

Appurtenances of Wastewater Collection System

Sl. No.	Lava No.	Length of Sewer Line	No. of Man Holes										No. of Lamp Holes	No. of Vent Shafts	150 mm id Connecting Pipe
			200 mm id	250 mm id	300 mm id	350 mm id	400 mm id	450mm id	500 mm id	600 mm id	700 mm id				
			M	M	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	M
1	2	2	4	5	6	7	8	9	10	11	12	13	14	15	
1	A3-A2-83A5	40	2									2	1	18	
2	A5-A4	195	10									10		90	
3	A5-A4	41	2									2		18	
4	A4-A4	41	2									2		18	
5	A4-A7	52	3									3		27	
6	A20-A7	48	2									2		18	
7	A7-A7	105	3									3		27	
8	A7-A10	55	3									3		27	
9	A5-A3	40	2									2		18	
10	A5-A6	53	3									3		27	
11	A20-A6	48	2									2		18	
12	A5-A8	55	3									3		27	
13	A18-A15	18	1									1	1	9	
14	A15-A15	40	2									2		18	
15	A15-A12	53	3									3		27	
16	A18-A12	53	3									3		27	
17	A12-A9	54	3									3		27	
18	A9-A10	175	9									9	1	81	
19	A15-A10	30	2									2		18	
20	A10-A11	175	9									9		81	
21	A11-A11	23	1									1		9	
22	A11-A14	55	3									3		27	
23	A60-A38	23	4									4		36	
24	A38-A14	101	5									5		45	
25	A14-E25	110	6									6		54	
26	E25-E23	45	3									3		27	
27	E20-E29	27	1									1		9	
28	E29-E27	85	4									4		36	
29	E23-E27	84	4									4		36	
30	E28-E26	77	4									4		36	
31	E26-E27	68	3									3		27	
32	E21-E31	83	4									4		36	
33	E31-E21	92	5									5		45	
34	E21-E22	44	2									2		18	
35	E22-A22	84	4									4		36	
36	A22-E23	19	1									1		9	
37	E23-A21	91	5									5		45	

Apprenticeship of Waste Water Collection System

Sr. No	Line No.	Length of Sewer Line	No. of Man Holes										No. of Lamp Holes	No. of Vent Shafts	150 mm id Connecting Pipe
			200 mm id	250 mm id	300 mm id	350 mm id	400 mm id	450mm id	500 mm id	600 mm id	700 mm id				
			M	M	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	M
1	2	2	4	5	6	7	8	9	10	11	12	13	14	15	
38	A21-A35	181			9							1			9
39	A35-A28	17			1							2			27
40	A28-A31	57			3							2			18
41	A32-A31	44	2									3			27
42	A31-A34	69			3							5			45
43	A34-A39	108				5						5			45
44	A39-A24	98				5						1			9
45	A24-A2E	15				1									
SECTOR 82A-															
46	A24-A33	60	3									3			27
47	A34-A33	6													
48	A33-A35	50	3										1		
49	A37-A36	7										3			27
50	A36-A35	50	3												36
51	A35-A32	71	4												
52	A49-A31	5										3	3		27
53	A31-A32	50	3									2			18
54	A32-A6	40	2									3			27
55	A6-A5	61	3												
56	A21-A20	2										1			9
57	A20-A15	26	1									4			36
58	A15-A16	85	4									3			27
59	A30-A16	50	2									1			9
60	A16-A17	23	1									2	1		27
61	A17-A5	61	3												
62	A5-A80	81	4									4			36
63	A80-A59	64	3									3			27
64	A59-A14	69	3									5			45
65	A14-A10	95	5												
66	A28-A27	84	4									4			36
67	A27-A26	73	4									5			45
68	A26-A25	101	5									2			27
69	A25-A24	60	3									4			36
70	A24-A23	86	4									5			45
71	A23-A22	102	5									5			45
72	A22-A10	98	5												
73	A10-A9	56	3									3			27
74	A9-A58	103	5									5			45
75	A58-A3	50	3												27

Appurtenances of Waste Water Collection System

Sr. No	Line No.	Length of Sewer Line	No. of Man Holes										No. of Lamp Holes	No. of Vent Shafts	150 mm id Connecting Pipe
			200 mm id	250 mm id	300 mm id	350 mm id	400 mm id	450mm id	500 mm id	600 mm id	700 mm id				
			M	M	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	M
1	3	3	4	5	6	7	8	9	10	11	12	13	14	15	
35	A3-A2	22	1									1		9	
37	A2-A1	56	3									3		27	
38	B2A35-A2A1	136	7									7	1	63	
39	B2A1-B2E10	73		4								4		36	
40															
41	B2E10-	220		11								11		99	
42	E16-E17	69		3								3		27	
43	E17-E18	138			7							7		63	
44	E21-E22	16	1									1		9	
45	E18-E21	75	4									4		36	
46	E11-E12	58			3							3		27	
47	E18-E12	125	6									6	1	54	
48	E21-E12	73	4									4		36	
49	E12-E14	55			3							3		27	
50	E4-E14	73	4									4		36	
51															
52	E5-E15	70	4									4	1	36	
53	E20-E15	150										5		45	
54	E15-E14	54	3									3	1	27	
55															
56	E14-E19	189				9						9		81	
57	B2E19-B2E	69				2						2		18	
58															
59	B2E-STP 3	15					0	1	0	0	0	1		9	
60		6607	240	38	34	23		1				335	10	3015	
61															
62	B2A46-B2A63	47	2			0						2	1	18	
63	B2A63-B2A63	71	4			0						4	1	36	
64	B2A44-B2A63	70	4			0						4	1	36	
65	B2A63-B2A43	15	1			0						1	1	9	
66	B2A43-	35	2			0						2	1	18	
67		238	13			0						5	5	45	
68	SECTOR E2-														
69	B2B21-B2B21	95	3			0						3		27	
70	B2B21-B2B21	60	3			0						3		27	
71	B2B21-B2B21	92	5			0						5		45	
72	B2B21-B2B21	49	2			0						2	1	18	
73	B2B21-B2B21	102	5			0						5		45	
74	B2B21-B2B21	81	4			0						4		36	
75	B2B21-B2B21	51	3			0						3		27	
76	B2B21-B2B21	95	5			0						5		45	
77	B2B21-B2B21	3				0									
78	B2B21-B2B21	45	3			0						3	1	27	
79	B2B21-B2B21	40	2			0						2		18	
80	B2B21-B2B21	95	5			0						5		45	
81	B2B21-B2B21	34	2			0						2		18	
82	B2B21-B2B21	56	3			0						3		27	

Appurtenances of Waste Water Collection System

Sr. No	Line No	Length of Sewer Line	No. of Man Holes										No. of Lamp Holes	No. of Vent Shafts	150 mm i/d Connecting Pipe
			200 mm i/d	250 mm i/d	300 mm i/d	350 mm i/d	400 mm i/d	450mm i/d	500 mm i/d	600 mm i/d	700 mm i/d				
			M	M	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	
1	2	2	4	5	5	7	8	9	10	11	12	13	14	15	M
116	C4-C7	34	2			0						2			18
117	C2-F35	42	2			0						2			18
118	F35-F32	33	2			0						2			18
119	F32-B10	87	4			0						4			36
120	B10-B11	66	3			0						3			27
121	B12-B11	95	5			0						5			45
122	B11-C1	54	3			0						3	1		27
123	C1-C21	158	8			0						8			72
124	C21-C31	8				0						0			0
125	C31-C42	68	3			0						3			27
126	C22-C24	29	1			0						1			9
127	C24-C42	100	5			0						5			45
128	C43-C45	39	2			0						2			18
129	C43-C42	54	3			0						3			27
130	C42-C44	78		4		0						4			36
131	C44-C45	34		2		0						2			18
132	C45-C36	51		3		0						3			27
133	C32-C26	29	1			0						1			9
134	C26-C45	65		3		0						3			27
135	C25-C47	126		6		0						6			54
136	C47-C7	90		5		0						5			45
137	B37-B30C48	14		1		0						1			9
138	B30-B30C30	27				0						1			9
139	C49-C50	60	3			0						3			27
140	C30-C31	55	2			0						2			18
141	C32-C31	43	2			0						2			18
142	C31-C34	58	3			0						3			27
143	812-B7	85	4			0						4			36
144	813-B7	27	1			0						1			9
145	B7-B3C34	87	4			0						4			36
146	C34-C50	77	4			0						4			36
147	C14-C36	154	8			0						8			72
148	C36-C35	75	4			0						4			36
149	C13-C35	161	8			0						8			72
150	C35-C50	69	3			0						3			27
151	C51-C50	98	5			0						5			45
152	C50-C33	93	5			0						5			45

Appurtenances of Waste Water Collection System

Sr. No.	Line No.	Length of Sewer Line	No. of Man Holes										No. of Lamp Holes	No. of Vent Shafts	150 mm id Connecting Pipe
			200 mm id	250 mm id	300 mm id	350 mm id	400 mm id	450mm id	500 mm id	600 mm id	700 mm id				
			M	M	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	M
1	2	2	4	5	6	7	8	9	10	11	12	13	14	15	
153	82C33-82C48	147	7			0						7		63	
154	82C48-82C58	38				0									
155	F29-4C8	41	2		2	0						1		18	
156	C8-F30	72			4	0						1		18	
157	F31-F39	6				0						0		0	
158	82F39-82D70	40				2						1		18	
159	82B17-82B16	34	2			0						1		18	
160	B16-B15	123	6			0						5		54	
161	B15-B37	188	9			0						9		81	
162	B37-B36	46	2			0						2		18	
163	B1-B36	69	3			0						3		27	
164	B36-E2	45	2			0						2		18	
165	E2-E3	29	1			0						1		9	
166	B34-F34	157	8			0						8		72	
167	B4-B3	54	3			0						3	1	27	
168	B24-B23	29	1			0						1		9	
169	B23-B5	208	10			0						10		90	
170	B1-B2	55	3			0						3		27	
171	B6-B2	46	2			0						2		18	
172	B2-B3	61	3			0						3		27	
173	E3-E4	55	3			0						3	1	27	
174	F4-F5	54	3			0						3		27	
175	E5-E6	19	1			0						1		9	
176	E7-E6	67	3			0						3		27	
177	E6-B5	64	3			0						3		27	
178	F5-B5	33	2			0						2		18	
179	B5-B7	197		10		0						10		90	
180	F13-B6	30	2			0						2		18	
181	B8-B7	59	3			0						3		27	
182	B7-F7	55		3		0						3		27	
183	F9-F1	139	8		3	0						8		72	
184	F1-F2	57				0						3		27	
185	F13-F18	18	1			0						1		9	
186	F18-F16	13	1			0						1		9	
187	F16-F15	93	5			0						5		45	
188	F15-F12	53	3			0						3		27	
189	F12-F14	55	3			0						3		27	

Appurtenance of Wastewater Collection System

Sr. No	Line No.	Length of Sewer Line	No. of Man Holes										No. of Lamp Holes	No. of Vent Shafts	150 mm id Connecting Pipe
			200 mm id	250 mm id	300 mm id	350 mm id	400 mm id	450mm id	500 mm id	600 mm id	700 mm id				
1	2	1	M	M	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	M
100	F14-F2	176	9	5	6	0	8	9	10	11	12	13	9	14	15
191	F2-F3	54			3	0							3		27
192	F15-F3	147	7			0							7		63
193	F3-F4	6				0									18
194	F13-F4	40	2			0							2		9
195	F4-F5	27			1	0							1		9
196	F21-F20	81	4			0							4		36
197	F20-F5	19	1			0							1		9
198	F5-F6	89			4	0							4		36
199	F21-F6	43	2			0							2		18
200	F16-F23	98	5			0							5		45
201	F23-F6	59	3			0							3	1	27
202	F6-F7	129			6	0							6		54
203	F26-F7	75	4			0							4		36
204	F25-F7	29	1			0							1		9
205	F7-F8	66			3	0							3		27
206	D71-F8	37			0	0							0		0
207	F8-F27	43			2	0							2		18
208	F24-F36	43	2			0							2		18
209	F36-F28	75	4			0							4		36
210	F28-F27	174	9			0							9		81
211	F27-D22	36			2	0							2		18
212	D22-D38	53			3	0							3		27
213	D40-D39	40	2			0							2		18
214	D39-D38	62	3			0							3		27
215	S2038	151			8	0							8		72
216	S2038-S2037	69				0									
217	D24-D23	49				3							3		27
218	S2023	150				8							8		
219	S2033-S2033	140	7			0							7		63
220	C53-C52	60	3			0							3		27
221	C40-C38	8				0							0		0
222	C38-C52	40	2			0							2		18

Sr. No	Line No	Length of Sewer Line	No. of Man Holes										No. of Lamp Holes	No. of Vent Shafts	150 mm i/d Connecting Pipe
			200 mm i/d	250 mm i/d	300 mm i/d	350 mm i/d	400 mm i/d	450mm i/d	500 mm i/d	600 mm i/d	700 mm i/d				
			M	M	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1	2	2	4	5	6	7	8	9	10	11	12	13	14	15	
258	C11-C10	55	3			0						3			
259	C17-C10	61	3			0						3	1		
260	C14-C10	103		5		0						3			
261	C10-C9	58		3		0						5			45
262	C9-C9	110	6			0						3			27
263	C9-C6	49		2		0						6			54
264	C6-C5	65			3	0						2			18
265	B38-B38	90				0						3			27
266	B38-B37	27	5			0						5			45
267	B37-C5	140	7			0						1			9
268	C5-C4	17				0		1				7			63
269	C20-C4	90	5			0						5			45
270	C4-C3	20				0		1				1			9
271	B41-B40	141	7			0						2			
272	B42-B40	185	9			0						2	1		63
273	B40-C3	18	1			0						9			81
274	C3-C2	33				0		2				1	1		9
275	C17-C16	37				0						2			18
276	C18-C16	34	2			0						2			18
277	C16-C15	49	2			0						2			18
278	C19-C15	42	2			0						2			18
279	C15-C2	25	1			0						1			9
280	C2-C1	40				0						2			18
281	C1-B36	67				0		3				2			27
282	B36-B15	177				0		9				9			81
283	B23-B21	75	4			0						4			36
284	B23-B21	45	2			0						2			18
285	B21-B20	48	2			0						2			18
286	B24-B20	53	3			0						3			27
287	B20-B20	85	4			0						4			36
288	B20-B19	40	2			0						2			18
289	B21-B19	118	6			0						6			54
290	B19-B18	39	2			0						2			18
291	B23-B18	57	3			0						3			27
292	B33-B18	152	8			0						8			72
293	B13-B17	42	2			0						2			18
294	B14-B17	146	7			0						7			63
295	B17-B16	49	2			0						2			18
296	B22-B16	68	3			0						3			27
297	B15-B16	174	9			0						9			81
298	B16-B15	35			2	0						2	1		18

Appurtenances of Waste Water Collection System

Sl. No	Line No.	Length of Sensor Line	No. of Man Holes										No. of Lamp Holes	No. of Vent Shafts	150 mm id Connecting Pipe
			200 mm id	250 mm id	300 mm id	350 mm id	400 mm id	450mm id	500 mm id	600 mm id	700 mm id	No.	No.	No.	M
1	2	2	M 4	M 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 11	No. 12	13	14	15	
299	B15-B14	45				0	2					2			18
300	B14-B7	50				0	3					3			27
301	B12-B7	45	2			0						2			15
302	B1-B6	64				0	3					3			27
303	B11-B6	39	2			0						2	1		18
304	B5-B5	35				0	2					2			15
305	B10-B5	47	2			0	2					2			15
306	B5-B1	49				0						2			15
307	B9-B4	47	2			0	1					1	1		9
308	B4-B3	24				0						1			9
309	B8-B3	10	1			0			8			8			72
310	B3-B2	154				0			1			1			9
311	B2-B1	28				0			8			8			72
312	B2B1-B2A1	156				0			3			3			27
313	A1-A2	50				0									
314	A0-A5	49	1			0						2			18
315	A5-A4	97	5			0						5			45
316	A4-A3	37	2			0						2			18
317	A3-X	20				0			1			1			9
318	X-STP-2	54				0									
319	STP2-HRDA	40				0									
320	STP2-HRDA	14756	555	47	46	43	39	0	21	0	5	7.7	14	6453	
321	A3A36-B1A37	75	4									4			36
322	B3A37-B3E7	25	1									1			9
323	E7-A41	32	2									2			18
324	A3A40	40	1									1	1		18
325	A40-A51	24	1									1			9
326	A51-A41	129	6									6			54
327	A41-E5	17	1									1			9
328	E5-E6	122	6									6			54
329	E6-A42	36	2									2			18
330	A42-A49	15	1									1			9
331	A48-A50	182	9									9			81
332	A50-A42	150	8									8			72
333	A42-A55	13	1									1			9
334	E3-A55	104	5									5			45
335	A55-A63	43	2									2			18
336	A59-A53	27	1									1			9

Appurtenances of Waste Water Collection System

Sr. No	Line No.	Length of Sewer Line	No. of Man Holes										No. of Lamp Holes	No. of Vent Shafts	150 mm id Connecting Pipe
			200 mm id	250 mm id	300 mm id	350 mm id	400 mm id	450mm id	500 mm id	600 mm id	700 mm id	No.	No.	No.	M
1	2	2	M	M	No.	No.	No.	No.	No.	No.	No.	13	14	15	
235	A43-A57	7	4	5	6	7	8	9	10	11		2			18
236	A57-A64	47	2									4			36
237	A54-A44	72	4												
238	A45-A46	34	2									2			18
239	B7-A46	30	2									2			18
240	A46-A45	62	3									3			27
241	A45-A44	67	3									3			27
242	83A44-83E1	217	11									11			99
243	81E16-83E15	121	6									6			54
244	E17-E15	100	5									5			45
245	E15-E5	67	3									3	1		27
246	E7-E5	160	8									8			72
247	E5-E4	50	3									3			27
248	E6-E4	54	3									3			27
249	E4-E14	172	6									6			54
250	E14-E13	54	3									3			27
251	E13-E13	117	6									6			54
252	E13-E11	20	1									1			9
253	E12-E11	47	2									2			18
254	E11-E10	36	2									2			18
255	E2-E2	109	5									5			45
256	E2-E10	163	8									8			72
257	E10-E8	49		2								2			18
258	81E8-83E1	163		8								8			72
259	83E1-83B12	66			3							3			27
260	A52-A53	33	2									2			18
261	A53-B12	124	6									6			54
262	83B12-83B12	25			1							1			9
SECTOR 84															
263	84E2-84E2	46	2									2			18
264	E4-E2	18	1									1			9
265	E2-E1	20	1									1			9
266	E1-A7	49		2								2			18
267	A7-D23	95		5								5			45
268	D23-D7	86		4								4			36
269	D20-D7	11	4									4			36
270	D1-D21	29			1							1			9
271	D21-D22	159			8							8			72
272	D5-D722	43	2									2			18
273	D22-D18	47			2							2			18

