	1.608	22.909	24.517	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.050	0.402	3.215	3.617	
	<b>ITEM No. 5 :-</b> Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.000	0.000	13.263	13.263	
	<b>Item No. : 11</b> Transportation of earth Transportation charges							8.294	82.239	90.533	
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							24.517			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.800	3.265			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
								8.294			
	<b>Net Qty = A - B</b>							16.223	137.009	153.231	



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

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Aurangpura 600mm RCC 1.2 MH Exc.

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	IL	EX.L	L	B	D		Page	Quantity	
	PCC	1		0.785	1.960	1.960	0.250	0.75			
	Murram bedding							0.00			
	<b>Total (B)</b>							<b>3.31</b>			
		<b>Net Qty = A - B</b>						<b>8.63</b>		<b>162.28</b>	<b>170.91</b>
	<b>ABM 17</b>										
	CH613.85	565.100	563.300	563.050			2.050				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.500	8.33	98.84	107.17	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.200	1.11	41.05	42.17	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murram etc complete.										
	(b) For Lift 1.5m to 3.0ft	1			0.785	7.075	0.350	1.94	30.69	32.64	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.179	97.29	100.47	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>11.385</b>			
	<b>Deduction</b>										
	Brick work	1		0.785	1.310	1.310	1.800	2.42			
	Brick work							0.00			
	PCC	1		0.785	1.960	1.960	0.250	0.75			
	Murram bedding							0.00			
	<b>Total (B)</b>							<b>3.18</b>			
		<b>Net Qty = A - B</b>						<b>8.21</b>		<b>170.91</b>	<b>179.11</b>
	<b>ABM 18</b>										
	CH639.85	565.290	563.890	563.640			1.650				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.300	7.22	107.17	114.39	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murram etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.200	1.11	12.24	13.35	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.150	0.83	32.64	33.47	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.640	100.47	103.11	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>9.164</b>			
	<b>Deduction</b>										
	Brick work	1		0.785	1.310	1.310	1.400	1.89			
	Brick work							0.00			
	PCC	1		0.785	1.960	1.960	0.250	0.75			
	Murram bedding							0.00			
	<b>Total (B)</b>							<b>2.64</b>			
		<b>Net Qty = A - B</b>						<b>6.52</b>		<b>179.11</b>	<b>185.64</b>
	<b>ABM 19</b>										
	CH680.85	565.520	563.920	563.670			1.850				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.300	7.22	114.39	121.61	



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

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Aurangpura 600mm RCC 1.2 MH Exc.

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity	
		No			L	B		D	Page		Quantity
		GL	IL	EX.L							
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.200	1.11	13.35	14.46	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.350	1.94	33.47	35.41	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.909	103.11	106.02	
	Item No. 30 :- Refilling the excavated trenches ...							10.275			
	<b>Total Excavation(A)=</b>										
	<b>Deduction</b>										
	Brick work	1			0.785	1.310	1.310	1.600	2.16		
	Brick work							0.00			
	PCC	1			0.785	1.960	1.960	0.250	0.75		
	Murrum bedding							0.00			
	<b>Total (B)</b>							2.91			
	<b>Net Qty = A - B</b>							<b>7.37</b>	<b>185.64</b>	<b>193.00</b>	
	<b>ABM 20</b>										
	<b>CH731.85</b>	566.110	563.960	563.710			2.400				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.500	8.33	121.61	129.94	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.500	2.78	42.17	44.94	
	(c) For Lift 3.0m to 4.5m	1			0.785	7.075	0.000	0.00	12.06	12.06	
	(d) For Lift 4.5m to 6.0m	1			0.785	7.075	0.000	0.00	6.35	6.35	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.000	0.00	14.46	14.46	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.400	2.22	35.41	37.63	
	(c) For Lift 3.0m to 4.5m	1			0.785	7.075	0.000	0.00	13.26	13.26	
	(d) For Lift 4.5m to 6.0m	1			0.785	7.075	0.000	0.00	8.32	8.32	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.000	0.00	2.04	2.04	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.000	0.00	26.46	26.46	
	(c) For Lift 3.0m to 4.5m	1			0.785	7.075	0.000	0.00	3.62	3.62	
	ITEM NO. 5 :- Excavation for foundation / pipe trenches in laterite rock masses by chiseling etc. Completed.										
	(c) For Lift 3.0m to 4.5m	1			0.785	7.075	0.000	0.00	13.26	13.26	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.650	106.02	109.67	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							13.329			
	<b>Deduction</b>										
	Brick work	1			0.785	1.310	1.310	2.150	2.90		
	Brick work							0.00			
	PCC	1			0.785	1.960	1.960	0.250	0.75		
	Murrum bedding							0.00			
	<b>Total (B)</b>							3.65			
	<b>Net Qty = A - B</b>							<b>9.68</b>	<b>193.00</b>	<b>202.68</b>	



