ESTIMATED BILL OF QUANTITIES FOR 60 KLD PHYTORID SEWAGE TREATMENT PLANT

JOB No. 2

ESTIMATED COST: Rs. 6,63000/ EARNEST MONEY: Rs. 13500/

	25 THAT 25 COST 1 No. 0,000007											
ITEM No.	STRUCTURE TYPE	DSR 20	18 Item Description	NOS	Length (M)	Width (M)	Heigh t (M)	Total Qty	Unit	Rate in Rs.	Rate in words	Amount in Rupees
			Earthwork/Excavation									1
1	ALL STRUCTURES		Earthwork in Excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m.									
			All kind of soil surface	1	22.6	5.86	1.5	198.65	cum			
			TOTAL EXCAVATION					198.65	Cum			
2	ALL STRUCTURES	CPWD/ 10.	Excavating trenches of required width for pipes, cables etc. including excavation for sockets, and dressing of sides and ramming of bottoms, depth upto 1.5m, including getting out the excavated soil and then returning the soil as required, in layers not exceedling 20cm in depth including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m.sipes, cables etc exceeding 80mm dia but not exceeding 300mm dia	5	40			200.00	m			
			RUBBLE soling]

3	ALL STRUCTURES		Providing laying and compacting Stone Aggregate/ brick ballast Rubble soling in entire Treatment Plant 40mm Nominal Size with bed slope @ 1%.	1	22.2	5.16	0.25	28.64	Cum	
			TOTAL RUBBLE SOLING					28.64	Cum	
			Centring and Shuttering							
		CPWD/ 5.9	Centring and shuttering including strutting, propping etc., and removal of form for							
4	SEDIMENTATION TANK	CPWD/5.9.2	Baffle Walls(BAFFLE WALL, beam) (any thickness) including attach plasters, butteresses, plinth and string courses etc.	4	4.46	0.3		5.35	Sqm	
	PHYTORID			12	4.46	0.15		8.03	sqm	
	SEDIMENTATION TANK	CPWD/ 5.9.3	suspended floors, roofs, landings, balconies and access platform	1	5	4		20.00	Sqm	
			Total shuttering					33.38	Sqm	
5		CPWD/ 5.10.3	providing and fixing tie bolt, spring coil and plastic cone in wall shuttering complete as per the direction of Engineer-incharge.							
			20 mm dia. & 150 mm length CONCRETE WORK & RCC WORK	1				40.00	Set	

		CPWD/ 5.33.1	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. and curing complete 5.33.1 All works upto plinth level								
	SEDIMENTATION TANK	CPWD/ 5.33.1	Providing and laying in position machine batched and machine mixed design mix M-25/1:2:4 grade cement concrete for reinforced cement concrete work in raft of sedimentation tank with slope @ 1%.	1	6	5.16	0.15	4.64	Cum		
6		CI WD/ 3.33.1	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work in raft foundation of Phytorid tank with bed slope @ !%.	1	15.5	5.16	0.15	12.00	Cum		
								16.64	cum		
			RCC in suspended beams & floors/slabs								
			Providing and laying in position machine batched and machinemixed design mix M-25 grade cement concrete for reinforced cement concrete work in roof slab of sedimentation tank	1	5.345	4.46	0.15	3.58	Cum		
7	SEDIMENTATION	5.33.1	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work in beam to supprot brick baffle walls of sedimentation tank	2	4.46	0.23	0.23	0.47			