Acquisitionen in Wasser Collection Subject

DESIGN STATEMENT OF RECYCLING

For Vatika Limited



10/19

Recycling of Treated Waste Water

Sr. No.	Name of Water Pipe Line	Length of Water Pipe	Outer Diameter of Water Pipe Line	Net Water Demand to meet from Recycled Water Supply	Design of Pipe Line					Length of pipe										No of Sloist Valves						
					Net Water Demand		Total Water Demand	Easid Loss per M	Total Easid Loss	Head Loss Programme	Terminal Head	119 mm old	160 mm old	210 mm old	240 mm old	310 mm old	110 mm old	150 mm old	210 mm old	260mm old	310 mm old					
					Self	Previous																Total	23 HRS	LPM	Mtr	Mtr
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1	STP-1-81C8	20	250	0	0.00	685.58	685.58	1428.91	0.0018	0.036	0.036	24.96	0	0	0	20	0	0	0	0	0	0	0	0	0	0
2	81C8-C12	157	100	46538	46.84	0.00	46.84	97.58	0.0011	0.168	0.204	24.80	157	0	0	0	0	0	0	0	0	0	0	0	0	0
3	C8-C7	31	250	1996	2.00	637.04	639.04	1331.33	0.0016	0.048	0.094	24.92	0	0	0	31	0	0	0	0	0	0	0	0	0	0
4	C7-C6	71	100	1888	1.89	30.21	32.10	66.87	0.0025	0.038	0.122	24.88	71	0	0	0	0	0	0	0	0	0	0	0	0	0
5	C6-C13	225	100	30211	30.21	0.00	30.21	62.94	0.0025	0.107	0.219	24.77	225	0	0	0	0	0	0	0	0	0	0	0	0	0
6	C7-C10	67	200	2884	2.88	602.06	604.94	1260.30	0.0042	0.280	0.364	24.64	0	0	67	0	0	0	0	0	0	0	0	0	0	0
7	C10-C11	86	100	4728	4.73	0.00	4.73	9.85	0.0000	0.001	0.366	24.63	86	0	0	0	0	0	0	0	0	0	0	0	0	0
8	C10-B12	214	200	12134	12.13	585.20	597.33	1244.44	0.0041	0.875	1.239	23.76	0	0	214	0	0	0	0	0	0	0	0	0	0	0
9	B12-B13	15	200	790	0.79	223.57	224.36	467.42	0.0037	0.010	1.249	23.75	0	0	15	0	0	0	0	0	0	0	0	0	0	0
10	B13-B14	39	150	2995	2.99	220.58	223.57	465.77	0.0037	0.105	1.354	23.65	0	39	0	0	0	0	0	0	0	0	0	0	0	0
11	B14-B17	55	150	2992	2.59	217.38	220.58	459.53	0.0036	0.144	1.498	23.50	0	55	0	0	0	0	0	0	0	0	0	0	0	0
12	B17-B27	84	150	275	0.27	217.71	217.98	454.13	0.0036	0.036	1.514	23.47	0	14	0	0	0	0	0	0	0	0	0	0	0	0
13	B27-B19	53	150	5035	5.03	212.67	217.71	453.56	0.0036	0.136	1.670	23.33	0	53	0	0	0	0	0	0	0	0	0	0	0	0
14	B19-B21	18	150	2386	2.39	210.29	212.67	443.07	0.0035	0.044	1.714	23.29	0	18	0	0	0	0	0	0	0	0	0	0	0	0
15	B21-B22	36	150	481	0.48	209.81	210.29	418.10	0.0034	0.085	1.800	23.20	0	36	0	0	0	0	0	0	0	0	0	0	0	0
16	B22-B7	84	150	2917	2.59	206.32	209.81	437.10	0.0034	0.201	2.001	23.00	0	84	0	0	0	0	0	0	0	0	0	0	0	0
17	B18-B5	206	100	13731	13.73	12.98	26.71	55.66	0.0004	0.078	2.079	22.92	206	0	0	0	0	0	0	0	0	0	0	0	0	0
18	B5-B4	86	100	2678	2.68	10.31	12.98	27.05	0.0001	0.009	2.088	22.91	86	0	0	0	0	0	0	0	0	0	0	0	0	0
19	B4-B6	71	100	6753	6.75	0.00	6.75	14.07	0.0000	0.002	2.090	22.91	71	0	0	0	0	0	0	0	0	0	0	0	0	0
20	B4-B3	53	100	1922	1.92	1.63	3.55	7.40	0.0000	0.000	2.088	22.91	53	0	0	0	0	0	0	0	0	0	0	0	0	0
21	B3-B2	38	100	1630	1.63	0.00	1.63	3.40	0.0000	0.000	2.088	22.91	38	0	0	0	0	0	0	0	0	0	0	0	0	0
SECTOR-84																										
22	B3-B5-B4-D17	73	150	2472	2.47	177.63	180.11	375.23	0.0038	0.132	2.132	22.87	0	73	0	0	0	0	0	0	0	0	0	0	0	0
23	B4-D17-B4	137	100	13778	13.78	0.00	13.78	28.70	0.0001	0.015	2.148	22.85	137	0	0	0	0	0	0	0	0	0	0	0	0	0
24	D17-D18	53	150	2992	2.59	161.27	163.86	341.37	0.0015	0.080	2.213	22.79	0	53	0	0	0	0	0	0	0	0	0	0	0	0
25	D18-D6	48	100	3055	3.05	0.00	3.05	6.36	0.0000	0.000	2.313	22.79	48	0	0	0	0	0	0	0	0	0	0	0	0	0
26	D18-D3	140	100	13507	13.51	0.00	13.51	28.14	0.0001	0.015	2.238	22.77	140	0	0	0	0	0	0	0	0	0	0	0	0	0

Recycling of Treated Waste Water

Sr No.	Name of Water Pipe Line	Length of Water Pipe Line	Outer Diameter of Water Pipe Line	Net Water Demand to meet from Recycled Water Supply	Design of Pipe Line					Length of pipe										No of Street Valves						
					Net water Demand		Total Water Demand		Total Water Demand	Head Loss per M	Total Head Loss	Head Loss Progressive	Terminal Head	110 mm o/d	160 mm o/d	210 mm o/d	260 mm o/d	310 mm o/d	110 mm e/d	160 mm e/d	210 mm e/d	260 mm e/d	310 mm e/d			
					Self	Previous	Total	KLD																		
		m	mm	Litres	KLD	KLD	KLD	8	9	10	Mtr	Mtr	Mtr	m	m	m	m	m	No.	No.	No.	No.	No.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
27	D18-D19	113	100	8478	8.48	85.22	93.70	195.22	0.0039	0.437	2.650	22.35	113	0	0	0	0	0	0	0	0	0	0	0	0	0
28	D19-D20	56	100	6478	6.43	0.00	6.43	13.39	0.0000	0.002	2.651	22.35	56	0	0	0	0	0	0	0	0	0	0	0	0	0
29	D19-D2	117	100	42014	42.01	36.78	78.80	164.16	0.0028	0.319	2.979	22.02	117	0	0	0	0	0	0	0	0	0	0	0	0	0
30	D2-A2	62	100	2094	2.09	34.69	36.78	76.63	0.0007	0.042	3.021	21.98	62	0	0	0	0	0	0	0	0	0	0	0	0	0
31	A2-D1	59	100	1939	1.94	0.00	1.94	4.04	0.0000	0.000	3.021	21.98	59	0	0	0	0	0	0	0	0	0	0	0	0	0
32	A2-A2	37	100	3141	3.14	0.00	3.14	6.54	0.0000	0.000	3.021	21.98	37	0	0	0	0	0	0	0	0	0	0	0	0	0
33	A2-A1	53	100	3844	3.84	25.75	29.61	61.68	0.0005	0.054	3.045	21.95	53	0	0	0	0	0	0	0	0	0	0	0	0	0
34	A3-A11	141	100	8796	8.80	16.97	25.76	53.68	0.0004	0.050	3.095	21.90	141	0	0	0	0	0	0	0	0	0	0	0	0	0
35	A11-A12	53	100	11999	12.00	4.97	16.97	35.55	0.0002	0.009	3.104	21.90	53	0	0	0	0	0	0	0	0	0	0	0	0	0
36	A12-A12	53	100	3338	3.34	0.00	3.34	6.95	0.0000	0.000	3.104	21.90	53	0	0	0	0	0	0	0	0	0	0	0	0	0
37	A12-A13	8	100	1630	1.63	0.00	1.63	3.40	0.0000	0.000	3.104	21.90	8	0	0	0	0	0	0	0	0	0	0	0	0	0
38	D18-D22	46	100	1511	1.51	49.49	51.00	106.25	0.0013	0.058	3.270	22.73	46	0	0	0	0	0	0	0	0	0	0	0	0	0
39	D22-D25	50	100	3633	3.63	0.00	3.63	7.57	0.0000	0.000	2.271	22.73	50	0	0	0	0	0	0	0	0	0	0	0	0	0
40	D22-D21	160	100	14136	14.14	31.72	45.86	95.54	0.0010	0.165	2.435	22.56	160	0	0	0	0	0	0	0	0	0	0	0	0	0
41	D21-D7	29	100	755	0.76	30.97	31.72	66.09	0.0005	0.015	2.450	22.55	29	0	0	0	0	0	0	0	0	0	0	0	0	0
42	D7-A4	87	100	6127	6.13	0.00	6.13	12.71	0.0000	0.002	2.452	22.55	87	0	0	0	0	0	0	0	0	0	0	0	0	0
43	D7-D23	87	100	2540	2.54	22.30	24.84	51.75	0.0003	0.039	2.479	22.52	87	0	0	0	0	0	0	0	0	0	0	0	0	0
44	D23-A7	95	100	8221	8.22	14.08	22.30	46.45	0.0003	0.026	2.965	22.50	95	0	0	0	0	0	0	0	0	0	0	0	0	0
45	A7-E1	47	100	2025	2.03	12.05	14.08	25.33	0.0001	0.005	2.510	22.49	47	0	0	0	0	0	0	0	0	0	0	0	0	0
46	E1-E2	20	100	3443	2.44	9.61	12.05	25.11	0.0001	0.002	2.512	22.49	20	0	0	0	0	0	0	0	0	0	0	0	0	0
47	E2-E3	46	100	6892	6.89	0.00	6.89	14.36	0.0000	0.001	2.513	22.49	46	0	0	0	0	0	0	0	0	0	0	0	0	0
48	E4-E4E4	25	100	2717	2.72	0.00	2.72	5.66	0.0000	0.000	2.512	22.49	25	0	0	0	0	0	0	0	0	0	0	0	0	0
49	B12-B12	24	200	1836	1.84	355.00	360.84	751.74	0.0016	0.039	1.278	23.72	0	0	24	0	0	0	0	0	0	0	0	0	0	0
50	B12-A52	163	100	17891	17.89	0.00	17.89	37.27	0.0002	0.029	1.307	23.69	163	0	0	0	0	0	0	0	0	0	0	0	0	0
51	B12-E1	67	150	1922	1.92	339.19	341.11	710.65	0.0059	0.394	1.671	23.33	0	67	0	0	0	0	0	0	0	0	0	0	0	0
52	E1-A44	317	150	24331	24.33	144.01	168.34	350.72	0.0016	0.504	1.175	22.82	0	317	0	0	0	0	0	0	0	0	0	0	0	0
53	E1-E8	163	150	17137	17.14	155.71	170.84	355.93	0.0016	0.266	1.938	23.06	0	163	0	0	0	0	0	0	0	0	0	0	0	0
54	E8-E10	50	150	6070	6.07	147.64	153.71	320.22	0.0015	0.067	2.035	23.00	0	50	0	0	0	0	0	0	0	0	0	0	0	0
55	E10-E2	163	100	20337	20.34	8.44	28.77	99.94	0.0004	0.071	2.076	22.92	163	0	0	0	0	0	0	0	0	0	0	0	0	0
56	E2-E2	109	100	8436	8.44	0.00	8.44	17.37	0.0000	0.005	2.081	22.92	109	0	0	0	0	0	0	0	0	0	0	0	0	0

Recycling of Treated Waste Water

Sr. No.	Name of Water Pipe Line	Length of Water Pipe Line	Outer Diameter of Water Pipe Line	Net Water Demand to meet from Recycled Water Supply	Design of Pipe Line				Length of pipe										No. of Slotted Valves			
					New Water Demand		Total Water Demand		Total Head Loss per M	Total Head Loss	Head Loss Friction	Terminal Head	110 mm o/d	160 mm o/d	210 mm o/d	260 mm o/d	310 mm o/d	310 mm o/d	310 mm o/d	310 mm o/d	310 mm o/d	310 mm o/d
					Self	Previous	Total	20 HRS														
					KLD	KLD	KLD	LPM	Mtr	Mtr	Mtr	Mtr	m	m	m	m	m	m	No.	No.	No.	No.
					5	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	E10-E11	36	100	1050	1.03	117.83	118.86	247.64	0.0001	0.0001	2.035	22.97	0	36	0	0	0	0	0	0	0	0
37	E11-E12	51	100	5564	5.66	0.00	5.66	11.80	0.0000	0.001	2.036	22.96	51	0	0	0	0	0	0	0	0	0
58	E12-E13	37	100	1974	1.97	110.20	112.17	233.69	0.0007	0.008	2.063	22.94	0	37	0	0	0	0	0	0	0	0
59	E13-E14	100	100	13660	13.06	0.00	13.06	27.21	0.0001	0.010	2.073	22.93	100	0	0	0	0	0	0	0	0	0
60	E14-E15	54	100	1922	1.92	95.21	97.14	202.37	0.0006	0.021	2.094	22.91	0	54	0	0	0	0	0	0	0	0
61	E15-E16	122	100	17042	17.04	78.17	95.21	198.56	0.0040	0.485	2.580	22.42	122	0	0	0	0	0	0	0	0	0
62	E16-E17	53	100	10456	10.46	0.00	10.46	21.78	0.0001	0.004	2.584	22.42	53	0	0	0	0	0	0	0	0	0
63	E17-E18	50	100	1682	1.68	66.03	67.72	141.08	0.0021	0.166	2.686	22.31	50	0	0	0	0	0	0	0	0	0
64	E18-E19	165	100	40903	40.90	0.00	40.90	85.21	0.0008	0.138	2.834	22.18	165	0	0	0	0	0	0	0	0	0
65	E19-E20	67	100	4188	4.19	20.94	25.13	52.36	0.0003	0.023	2.709	22.29	67	0	0	0	0	0	0	0	0	0
66	E20-E21	131	100	11342	11.34	0.00	11.34	23.63	0.0001	0.010	2.719	22.28	131	0	0	0	0	0	0	0	0	0
67	E21-E22	110	100	9602	9.60	0.00	9.60	20.00	0.0001	0.006	2.715	22.28	110	0	0	0	0	0	0	0	0	0
68	E22-E23	80	100	4926	4.92	16.05	20.97	43.70	0.0002	0.019	2.195	22.81	80	0	0	0	0	0	0	0	0	0
69	A44-A45	65	100	2750	2.75	8.50	16.05	33.43	0.0001	0.009	2.204	22.80	65	0	0	0	0	0	0	0	0	0
70	A45-A46	36	100	3982	3.98	0.00	3.98	8.30	0.0000	0.000	2.204	22.80	36	0	0	0	0	0	0	0	0	0
71	A46-A47	39	100	4316	4.32	0.00	4.32	8.99	0.0000	0.001	2.205	22.80	39	0	0	0	0	0	0	0	0	0
72	A44-A54	78	100	7989	7.99	0.00	7.99	16.84	0.0000	0.003	2.179	22.82	78	0	0	0	0	0	0	0	0	0
73	A44-A57	52	100	4720	4.72	110.33	115.05	239.69	0.0057	0.294	2.470	22.53	52	0	0	0	0	0	0	0	0	0
74	A57-A43	10	100	309	0.31	110.02	110.33	229.85	0.0032	0.032	2.322	22.48	10	0	0	0	0	0	0	0	0	0
75	A43-A58	33	100	2901	2.90	0.00	2.90	6.04	0.0000	0.000	2.322	22.48	33	0	0	0	0	0	0	0	0	0
76	A43-A56	51	100	6267	6.27	106.85	107.12	223.17	0.0050	0.253	2.775	22.22	51	0	0	0	0	0	0	0	0	0
77	A56-E3	104	100	7406	7.41	0.00	7.41	15.43	0.0000	0.004	2.779	22.22	104	0	0	0	0	0	0	0	0	0
78	A56-A42	13	100	1459	1.46	91.59	93.45	194.68	0.0039	0.039	2.825	22.17	13	0	0	0	0	0	0	0	0	0
79	A42-A50	120	100	11957	11.94	16.37	28.31	58.98	0.0004	0.063	2.838	22.11	120	0	0	0	0	0	0	0	0	0
80	A50-A49	183	100	5493	5.49	10.88	16.37	34.11	0.0002	0.028	2.916	22.08	183	0	0	0	0	0	0	0	0	0
81	A49-A48	25	100	10878	10.88	0.00	10.88	22.66	0.0001	0.002	2.918	22.08	25	0	0	0	0	0	0	0	0	0
82	A42-E6	37	100	2789	2.79	60.89	63.68	132.67	0.0019	0.070	2.895	22.10	37	0	0	0	0	0	0	0	0	0
83	E6-E7	126	100	10455	10.46	0.00	10.46	21.78	0.0001	0.008	2.904	22.10	126	0	0	0	0	0	0	0	0	0
84	E6-A41	15	100	2205	2.21	48.23	50.44	105.07	0.0012	0.020	2.915	22.09	15	0	0	0	0	0	0	0	0	0
85	A41-E7	55	100	2549	2.55	21.79	24.34	50.71	0.0003	0.018	2.932	22.07	55	0	0	0	0	0	0	0	0	0
87	E7-E3A37	11	100	9157	9.16	12.63	21.79	45.40	0.0003	0.003	2.935	22.06	11	0	0	0	0	0	0	0	0	0
88	A37-A36	81	100	13634	12.63	0.00	12.63	26.32	0.0001	0.008	2.943	22.06	81	0	0	0	0	0	0	0	0	0

Recycling of Treated Waste Water

Sr No.	Name of Water Pipe Line	Length of Water Pipe Line	Outer Diameter of Water Pipe Line	Net Water Demand to be met from Recycled Water Supply	Design of Pipe Line				Length of pipe										No of Stone Values			
					Net Water Demand		Total Water Demand		Total Water Loss per M	Total Head Loss	Total Head Loss Progressive	Terminal Head	110 mm o/d	150 mm o/d	210 mm o/d	250 mm o/d	310 mm o/d	110 mm o/d	150 mm o/d	210 mm o/d	250 mm o/d	310 mm o/d
					Self	Previous	Total	20 HRS														
				Litres	KLD	KLD	KLD	LPM	Mtr	Mtr	Mtr	Mtr	m	m	m	m	m	m	m	m	m	m
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
89	A41-A51	129	100	19954	19.99	3.90	23.89	49.77	0.0003	0.040	2.955	22.05	129	0	0	0	0	0	0	0	0	0
90	A51-A40	23	100	852	0.89	3.00	3.90	8.12	0.0000	0.000	2.955	22.05	23	0	0	0	0	0	0	0	0	0
91	A51-A40	38	100	3064	3.00	0.00	3.00	5.36	0.0000	0.000	2.955	22.04	38	0	0	0	0	0	0	0	0	0
92	S1P2-X	55	300	68576.47	8.41	1473.49	1481.89	3087.27	0.0031	0.168	0.168	24.83	5479	1149	338	51	8	69	16	4	2	0
93	X-85-A2	19	250	8406	8.41	477.20	485.60	1011.68	0.0009	0.018	0.165	24.81	0	0	0	19	0	0	0	0	0	0
94	85A3-85A4	38	100	6972	6.97	10.92	17.89	37.27	0.0002	0.007	0.193	24.81	38	0	0	0	0	0	0	0	0	0
95	A4-A5	57	100	4680	4.68	6.24	10.92	22.75	0.0001	0.007	0.200	24.80	57	0	0	0	0	0	0	0	0	0
96	A5-A6	54	100	6238	6.24	0.00	6.24	11.00	0.0000	0.001	0.201	24.80	54	0	0	0	0	0	0	0	0	0
97	A2-A1	51	200	790	0.79	458.52	459.31	956.89	0.0025	0.128	0.314	24.69	0	0	51	0	0	0	0	1	0	0
98	A1-B1	155	200	14770	14.77	443.75	458.52	955.25	0.0025	0.388	0.702	24.30	0	0	555	0	0	0	0	1	0	0
99	B1-B2	28	200	515	0.51	443.23	443.75	924.48	0.0024	0.066	0.768	24.23	0	0	28	0	0	0	0	1	0	0
100	B2-B3	155	200	10852	10.85	432.38	443.23	923.40	0.0024	0.365	1.133	23.87	0	0	155	0	0	0	0	1	0	0
101	B3-B4	16	100	2446	2.45	0.00	2.45	5.10	0.0000	0.000	1.133	23.87	16	0	0	0	0	0	0	0	0	0
102	B4-B5	28	200	1570	1.57	428.37	429.94	895.70	0.0022	0.062	1.195	23.81	0	0	28	0	0	0	0	1	0	0
103	B5-B6	35	200	1099	1.10	415.42	416.52	867.74	0.0021	0.073	1.375	23.63	0	0	35	0	0	0	0	1	0	0
104	B6-B7	64	200	2300	2.30	407.08	409.38	852.87	0.0020	0.130	1.504	23.50	0	0	64	0	0	0	0	1	0	0
105	B7-B8	50	100	3336	3.34	0.00	3.34	7.99	0.0000	0.001	1.505	23.50	50	0	0	0	0	0	0	0	0	0
106	B8-B9	50	150	6848	6.85	396.39	403.24	840.03	0.0060	0.401	1.905	23.09	0	50	0	0	0	0	1	0	0	0
107	B9-B10	45	150	1442	1.44	394.95	396.39	825.82	0.0078	0.349	2.255	22.75	0	45	0	0	0	0	1	0	0	0
112	B15-B16	178	150	17517	17.52	177.85	195.36	407.01	0.0021	0.373	2.627	22.37	0	178	0	0	0	0	1	0	0	0
113	B16-C1	67	150	3467	3.47	174.38	177.85	370.53	0.0018	0.118	2.765	22.25	0	67	0	0	0	0	1	0	0	0
114	C1-C2	40	150	1050	1.03	173.35	174.38	363.29	0.0017	0.068	2.813	22.19	0	40	0	0	0	0	1	0	0	0
115	C2-C15	25	100	995	1.00	29.85	30.84	64.25	0.0005	0.012	2.806	22.17	25	0	0	0	0	0	1	0	0	0
116	C15-C19	45	100	7526	7.53	0.00	7.53	15.68	0.0000	0.002	2.827	22.17	45	0	0	0	0	0	1	0	0	0
117	C15-C16	49	100	4720	4.72	17.60	22.32	46.50	0.0003	0.013	2.839	22.16	49	0	0	0	0	0	1	0	0	0
118	C16-C18	35	100	4282	4.28	0.00	4.28	8.92	0.0000	0.000	2.839	22.16	35	0	0	0	0	0	1	0	0	0