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# AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

## Measurement Book

Book No. :-

Page No. :- 198

**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.

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

1 of 1

Aurangpura 600mm RCC MANHOLE

### 14th R A BILL MEASUREMENTS

#### BRANCH SEWER AT "AURANGPURA (Bhaji Mandi)"

**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 5 M

Sr.No.	Chainage	MJH No	MTL	IL	Depth	Depth Difference than 5 m	Total Difference	Rebate/Add for Excess height (per 50 cm)
1	CH 329.20	ABM 9	568.210	562.735	5.475	0.475	-11.675	-23.350
2	CH 370.50	ABM 10	567.735	562.885	4.850	-0.150		
3	CH 414.30	ABM 11	566.900	562.900	4.000	-1.000		
4	CH 443.10	ABM 12	566.350	562.950	3.400	-1.600		
5	CH 474.40	ABM 13	565.910	563.010	2.900	-2.100		
6	CH 533.20	ABM 14	565.130	563.130	2.000	-3.000		
7	CH 780.50	ABM 21	566.910	564.010	2.900	-2.100		
8	CH 809.30	ABM 22	566.830	564.030	2.800	-2.200		
<b>Total</b>								-23.350

**Item No. : 21** Providing and constructing on sewer BBM manhole 1.2 m dia at bottom and 0.5 m dia at top and up to a depth of 2 M

Sr.No.	Chainage	MH No	MTL	IL	Depth	Depth Difference than 2 m	Total Difference	Rebate/Add for Excess height (per 50 cm)
1	CH 561.85	ABM 15	565.200	563.200	2.000	0.000	-1.150	-2.300
2	CH 587.85	ABM 16	565.150	563.250	1.900	-0.100		
3	CH 613.85	ABM 17	565.100	563.300	1.800	-0.200		
4	CH 639.85	ABM 18	565.290	563.890	1.400	-0.600		
5	CH 680.85	ABM 19	565.520	563.920	1.600	-0.400		
6	CH 731.85	ABM 20	566.110	563.960	2.150	0.150		
<b>Total</b>								-2.300



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# AURANGABAD MUNICIPAL CORPORATION

(From No.52)

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Aurangabad 600mm RCC Quantity Made At Street

**Part A BILL MEASUREMENTS**

Branch Sewer - "AURANGAPURA (Bhaji Mandir)"

SR NO	Description	ITEM 1			ITEM 2			ITEM 4			ITEM 5			ITEM 7	ITEM 11	ITEM 17 600mm	ITEM 21 upto 2 m Full Rate	ITEM 21.1 Rebate	ITEM 21.1 2.5 m	ITEM 23.1 Rebate	ITEM 30	ERL 6 0
		0-1.5	1.5-3.0	3.0-4.5	4.5-9	0-1.5	1.5-3.0	3.0-4.5	4.5-9	0-1.5	1.5-3.0	3.4-5	4.5-6									
1	For Pipe	1,401.122	403.720	158.756	48.333	144.872	303.003	105.156	94.929	22.464	230.882	31.725	9.356	21.226	129.514	22.995	9.382	142.298	372.260		2,771.73	3,665
2	For Manhole	128.945	44.942	12,058	₹ 6,350	14,462	37,534	13,263	₹ 8,320	2,039	26,461	3,617	₹	₹	13,263			₹	108.673		202,682	
	<b>Total</b>	<b>1,531.067</b>	<b>448.662</b>	<b>171.814</b>	<b>55,683</b>	<b>159,334</b>	<b>341,538</b>	<b>118,419</b>	<b>103,248</b>	<b>24,483</b>	<b>267,343</b>	<b>35,342</b>	<b>9,386</b>	<b>21,226</b>	<b>142,778</b>	<b>22,998</b>	<b>9,382</b>	<b>142,298</b>	<b>481,933</b>	<b>8,000</b>	<b>2,974.41</b>	<b>3,665</b>

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