

QUANTITY CALCULATIONS

S.NO.	DESCRIPTION	no.	L	B	H	E&S	
1	Dismantling brick on edge flooring		3622	5		18110.00	sq.m
2	Centring & Shuttering for flat surface						
	Collection tank	1	3.7	3.7		13.69	
	Screening tank	1	3.4	2.7		9.18	
	Screening tank(pump)	1	2.45	2.7		6.62	
	Manhole(1.2m to 2m)	27	1.5	0.9		36.45	
	Manhole(2m to 3m)	47	1.5	0.9		63.45	
	Manhole(3m to 5m)	63	1.5	0.9		85.05	
					TOTAL	214.44	sq.m
			P				
3	Centring & Shuttering for vertical surface						
	Collection tank(inner)	1	12		8.8	105.60	
	Collection tank(outer)	1	16.4		9.4	154.16	
	Screening tank(inner)	1	8.4		6.3	52.92	
	Screening tank(inlet)	1	7.1		6.3	44.73	
	Inlet+screening tank	1	14.1		6.75	95.18	
	Manhole(1.2m to 2m) base slab	27	7.72		0.2	41.69	
	Manhole(1.2m to 2m) top slab	27	6.64		0.175	31.37	
	Manhole(2m to 3m) base slab	47	7.72		0.2	72.57	
	Manhole(2m to 3m) top slab	47	6.64		0.175	54.61	
	Manhole(3m to 5m) base slab	63	7.72		0.2	97.27	
	Manhole(3m to 5m) top slab	63	6.64		0.175	73.21	
	Cleanouts	23	1.2		0.125	3.45	
					total	826.76	sq.m
4	P.C.C. 1:4:8 with stone						
	room		16.92	1	0.23	3.89	
	Manhole					72.00	
	SW line		3622	1	0.1	362.20	
	Collection tank		6	6	0.15	5.40	
	Screening tank		3.25		3	9.75	
	Screening tank(inlet)		3.3	3	0.15	1.49	
	benching					77.00	
	beam(facultative, maturation tanks)					50.00	
					TOTAL	581.73	cum
5	Cement Concrete 1:2:4						
						137.50	cum
6	Extra for mechanical mixer used by the contractor at his own cost						
	P.C.C. 1:4:8 with stone(as from 4)					581.73	
	Manhole(as from 5)					137.50	
	P.C.C. 1:4:8 with stone(as per 26)					30.00	
					TOTAL	782.00	cum
7	Extra for vibrator used by the contractor at his own cost						
	Manhole					137.50	
	M30					140.58	
					TOTAL	278.08	cum
8	First class burnt brick work laid in cement sand mortar 1:4 in foundation and plinth.(upto 1.5m)						
					total	664.72	
	Manhole(1.2m to 2m)	27	5.72	0.23	1.5	53.28	
		27	3.09	0.345	0.23	6.62	
	Manhole(2m to 3m)	47	5.72	0.23	1.5	92.75	
		47	3.09	0.345	1	50.10	
	Manhole(3m to 5m)	63	5.72	0.23	1.5	124.32	
		63	3.09	0.345	1.5	100.74	
		63	7.84	0.46	1.18	268.10	
	Total (for sr. no. 8 & 9)					695.92	cum

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9	First class burnt brick work laid in cement sand mortar 1:4 in first storey upto 4m above plinth level.					
					total	31.20 cum
10	12.5mm th. Inside Cement plaster 1:2 (Manhole)					
	Manhole					1626.89
	Cleanouts					69.12
					TOTAL	1696.01 sq.m
11	Cement rendering on plaster 1mm thick					
	Manhole					1626.89
	Cleanouts					69.12
					TOTAL	1696.01 sq.m
12	Dismantling of bituminous courses of flexible pavements by manual means & disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately as per technical clauses 202 of MORT & H specifications.					
					total	256.00 cum
13	For all classes of soil except rocky (upto 3m)					
	SW line					7034.89
	Manhole					1930.60
	facultative tank					3906.00
	1 st maturation					826.00
	2 nd maturation tank					826.00
	3 rd maturation tank					826.00
	anearobic tank					300.00
	Collection tank					162.00
	Existing wastewater ponds at STP site(Lumpsum)					4581.11
					total	20392.60 cum
14	For depth exceeding 3 metres but not exceeds 4.5m					
	SW line					926.54
	Manhole					378.93
	Collection tank					54.00
					total	1359.47
15	For depth exceeding 4.5 metres but not exceeds 6m					
	SW line					113.26
	Manhole					38.53
	Collection tank					54.00
					total	205.79
16	For depth exceeding 6 metres but not exceeds 7.5m					
	Manhole					30.53
	Collection tank					54.00
					TOTAL	84.53
17	For depth exceeding 7.5 metres but not exceeds 9m					
	Collection tank					54.00
					TOTAL	54.00
18	SW PIPE (150mm) included all items					
	Total SW Line length					3322.00
	Manhole(Deduction)					220.80
						3101.20
19	R.C.C. Manhole cover 560mm i/dextra heavy duty					147.00
20	cold twisted deformed Fe415 grade as per IS 1786-1985	see page 5 & 6				120.42 qtl
21	M-30					
	Manhole slab					65.00
	Slab (Collection ,screening & inlet tanks)					75.58

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						140.58	
22	Room						
			17.154	10.59		181.74	sq.ft
23	Cleanouts						
			23				
24	PVC 100 dia connected with pump					28.00	
25	Pump (1 HP)					3.00	
26	Boundry Wall(PCC 1:4:8) length =400 m. approx.						
			400	0.5	0.15	30.00	cum
27	Boundry Wall(1:4 First Brick work in foundation and plinth)						
			400	1.15	0.23	105.80	cum
28	Boundary wall (First class burnt brick work laid in cement sand mortar 1:4 in first storey upto 4m above plinth level)						
			400	1.5	0.23	138.00	cum
29	Excavation(Boundry Wall upto 3 m.)						
			400	1.12	0.5	224.00	cum
30	Generator(5KW)						
			1				
31	Roads, plantation, embience etc inside STP site						
						Lumpsum	
32	Providing M.S. foot rests made of 20x20 mm square bar including fixing in manholes with 20x20x10 cm cement concrete blocks 1:2:4 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design.(137 manholes plus screen chambers & collection tanks(Lumpsum))					2400.00	
33	115 mm thick brick on edge lining in herring bone bond/zig-zag or other specified pattern in 1:3 cement sand mortar over 10mm thick cement plaster 1:3 over 12.50 mm thick cement plaster in 1:5 on sub grade.						
	On side slopes.					2205.56	sq.m
	In bed					3312.37	sq.m