Recycling of Treated Waste Water

Sr No.	Name of Water Pipe line	Length m	Outer Diameter of Water Pipe line mm	Net Water Demand to meet from Recycled Water Supply Litres	Design of Pipe Line										Length of pipe										No of Slice Values									
					Net Water Demand				Total		20 HRS	Total Water Loss per M	Head Loss Progressive Mtr	Terminal Head Mtr	110 mm o/d	160 mm o/d	210 mm o/d	240 mm o/d	310 mm o/d	110 mm o/d	160 mm o/d	210 mm o/d	240 mm o/d	310 mm o/d										
					Self	Previous	KLD	KLD	KLD	KLD																								
154	X-N	81	300	0	0.00	987.88	987.88	2058.09	0.0014	0.117	0.284	24.72	0	0	0	0	81	0	0	0	0	0	0	0	0	1								
SECTION 8C																																		
155	X-B20-B25	17	250	0	0.00	987.88	987.88	2058.09	0.0035	0.039	0.344	24.66	0	0	0	17	0	0	0	0	0	0	0	0	0	0								
156	B20-B21	63	250	0	0.00	987.88	987.88	2058.09	0.0035	0.230	0.564	24.44	0	0	0	63	0	0	0	0	0	0	0	0	0	0								
157	D21- D17	16	150	721	0.72	112.80	113.52	236.90	0.0008	0.012	0.577	24.42	0	16	0	0	0	0	0	0	0	0	0	0	0	0								
158	D17-D41	79	100	6316	6.32	0.00	6.32	13.16	0.0000	0.002	0.579	24.42	79	0	0	0	0	0	0	0	0	0	0	0	0	0								
159	D17-D19	57	150	3492	3.49	102.99	106.48	221.84	0.0007	0.039	0.616	24.38	0	57	0	0	0	0	0	0	0	0	0	0	0	0								
160	D19- D16	42	150	2094	2.09	100.90	102.99	214.57	0.0006	0.027	0.642	24.36	0	42	0	0	0	0	0	0	0	0	0	0	0	0								
161	D16- D18	46	100	3527	3.53	0.00	3.53	7.35	0.0000	0.000	0.643	24.36	46	0	0	0	0	0	0	0	0	0	0	0	0	0								
162	D16- D15	39	150	2128	2.13	95.24	97.37	202.86	0.0006	0.034	0.676	24.32	0	59	0	0	0	0	0	0	0	0	0	0	0	0								
163	D15- D11	73	150	39188	39.19	56.06	95.24	158.42	0.0006	0.040	0.717	24.28	0	73	0	0	0	0	0	0	0	0	0	0	0	0								
164	D11-D10	90	100	6221	6.22	1.29	7.51	15.64	0.0000	0.003	0.720	24.28	90	0	0	0	0	0	0	0	0	0	0	0	0	0								
165	D10-D14	10	100	1287	1.29	0.00	1.29	2.68	0.0000	0.000	0.720	24.28	10	0	0	0	0	0	0	0	0	0	0	0	0	0								
166	D11-D17	53	100	3947	3.95	44.60	48.55	101.14	0.0011	0.061	0.778	24.22	53	0	0	0	0	0	0	0	0	0	0	0	0	0								
167	D17-D18	139	100	16441	16.44	0.00	16.44	34.25	0.0002	0.021	0.799	24.20	139	0	0	0	0	0	0	0	0	0	0	0	0	0								
168	D17-D16	53	100	4454	4.45	23.70	28.16	58.66	0.0004	0.022	0.800	24.20	53	0	0	0	0	0	0	0	0	0	0	0	0	0								
169	D16-D15	16	100	2042	2.04	0.00	2.04	4.26	0.0000	0.000	0.800	24.20	16	0	0	0	0	0	0	0	0	0	0	0	0	0								
170	D16-D17	77	100	3650	3.63	18.03	21.66	45.13	0.0003	0.020	0.819	24.18	77	0	0	0	0	0	0	0	0	0	0	0	0	0								
171	D17- D13	56	100	18031	18.03	0.00	18.03	37.57	0.0002	0.010	0.830	24.17	56	0	0	0	0	0	0	0	0	0	0	0	0	0								
172	D21-D33	65	250	1922	1.92	872.44	874.36	1821.58	0.0028	0.181	0.746	24.25	0	0	0	65	0	0	0	0	0	0	0	0	0	0								
173	D33-D34	54	100	4239	4.24	0.00	4.24	8.83	0.0000	0.001	0.747	24.25	54	0	0	0	0	0	0	0	0	0	0	0	0	0								
174	D33-D32	68	250	2909	2.91	865.29	868.20	1808.75	0.0028	0.187	0.933	24.07	0	0	0	68	0	0	0	0	0	0	0	0	0	0								
175	D32-D31	16	100	1939	1.94	0.00	1.94	4.04	0.0000	0.000	0.933	24.07	16	0	0	0	0	0	0	0	0	0	0	0	0	0								
176	D32- D29	65	250	4119	4.12	859.23	863.35	1798.54	0.0027	0.177	1.110	23.89	0	0	0	65	0	0	0	0	0	0	0	0	0	0								
177	D29- D25	76	100	4335	4.33	0.00	4.33	9.01	0.0000	0.001	1.111	23.89	76	0	0	0	0	0	0	0	0	0	0	0	0	0								
178	D25-D28	103	250	9276	9.28	845.63	854.90	1781.05	0.0027	0.276	1.386	23.61	0	0	0	103	0	0	0	0	0	0	0	0	0	0								
179	D28-D27	219	250	51903	51.90	751.73	845.63	1761.73	0.0026	0.375	1.961	23.64	0	0	0	219	0	0	0	0	0	0	0	0	0	0								
180	D27- D27	48	250	1648	1.65	790.08	791.73	1649.43	0.0023	0.311	2.072	22.93	0	0	0	48	0	0	0	0	0	0	0	0	0	0								
181	B20-B21	27	100	927	0.93	83.27	84.19	175.40	0.0032	0.086	2.158	22.84	27	0	0	0	0	0	0	0	0	0	0	0	0	0								

Sl. No.	Name of Water Pipe Line	Length of Water Pipe Line	Outer Diameter of Water Pipe Line	Net Water Demand to meet from Retained Water Supply	Design of Pipe Line					Length of pipe										No of Silted Valves				
					Net Water Demand		Head Loss			Terminal Head		113 mm old	160 mm old	210 mm old	250 mm old	310 mm old	110 mm old	160 mm old	210 mm old	310 mm old	No.	No.	No.	No.
					Self	Previous	Total	Total Head Loss	Head Loss per M	Mtr	Mtr	Mtr	Mtr	Mtr	Mtr	Mtr	Mtr	Mtr	Mtr	Mtr				
182	C18-C23	215	100	22187	2219	2758	4976	105.67	0.0012	0.258	2.416	22.58	215	0	0	0	0	0	0	0	0	0	0	0
183	C23-C33	60	100	2781	2.78	15.83	18.66	38.87	0.0002	0.012	2.438	22.57	60	0	0	0	0	0	0	0	0	0	0	0
184	C33-C43	140	100	15873	1588	0.03	15.88	33.07	0.0001	0.003	2.448	22.53	140	0	0	0	0	0	0	0	0	0	0	0
185	C43-C53	39	100	824	0.82	8.10	8.92	18.59	0.0000	0.002	2.418	22.58	39	0	0	0	0	0	0	0	0	0	0	0
186	C53-C60	8	100	8097	8.10	0.00	8.10	16.87	0.0000	0.000	2.418	22.58	8	0	0	0	0	0	0	0	0	0	0	0
187	C60-C71	30	100	1983	1.98	31.52	33.50	69.80	0.0006	0.017	2.175	22.82	30	0	0	0	0	0	0	0	0	0	0	0
188	C71-C80	82	100	2781	2.78	28.74	31.52	65.67	0.0005	0.042	2.218	22.78	82	0	0	0	0	0	0	0	0	0	0	0
189	C80-C84	81	100	4635	4.63	24.10	28.74	59.37	0.0004	0.035	2.253	22.75	81	0	0	0	0	0	0	0	0	0	0	0
190	C84-C94	95	100	24104	2412	0.00	24.10	50.22	0.0003	0.039	2.283	22.72	95	0	0	0	0	0	0	0	0	0	0	0
191	D16-D23	150	250	4944	4.94	790.94	795.89	1470.60	0.0019	0.282	2.354	22.65	0	0	0	150	0	0	0	0	0	0	0	0
192	D23-D24	59	100	6319	6.12	0.00	6.12	12.25	0.0000	0.001	2.354	22.65	59	0	0	0	0	0	0	0	0	0	0	0
193	D24-D26	69	250	2369	2.37	692.45	694.82	1447.55	0.0013	0.126	2.180	22.52	0	0	0	69	0	0	0	0	0	0	0	0
194	D26-D28	40	250	1751	1.75	387.83	389.58	811.63	0.0006	0.035	2.305	22.50	0	0	0	40	0	0	0	0	0	0	0	0
195	F20-F31	6	100	1365	1.36	0.00	1.36	2.84	0.0000	0.000	2.505	22.50	6	0	0	0	0	0	0	0	0	0	0	0
196	F30-C3	71	250	2094	2.09	384.37	386.47	895.14	0.0006	0.044	2.549	22.45	0	0	0	71	0	0	0	0	0	0	0	0
197	C3-F29	45	100	5166	5.17	0.00	5.17	10.76	0.0000	0.001	2.550	22.45	45	0	0	0	0	0	0	0	0	0	0	0
198	C3-C43	38	250	1516	1.54	377.67	379.21	790.01	0.0006	0.023	2.372	22.43	0	0	0	38	0	0	0	0	0	0	0	0
199	C43-C33	147	150	13872	13.87	143.01	156.88	326.84	0.0014	0.205	2.377	22.22	0	0	0	0	0	0	0	0	0	0	0	0
200	C33-C50	92	150	2266	2.27	140.75	143.01	297.94	0.0012	0.108	2.885	22.11	0	0	0	0	0	0	0	0	0	0	0	0
201	C50-C51	105	100	6256	6.25	0.00	6.25	13.03	0.0000	0.003	2.888	22.11	105	0	0	0	0	0	0	0	0	0	0	0
202	C50-C35	65	150	9447	9.45	36.11	45.56	94.91	0.0001	0.010	2.895	22.11	0	0	0	0	0	0	0	0	0	0	0	0
203	C35-C12	165	100	19093	19.09	0.00	19.09	39.78	0.0002	0.034	2.928	22.07	165	0	0	0	0	0	0	0	0	0	0	0
204	C35-C38	75	100	2060	2.06	14.96	17.02	35.46	0.0002	0.012	2.907	22.09	75	0	0	0	0	0	0	0	0	0	0	0
205	C36-C14	162	100	14929	14.96	0.00	14.96	31.16	0.0001	0.021	2.928	22.07	162	0	0	0	0	0	0	0	0	0	0	0
206	C50-C34	76	150	14650	14.63	74.30	88.93	185.28	0.0005	0.057	2.922	22.08	0	0	0	0	0	0	0	0	0	0	0	0

Recycling of Treated Waste Water

Sr. No.	Name of Water Type	Length of Water Pipe (m)	Order Diameter of Water Pipe (mm)	Net Water Demand to meet from Recycled Water Supply	Design of Pipe Line				Lengths of pipe										No. of Sheet Valves				
					Total Water Demand				Total Head Loss per M	Total Head Loss	Head Progressive	Terminal Head	110 mm od	160 mm od	210 mm od	260 mm od	310 mm od	310 mm od	160 mm od	210 mm od	260 mm od	310 mm od	
					Self	Previous	Total	20 HRS															
				Litres	KLD	KLD	KLD	LPM	Mtr	Mtr	Mtr	Mtr	m	m	m	m	m	m	No.	No.	No.	No.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
207	C14-B7	87	100	8087	8.09	28.43	36.52	76.08	0.0007	0.039	2.981	22.02	87	0	0	0	0	0	0	0	0	0	0
208	B7-B12	87	100	14217	14.22	0.99	14.22	29.62	0.0001	0.010	2.981	22.02	87	0	0	0	0	0	0	0	0	0	0
209	B7-B11	25	100	14217	14.22	0.00	14.22	29.62	0.0001	0.003	2.984	22.02	25	0	0	0	0	0	0	0	0	0	0
210	C34-C31	58	100	27555	27.56	10.42	37.98	78.71	0.0007	0.042	2.984	22.04	58	0	0	0	0	0	0	0	0	0	0
211	C31-C32	47	100	2720	2.72	0.00	2.72	5.67	0.0000	0.000	1.984	22.04	47	0	0	0	0	0	0	0	0	0	0
212	C31-C30	56	100	3544	3.54	4.15	7.70	16.04	0.0000	0.002	2.966	22.03	56	0	0	0	0	0	0	0	0	0	0
213	C30-C30	27	100	850	0.85	0.00	0.85	1.77	0.0000	0.000	2.966	22.03	27	0	0	0	0	0	0	0	0	0	0
214	C30-C48	66	100	3304	3.30	0.00	3.30	6.88	0.0000	0.001	2.967	22.03	66	0	0	0	0	0	0	0	0	0	0
215	C48-C7	14	250	1399	1.40	219.39	220.79	459.97	0.0002	0.003	2.975	22.43	0	0	0	14	0	0	0	0	0	1	0
216	C7-C47	90	250	3682	3.68	215.71	219.39	457.06	0.0002	0.019	2.984	22.41	0	0	0	90	0	0	0	0	0	1	0
217	C47-C75	125	250	4291	4.29	211.41	215.71	449.39	0.0002	0.036	2.820	22.38	0	0	0	125	0	0	0	0	0	1	0
218	C75-C26	64	250	4900	4.90	206.51	211.41	449.45	0.0002	0.013	2.633	22.37	0	0	0	64	0	0	0	0	0	1	0
219	C26-C27	38	100	26376	26.38	0.00	26.38	54.74	0.0004	0.014	2.647	22.35	38	0	0	0	0	0	0	0	0	1	0
220	C26-C45	53	200	996	1.00	179.24	180.24	375.50	0.0004	0.024	2.657	22.34	0	0	53	0	0	0	0	0	1	0	
221	C45-C44	34	200	1305	1.30	177.94	179.24	373.42	0.0004	0.015	2.672	22.33	0	0	34	0	0	0	0	0	1	0	
222	C44-C42	79	200	7015	7.02	170.92	177.94	370.70	0.0004	0.034	2.706	22.29	0	0	79	0	0	0	0	0	0	0	
223	C42-C43	54	100	1957	1.96	2.75	4.71	9.82	0.0000	0.001	2.707	22.29	54	0	0	0	0	0	0	0	0	0	0
224	C43-C43	47	100	2755	2.75	0.00	2.75	5.74	0.0000	0.000	2.707	22.29	47	0	0	0	0	0	0	0	0	0	0
225	C42-C24	100	200	5149	5.15	161.06	166.21	346.27	0.0004	0.038	2.744	22.26	0	0	100	0	0	0	0	0	1	0	
226	C24-C22	28	200	1216	1.24	159.82	161.06	335.54	0.0004	0.010	2.755	22.25	0	0	28	0	0	0	0	0	1	0	
227	C22-C21	67	200	8297	8.30	151.53	159.82	332.96	0.0004	0.024	2.778	22.22	0	0	67	0	0	0	0	0	1	0	
228	C21-C21	21	100	850	0.85	0.00	0.85	1.77	0.0000	0.000	2.778	22.22	21	0	0	0	0	0	0	0	0	0	0
229	C21-C1	159	200	13430	13.43	137.25	150.68	313.91	0.0005	0.051	2.829	22.17	0	0	159	0	0	0	0	0	1	0	
230	C1-B11	63	200	6488	6.49	130.76	137.25	285.93	0.0003	0.017	2.846	22.15	0	0	63	0	0	0	0	0	1	0	
231	B11-B12	102	100	15604	15.60	0.00	15.60	32.70	0.0001	0.014	2.860	22.14	102	0	0	0	0	0	0	0	0	0	0
232	B11-B10	65	200	6410	6.41	108.65	115.06	239.72	0.0002	0.013	3.859	22.14	0	0	65	0	0	0	0	0	0	0	0
233	B10-P32	87	100	5183	5.18	6.84	12.02	25.05	0.0001	0.008	2.866	22.13	87	0	0	0	0	0	0	0	0	0	0
234	F32-F35	32	100	1202	1.20	5.64	6.84	34.25	0.0000	0.001	2.867	22.13	32	0	0	0	0	0	0	0	0	0	0
235	F35-C2	42	100	927	0.93	4.71	5.64	11.75	0.0000	0.001	2.868	22.13	42	0	0	0	0	0	0	0	0	0	0
236	C2-C4	41	100	4713	4.71	0.00	4.71	9.82	0.0000	0.001	2.869	22.13	41	0	0	0	0	0	0	0	0	0	0
237	B10-B9	56	150	3947	3.95	92.68	96.63	201.31	0.0006	0.032	2.890	22.11	0	56	0	0	0	0	0	0	0	0	0
238	B9-B30	34	150	16336	16.34	76.35	92.68	193.09	0.0005	0.018	2.908	22.09	0	34	0	0	0	0	0	0	0	0	0

Recycling of Treated Waste Water

Name of Line	Outer Diameter mm	Net Water Demand to satisfy Water Supply	Design of Pipe Line					Length of pipe										No of Stakes Values								
			24 Hrs. Demand					Total Head Loss		Total Head Loss per M		Total Head Loss		100 m		200 m		300 m		400 m		500 m				
			Self	Previous	Total	SLD	R/L	SLD	R/L	SLD	R/L	SLD	R/L	SLD	R/L	SLD	R/L	SLD	R/L	SLD	R/L	SLD	R/L	SLD	R/L	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
239	B30-B29	103	100	0	0.00	0.00	0.00	0.00	0.0000	0.0000	2.908	22.09	103	0	0	0	0	0	0	0	0	0	0	0	0	0
240	B30-B31	40	150	16236	16.34	60.01	76.35	159.05	0.0004	0.015	2.923	22.08	0	40	0	0	0	0	0	0	0	0	0	0	0	0
241	B31-B33	56	100	2420	2.42	0.00	2.42	5.04	0.0000	0.000	2.923	22.08	56	0	0	0	0	0	0	0	0	0	0	0	0	0
242	B31-B32	5	150	240	0.24	57.35	57.59	119.98	0.0002	0.001	2.923	22.08	0	5	0	0	0	0	0	0	0	0	0	0	0	0
243	B32-B35	104	100	11645	11.64	0.00	11.64	24.26	0.0001	0.008	2.933	22.07	104	0	0	0	0	0	0	0	0	0	0	0	0	0
244	B32-B34	50	100	5192	5.19	40.51	45.70	95.22	0.0010	0.051	2.975	22.02	50	0	0	0	0	0	0	0	0	0	0	0	0	0
245	B35-B33	51	100	7972	7.97	0.00	7.97	16.61	0.0000	0.004	2.979	22.02	51	0	0	0	0	0	0	0	0	0	0	0	0	0
246	B35-B26	5	100	378	0.38	32.16	32.54	67.79	0.0005	0.003	2.978	22.02	5	0	0	0	0	0	0	0	0	0	0	0	0	0
247	B36-B34	111	100	8376	8.38	0.00	8.38	17.45	0.0000	0.005	2.983	22.02	111	0	0	0	0	0	0	0	0	0	0	0	0	0
248	B36-B27	50	100	5639	5.64	20.15	25.79	49.56	0.0003	0.015	2.993	22.01	50	0	0	0	0	0	0	0	0	0	0	0	0	0
249	B37-B24	103	100	8624	8.62	0.00	8.62	17.97	0.0000	0.005	2.998	22.00	103	0	0	0	0	0	0	0	0	0	0	0	0	0
250	B37-B22	60	100	1957	1.95	9.57	11.52	24.01	0.0001	0.005	2.998	22.00	60	0	0	0	0	0	0	0	0	0	0	0	0	0
251	B38-B23	300	100	9568	9.57	0.00	9.57	19.93	0.0001	0.006	3.004	22.00	300	0	0	0	0	0	0	0	0	0	0	0	0	0
252	D30-D38	152	250	12202	12.20	287.28	302.87	630.98	0.0004	0.020	2.540	22.46	0	0	0	0	0	0	0	0	0	0	0	0	0	0
253	D38-D39	62	100	2128	2.13	4.65	6.78	14.12																		

Recycling of Treated Waste Water

Sr No.	Name of Water Pipe Line	Length of Water Pipe Line	Outer Diameter of Water Pipe Line	Net Water Demanded to meet from Recycled Water Supply	Design of Pipe Line				Length of pipe							No of Stake Valves				
					Net Water Demanded		Total Water Demanded	Head Loss per M	Total Head Loss	Head Loss Progressive	Terminal Head	110 mm old	160 mm old	210 mm old	260 mm old	310 mm old	100 mm old	150 mm old	200 mm old	250 mm old
					Self	Previous														
					KLD	KLD	KLD	LPM	Mtr	Mtr	Mtr	m	m	m	m	m	No.	No.	No.	No.
1	F1-F2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
270	F21-F22	10	100	834	0.88	0.00	0.88	1.84	0.0000	0.0000	2.749	22.25	10	0	0	0	1	0	0	0
271	F4-F5	40	200	32544	13.84	587.24	201.05	418.52	0.0025	0.049	1.797	22.20	0	0	0	0	0	0	0	0
272	F5-F20	19	100	1467	1.47	6.06	7.53	15.68	0.0000	0.001	1.798	22.20	19	0	0	0	1	0	0	0
273	F20-F21	81	100	6059	6.06	0.00	6.06	12.62	0.0000	0.002	2.800	22.20	81	0	0	0	3	0	0	0
274	F5-F4	26	150	2832	2.83	176.88	179.71	374.40	0.0018	0.047	2.844	22.36	0	26	0	0	0	1	0	0
275	F4-F3	6	150	815	0.82	176.07	176.88	368.50	0.0017	0.010	2.854	22.35	0	6	0	0	0	1	0	0
276	F3-F12	53	100	4379	4.38	0.00	4.38	9.12	0.0000	0.001	2.855	22.15	53	0	0	0	1	0	0	0
277	F1-F15	145	100	18999	19.00	0.00	19.00	39.58	0.0002	0.029	3.883	22.12	145	0	0	0	1	0	0	0
278	F3-F2	54	150	3201	3.20	149.49	152.69	318.10	0.0013	0.072	2.926	22.07	0	54	0	0	0	1	0	0
279	F2-F14	175	150	15455	15.45	29.79	45.24	54.26	0.0001	0.024	2.950	22.05	0	175	0	0	0	1	0	0
280	F14-F15	54	150	3476	3.48	26.31	29.79	62.06	0.0001	0.023	2.954	22.05	0	54	0	0	0	1	0	0
281	F15-F16	32	100	3407	3.41	22.91	26.31	54.93	0.0004	0.019	2.973	22.03	32	0	0	0	1	0	0	0
282	F16-F18	13	100	1167	1.17	21.74	22.91	47.72	0.0002	0.004	2.976	22.02	13	0	0	0	1	0	0	0
283	F18-F19	24	100	2643	2.64	0.00	2.64	5.51	0.0000	0.000	2.977	22.02	24	0	0	0	1	0	0	0
284	F18-F11	102	100	19696	19.10	0.00	19.10	39.78	0.0002	0.021	2.997	22.00	102	0	0	0	1	0	0	0
285	F2-F1	57	100	4891	4.89	99.35	104.24	217.17	0.0047	0.269	3.194	21.81	57	0	0	0	1	0	0	0
286	F1-F9	168	100	22860	22.86	0.00	22.86	47.53	0.0003	0.043	3.242	21.76	168	0	0	0	1	0	0	0
287	F1-F7	55	100	5303	5.30	71.19	76.49	159.36	0.0027	0.146	3.341	21.66	55	0	0	0	1	0	0	0
288	B7-B8	59	100	7731	7.73	8.00	15.73	32.76	0.0001	0.008	3.349	21.65	59	0	0	0	1	0	0	0
289	B8-F33	22	100	7995	8.00	0.00	8.00	16.66	0.0000	0.001	3.350	21.65	22	0	0	0	1	0	0	0
290	B7-B5	196	100	27057	27.06	28.41	55.46	115.55	0.0015	0.287	3.628	21.37	196	0	0	0	1	0	0	0
291	B5-F9	38	100	6316	6.32	0.00	6.32	13.16	0.0000	0.001	3.629	21.37	38	0	0	0	1	0	0	0
292	B5-E6	64	100	5378	5.38	16.71	22.09	46.02	0.0003	0.017	3.645	21.36	64	0	0	0	1	0	0	0
293	E6-F7	70	100	16712	16.71	0.00	16.71	24.82	0.0002	0.011	3.656	21.34	70	0	0	0	1	0	0	0
		13732		1481891.3	1481.89							8755	1730	1541	1570	136	128	59	23	21
294	STP 3-E2E	15	250	0	0.00	966.79	966.79	2014.15	0.0034	0.059	0.050	34.95	0	0	0	0	0	0	0	0
295	E2E-E3E19	49	200	13371	13.37	611.23	624.60	1301.26	0.0044	0.218	0.268	24.73	0	0	0	0	0	0	1	0
296	E19-E14	190	200	21155	21.20	590.04	611.23	1273.40	0.0045	0.810	1.078	23.92	0	0	0	0	0	0	1	0

Recycling of Treated Waste Water

Sr No.	Name of Water Pipe Line	Length of Water Pipe Line	Outer Diameter of Water Pipe Line	Net Water Demand to meet from Recycled Water Supply	Design of Pipe Line					Length of pipe										No of Static Valves																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
					Net Water Demand			Total Water Demand	Head Loss per M	Total Head Loss	Head Loss Progressive	Terminal Head	110 mm o/d	160 mm o/d	210 mm o/d	250 mm o/d	310 mm o/d	360 mm o/d	240mm o/d	310 mm o/d	240mm o/d	310 mm o/d	240mm o/d	310 mm o/d	240mm o/d	310 mm o/d																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
					Self	Previous	Total																				20 HRS	KLD	KLD	KLD	LPM	Mtr	Mtr	Mtr	m	m	m	m	m	m	No.	No.	No.	No.	No.	No.	No.	No.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Recycling of Treated Waste Water

Sr. No.	Name of Water Pipe Line	Length m	Outer Diameter of Water Pipe Line mm	Net Water Demand to served from Recycled Water Supply	Net Water Demand			Design of Pipe Line			Length of pipe					No of Street Valves				
					Self	Previous	Total	Total Water Demand	Head Loss per M	Total Head Loss	Head Loss Progressive	Terminal Head	110 mm old	168 mm old	210 mm old	260 mm old	310 mm old	360 mm old	380 mm old	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
356	A5-A6	60	100	2437	2.44	39.58	42.02	87.53	0.0009	0.053	2.892	22.11	60	0	0	0	0	0	0	0
357	A6-A32	38	100	9002	9.00	30.58	39.58	81.46	0.0008	0.050	2.921	22.08	38	0	0	0	0	0	0	0
358	A32-A31	50	100	3912	3.91	1.97	5.89	12.26	0.0000	0.001	2.923	22.08	50	0	0	0	0	0	0	0
359	A31-A69	11	100	1974	1.97	0.00	1.97	4.11	0.0000	0.000	2.923	22.08	11	0	0	0	0	0	0	0
360	A32-A35	72	100	4585	4.39	20.31	24.69	51.44	0.0003	0.024	2.945	22.05	72	0	0	0	0	0	0	0
361	A35-A33	50	100	4438	4.44	11.10	15.53	32.36	0.0001	0.007	2.952	22.05	50	0	0	0	0	0	0	0
362	A33-A34	14	100	2377	2.38	0.00	2.38	4.95	0.0000	0.000	2.952	22.05	14	0	0	0	0	0	0	0
363	A33-A31	67	100	8718	8.72	0.00	8.72	18.16	0.0000	0.003	2.955	22.04	67	0	0	0	0	0	0	0
364	A35-A36	50	100	3742	3.74	1.03	4.77	9.94	0.0000	0.001	2.946	22.05	50	0	0	0	0	0	0	0
365	A36-A37	7	100	1030	1.03	0.00	1.03	2.15	0.0000	0.000	2.946	22.05	7	0	0	0	0	0	0	0
366	82E-82E24	13	200	0	0.00	342.19	342.19	712.89	0.0015	0.019	0.069	24.63	0	0	13	0	0	0	0	0
SECTOR 83-																				
367	82E24-	98	200	0	0.00	342.19	342.19	712.89	0.0015	0.143	0.212	24.79	0	0	98	0	0	0	0	0
368	83A29-A34	107	300	18875	18.87	323.31	342.19	712.89	0.0015	0.156	0.368	24.63	0	0	107	0	0	0	0	0
369	A34-A31	69	150	1991	1.99	321.32	323.31	673.57	0.0003	0.367	0.735	24.36	0	69	0	0	0	0	0	0
370	A31-A32	50	100	19470	10.47	0.00	10.47	21.81	0.0001	0.003	0.739	24.36	50	0	0	0	0	0	0	0
371	A31-A28	57	150	3188	3.19	307.66	310.85	647.61	0.0049	0.282	1.017	23.98	0	57	0	0	0	0	0	0
372	A28-A35	17	150	5188	3.19	364.48	367.66	640.97	0.0049	0.083	1.100	23.90	0	17	0	0	0	0	0	0
373	A35-A21	181	150	0	0.00	304.48	304.48	624.32	0.0048	0.862	1.962	23.84	0	181	0	0	0	0	0	0
374	A21-A17	97	150	4928	4.93	299.55	304.48	634.32	0.0048	0.452	2.434	23.48	0	97	0	0	0	0	0	0
375	A17-E23	19	150	1133	1.13	298.42	299.55	624.06	0.0046	0.088	2.512	22.49	0	19	0	0	0	0	0	0
376	E23-E22	83	150	2575	2.57	87.99	90.56	188.67	0.0005	0.042	2.554	22.45	0	83	0	0	0	0	0	0
377	E22-E21	44	100	30865	30.86	57.12	87.99	183.31	0.0034	0.152	2.706	22.29	44	0	0	0	0	0	0	0
378	E21-E27	175	100	9508	9.51	47.62	57.12	119.01	0.0015	0.271	2.976	22.02	175	0	0	0	0	0	0	0
379	E27-E26	68	100	2429	2.43	13.51	15.93	33.20	0.0001	0.010	2.566	22.01	68	0	0	0	0	0	0	0
380	E26-E28	83	100	13505	13.51	0.00	13.51	28.14	0.0001	0.009	2.955	22.00	83	0	0	0	0	0	0	0
381	E27-E29	85	100	7723	7.72	4.51	12.23	25.48	0.0001	0.008	2.984	22.02	85	0	0	0	0	0	0	0
382	E28-E30	34	100	4505	4.51	0.00	4.51	9.39	0.0000	0.000	2.984	22.02	34	0	0	0	0	0	0	0
383	E31-E33	88	100	19453	19.45	0.00	19.45	40.53	0.0002	0.019	2.995	22.01	88	0	0	0	0	0	0	0

DESIGN STATEMENT OF DRAINAGE

For Vatika Limited


Date: 10/09/2019

2014

Abstract of Storm Water Drainage

Size	Length	Avg Depth	Manhole	Vent Shaft
400	21966	10.81	1123	30
500	2692	47.43	136	
600	1769	2.39	88	
700	1046	17.75	55	
800	240	78.97	13	
900	254	231.93	15	
1000	207	2.96	10	
1100	439	3.14	22	
1200	125	3.52	7	

For Vetika Limited

Design Statement of Storm Water Drainage

Sr. No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge	Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall	Formation Level			Invert Level		
				Self	Branch	Total								Upper end	Lower end	Upper end	Lower end	Upper end	Lower end
						M/D	Cum.	M/Sec	Cum.	mm			M	M	M	M	M	M	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	E3E-16	28	67472	67	0	67	0.07	0.0008	0.63	0.079	400	700	OK	28	233.148	0.000	231.748	231.708	
2	E34-E29	50	394805	396	0	296	0.30	0.0034	0.63	0.079	400	700	OK	50	0.000	0.000	-1.400	-1.471	
3	E20-E27	71	592719	596	363	959	0.96	0.0111	0.63	0.079	400	700	OK	71	0.10	0.000	-1.471	-1.573	
4	E33-E27	87	924440	924	0	924	0.92	0.0107	0.63	0.079	400	700	OK	87	0.12	233.160	231.860	231.735	
5	E28-E26	81	1057020	1057	0	1057	1.06	0.0122	0.63	0.079	400	700	OK	81	0.12	233.219	231.817	231.701	
6	E26-E27	68	366810	366	1057	1423	1.43	0.0165	0.63	0.079	400	700	OK	68	0.10	233.116	231.701	231.604	
7	E27-E21	158	1024845	1025	3307	4332	4.33	0.0501	0.63	0.079	400	700	OK	158	0.23	0.000	-1.573	-1.799	-1.899
8	E20-E21	36	3971377	3971	0	3971	3.97	0.0460	0.63	0.079	400	700	OK	36	0.05	0.000	-1.400	-1.451	
9	E23-E21	36	202440	202	8303	8506	8.51	0.0984	0.63	0.134	500	800	OK	36	0.05	0.000	-1.899	-1.944	
10	A22-E22	78	173660	174	8506	8680	8.68	0.1035	0.68	0.134	500	800	OK	78	0.10	233.279	233.519	-1.944	-2.041
11	A21-A22	76	638639	639	0	639	0.64	0.0074	0.63	0.079	400	700	OK	76	0.11	0.000	233.519	-1.400	-1.509
12	A22-E23	26	76410	76	9218	9394	9.39	0.1087	0.68	0.134	500	800	OK	26	0.03	233.519	233.889	-2.041	-2.074
13	E25-E23	29	203009	203	9394	9597	9.60	0.1111	0.68	0.134	500	800	OK	29	0.04	233.889	0.000	-2.074	-2.110
14	A14-E25	86	599704	600	9597	10197	10.20	0.1180	0.68	0.134	500	800	OK	86	0.11	0.000	-2.110	-2.217	-2.317
15	A60-A59	100	747475	747	0	747	0.75	0.0087	0.63	0.079	400	700	OK	100	0.14	234.566	233.166	233.023	
16	A59-A14	131	927142	927	747	1675	1.67	0.0194	0.63	0.079	400	700	OK	131	0.19	234.341	0.000	233.023	232.836
17	A11-A14	56	325989	330	11872	12202	12.20	0.1412	0.72	0.205	600	900	OK	56	0.06	0.000	-2.317	-2.380	
18	A10-A11	181	1092095	1093	12202	13294	13.29	0.1539	0.72	0.205	600	900	OK	181	0.20	0.000	-2.380	-2.581	-2.681
19	A13-A10	40	272806	273	0	273	0.27	0.0032	0.63	0.079	400	700	OK	40	0.06	234.898	0.000	233.498	233.441
20	83A2-83A5	44	2124709	2125	0	2125	2.12	0.0246	0.63	0.079	400	700	OK	44	0.06	0.000	-1.400	-1.463	
21	A5-A4	199	1836355	1836	2125	3961	3.96	0.0458	0.63	0.079	400	700	OK	199	0.28	0.000	235.160	-1.463	-1.747
22	A8-A4	53	454447	454	0	454	0.45	0.0053	0.63	0.079	400	700	OK	53	0.08	235.528	235.160	234.128	234.052
23	A4-A4	25	1647413	1647	0	1647	1.65	0.0191	0.63	0.079	400	700	OK	25	0.04	235.544	235.160	234.144	234.108
24	A4-A7	56	311778	312	6063	6375	6.37	0.0728	0.63	0.079	400	700	OK	56	0.08	235.160	0.000	-1.747	-1.827
25	A20-A7	62	389723	390	0	390	0.39	0.0045	0.63	0.079	400	700	OK	62	0.09	235.143	0.000	233.743	233.654
26	A7-A7	92	547120	547	0	547	0.55	0.0063	0.63	0.079	400	700	OK	92	0.13	235.150	0.000	233.750	233.619
27	A7-A10	53	295076	295	7312	7607	7.61	0.0880	0.68	0.134	500	800	OK	53	0.07	0.000	-1.827	-1.893	
28	A9-A10	181	1007712	1008	21174	22182	22.18	0.2567	0.76	0.259	700	1000	OK	181	0.18	0.000	-2.681	-2.862	-2.962

Design Statement of Storm Water Drainage

Sr. No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated				Discharge Cum. 9	Velocity M/sec 10	Flow Cum. 11	Size of Storm line mm 12	Slope 13	Length of Storm line M 14	Fall M 15	Formation Level			Invert Level		
				Quantity of Waste Water generated			Upper end								Lower end	Upper end	Lower end	Upper end	Lower end	
				Self	Branch	Total														
1	2	3	4	5	6	7	8	9	10	11	12	13	M 14	M 15	M 16	M 17	M 18	M 19	M 20	
29	A3-A3	32	394174	394	0	394	0.39	0.0246	0.63	0.079	400	700	OK	0.05	0.05	235.821	0.000	234.421	234.375	
30	A3-A6	56	932403	932	394	1327	1.33	0.0154	0.63	0.079	400	700	OK	0.08	0.08	0.000	0.000	234.375	234.295	
31	A20-A6	41	457939	458	0	458	0.46	0.0053	0.63	0.079	400	700	OK	0.06	0.06	235.531	0.000	234.131	234.073	
32	A6-A9	53	915701	916	1783	2700	2.70	0.0313	0.63	0.079	400	700	OK	0.08	0.08	0.000	0.000	234.073	233.997	
33	A18-A15	25	183726	184	0	184	0.18	0.0021	0.63	0.079	400	700	OK	0.04	0.04	234.679	234.915	233.279	233.244	
34	A16-A15	32	254055	254	0	254	0.25	0.0029	0.63	0.079	400	700	OK	0.05	0.05	234.664	234.935	233.264	233.218	
35	A15-A12	53	915701	916	438	1353	1.35	0.0157	0.63	0.079	400	700	OK	0.08	0.08	234.985	235.242	233.218	233.143	
36	A19-A12	51	409908	410	0	410	0.41	0.0047	0.63	0.079	400	700	OK	0.07	0.07	234.967	235.242	233.557	233.494	
37	A12-A9	56	952405	932	1763	2696	2.70	0.0312	0.63	0.079	400	700	OK	0.08	0.08	235.242	0.000	233.343	233.063	
38	83A9-OUTFALL	30	0	0	27577	27577	27.58	0.3192	0.79	6.399	800	1100	OK	0.03	0.03	0.000	0.000	-2.962	-2.989	
39	82A31-	66	426695	429	0	429	0.43	0.0050	0.63	0.079	400	700	OK	0.09	0.09	237.546	237.479	236.146	236.052	
40	A34-A33	12	139187	139	0	139	0.14	0.0016	0.63	0.079	400	700	OK	0.02	0.02	237.484	237.479	236.084	236.067	
41	A33-A35	50	382070	382	568	950	0.95	0.0110	0.63	0.079	400	700	OK	0.07	0.07	237.479	237.441	236.032	235.980	
42	A37-A36	14	69464	69	0	69	0.07	0.0008	0.63	0.079	400	700	OK	0.02	0.02	236.644	236.774	235.244	235.224	
43	A36-A35	50	302654	303	69	372	0.37	0.0043	0.63	0.079	400	700	OK	0.07	0.07	236.774	237.441	235.224	235.153	
44	A35-A32	55	318854	319	1322	1641	1.64	0.0190	0.63	0.079	400	700	OK	0.08	0.08	237.441	236.811	235.153	235.074	
45	A49-A31	26	204451	204	0	204	0.20	0.0024	0.63	0.079	400	700	OK	0.04	0.04	237.816	237.546	236.416	236.379	
46	A31-A32	55	306211	306	204	511	0.51	0.0059	0.63	0.079	400	700	OK	0.08	0.08	237.546	236.811	236.379	236.200	
47	A32-A6	44	330455	330	2152	2482	2.48	0.0287	0.63	0.079	400	700	OK	0.06	0.06	236.811	236.501	235.074	235.011	
48	A37-A37	84	249905	249	0	249	0.25	0.0029	0.63	0.079	400	700	OK	0.12	0.12	237.043	236.646	235.643	235.573	
49	A37-A6	12	30101	30	249	279	0.28	0.0052	0.63	0.079	400	700	OK	0.02	0.02	236.646	236.501	235.523	235.505	
50	A6-A5	71	164398	164	2761	2926	2.95	0.0339	0.63	0.079	400	700	OK	0.10	0.10	236.501	236.327	235.011	234.910	
51	A61-A5	25	540244	540	0	540	0.54	0.0063	0.63	0.079	400	700	OK	0.04	0.04	236.199	236.327	234.799	234.764	
52	A17-A5	71	601359	601	3456	4067	4.07	0.0471	0.63	0.079	400	700	OK	0.10	0.10	236.327	236.357	234.264	234.662	

Design Statement of Storm Water Drainage

Sr. No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge	Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall	Formation Level		Invert Level			
				Self	Branch	Total	MLD	Cum.	M/sec	Cum.	mm			Upper end	Lower end	Upper end	Lower end		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
52	A16-A17	36	211131	217	4067	4284	4.28	0.0496	0.63	0.079	400	700	35	0.05	236.357	236.371	234.662	234.611	
54	A20-A15	13	126052	128	0	128	0.13	0.0015	0.63	0.079	400	700	13	0.02	236.125	236.149	234.725	234.706	
55	A21-A20	7	105782	106	0	106	0.11	0.0012	0.63	0.079	400	700	7	0.01	236.174	236.149	234.774	234.764	
56	A20-A16	71	414004	414	234	648	0.65	0.0075	0.63	0.079	400	700	71	0.10	236.149	236.371	234.706	234.605	
57	A15-A16	78	423128	423	4932	5355	5.36	0.0620	0.63	0.079	400	700	78	0.11	236.371	236.125	234.605	234.493	
58	A15-A14	27	139187	139	5355	5494	5.49	0.0636	0.63	0.079	400	700	27	0.04	236.125	236.011	234.493	234.455	234.355
59	A14-A14	51	901056	901	0	901	0.90	0.0104	0.63	0.079	400	700	51	0.07	235.999	236.011	234.493	234.420	
60	A14-A10	99	573449	573	6395	6969	6.97	0.0807	0.68	0.134	500	800	99	0.12	236.011	236.045	234.355	234.231	
61	A28-A27	76	615364	615	0	615	0.62	0.0071	0.63	0.079	400	700	76	0.11	236.180	236.161	234.780	234.671	
62	A27-A26	73	149029	149	615	764	0.78	0.0091	0.63	0.079	400	700	73	0.10	236.161	236.147	234.671	234.567	
63	A26-A25	79	411993	412	784	1196	1.20	0.0138	0.63	0.079	400	700	79	0.11	236.147	236.129	234.567	234.454	
64	A25-A24	64	133626	1334	1196	2530	2.53	0.0293	0.63	0.079	400	700	64	0.09	236.129	236.117	234.454	234.362	
65	A24-A23	102	423791	424	2530	2954	2.95	0.0342	0.63	0.079	400	700	102	0.15	236.117	236.097	234.362	234.217	
66	A23-A22	86	526359	526	2954	3480	3.48	0.0403	0.63	0.079	400	700	86	0.12	236.097	236.070	234.217	234.094	
67	A22-A10	90	1382262	1382	3480	4862	4.86	0.0563	0.63	0.079	400	700	90	0.13	236.070	236.045	234.094	233.965	233.865
68	A10-A9	67	373020	373	11831	12204	12.20	0.1413	0.72	0.205	600	900	67	0.07	236.045	235.218	233.865	233.793	
69	A8-A9	20	100214	100	0	100	0.10	0.0012	0.63	0.079	400	700	20	0.03	235.271	235.218	233.821	233.793	
70	A9-A58	97	528900	529	12304	12833	12.83	0.1485	0.72	0.205	600	900	97	0.11	235.218	235.369	233.791	233.683	
71	A58-A3	71	430926	481	12833	13314	13.31	0.1541	0.72	0.205	600	900	71	0.08	235.369	235.464	233.683	233.604	
72	A3-A2	7	13893	14	13314	13328	13.33	0.1543	0.72	0.205	600	900	7	0.01	235.464	235.402	233.604	233.596	
73	A2-A1	56	311178	312	13328	13640	13.64	0.1579	0.72	0.205	600	900	56	0.06	235.402	235.153	233.596	233.534	233.434
74	82A55-A1	116	4294417	4294	0	4294	4.29	0.0497	0.63	0.079	400	700	116	0.17	235.878	235.153	234.478	234.312	
	82A46-	39	238266	228	0	228	0.23	0.0026	0.63	0.079	400	700	39	0.06	235.248	235.236	233.848	233.792	
	82A45-	10	111349	111	0	111	0.11	0.0013	0.63	0.079	400	700	10	0.01	235.241	235.236	233.841	233.827	
	82A63-	70	259266	259	340	599	0.60	0.0049	0.63	0.079	400	700	70	0.10	235.236	235.222	233.792	233.692	
	82A44-	63	361885	362	0	362	0.36	0.0042	0.63	0.079	400	700	63	0.09	235.239	235.222	233.839	233.749	
	82A62-	11	25470	25	961	986	0.99	0.0114	0.63	0.079	400	700	11	0.02	235.222	235.220	233.692	233.676	
	82A64-	84	2303161	2303	0	2303	2.30	0.0267	0.63	0.079	400	700	84	0.12	235.203	235.220	233.803	233.683	
	82A43-	50	0	0	3289	3289	3.29	0.0281	0.63	0.079	400	700	50	0.04	235.220	235.220	233.676	233.634	

Design Statement of Storm Water Drainage

Stn No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge	Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall	Formation Level		Invert Level	
				Self	Branch	Total	MLD	Cum.	M/sec	Cum.	mm			Upper end	Lower end	Upper end	Lower end
				KLD	KLD	KLD	8	9	10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7											
75	82A7-A1	55	190368	190	3289	3480	3.48	0.0403	0.63	0.079	400	700	OK	235.161	235.153	235.761	233.682
76	82A1-OUTFALL	30	169819	169	21414	21583	21.58	0.1498	0.76	0.253	700	1000	OK	235.153	235.153	233.434	233.404
77	82B34-	41	427615	428	0	428	0.43	0.0049	0.63	0.079	400	700	OK	234.833	234.842	233.433	233.375
78	82B3-B3	225	1296177	1296	428	1724	1.72	0.0200	0.63	0.079	400	700	OK	234.842	234.819	233.375	233.053
79	82B4-B4	172	1174736	1175	0	1175	1.17	0.0136	0.63	0.079	400	700	OK	234.833	233.783	233.433	233.188
80	B4-B3	54	300643	301	1175	1475	1.48	0.0171	0.63	0.079	400	700	OK	233.783	234.019	233.188	233.110
81	B3-B2	57	317346	317	3199	3517	3.52	0.0407	0.63	0.079	400	700	OK	234.019	234.299	233.053	232.972
82	B4-B2	55	501270	501	0	501	0.50	0.0058	0.63	0.079	400	700	OK	234.592	234.299	233.191	233.114
83	B2-B3	68	318388	319	4018	4396	4.40	0.0509	0.63	0.079	400	700	OK	234.299	234.216	232.972	232.875
84	E4-E5	43	314736	315	0	315	0.31	0.0056	0.63	0.079	400	700	OK	233.618	233.433	232.218	232.157
85	E3-E4	55	317346	317	315	632	0.63	0.0073	0.63	0.079	400	700	OK	233.933	234.216	232.157	232.078
86	82B17-	19	319283	319	0	319	0.32	0.0037	0.63	0.079	400	700	OK	235.406	235.401	234.006	233.979
87	B16-B15	119	1656148	1656	319	1955	1.96	0.0226	0.63	0.079	400	700	OK	235.401	235.377	233.979	233.809
88	B15-E1	209	1024414	1024	1655	2680	2.98	0.0345	0.63	0.079	400	700	OK	235.377	234.705	233.809	233.510
89	E1-E2	54	279545	280	2580	3259	3.26	0.0377	0.63	0.079	400	700	OK	234.705	234.485	233.510	233.433
90	B1-E2	106	650758	691	0	691	0.69	0.0480	0.63	0.079	400	700	OK	234.633	234.485	233.233	233.082
91	E2-E3	54	116917	117	3630	4067	4.07	0.0471	0.63	0.079	400	700	OK	234.485	234.216	233.082	233.004
92	E3-E12	127	767068	707	9095	9802	9.80	0.1135	0.68	0.134	500	800	OK	234.216	234.052	231.978	231.820
93	E12-E14	44	317346	317	0	317	0.32	0.0037	0.63	0.079	400	700	OK	233.765	234.052	232.365	232.302
94	E2E10-	239	2692948	2893	0	2893	2.89	0.0135	0.63	0.079	400	700	OK	234.614	234.274	233.214	232.872
95	E16-E17	70	321348	321	2893	3214	3.21	0.0372	0.63	0.079	400	700	OK	234.274	234.300	232.872	232.772
96	E17-E11	144	901390	901	3214	4116	4.12	0.0476	0.63	0.079	400	700	OK	234.300	234.347	232.772	232.567
97	E17-E11	14	33495	33	0	33	0.03	0.0004	0.63	0.079	400	700	OK	234.531	234.347	233.121	233.101
98	E11-E11	90	590617	591	0	591	0.59	0.0568	0.63	0.079	400	700	OK	234.445	234.347	233.045	232.917

Sheet No:-4

Design Statement of Storm Water Drainage

Sr No	Line No	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge		Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall	Formation Level		Invert Level	
				Self	Branch	Total	M/D	Cum							Upper end	Lower end	Upper end	Lower end
				KLD	KLD	KLD	8	9	M/sec	Cum	mm		M	M	M	M	M	M
99	E11-E12	55	300643	301	4749	5040	5.04	0.9583	0.63	0.079	400	100	55	0.08	234.347	234.052	232.567	232.488
100	E18-E12	130	695933	696	15160	15856	15.86	0.1835	0.72	0.205	600	900	130	0.14	234.052	233.835	231.720	231.575
101	E18-E19	88	738817	739	15856	16595	16.59	0.1921	0.72	0.205	600	900	88	0.10	233.835	233.405	231.575	231.477
102	E5-E15	81	695933	696	0	696	0.70	0.0081	0.63	0.079	400	700	81	0.12	232.618	232.462	232.218	232.105
103	E20-E15	133	937811	938	0	938	0.94	0.0109	0.63	0.079	400	700	133	0.19	232.197	232.462	231.797	231.607
104	E15-E14	54	300643	301	1634	1934	1.95	0.0224	0.63	0.079	400	700	54	0.08	233.462	233.765	231.607	231.530
105	E4-E14	84	701501	702	0	702	0.70	0.0081	0.63	0.079	400	700	84	0.12	233.933	233.765	232.533	232.413
106	E14-E19	180	974307	974	2636	3610	3.61	0.0418	0.63	0.079	400	700	180	0.26	233.765	233.405	231.530	231.173
107	E2E19-	70	1225601	1230	20205	21435	21.43	0.2431	0.76	0.293	700	1000	70	0.07	233.405	233.319	231.133	231.103
108	E2E26-	64	0	0	0	0	0.00	0.0000	0.63	0.079	400	700	64	0.09	233.142	233.319	231.742	231.651
109	E2E24- OUTFALL	30	0	0	21435	21435	21.43	0.2431	0.76	0.293	700	1000	30	0.03	233.319	233.319	231.103	231.073
110	E3A35-	62	375989	374	0	374	0.37	0.0043	0.63	0.079	400	700	62	0.09	231.899	231.766	230.409	230.321
111	A32-A31	55	829518	830	0	830	0.83	0.0096	0.63	0.079	400	700	55	0.08	231.849	231.766	230.449	230.371
112	A31-A34	61	207140	207	1204	1411	1.41	0.0163	0.63	0.079	400	700	61	0.09	231.766	0.000	230.321	230.234
113	A33-A34	73	2168077	2168	0	2168	2.17	0.0251	0.63	0.079	400	700	73	0.10	231.754	0.000	230.354	230.250
114	E3A34-	135	0	0	3579	3579	3.58	0.0414	0.63	0.079	400	700	135	0.19	0.000	231.767	230.234	230.041
115	E3A29- OUTFALL	30	0	0	3579	3579	3.58	0.0414	0.63	0.079	400	700	30	0.04	231.767	231.767	230.041	229.998
116	B2B21-	109	666477	666	0	666	0.67	0.0077	0.63	0.079	400	700	109	0.16	235.012	234.893	233.612	233.456
117	B22-B27	58	131981	132	666	798	0.80	0.0092	0.63	0.079	400	700	58	0.08	234.893	234.834	233.456	233.374
118	B28-B27	81	513715	514	0	514	0.51	0.0059	0.63	0.079	400	700	81	0.12	234.857	234.834	233.457	233.341
119	B27-B26	47	273811	274	1312	1586	1.59	0.0184	0.63	0.079	400	700	47	0.07	234.834	234.660	233.341	233.274
120	B34-B26	113	1053575	1054	0	1054	1.05	0.0122	0.63	0.079	400	700	113	0.16	234.820	234.660	233.420	233.258
121	B26-B25	10	25470	25	2640	2665	2.67	0.0308	0.63	0.079	400	700	10	0.01	234.660	234.632	233.258	233.244
122	B25-B25	62	389723	390	0	390	0.39	0.0045	0.63	0.079	400	700	62	0.09	234.842	234.632	233.442	233.354

For Vaika Limited
Authorized Signatory

Design Statement of Storm Water Drainage

Sr No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge			Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Formation Level			Invert Level		
				Quantity of Waste Water generated			Discharge								Formation Level			Invert Level		
				Self	Branch	Total	KLD	KLD	KLD						M.D	Cum.	M/sec	Upper end	Lower end	Upper end
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
123	B25-B32	48	267358	267	3055	3322	3.32	0.0384	0.63	0.079	400	700	OK	48	0.07	234.552	234.454	233.244	233.175	
124	B35- B32	105	681242	681	0	681	0.68	0.0079	0.63	0.079	400	700	OK	105	0.15	234.660	234.454	233.201	233.051	
125	B32- B31	6	16208	16	4003	4019	4.02	0.0465	0.63	0.079	400	700	OK	6	0.01	234.454	234.455	233.051	233.042	
126	B33- B31	34	228266	228	0	228	0.23	0.0026	0.63	0.079	400	700	OK	34	0.05	234.445	234.455	233.045	233.096	
127	B31-B9	62	1128244	1128	4248	5376	5.38	0.0622	0.63	0.079	400	700	OK	62	0.09	234.435	234.226	232.996	232.908	
128	B9- B10	56	439253	439	5376	5815	5.82	0.0673	0.63	0.079	400	700	OK	56	0.08	234.226	234.415	232.908	232.828	
129	C4-C2	53	588495	588	0	588	0.59	0.0068	0.63	0.079	400	700	OK	53	0.08	233.553	233.817	232.155	232.077	
130	C2-F35	21	98039	99	583	682	0.69	0.0080	0.63	0.079	400	700	OK	21	0.03	233.817	234.195	232.077	232.047	
131	F35-F32	40	111392	111	587	698	0.80	0.0092	0.63	0.079	400	700	OK	40	0.06	234.195	234.237	232.047	231.990	
132	F32-B10	93	554699	555	799	1354	1.35	0.0157	0.63	0.079	400	700	OK	93	0.13	234.237	234.415	231.990	231.757	
133	B10-B11	54	300643	301	7169	7469	7.47	0.0065	0.68	0.134	500	800	OK	54	0.07	234.415	234.437	231.757	231.690	
134	B12-B11	114	892273	1892	0	1892	1.89	0.0219	0.63	0.079	400	700	OK	114	0.16	234.437	234.437	233.165	233.001	
135	B11-C1	65	367453	367	9363	9729	9.73	0.1126	0.68	0.134	500	800	OK	65	0.08	234.437	234.101	231.690	231.607	
136	F35-C1	22	356318	356	0	356	0.36	0.0041	0.63	0.079	400	700	OK	22	0.03	234.101	234.101	232.795	232.763	
137	C1-C21	170	1307890	1207	10085	11295	11.29	0.1307	0.68	0.134	500	800	OK	170	0.21	234.101	234.319	231.607	231.395	
138	C21-C21	13	55675	56	0	56	0.06	0.0006	0.63	0.079	400	700	OK	13	0.02	234.322	234.319	232.922	232.903	
139	C21-C22	64	665318	665	11349	12014	12.01	0.1390	0.72	0.205	600	900	OK	64	0.07	234.319	234.055	231.295	231.224	
140	C22-C24	34	144059	144	12014	12158	12.16	0.1407	0.72	0.205	600	900	OK	34	0.04	234.055	233.746	231.224	231.186	
141	C24-C42	93	682676	683	12158	12841	12.84	0.1486	0.72	0.205	600	900	OK	93	0.10	233.746	233.778	231.186	231.083	
142	C43-C43	31	248991	249	0	249	0.25	0.0029	0.63	0.079	400	700	OK	31	0.04	233.814	233.796	232.414	232.369	
143	C43-C42	57	131981	132	249	381	0.38	0.0044	0.63	0.079	400	700	OK	57	0.08	233.796	233.778	232.369	232.288	
144	C42-C44	62	323416	323	13222	13545	13.55	0.1568	0.72	0.205	600	900	OK	62	0.07	233.778	233.598	231.083	231.014	
145	C44-C45	37	106198	106	13545	13651	13.65	0.1580	0.72	0.205	600	900	OK	37	0.04	233.598	233.495	231.014	230.972	
146	C45-C26	40	121780	122	13651	13773	13.77	0.1594	0.72	0.205	600	900	OK	40	0.04	233.495	233.355	230.973	230.928	
147	C27-C26	37	896965	891	0	891	0.89	0.0103	0.63	0.079	400	700	OK	37	0.05	233.355	233.355	231.965	231.912	
148	C26-C25	68	384155	384	14664	15048	15.05	0.1742	0.72	0.205	600	900	OK	68	0.08	233.355	233.331	230.928	230.853	
149	C25-C47	125	398697	399	15048	15447	15.45	0.1788	0.72	0.205	600	900	OK	125	0.14	233.331	232.968	230.853	230.714	
150	C47-C7	66	702824	703	15447	16150	16.15	0.1869	0.72	0.205	600	900	OK	66	0.07	232.988	233.040	230.714	230.640	
151	82C7-	26	144754	145	16150	16294	16.29	0.1886	0.72	0.205	600	900	OK	26	0.03	233.040	232.907	230.640	230.611	
152	82C70-	13	55675	56	0	56	0.56	0.0006	0.63	0.079	400	700	OK	13	0.02	232.959	232.954	231.559	231.541	

Design Statement of Storm Water Drainage

Design Statement of Storm Water Drainage																			
Sr. No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge		Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall	Formation Level		Invert Level		
				Self	Branch	Total	MLD	Cum.							M/sec	Cum.	Upper end	Lower end	Upper end
	2	3	4	5	6	7	8	9	10	11	12	13	M	M	M	M	M	M	
1													14	15	16	17	18	19	
153	C49-C30	78	489826	490	0	490	0.49	0.0057	0.63	0.079	400	700	OK	0.11	232.973	232.954	231.573	231.462	
154	C30-C31	59	328481	328	546	874	0.87	0.0101	0.63	0.079	400	700	OK	0.08	232.954	232.726	231.462	231.377	
155	C32-C31	33	285915	286	0	286	0.29	0.0033	0.63	0.079	400	700	OK	0.05	232.740	232.726	231.340	231.292	
156	C31-C34	55	1845666	1846	1160	3006	3.01	0.0348	0.63	0.079	400	700	OK	0.08	232.726	232.518	231.292	231.214	
157	812-B7	132	1633332	1633	0	1633	1.63	0.0189	0.63	0.079	400	700	OK	0.19	232.574	232.540	231.174	230.986	
158	811-B7	15	1633332	1633	0	1633	1.63	0.0189	0.63	0.079	400	700	OK	0.15	232.552	232.540	231.152	231.131	
159	B7-82C34	87	820609	821	3267	4087	4.09	0.0473	0.63	0.079	400	700	OK	0.12	232.540	232.518	230.986	230.861	230.761
160	C34-C50	109	693224	693	7093	7786	7.79	0.0501	0.68	0.134	500	800	OK	0.14	232.518	232.619	230.761	230.625	
161	C12-C35	144	1104759	1104	0	1104	1.10	0.0128	0.63	0.079	400	700	OK	0.21	232.592	232.216	231.192	230.986	
162	C35-C50	90	354891	355	1104	1459	1.46	0.0169	0.63	0.079	400	700	OK	0.13	232.216	232.619	230.986	230.858	
163	C51-C50	57	670499	670	0	670	0.67	0.0078	0.63	0.079	400	700	OK	0.08	232.713	232.619	231.313	231.232	
164	C50-C33	72	152820	153	9916	10669	10.07	0.1165	0.68	0.134	500	800	OK	0.09	232.619	232.924	230.625	230.535	
165	82C33-	122	1084466	1084	10069	11153	11.15	0.1291	0.68	0.134	500	800	OK	0.15	232.924	231.907	230.535	230.383	230.083
166	82C48-82C8	31	167024	167	27447	27614	27.61	0.3196	0.79	0.399	800	1100	OK	0.03	232.907	232.845	230.083	230.054	
167	F29-C8	55	353745	394	0	394	0.39	0.0046	0.63	0.079	400	700	OK	0.08	232.860	232.845	231.460	231.382	
168	C8-F30	61	258267	238	28008	28247	28.25	0.3269	0.75	0.399	800	1100	OK	0.06	232.845	232.733	230.054	229.999	
169	F31-F30	19	193819	194	0	194	0.19	0.0022	0.63	0.079	400	700	OK	0.03	232.669	232.733	231.269	231.242	
170	82F30-	52	263774	264	28440	28704	28.70	0.3322	0.79	0.399	800	1100	OK	0.05	232.736	232.705	229.999	229.952	229.752
171	82E7-	100	1914935	1915	0	1915	1.91	0.0222	0.63	0.079	400	700	OK	0.14	232.245	232.553	231.846	231.703	
172	E6-B5	72	239556	240	1915	2154	2.15	0.0249	0.63	0.079	400	700	OK	0.10	232.553	232.671	231.703	231.609	
173	F9-B5	63	402185	402	0	402	0.40	0.0047	0.63	0.079	400	700	OK	0.09	232.545	232.671	232.145	232.055	
174	B5-B7	194	1698432	1498	2557	4055	4.06	0.0469	0.63	0.079	400	700	OK	0.28	232.671	232.980	231.600	231.323	
175	F33-B8	39	620832	623	0	623	0.62	0.0072	0.63	0.079	400	700	OK	0.06	234.070	234.030	232.670	232.614	
176	B8-B7	85	818231	818	623	1441	1.44	0.0167	0.63	0.079	400	700	OK	0.12	234.030	233.980	232.614	232.493	

Design Statement of Storm Water Drainage

Sr. No.	Line No.	Length	Quantity Storm water accumulated			Quantity of Waste Water generated			Discharge	Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall		Formation Level		Invert Level	
			L	4	5	KLD	Branch	Total	MLD	Cum.	M/sec	Cum.	mm		M	M	Upper end	Lower end	Upper end	Lower end
1	2	3																		
177	B7-F1	66	367453		587	5495			5.86	0.6079	0.63	0.079	400	OK	66	0.09	233.580	233.884	231.313	231.229
178	F9-F1	145	1155423		1195	0			1.20	0.0138	0.63	0.079	400	OK	145	0.21	233.545	233.844	232.145	231.938
179	F1-F2	54	368143		368	7049			7.43	0.0860	0.68	0.134	500	OK	54	0.07	233.884	233.801	231.129	231.061
180	F14-F2	141	945470		945	0			0.95	0.0110	0.63	0.079	400	OK	141	0.20	233.515	233.831	232.115	231.913
181	F1-F3	57	272806		273	8374			8.65	0.1001	0.68	0.134	500	OK	57	0.07	233.801	233.552	231.061	230.990
182	F19-F18	15	151155		151	0			0.15	0.0017	0.63	0.079	400	OK	15	0.02	233.550	233.523	232.150	232.129
183	F18-F16	25	27786		28	151			0.18	0.0021	0.63	0.079	400	OK	25	0.04	233.523	233.490	232.129	232.083
184	F11-F16	70	862236		862	0			0.86	0.0100	0.63	0.079	400	OK	70	0.10	233.323	233.400	231.923	231.823
185	F16-F15	40	306211		306	1841			1.35	0.0155	0.63	0.079	400	OK	40	0.06	233.490	233.266	231.823	231.766
186	F14-F15	25	317346		317	0			0.32	0.0037	0.63	0.079	400	OK	25	0.04	233.515	233.266	232.115	232.079
187	F15-F3	170	946470		946	1655			2.61	0.0302	0.63	0.079	400	OK	170	0.24	233.266	233.552	231.766	231.525
188	F3-F4	24	50107		50	11258			11.21	0.1309	0.68	0.134	500	OK	24	0.03	233.552	233.472	230.990	230.860
189	F12-F4	55	281390		281	0			0.28	0.0033	0.63	0.079	400	OK	55	0.08	233.551	233.472	232.151	232.073
190	F4-F5	24	295076		295	11589			11.88	0.1375	0.72	0.205	600	OK	24	0.03	233.472	233.264	230.860	230.833
191	F21-F20	76	550640		551	0			0.55	0.0064	0.63	0.079	400	OK	76	0.11	233.109	233.321	231.709	231.600
192	F20-F5	28	100889		201	551			0.75	0.0087	0.63	0.079	400	OK	28	0.04	233.321	233.364	231.600	231.560
193	F5-F6	67	1015357		1015	12636			13.65	0.1590	0.72	0.205	600	OK	67	0.07	233.364	233.030	230.833	230.799
194	F21-F6	54	373020		373	0			0.37	0.0045	0.63	0.079	400	OK	54	0.08	233.109	233.030	231.709	231.631
195	F24-F23	110	651394		651	0			0.65	0.0075	0.63	0.079	400	OK	110	0.16	233.271	233.121	231.871	231.714
196	F23-F6	54	300643		301	651			0.95	0.0110	0.63	0.079	400	OK	54	0.08	233.121	233.030	231.714	231.636
197	F6-F7	135	232176		757	14976			15.73	0.1821	0.72	0.205	600	OK	135	0.15	233.030	232.443	230.799	230.609
198	F26-F7	73	683676		684	0			0.68	0.0079	0.63	0.079	400	OK	73	0.10	232.443	232.443	231.149	231.045
199	F25-F7	23	223417		223	0			0.22	0.0026	0.63	0.079	400	OK	23	0.05	232.443	232.443	231.102	231.070
200	F7-F8	55	127350		127	16540			16.78	0.1941	0.72	0.205	600	OK	55	0.06	232.443	232.315	230.509	230.548
201	D1-F8	28	572275		572	0			0.57	0.0066	0.63	0.079	400	OK	28	0.04	232.315	232.315	230.811	230.771
202	F8-F27	48	267238		267	17340			17.61	0.2038	0.72	0.205	600	OK	48	0.05	232.315	232.380	230.548	230.394
203	F14-F36	38	337530		338	0			0.34	0.0039	0.63	0.079	400	OK	38	0.05	232.871	232.861	231.471	231.417
204	F36-F28	61	165524		166	338			0.50	0.0058	0.63	0.079	400	OK	61	0.09	232.861	232.669	231.417	231.330

Sheet No:-8

Design Statement of Storm Water Drainage

Sr. No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge		Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall	Formation Level			Invert Level		
				Quantity of Waste Water generated			Discharge								Formation Level			Invert Level		
				Self	Branch	Total	M.D	Cum.							M	M	M	M	M	M
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
205	F28-F27	148	901930	902	503	1405	1.40	0.0163	0.63	0.079	400	700	OK	0.21	232.669	232.580	231.330	231.118		
206	F27-D22	47	509462	509	19012	19522	19.52	0.2259	0.76	0.293	700	1000	OK	0.05	232.380	232.846	230.394	230.347		
207	D22-D38	53	416481	416	19522	19938	19.94	0.2308	0.76	0.293	700	1000	OK	0.05	232.846	232.772	230.347	230.294		
208	D40-D39	36	382725	353	0	353	0.35	0.0041	0.63	0.079	400	700	OK	0.05	232.794	232.782	231.294	231.343		
209	D39-D38	61	143559	144	353	496	0.50	0.0057	0.63	0.079	400	700	OK	0.09	232.782	232.772	231.343	231.256		
210	82D38-	174	1002144	1002	20435	21437	21.44	0.2481	0.76	0.293	700	1000	OK	0.17	232.772	232.705	230.294	230.120		
211	82D20-	69	120469	220	50141	50361	50.36	0.5829	0.85	0.665	1000	1300	OK	0.05	232.705	232.774	229.752	229.699		
212	D24-D23	63	417560	418	0	418	0.42	0.0048	0.63	0.079	400	700	OK	0.09	232.793	232.774	231.393	231.303		
213	82D23-	138	372918	376	50779	51155	51.15	0.5921	0.85	0.665	1000	1300	OK	0.11	232.774	232.538	229.699	229.592	229.492	
214	82C14-	137	1248399	1248	0	1248	1.25	0.0144	0.63	0.079	400	700	OK	0.29	232.410	232.239	231.010	230.814		
215	C35-C38	84	333426	333	1248	1582	1.58	0.0183	0.63	0.079	400	700	OK	0.12	232.239	231.952	230.814	230.694		
216	C40-C38	27	495696	496	0	496	0.50	0.0057	0.63	0.079	400	700	OK	0.04	231.772	231.952	230.372	230.333		
217	C38-C52	25	55571	56	2078	2133	2.13	0.0247	0.63	0.079	400	700	OK	0.04	231.952	231.969	230.333	230.298		
218	82C53-	134	859364	859	0	859	0.86	0.0099	0.63	0.079	400	700	OK	0.19	232.042	231.993	230.642	230.451		
219	C53-C52	81	187552	188	859	1047	1.06	0.0121	0.63	0.079	400	700	OK	0.12	231.993	231.969	230.451	230.335		
220	C52-C16	217	1620917	1621	3180	4801	4.80	0.0536	0.63	0.079	400	700	OK	0.31	231.969	232.281	230.298	229.988		
221	C41-C54	84	1753225	1753	0	1753	1.75	0.0203	0.63	0.079	400	700	OK	0.12	231.662	231.882	230.262	230.142		
222	C54-C20	105	312587	313	1753	2066	2.07	0.0239	0.63	0.079	400	700	OK	0.15	231.882	232.018	230.142	229.992		
223	C20-C18	82	187552	188	2066	2253	2.25	0.0261	0.63	0.079	400	700	OK	0.12	232.018	232.191	229.992	229.875		
224	C18-C16	40	324384	324	2253	2578	2.58	0.0298	0.63	0.079	400	700	OK	0.06	232.191	232.281	229.875	229.818	229.718	
225	83C16-	37	62517	63	7379	7441	7.44	0.0851	0.68	0.134	500	800	OK	0.05	232.281	232.338	229.718	229.672		
226	82D26-	48	190055	190	58596	58786	58.79	0.6804	0.87	0.827	1100	1400	OK	0.03	232.338	232.318	229.692	229.458		

Design Statement of Storm Water Drainage

St. No.	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge		Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall		Formation Level		Invert Level	
				Self	Branch	Total	M/D	Cu.m								Upper end/Lower end	M	Upper end	M
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
227	D27-D28	220	1759870	1760	58786	66546	60.55	0.7008	0.87	0.827	1100	1400	OK	0.16	232.218	232.245	229.458	229.501	
228	D28-D29	110	1042403	1042	66546	61588	61.59	0.7128	0.87	0.827	1100	1400	OK	0.08	232.245	232.275	229.501	229.522	
229	D29-D30	77	601043	601	0	601	0.60	0.0070	0.63	0.079	400	700	OK	0.11	232.822	232.775	231.422	231.512	
230	D30-D31	61	339616	340	62189	62529	62.53	0.7237	0.87	0.827	1100	1400	OK	0.04	232.775	232.715	229.212	229.179	229.079
231	D31-D32	50	1361102	1361	0	1361	1.36	0.0158	0.63	0.079	400	700	OK	0.07	232.098	232.178	229.698	230.626	
232	D32-D33	76	555201	555	1361	1916	1.92	0.0222	0.63	0.079	400	700	OK	0.11	232.178	232.618	230.626	230.518	
233	D33-D34	22	318780	319	0	319	0.32	0.0037	0.63	0.079	400	700	OK	0.03	231.636	231.618	230.226	230.194	
234	D34-D35	70	551778	552	2255	2787	2.79	0.0323	0.63	0.079	400	700	OK	0.10	231.618	231.542	230.194	230.094	
235	D35-D36	117	720214	720	0	720	0.72	0.0083	0.63	0.079	400	700	OK	0.17	231.542	231.542	229.560	229.792	
236	D36-D37	56	311778	312	3507	3819	3.82	0.0442	0.63	0.079	400	700	OK	0.08	231.542	231.401	229.792	229.712	
237	D37-D38	83	618418	618	0	618	0.62	0.0072	0.63	0.079	400	700	OK	0.12	231.295	231.401	229.895	229.777	
238	D38-D39	66	1339194	1339	4437	5776	5.78	0.0669	0.63	0.079	400	700	OK	0.09	231.401	231.380	229.715	229.619	
239	D39-D40	62	368157	368	5776	6145	6.14	0.0711	0.63	0.079	400	700	OK	0.09	231.380	231.362	229.619	229.538	
240	D40-D41	28	161457	161	0	161	0.16	0.0019	0.63	0.079	400	700	OK	0.04	231.512	231.562	230.112	230.072	
241	D41-D42	56	208016	208	6306	6514	6.51	0.0754	0.63	0.079	400	700	OK	0.08	231.562	231.551	229.550	229.450	
242	D42-D43	34	155889	156	8514	8670	8.67	0.0772	0.63	0.079	400	700	OK	0.05	231.551	231.523	229.450	229.402	
243	D43-D44	63	440296	440	0	440	0.44	0.0051	0.63	0.079	400	700	OK	0.09	231.523	231.523	230.125	230.033	
244	D44-D45	20	263575	264	7110	7374	7.41	0.0858	0.63	0.134	500	800	OK	0.03	231.343	231.339	229.302	229.277	
245	D45-D46	57	147877	148	3414	3562	3.56	0.0875	0.63	0.134	500	800	OK	0.07	231.339	231.383	229.277	229.206	
246	D46-D47	33	546935	547	0	547	0.55	0.0063	0.63	0.079	400	700	OK	0.05	231.383	231.383	229.995	229.948	
247	D47-D48	70	705375	705	8109	8814	8.81	0.1020	0.63	0.134	500	800	OK	0.09	231.383	232.723	229.206	229.118	
248	D48-D49	32	314218	314	71343	71657	71.66	0.8294	0.89	1.007	1200	1500	OK	0.02	232.723	232.521	229.079	229.057	
249	D49-D50	63	0	0	71657	71657	71.66	0.8294	0.89	1.007	1200	1500	OK	0.04	232.521	232.464	229.057	229.015	
250	D50-D51	39	0	0	0	0	0.00	0.0000	0.63	0.079	400	700	OK	0.06	232.464	232.464	229.848	230.792	
251	D51-D52	30	0	0	71657	71657	71.66	0.8294	0.89	1.007	1200	1500	OK	0.02	232.464	232.464	229.015	228.955	
252	D52-D53	43	170718	171	0	171	0.17	0.0020	0.63	0.079	400	700	OK	0.05	229.613	229.606	228.213	228.152	
253	D53-D54	45	388680	389	0	389	0.39	0.0045	0.63	0.079	400	700	OK	0.06	229.613	229.606	228.213	228.150	
254	D54-D55	55	261772	262	559	821	0.82	0.0095	0.63	0.079	400	700	OK	0.08	229.606	229.598	228.150	228.072	

Design Statement of Storm Water Drainage

Sr. No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge		Velocity	Flow	Size of Storm line	Slope	Length of Storm line		Fall		Formation Level			Invert Level										
				Quantity of Waste Water generated			Discharge										Formation Level			Invert Level										
				Self	Branch	Total	M/D	Cum.									Upper end	Lower end	Upper end	Lower end	Upper end	Lower end								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20											
255	C17-C10	87	51775	518	0	518	0.52	0.0060	0.63	0.079	400	700	OK	87	0.12	229.642	229.598	228.242	228.117											
256	C14-C10	77	42885	429	0	429	0.43	0.0050	0.63	0.079	400	700	OK	77	0.11	229.617	229.598	228.217	228.107											
257	C10-C9	58	219929	220	1768	1988	1.99	0.0230	0.63	0.079	400	700	OK	58	0.08	229.598	229.587	228.072	227.989											
258	C7-C9	72	617969	618	0	618	0.62	0.0072	0.63	0.079	400	700	OK	72	0.10	229.394	229.587	227.994	227.891											
259	C9-C6	47	498161	499	2606	3104	3.10	0.0359	0.63	0.079	400	700	OK	47	0.07	229.587	229.577	227.891	227.824											
260	C7-C6	85	592677	593	0	593	0.59	0.0069	0.63	0.079	400	700	OK	85	0.12	229.594	229.577	227.994	227.872											
261	C6-C5	74	180606	181	3497	3678	3.88	0.0449	0.63	0.079	400	700	OK	74	0.11	229.577	229.737	227.824	227.718											
262	B39-B38	90	756695	755	0	755	0.75	0.0087	0.63	0.079	400	700	OK	90	0.13	229.789	229.771	228.389	228.261											
263	B38-B37	49	64833	65	755	820	0.82	0.0095	0.63	0.079	400	700	OK	49	0.07	229.771	229.760	228.261	228.191											
264	B37-C5	105	581313	581	820	1401	1.40	0.0162	0.63	0.079	400	700	OK	105	0.15	229.760	229.737	228.191	228.041											
265	C5-C4	27	53256	53	5278	5332	5.33	0.0617	0.63	0.079	400	700	OK	27	0.04	229.737	229.777	227.718	227.679											
266	C20-C4	104	655416	655	0	655	0.66	0.0076	0.63	0.079	400	700	OK	104	0.15	229.798	229.777	228.398	228.250											
267	C4-C2	52	120404	120	5987	6108	6.11	0.0707	0.63	0.079	400	700	OK	52	0.07	229.777	229.895	227.679	227.605											
268	B41-B40	133	657169	657	0	657	0.66	0.0076	0.63	0.079	400	700	OK	133	0.19	230.892	229.972	229.492	229.302											
269	B42-B40	144	701055	701	0	701	0.70	0.0081	0.63	0.079	400	700	OK	144	0.21	230.002	229.972	228.602	228.396											
270	B40-C2	31	69464	69	1258	1428	1.43	0.0166	0.63	0.079	400	700	OK	31	0.04	229.972	229.895	228.396	228.352											
271	C17-C16	45	611808	612	0	612	0.61	0.0071	0.63	0.079	400	700	OK	45	0.06	229.642	229.730	228.242	228.177											
272	C18-C16	42	283941	284	0	284	0.28	0.0033	0.63	0.079	400	700	OK	42	0.06	229.739	229.730	228.359	228.279											
273	C16-C15	48	272806	273	896	1169	1.17	0.0155	0.63	0.079	400	700	OK	48	0.07	229.730	229.828	228.177	228.109											
274	C19-C15	51	335556	336	0	336	0.34	0.0039	0.63	0.079	400	700	OK	51	0.07	229.839	229.828	228.439	228.366											
275	C15-C2	31	67148	67	1504	1571	1.57	0.0182	0.63	0.079	400	700	OK	31	0.04	229.828	229.895	228.109	228.064											
276	C2-C1	30	95745	94	9107	9200	9.20	0.1065	0.68	0.134	500	800	OK	30	0.04	229.895	229.973	227.505	227.467											
277	C1-B35	60	152689	156	9200	9356	9.36	0.1083	0.68	0.134	500	800	OK	60	0.08	229.973	230.873	227.467	227.392											
278	B33-B34	15	83357	83	0	83	0.08	0.0010	0.63	0.079	400	700	OK	15	0.02	230.846	230.806	229.446	229.425											
279	B34-B35	37	85672	86	83	169	0.17	0.0020	0.63	0.079	400	700	OK	37	0.05	229.806	230.776	229.425	229.372											
280	B35-B36	39	90303	90	169	259	0.26	0.0030	0.63	0.079	400	700	OK	39	0.06	229.776	230.873	229.372	229.316											
281	B36-B15	176	1078537	1079	9815	10694	10.69	0.1238	0.68	0.134	500	800	OK	176	0.22	230.873	231.217	227.392	227.072											

Design Statement of Storm Water Drainage

Sr. No.	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge	Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall	Formation Level		Invert Level	
				Self	Branch	Total	MLD	Cum.	M/sec	Cum.	mm	M	M	M	M	M	M
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
282	B26-B27	50	164398	164	0	164	0.16	0.0019	0.63	0.079	400	700	OK	0.07	231.304	231.315	229.904
283	B27-B29	71	0	0	164	164	0.16	0.0019	0.63	0.079	400	700	OK	0.10	231.325	231.347	229.731
284	B31-B30	24	92618	93	0	93	0.09	0.0011	0.63	0.079	400	700	OK	0.03	231.151	231.196	229.751
285	B30-B29	40	92618	93	93	185	0.19	0.0021	0.63	0.079	400	700	OK	0.06	231.196	231.247	229.717
286	B29-B21	53	207817	308	350	657	0.66	0.0076	0.63	0.079	400	700	OK	0.08	231.247	231.328	229.584
287	B25-B21	64	756081	756	0	756	0.76	0.0088	0.63	0.079	400	700	OK	0.09	231.343	231.318	229.943
288	B21-B20	44	173496	173	1414	1587	1.59	0.0184	0.63	0.079	400	700	OK	0.06	231.328	231.337	229.584
289	B24-B20	45	217993	218	0	218	0.22	0.0025	0.63	0.079	400	700	OK	0.06	231.347	231.337	229.547
290	B20-B20	92	448052	449	0	449	0.45	0.0052	0.63	0.079	400	700	OK	0.13	231.157	231.337	229.797
291	B20-B19	47	167627	168	2254	2421	2.42	0.0280	0.63	0.079	400	700	OK	0.07	231.337	231.345	229.521
292	B31-B19	151	625631	626	0	626	0.63	0.0072	0.63	0.079	400	700	OK	0.19	231.153	231.345	229.752
293	B19-B18	40	126534	127	3047	3174	3.17	0.0367	0.63	0.079	400	700	OK	0.06	231.345	231.353	229.454
294	B23-B18	71	340613	341	0	341	0.34	0.0039	0.63	0.079	400	700	OK	0.10	231.376	231.353	229.976
295	B35-B18	149	733976	734	0	734	0.73	0.0085	0.63	0.079	400	700	OK	0.21	230.846	231.353	229.446
296	B18-B17	41	126652	127	4248	4375	4.37	0.0596	0.63	0.079	400	700	OK	0.06	231.353	231.339	229.735
297	B34-B17	157	791432	791	0	791	0.79	0.0092	0.63	0.079	400	700	OK	0.22	230.806	231.339	229.406
298	B17-B16	39	146204	146	5166	5312	5.31	0.0615	0.63	0.079	400	700	OK	0.06	231.359	231.369	229.175
299	B22-B16	60	261949	268	0	268	0.27	0.0031	0.63	0.079	400	700	OK	0.09	231.347	231.369	229.847
300	B35-B16	182	881187	881	0	881	0.88	0.0102	0.63	0.079	400	700	OK	0.26	230.776	231.369	229.116
301	B16-B15	36	136859	187	6462	6648	6.65	0.0769	0.63	0.079	400	700	OK	0.05	231.369	231.377	229.116
302	B15-B14	42	115460	115	17342	17458	17.46	0.2021	0.72	0.205	600	900	OK	0.05	231.327	231.318	227.072
303	B14-B17	53	289508	290	17458	1747	17.75	0.2054	0.76	0.293	700	1000	OK	0.05	231.318	231.308	226.926
304	B12-B17	35	211564	212	0	212	0.21	0.0024	0.63	0.079	400	700	OK	0.05	231.317	231.308	229.817
305	B7-B16	66	155136	155	17959	18114	18.11	0.2097	0.76	0.293	700	1000	OK	0.07	231.268	231.195	226.807
306	B11-B16	50	322913	323	0	323	0.32	0.0037	0.63	0.079	400	700	OK	0.07	231.266	231.195	229.806
307	B5-B15	31	74895	74	18437	18511	18.51	0.2142	0.76	0.293	700	1000	OK	0.03	231.195	231.162	226.807
308	B10-B15	35	211564	212	0	212	0.21	0.0024	0.63	0.079	400	700	OK	0.05	231.171	231.162	229.771
309	B5-B14	48	111142	111	18722	18834	18.83	0.2180	0.76	0.293	700	1000	OK	0.05	231.162	231.113	226.776
310	B9-B14	35	211564	212	0	212	0.21	0.0024	0.63	0.079	400	700	OK	0.05	231.126	231.113	229.726
311	B4-B13	31	172592	173	19045	19218	19.22	0.2224	0.76	0.293	700	1000	OK	0.03	231.113	231.098	226.728
312	B8-B13	18	150322	150	0	150	0.15	0.0017	0.63	0.079	400	700	OK	0.03	231.103	231.098	229.705
																	229.637

Design Statement of Storm Water Drainage

Sr. No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge			Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall	Formation Level		Invert Level	
				Self	Branch	Total	KLD	MLD	Cum.	M/sec	Cum.	mm				M	M	M	M
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
313	B3-B2	167	1113671	1114	19168	20482	20482	0.2371	0.16	0.293	700	1000	OK	167	0.17	231.098	231.017	226.697	226.530
314	B2-B1	17	34732	35	20482	20516	20516	0.2371	0.16	0.293	700	1000	OK	17	0.02	231.017	231.237	226.530	226.513
315	A6-A5	40	272806	273	0	273	0.273	0.0032	0.63	0.079	400	700	OK	40	0.06	230.243	230.232	228.843	228.786
316	A5-A4	97	261021	261	273	534	0.534	0.0062	0.63	0.079	400	700	OK	97	0.14	230.232	230.213	228.786	228.647
317	A4-A3	52	742760	743	534	1277	1.277	0.0148	0.63	0.079	400	700	OK	52	0.07	230.213	230.422	228.647	228.573
318	A3-A2	64	1695919	1695	0	1695	1.70	0.0156	0.63	0.079	400	700	OK	64	0.09	230.669	230.422	229.269	229.177
319	A2-A1	30	53256	53	2972	3025	3.02	0.0550	0.63	0.079	400	700	OK	39	0.06	230.422	230.613	228.573	228.517
320	85A1-85B1	154	1593795	1594	3025	4619	4.62	0.0555	0.63	0.079	400	700	OK	154	0.22	230.613	231.237	228.517	228.297
321	85B1-OUTFALL	30	0	0	25135	25135	25.14	0.2909	0.76	0.293	700	1000	OK	30	0.03	231.237	231.237	226.513	226.483
322	83A-36	91	1342906	1343	0	1343	1.34	0.0155	0.63	0.079	400	700	OK	91	0.13	231.890	0.000	230.499	230.360
323	A36-A38	21	63644	64	1343	1406	1.41	0.0162	0.63	0.079	400	700	OK	21	0.03	0.000	0.000	230.360	230.330
324	A38-A40	37	258617	259	1406	1665	1.66	0.0193	0.63	0.079	400	700	OK	37	0.05	0.000	0.000	230.350	230.277
325	A40-A51	26	60202	60	1665	1725	1.72	0.0200	0.63	0.079	400	700	OK	26	0.04	0.000	231.465	230.277	230.240
326	A51-A41	140	1131519	1132	1725	2856	2.86	0.0331	0.63	0.079	400	700	OK	140	0.20	231.465	0.000	230.240	230.040
327	E7-E7	34	1247702	1243	0	1243	1.24	0.0144	0.63	0.079	400	700	OK	34	0.05	231.643	250.675	230.243	230.194
328	E7-A41	30	325427	325	1243	1568	1.57	0.0181	0.63	0.079	400	700	OK	30	0.04	230.675	0.000	230.194	230.152
329	A41-E6	19	111349	111	4125	4536	4.54	0.0525	0.63	0.079	400	700	OK	19	0.03	0.000	230.240	230.040	230.013
330	E6-E6	111	666281	666	0	666	0.67	0.0077	0.63	0.079	400	700	OK	111	0.16	0.474	230.240	-0.926	-1.084
331	E6-A42	37	236347	236	5202	5439	5.44	0.0629	0.63	0.079	400	700	OK	37	0.05	230.240	231.768	-1.084	-1.137
332	A48-A49	26	876696	877	0	877	0.88	0.0101	0.63	0.079	400	700	OK	26	0.04	232.290	232.360	230.890	230.853
333	A49-A50	162	965337	965	877	1842	1.84	0.0213	0.63	0.079	400	700	OK	162	0.23	232.360	232.098	230.855	230.621
334	A50-A42	156	1153641	1154	1842	2996	3.00	0.0547	0.63	0.079	400	700	OK	156	0.22	232.098	231.768	230.821	230.598
335	A42-A56	13	72377	72	8434	8507	8.51	0.0985	0.68	0.134	500	800	OK	13	0.02	231.768	231.219	-1.237	-1.263
336	E5-A56	82	607866	608	0	608	0.61	0.0070	0.63	0.079	400	700	OK	82	0.12	231.750	231.219	230.350	230.233
337	A56-A43	40	313752	314	9114	9428	9.43	0.1091	0.68	0.134	500	800	OK	40	0.05	231.219	231.179	-1.253	-1.303
338	A58-A43	46	488318	488	0	488	0.49	0.0057	0.63	0.079	400	700	OK	46	0.07	0.000	231.179	-1.400	-1.466

Design Statement of Storm Water Drainage

St. No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated				Discharge	Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall	Formation Level		Invert Level		
				Self	Branch	Total	KLD	MLD	Cum.	M/sec	Cum.	mm			Upper end	Lower end	Upper end	Lower end	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
339	A43-A47	10	32980	33	9917	9950	9.95	0.1152	0.63	0.134	500	800	OK	0.01	231.179	230.571	-1.456	-1.475	
340	A47-A44	46	291017	291	9950	10241	10.24	0.1185	0.68	0.134	500	800	OK	0.06	230.971	230.763	-1.478	-1.536	
341	A44-A44	91	568837	569	0	569	0.57	0.0666	0.63	0.079	400	700	OK	0.13	0.000	230.703	-1.400	-1.530	
342	A44-A45	57	306211	306	10809	11116	11.12	0.1287	0.68	0.134	500	800	OK	0.07	230.703	0.000	-1.536	-1.607	
343	A47-A46	44	386632	387	0	387	0.39	0.0045	0.63	0.079	400	700	OK	0.06	0.000	0.000	-1.400	-1.463	
344	B1-A46	48	347697	348	0	348	0.35	0.0040	0.63	0.079	400	700	OK	0.07	0.000	0.000	-1.400	-1.469	
345	A46-A45	71	917331	917	734	1652	1.65	0.0191	0.63	0.079	400	700	OK	0.10	0.000	0.000	-1.469	-1.570	
346	A45-B12	208	1880392	1880	12767	14648	14.65	0.1695	0.68	0.134	500	800	CHFC	0.26	0.000	230.438	-1.607	-1.867	
347	B12-B16	110	692880	693	0	693	0.69	0.0080	0.63	0.079	400	700	OK	0.16	230.710	0.000	230.310	229.155	
348	E17-E15	81	508148	508	0	508	0.51	0.0059	0.63	0.079	400	700	OK	0.12	230.850	0.000	230.450	229.334	
349	E15-E5	65	359750	351	1201	1552	1.55	0.0180	0.63	0.079	400	700	OK	0.09	0.000	230.402	229.153	229.060	
350	E5-E3	107	1242702	1243	0	1243	1.24	0.0144	0.65	0.079	400	700	OK	0.15	231.294	230.402	229.894	229.742	
351	E3-E4	49	113458	113	2794	2908	2.91	0.0327	0.63	0.079	400	700	OK	0.07	230.402	0.000	230.060	228.990	
352	E4-E4	75	666381	666	0	666	0.67	0.0073	0.63	0.079	400	700	OK	0.11	0.394	0.000	-1.096	-1.113	
353	E4-E14	115	677686	678	3574	4252	4.25	0.0492	0.63	0.079	400	700	OK	0.16	0.000	0.000	-1.113	-1.277	
354	E14-E13	55	214416	214	4332	4466	4.47	0.0517	0.63	0.079	400	700	OK	0.08	0.000	0.000	-1.237	-1.356	
355	E13-E13	102	200961	201	0	201	0.20	0.0081	0.63	0.079	400	700	OK	0.10	230.093	0.000	228.693	228.547	
356	E13-E11	39	204451	204	5167	5372	5.37	0.0622	0.63	0.079	400	700	OK	0.06	0.000	0.000	-1.356	-1.411	
357	E12-E11	43	328444	328	0	328	0.33	0.0038	0.63	0.079	400	700	OK	0.06	229.988	0.000	228.588	228.527	
358	E11-E10	32	69464	69	5700	5770	5.77	0.0648	0.63	0.079	400	700	OK	0.05	0.000	0.000	-1.411	-1.457	
359	E3-E10	37	369950	370	0	370	0.37	0.0043	0.63	0.079	400	700	OK	0.05	0.000	0.000	-1.400	-1.453	
360	E3-E10	160	1012200	1012	6140	7152	7.15	0.0828	0.68	0.134	500	800	OK	0.20	0.000	0.000	-1.553	-1.752	
361	E2-E2	113	774810	775	0	775	0.77	0.0090	0.63	0.079	400	700	OK	0.16	229.893	0.000	228.493	228.311	
362	E2-E1	49	113458	113	7927	8040	8.04	0.0931	0.68	0.134	500	800	OK	0.06	0.000	0.000	-1.753	-1.814	
363	A44-E1	167	1321427	1321	0	1321	1.32	0.0153	0.63	0.079	400	700	OK	0.24	0.000	0.000	-1.400	-1.639	
364	E3-E1	125	903989	994	0	994	0.99	0.0115	0.63	0.079	400	700	OK	0.18	0.000	0.000	-1.400	-1.579	
365	B3-E1	25	129666	130	10355	10485	10.49	0.1214	0.68	0.134	500	800	OK	0.07	0.000	230.438	-1.814	-1.885	-2.083
366	B3-B12	18	131619	134	25133	25266	25.27	0.2924	0.76	0.293	700	1000	OK	0.02	230.438	229.738	-2.083	-2.101	
367	B3C12-C6	180	1468547	1469	0	1469	1.47	0.0170	0.63	0.079	400	700	OK	0.26	228.747	228.747	227.247	227.090	
368	C6-C7	58	135421	133	1469	1602	1.60	0.0185	0.63	0.079	400	700	OK	0.08	228.747	0.000	227.090	227.007	226.907

Design Statement of Storm Water Drainage

Sr. No	Line No.	Length	Quantity Storm water accumulated	Quantity of Waste Water generated			Discharge		Velocity	Flow	Size of Storm line	Slope	Length of Storm line	Fall	Formation Level			Invert Level	
				Self	Branch	Total	MLD	Cum.							Upper end	Lower end	Upper end	Lower end	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
369	C12-C8	117	4686593	4687	0	4687	4.69	0.0542	0.63	0.079	400	700	OK	0.17	228.334	0.000	226.934	226.767	
370	C8-C7	25	188553	189	4687	4875	4.88	0.0564	0.63	0.079	400	700	OK	0.04	0.000	0.000	226.767	226.731	
371	C7-C10	80	346255	346	6477	6823	6.82	0.0790	0.68	0.134	500	800	OK	0.10	0.000	0.000	226.731	226.631	
372	C11-C10	61	356318	356	0	356	0.36	0.0041	0.63	0.079	400	700	OK	0.09	235.243	0.000	233.843	233.756	
373	C10-S3B12	215	1341145	1341	7180	8521	8.52	0.0986	0.68	0.134	500	800	OK	0.27	0.000	229.734	226.631	226.362	226.062
374	S3B12-	23	53356	53	35787	36320	3.63	0.3917	0.79	0.399	800	1100	OK	0.02	229.738	228.529	-2.101	-2.122	
375	B13-B14	43	324384	324	35840	36165	3.61	0.3934	0.79	0.399	800	1100	OK	0.04	228.529	229.716	-2.122	-2.161	-2.261
376	B14-B17	55	517124	517	34165	34682	3.46	0.4014	0.82	0.523	900	1200	OK	0.05	229.716	229.494	-2.261	-2.307	
377	B17-B27	11	18524	19	34682	34701	3.47	0.4016	0.82	0.523	900	1200	OK	0.01	229.494	229.277	-2.307	-2.316	
378	B27-B19	52	635601	634	34701	35334	3.53	0.4090	0.82	0.523	900	1200	OK	0.04	229.277	229.332	-2.316	-2.359	
379	B19-B21	41	285150	285	35334	35599	3.56	0.4120	0.82	0.523	900	1200	OK	0.03	229.332	229.646	-2.359	-2.393	
380	B21-B22	14	32416	32	35599	35632	3.63	0.4124	0.82	0.523	900	1200	OK	0.01	229.646	229.806	-2.393	-2.405	
381	S3B22-	51	201445	201	35632	35833	3.83	0.4147	0.82	0.523	900	1200	OK	0.04	229.806	229.906	-2.405	-2.448	
382	S3B22-S3B3	22	175057	173	0	173	0.17	0.0020	0.63	0.079	400	700	OK	0.03	230.760	230.760	229.360	229.328	
383	B3-B4	56	178228	178	173	351	0.35	0.0041	0.63	0.079	400	700	OK	0.08	230.760	0.000	229.328	229.248	
384	B6-B4	57	380599	381	0	381	0.38	0.0044	0.63	0.079	400	700	OK	0.08	230.749	0.000	229.249	229.268	
385	B4-B5	85	180506	181	732	912	0.91	0.0106	0.63	0.079	400	700	OK	0.12	0.000	230.018	229.248	229.127	
386	B5-S3B5	244	1751445	1751	912	2664	2.66	0.0308	0.63	0.079	400	700	OK	0.35	230.018	229.906	229.127	228.778	
387	S3B5- OUTFALL	30	0	0	38497	38497	38.50	0.4456	0.82	0.523	900	1200	OK	0.03	229.906	229.906	-2.448	-2.473	
388	S4E3-S4E2	49	275637	276	0	276	0.28	0.0032	0.63	0.079	400	700	OK	0.07	228.124	228.114	226.724	226.654	
389	S4-E2	29	150245	156	0	156	0.14	0.0016	0.63	0.079	400	700	OK	0.04	228.120	228.114	226.720	226.678	
390	E2-E1	21	118124	118	412	530	0.53	0.0061	0.63	0.079	400	700	OK	0.03	228.114	228.110	226.654	226.624	
391	E1-A7	59	156612	157	530	687	0.67	0.0077	0.63	0.079	400	700	OK	0.08	228.110	228.375	226.674	226.540	
392	A7-D23	92	730736	731	687	1397	1.40	0.0162	0.63	0.079	400	700	OK	0.13	228.375	228.092	226.540	226.408	
393	D23-D7	74	207666	208	1397	1605	1.61	0.0186	0.63	0.079	400	700	OK	0.11	228.092	228.934	226.408	226.303	
394	D20-D7	75	501072	501	0	501	0.50	0.0058	0.63	0.079	400	700	OK	0.11	228.938	228.934	227.518	227.411	
395	D7-D21	23	50940	51	2106	2157	2.16	0.0250	0.63	0.079	400	700	OK	0.05	228.934	228.936	226.303	226.270	

Appurtenances of Storm Water

St. No	Line No.	Length	Storm Pipe										No of Manhole																						
			Line 400 mm i/d	Length	M	Length	Line 500 mm i/d	Length	M	Length	Line 600 mm i/d	Length	Line 700 mm i/d	Length	M	Length	Line 800 mm i/d	Length	M	Length	Line 900 mm i/d	Length	Line 1000 mm i/d	Length	Line 1100 mm i/d	Length	Line 1200 mm i/d	No	No	No	No	No	No	No	
1	2	3	4	6	8	10	12	14	16	18	19	20	21	22	23	24	25	26																	
1	83E30-	28	28																																
2	E34-E29	50	50																																
3	E29-E27	71	71																																
4	E33-E27	87	87																																
5	E28-E26	81	81																																
6	E26-E27	68	68																																
7	E27-E21	158	158																																
8	E20-E21	36	36																																
9	E22-E21	36	36																																
10	A22-E22	78	78																																
11	A21-A22	76	76																																
12	A23-E23	26	26																																
13	E25-E23	29	29																																
14	A14-E25	86	86																																
15	A60-A59	100	100																																
16	A59-A14	131	131																																
17	A11-A14	56	56																																
18	A10-A11	181	181																																
19	A13-A10	40	40																																
20	83A2-83A5	44	44																																
21	A5-A4	199	199																																
22	A8-A4	53	53																																
23	A4-A4	25	25																																
24	A4-A7	56	56																																
25	A70-A7	62	62																																
26	A7-A7	92	92																																
27	A7-A10	53	53																																
28	A9-A10	181	181																																

Appurtenances of Storm Water

Sr. No	Line No.	Length	Storm Pipe Line 400 mm i/d		Storm Pipe Line 600 mm i/d		Storm Pipe Line 700 mm i/d		Storm Pipe Line 800 mm i/d		Storm Pipe Line 900 mm i/d		Storm Pipe Line 1100 mm i/d		Storm Pipe Line 1200 mm i/d		No of Manhole										
			mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	400 mm i/d	500 mm i/d	600 mm i/d	700 mm i/d	800 mm i/d	900 mm i/d	1000 mm i/d	1100 mm i/d	1200 mm i/d
1	2	3	M	4	M	6	M	8	M	10	M	12	M	14	M	16	M	18	19	20	21	22	23	24	25	26	No
29	A3-A5	32	✓																								No
30	A3-A6	56	✓																								No
31	A20-A6	41	✓																								No
32	A6-A9	53	✓																								No
33	A18-A15	25	✓																								No
34	A16-A15	32	✓																								No
35	A15-A12	53	✓																								No
36	A19-A12	51	✓																								No
37	A12-A9	56	✓																								No
38	83A9-OUTFALL	30										30										2					No
39	82A31-	66	✓																								No
40	A34-A33	12	✓																								No
41	A33-A35	50	✓																								No
42	A37-A36	14	✓																								No
43	A36-A35	50	✓																								No
44	A35-A32	55	✓																								No
45	A48-A31	26	✓																								No
46	A31-A32	55	✓																								No
47	A32-A6	44	✓																								No
48	A37-A37	84	✓																								No
49	A37-A6	12	✓																								No
50	A6-A5	71	✓																								No
51	A61-A5	25	✓																								No
52	A17-A5	71	✓																								No

Appurtenances of Storm Water

Sr. No	Line No.	Length	Storm Pipe										No of Mahade																
			Line 400 mm i/d	Length	Storm Pipe Line 500 mm i/d	Length	Storm Pipe Line 600 mm i/d	Length	Storm Pipe Line 700 mm i/d	Length	Storm Pipe Line 800 mm i/d	Length	Storm Pipe Line 900 mm i/d	Length	Storm Pipe Line 1000 mm i/d	Length	Storm Pipe Line 1100 mm i/d	Length	Storm Pipe Line 1200 mm i/d	400 mm i/d	500 mm i/d	600 mm i/d	700 mm i/d	800 mm i/d	900 mm i/d	1000 mm i/d	1100 mm i/d	1200 mm i/d	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
53	A16-A17	56	36																										
54	A20-A15	13	13																										
55	A21-A20	7	7																										
56	A20-A16	71	71																										
57	A15-A16	78	78																										
58	A15-A14	27	27																										
59	A14-A14	51	51																										
60	A14-A10	99	99																										
61	A28-A27	76	76																										
62	A27-A26	73	73																										
63	A26-A25	79	79																										
64	A25-A24	64	64																										
65	A24-A23	102	102																										
66	A23-A22	86	86																										
67	A22-A10	90	90																										
68	A10-A9	67	67																										
69	A8-A9	20	20																										
70	A9-A58	97	97																										
71	A58-A3	71	71																										
72	A3-A2	7	7																										
73	A2-A1	55	55																										
74	82A55-A1	116	116																										
	82A46-	39	39																										
	82A45-	10	10																										
	82A63-	70	70																										
	82A44-	63	63																										
	82A62-	11	11																										
	82A64-	84	84																										
	82A43-	30	30																										

Appurtenances of Storm Water

St. No	Line No.	Length	Storm Pipe										No of Manhole									
			Line 400 man id	Line 500 man id	Line 600 man id	Line 700 man id	Line 800 man id	Line 900 man id	Line 1000 man id	Line 1100 man id	Line 1200 man id	400 mm id	500 mm id	600 mm id	700 mm id	800 mm id	900 mm id	1000 man id	1100 man id	1200 man id		
1	2	3	4	6	8	10	12	14	16	16	16	18	19	20	21	22	23	24	25	26		
75	82A7-A1	55	55									3				2						
76	82A1- OUTFALL	30				30																
77	82B24-	41	41									3										
78	82B3- B3	225	225									11										
79	82B4- B4	172	172									9										
80	82B3- B3	54	54									3										
81	82B2- B2	57	57									3										
82	82B2- B2	55	55									3										
83	82B3- B3	68	68									3										
84	82B4- B4	43	43									3										
85	82B3- B3	55	55									3										
86	82B17-	19	19									1										
87	82B16-B15	119	119									6										
88	82B15-E1	209	209									10										
89	82B1-E1	54	54									3										
90	82B1-E2	106	106									5										
91	82B2-E3	54	54									2										
92	82B3-E12	127	127									6										
93	82B12-E14	44	44									2										
94	82B10-	239	239									12										
95	82B16-E17	70	70									4										
96	82B17-E11	144	144									7										
97	82B21-E11	14	14									1										
98	82B11-E11	90	90									5										

Appurtenances of Storm Water

Sr. No	Line No	Length	Storm Pipe Line 400		Storm Pipe Line 500		Storm Pipe Line 600		Storm Pipe Line 700		Storm Pipe Line 800		Storm Pipe Line 900		Storm Pipe Line 1000		Storm Pipe Line 1100		Storm Pipe Line 1200		No of Mahole																		
			mm i/d	Length	M	M	mm i/d	Length	M	M	mm i/d	Length	M	M	mm i/d	Length	M	M	mm i/d	Length	400 mm i/d	No.	500 mm i/d	No.	600 mm i/d	No.	700 mm i/d	No.	800 mm i/d	No.	900 mm i/d	No.	1000 mm i/d	No.	1100 mm i/d	No.	1200 mm i/d	No.	
1	2	3	4	55	✓	6	8		10	70	12	14	14	16	16							18	3	19	20	21	22	23	24	25	26								
99	E11- E12																																						
100	E18- E12	130				130																																	
101	E18-E19	88				88																																	
102	E5-E15	81	✓		81																																		
103	E20-E15	133	✓		133																																		
104	E15-E14	54	✓		54																																		
105	E4-E14	84	✓		84																																		
106	E14-E19	180	✓		180																																		
107	82E19-	70							70																		4												
108	82E26-	64	✓		64																																		
109	82E24- OUTFALL	30							30																		2												
110	83A35-	62	✓		62																																		
111	A32-A31	55	✓		55																																		
112	A31-A34	61	✓		61																																		
113	A33-A34	73	✓		73																																		
114	83A34-	135	✓		135																																		
115	83A29- OUTFALL	30	✓		30																																		
116	82B21-	109	✓		109																																		
117	B22-B27	58	✓		58																																		
118	B28- B27	81	✓		81																																		
119	B27- B26	47	✓		47																																		
120	B34- B26	113	✓		113																																		
121	B26-B25	10	✓		10																																		
122	B23- B25	62	✓		62																																		

Appurtenances of Storm Water

Sl. No	Line No.	Length	Storm Pipe Line 400		Storm Pipe Line 500		Storm Pipe Line 600		Storm Pipe Line 700		Storm Pipe Line 800		Storm Pipe Line 900		Storm Pipe Line 1000		Storm Pipe Line 1100		Storm Pipe Line 1200		No of Manhole									
			mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	400 mm i/d	500 mm i/d	600 mm i/d	700 mm i/d	800 mm i/d	900 mm i/d	1000 mm i/d	1100 mm i/d	1200 mm i/d	
1	2	3		4	6	8	10	12	14	14	14	14	14	14	14	14	14	14	14	14										
113	B15-B32	48	48																											
124	B35- B32	105	105																											
125	B32- B31	6	6																											
126	B33- B31	34	34																											
127	B31-B9	62	62																											
128	B9- B10	56	56																											
129	C4-C2	53	53																											
130	C2-F35	21	21																											
131	F35-F32	40	40																											
132	F32-B10	93	93																											
133	B10-B11	54	54																											
134	B12-B11	114	114																											
135	B11-C1	66	66																											
136	F35-C1	22	22																											
137	C1-C21	170	170																											
138	C21-C21	13	13																											
139	C21-C22	64	64				64																							
140	C22-C24	34	34				34																							
141	C24-C42	93	93				93																							
142	C43-C43	31	31																											
143	C43-C42	57	57																											
144	C42-C44	62	62				62																							
145	C44-C45	37	37				37																							
146	C45-C26	40	40				40																							
147	C27-C26	37	37																											
148	C26-C25	68	68				68																							
149	C25-C47	125	125				125																							
150	C47-C7	66	66				66																							
151	82C7-	26	26				26																							
152	82C30-	13	13																											

Appurtenances of Storm Water

St. No	Line No.	Length	Storm Pipe Line 400		Storm Pipe Line 500		Storm Pipe Line 600		Storm Pipe Line 700		Storm Pipe Line 800		Storm Pipe Line 900		Storm Pipe Line 1000		Storm Pipe Line 1100		Storm Pipe Line 1200		No. of Manhole																		
			mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	400 mm i/d	No.	500 mm i/d	No.	600 mm i/d	No.	700 mm i/d	No.	800 mm i/d	No.	900 mm i/d	No.	1000 mm i/d	No.	1100 mm i/d	No.	1200 mm i/d	No.	
1	2	3																																					
153	C49-C30	78	78																																				
154	C30-C31	59	59																																				
155	C31-C32	33	33																																				
156	C32-C33	55	55																																				
157	812-B7	132	132																																				
158	811-B7	15	15																																				
159	B7-82C34	87	87																																				
160	C34-C39	109		109																																			
161	C12-C35	144	144																																				
162	C35-C50	90	90																																				
163	C51-C50	57	57																																				
164	C50-C33	72		72																																			
165	82C33-	122		122																																			
166	82C48-82C8	31																																					
167	F29-C8	55	55																																				
168	C8-F30	61																																					
169	F31-F30	19	19																																				
170	82F30-	52																																					
171	82E7-	100	100																																				
172	E6-B5	72	72																																				
173	F9-B5	63	63																																				
174	B5-B7	194	194																																				
175	F31-B8	39	39																																				
176	B6-B7	85	85																																				

Appurtenances of Storm Water

Sl. No	Line No.	Length	No. of Manhole																	
			Storm Pipe Line 400 mm i/d	Storm Pipe Line 500 mm i/d	Storm Pipe Line 600 mm i/d	Storm Pipe Line 700 mm i/d	Storm Pipe Line 800 mm i/d	Storm Pipe Line 900 mm i/d	Storm Pipe Line 1000 mm i/d	Storm Pipe Line 1100 mm i/d	Storm Pipe Line 1200 mm i/d	400 mm i/d	500 mm i/d	600 mm i/d	700 mm i/d	800 mm i/d	900 mm i/d	1000 mm i/d	1100 mm i/d	1200 mm i/d
	2	3																		
177	B7- F1	66																		
178	F9- F1	145																		
179	F1- F2	54		54																
180	F14- F2	141																		
181	F2-F3	57		57																
182	F19-F18	15																		
183	F18-F16	25																		
184	F11-F16	70																		
185	F16-F15	40																		
186	F14-F15	25																		
187	F15-F3	170																		
188	F3-F4	24		24																
189	F12- F4	55																		
190	F4- F5	24			24															
191	F21-F20	76																		
192	F20-F3	28																		
193	F3- F6	67			67															
194	F21-F6	54																		
195	F24-F23	110																		
196	F23- F6	54																		
197	F6- F7	135			135															
198	F26- F7	73																		
199	F25- F7	23																		
200	F7- F8	55			55															
201	D1- F8	28																		
202	F8- F27	48			48															
203	F34-F36	38																		
204	F36-F28	61																		

Appurtenances of Storm Water

Sr. No	Line No.	Length	Storm Pipe Line 400		Storm Pipe Line 500		Storm Pipe Line 600		Storm Pipe Line 700		Storm Pipe Line 800		Storm Pipe Line 900		Storm Pipe Line 1000		Storm Pipe Line 1100		Storm Pipe Line 1200		No. of Manhole										
			mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	mm i/d	Length	400 mm i/d	500 mm i/d	600 mm i/d	700 mm i/d	800 mm i/d	900 mm i/d	1000 mm i/d	1100 mm i/d	1200 mm i/d
1	2	3	M	4	M	6	M	8	M	10	M	12	M	14	M	16	M	18	M	20	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
205	F28-F27	148	148																		7										
206	F27-D22	47							47															2							
207	D22- D38	53							53														3								
208	D40- D39	56	56																												
209	D39- D38	61	61																												
210	82D38-	174							174															9							
211	82D20-	69													69																3
212	D24-D23	63	63																												7
213	82D23-	138													138																
214	82C14-	137	137																												
215	C36-C38	84	84																												
216	C40-C38	27	27																												
217	C38-C52	25	25																												
218	82C53-	134	134																												
219	C53-C52	81	81																												
220	C52-C16	217	217																												
221	C41-C54	84	84																												
222	C54-C20	105	105																												
223	C20-C18	82	82																												
224	C18-C16	40	40																												
225	82C16-	37				37																									
226	82D26-	48																													2

Appurtenances of Storm Water

Sr. No.	Line No.	Length	Storm Pipe Line 400 mm i/d			Storm Pipe Line 500 mm i/d			Storm Pipe Line 600 mm i/d			Storm Pipe Line 700 mm i/d			Storm Pipe Line 800 mm i/d			Storm Pipe Line 900 mm i/d			Storm Pipe Line 1000 mm i/d			Storm Pipe Line 1100 mm i/d			Storm Pipe Line 1200 mm i/d		
			Length	M	No.	Length	M	No.	Length	M	No.	Length	M	No.	Length	M	No.	Length	M	No.	Length	M	No.	Length	M	No.	Length	M	No.
1	2	3		4	6	8	10	12	14	14	16	16	18	19	20	21	22	23	23	24	25	25	26	26	26	26	26	26	
227	D27-D28	220																											
228	D28-D29	110																											
229	D25-D29	77	77																										
230	D29-61	61									61																		
231	82D3-	50	50																										
232	D2-D6	76	76																										
233	D5-D6	22	22																										
234	D6-D7	70	70																										
235	D8-D7	117	117																										
236	D7-D11	56	56																										
237	D14-D11	83	83																										
238	D11-D15	66	66																										
239	D15-D16	62	62																										
240	D18-D16	28	28																										
241	D16-D19	56	56																										
242	D19-D17	34	34																										
243	D41-D17	63	63																										
244	82D17-	20	20																										
245	82D21-	57	57																										
246	D34-D33	33	33																										
247	D33-D32	70	70																										
248	D31-D32	32	32																										
249	82D31-	63	63																										
250	82D36-	39	39																										
251	82D35- OUTFALL	30	30																										
252	85C12-	43	43																										
253	C21-C11	45	45																										
254	C11-C10	55	55																										

Appurtenances of Storm Water

Sr. No.	Line No.	Length	Storm Pipe										No. of Manhole									
			Line 400 mm i/d	Line 500 mm i/d	Line 600 mm i/d	Line 700 mm i/d	Line 800 mm i/d	Line 900 mm i/d	Line 1000 mm i/d	Line 1100 mm i/d	Line 1200 mm i/d	400 mm i/d	500 mm i/d	600 mm i/d	700 mm i/d	800 mm i/d	900 mm i/d	1000 mm i/d	1100 mm i/d	1200 mm i/d	No.	No.
1	2	3	4	6	8	10	12	14	14	16	16	18	19	20	21	22	23	24	25	26		
245	C17-C10	87	17									4										
246	C14-C10	77	77									4										
257	C10-C9	58	58									3										
258	C7-C9	72	72									4										
259	C9-C6	47	47									2										
260	C7-C6	85	85									4										
261	C6-C5	74	74									4										
262	B39-B38	90	90									5										
263	B38-B37	49	49									2										
264	B37-C5	105	105									5										
265	C5-C4	27	27									1										
266	C20-C4	104	104									5										
267	C4-C3	52	52									3										
268	B41-B40	133	133									7										
269	B42-B40	144	144									7										
270	B40-C2	31	31									2										
271	C17-C16	45	45									2										
272	C18-C16	42	42									2										
273	C16-C15	48	48									2										
274	C19-C15	51	51									3										
275	C15-C2	31	31									2										
276	C2-C1	30	30										2									
277	C1-B36	60	60										3									
278	B33-B34	15	15									1										
279	B34-B35	37	37									2										
280	B35-B36	39	39									2										
281	B36-B35	176	176										9									

Appurtenances of Storm Water

Sr. No.	Line No.	Length	No. of Manhole									
			Storm Pipe Line 400 mm i/d	Storm Pipe Line 500 mm i/d	Storm Pipe Line 600 mm i/d	Storm Pipe Line 700 mm i/d	Storm Pipe Line 800 mm i/d	Storm Pipe Line 900 mm i/d	Storm Pipe Line 1000 mm i/d	Storm Pipe Line 1100 mm i/d	Storm Pipe Line 1200 mm i/d	
			Length	Length	Length	Length	Length	Length	Length	Length	Length	
			M	M	M	M	M	M	M	M	M	
			4	6	8	10	12	14	14	16	16	
282	B26- B27	50	50									
283	B27- B29	71	71									
284	B31- B30	24	24									
285	B30- B29	40	40									
286	B29-B21	53	53									
287	B25-B21	64	64									
288	B21-B20	44	44									
289	B24-B20	45	45									
290	B30-B20	92	92									
291	B20-B19	47	47									
292	B31-B19	131	131									
293	B19-B18	40	40									
294	B23-B18	71	71									
295	B33-B18	149	149									
296	B18-B17	41	41									
297	B34-B17	157	157									
298	B17-B16	39	39									
299	B22-B16	60	60									
300	B35-B16	182	182									
301	B16-B15	36	36									
302	B15-B14	42		42								
303	B14-B7	53				53						
304	B12-B7	35	35									
305	B7-B6	66				66						
306	B11-B6	50	50									
307	B6-B5	31				31						
308	B10-B5	35	35									
309	B3-B4	48				48						
310	B9-B4	35	35									
311	B4-B3	31				31						
312	B8-B3	18	18									

Appurtenances of Storm Water

Sr. No	Line No.	Length	Storm Pipe Line 400 mm i/d			Storm Pipe Line 500 mm i/d			Storm Pipe Line 600 mm i/d			Storm Pipe Line 700 mm i/d			Storm Pipe Line 800 mm i/d			Storm Pipe Line 900 mm i/d			Storm Pipe Line 1000 mm i/d			Storm Pipe Line 1100 mm i/d			Storm Pipe Line 1200 mm i/d		
			M	Length	M	M	Length	M	Length	M	M	Length	M	Length	M	M	Length	M	M	Length	M	M	Length	M	M	Length	M	M	Length
1	2	3	4	5	6	8	10	12	14	14	14	16	16	16	18	19	20	21	22	23	24	25	25	25	25	25	25	26	
313	B3-B2	167					167																						
314	B2-B1	17					17																						
315	A6-A5	40	40																										
316	A5-A4	97	97																										
317	A4-A2	52	52																										
318	A3-A2	64	64																										
319	A2-A1	39	39																										
320	85A1-85B1	154	154																										
321	85B1-OUTFALL	30					30											2											
322	83A-36-	91	91																										
323	A76-A38	21	21																										
324	A38-A40	37	37																										
325	A40-A51	26	26																										
326	A51-A41	140	140																										
327	E7-E7	34	34																										
328	E7-A41	30	30																										
329	A41-E6	19	19																										
330	E6-E6	111	111																										
331	E6-A42	37	37																										
332	A48-A49	26	26																										
333	A49-A50	162	162																										
334	A50-A42	156	156																										
335	A42-A56	13		13																									
336	E3-A56	82	82																										
337	A56-A43	40		40																									
338	A58-A43	46	46																										

For Valika Limited
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Appurtenances of Storm Water

Sr. No.	Line No.	Length	No of Manhole									
			Storm Pipe Line 400 mm i/d	Storm Pipe Line 500 mm i/d	Storm Pipe Line 600 mm i/d	Storm Pipe Line 700 mm i/d	Storm Pipe Line 800 mm i/d	Storm Pipe Line 900 mm i/d	Storm Pipe Line 1000 mm i/d	Storm Pipe Line 1100 mm i/d	Storm Pipe Line 1200 mm i/d	
			Length	Length	Length	Length	Length	Length	Length	Length	Length	
1	2	3	4	5	6	7	8	9	10	11	12	
335	A45-A57	10		10								
340	A37-A44	46		46								
341	A54-A44	91	91									
342	A44-A45	57		57								
343	A47-A46	44	44									
344	B1-A46	48	48									
345	A46-A45	71	71									
346	A45-B12	208		208								
347	83E16-	110	110									
348	E17-E15	81	81									
349	E15-E5	65	65									
350	E5-E5	107	107									
351	E5-E4	49	49									
352	E6-E4	75	75									
353	E4-E14	115	115									
354	E14-E13	55	55									
355	E13-E13	102	102									
356	E13-E11	39	39									
357	E12-E11	43	43									
358	E11-E10	32	32									
359	E8-E10	37	37									
360	E2-E10	160		160								
361	E2-E2	113	113									
362	E2-E1	49		49								
363	A45-E1	167	167									
364	E8-E1	125	125									
365	83E1-	55		55								
366	85B12-	18				18						
367	83C13-C6	180	180									
368	C6-C7	58	58									

Appurtenances of Storm Water

Sr. No	Line No.	Length	Storm Pipe	Storm Pipe	Storm Pipe	Storm Pipe	Storm Pipe	Storm Pipe	Storm Pipe	Storm Pipe	Storm Pipe	No. of Manhole														
			Line 400 mm i/d	Length	Line 500 mm i/d	Length	Line 600 mm i/d	Length	Line 700 mm i/d	Length	Line 800 mm i/d	Length	Line 900 mm i/d	Length	Line 1000 mm i/d	Length	Line 1200 mm i/d	400 mm i/d	500 mm i/d	600 mm i/d	700 mm i/d	800 mm i/d	900 mm i/d	1000 mm i/d	1100 mm i/d	1200 mm i/d
1	2	3	M	4	6	8	10	12	14	14	16	16	18	19	20	21	22	23	24	25	26					
369	C12-C8	117	117										6													
370	C8-C7	25	25										1													
371	C7-C10	80	80											4												
372	C11-C10	61	61										3													
373	C10-83B12	215	215											11												
374	83B12-	23						23									1									
375	B13-B14	43						43									2									
376	B14-B17	55							55									3								
377	B17-B27	11							11									1								
378	B27-B19	52							52									3								
379	B19-B21	41							41									2								
380	B21-B22	14							14									1								
381	83B22-	51							51									3								
382	83B2-83B3	22	22										1													
383	B3-B4	56	56										3													
384	B6-B4	57	57										3													
385	B4-B5	85	85										4													
386	B5-83B5	244	244										12													
387	83B5- OUTFALL	30							30									2								
388	84E3-84E2	49	49										2													
389	E4-E2	29	29										1													
390	E2-E1	21	21										1													
391	E1-A7	59	59										2													
392	A7-D23	92	92										5													
393	D23-D7	74	74										4													
394	D20-D7	75	75										4													
395	D7-D21	23	23										1													

No. of subjects

For Vatika Limited