PHYTORID mixed design mix M-25 grade cement concrete for reinforced cement concrete work in beam to supprot brick baffle walls of Phytorid tank Phytorid tank Phytorid tank PLAIN CEMENT CONCRETE Providing and laying in position cement concrete of specified grade excluding in raft the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size) 1	1 [
SCREEN CHAMBER CPWD/ 4.1.9 Providing and laying in position cement concrete of specified grade excluding in raft.the cost of centering and shuttering - All work up to plinth level : 1.4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size) 1 1.8 1.65 0.1 0.30 cum		PHYTORID		cement concrete work in beam to supprot brick baffle walls of	6	4.46	0.115	0.15	0.46	Cum		
SCREEN CHAMBER CPWD/ 4.1.9 Providing and laying in position cement concrete of specified grade excluding in raft.the cost of centering and shuttering - All work up to plinth level : 1.4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size) 1 1.8 1.65 0.1 0.30 cum									4.04	Cum		
CHAMBER CPWD/ 4.1.9 Septimentation TANK PHYTORID SCREEN CPWD/ 6.1.0 Brick work in screen chamber TANK PHYTORID TOTAL PCC Brick work in screen chamber TANK PHYTORID TOTAL PCC Brick work in screen chamber TANK PHYTORID TOTAL PCC TOTAL PCC TANK PHYTORID TOTAL PCC				PLAIN CEMENT CONCRETE								
SEDIMENTATION TANK PHYTORID Size) Size) 1 6.275 4.8 0.1 3.01 Cum	8		CPWD/ 4.1.9	specified grade excluding in raft.the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size)	1	1.8	1.65	0.1	0.30	cum		
TOTAL PCC					1	6.275	4.8	0.1	3.01	Cum		
SCREEN Brick Work Brick work in screen chamber 1 4.5 1.15 5.18 sqm SEDIMENTATION TANK CPWD/ 6.1.0 Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level. 6.13.1 Cement mortar 13 4 2.1 109.20 sqm SEDIMENTATION TOTAL HALF BRICK WORK 139.58 sqm SEDIMENTATION TANK PHYTORID SEDIMENTATION TANK CPWD/6.4 CPWD/6.4 CPWD/6.4 CPWD/6.4 Brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 7.5 in plain arch work in superstructure above plinth and unto floor five level in cement 2 4.46 2.7 0.23 5.54 cum cmm clay F.P.S. (non modular) clay F.P.S. (non		PHYTORID			1	15.5	4.8	0.1	7.44	Cum		
SCREEN CHAMBER Brick work in screen chamber 1 4.5 1.15 5.18 sqm				TOTAL PCC					10.75	Cum		
SEDIMENTATION TANK CPWD/ 6.1.0 PHYTORID TOTAL HALF BRICK WORK PHYTORID TOTAL FULL BRICK masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in plain arch work in superstructure above plinth level up to floor V level. 6.13.1 Cement mortar 13 4 2.1 109.20 sqm 109.20				Brick Work								
TANK CPWD/ 6.1.0 modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level. 6.13.1 Cement mortar TOTAL HALF BRICK WORK FULL BRICK MASONARY Brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 7.5 in plain arch work in Brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 7.5 in plain arch work in TOTAL FULL BRICK MASONARY TOTAL FULL BRICK MASONARY 3 4 2.1 109.20 sqm 109.20 sqm 129.5.46 2.7 0.23 6.78 cum 2 4.46 2.7 0.23 5.54 cum 2 4.46 2.7 0.23 5.54 cum 1 4.46 2.1 0.23 14.71 cum 1 4.46 2.1 0.23 2.15 cum				Brick work in screen chamber	1	4.5	1.15		5.18	sqm		
TOTAL HALF BRICK WORK SEDIMENTATION TANK PHYTORID PHYTORID TOTAL FULL BRICK of class designation 7.5 in plain arch work in tile bricks of class des	9		CPWD/ 6.1.0	· · · · · · · · · · · · · · · · · · ·	3	4	2.1		25.20	sqm		
FULL BRICK MASONARY SEDIMENTATION TANK PHYTORID FULL BRICK MASONARY Brick masonry with common purnt clay F.P.S. (non modular) tile bricks of class designation 7.5 in plain arch work in Brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 7.5 in plain arch work in TOTAL FULL BRICK MASONARY FULL BRICK MASONARY 2 5.46 2.7 0.23 6.78 cum 2 4.46 2.7 0.23 5.54 cum 1 5.52 2.1 0.23 14.71 cum 1 4.46 2.1 0.23 2.15 cum 2 70TAL FULL BRICK MASONARY 1 4.46 2.1 0.23 2.15 cum		PHYTORID		above plinth level up to floor V level. 6.13.1 Cement mortar	13	4	2.1		109.20	sqm		
SEDIMENTATION TANK PHYTORID Brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 7.5 in plain arch work in Brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 7.5 in plain arch work in tile bricks of class designation 7.5 in plain arch work in tile bricks of class designation 7.5 in plain arch work in TOTAL FULL BRICK MASONARY 2 5.46 2.7 0.23 6.78 cum 2 4.46 2.7 0.23 5.54 cum 2 15.23 2.1 0.23 14.71 cum 1 4.46 2.1 0.23 2.15 cum TOTAL FULL BRICK MASONARY 2 9.19 cum				TOTAL HALF BRICK WORK			_	_	139.58	sqm	_	_
TANK CPWD/6.4												
PHYTORID CPWD/6.4 Superstructure above plinth and unto floor five level in cement Brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 7.5 in plain arch work in TOTAL FULL BRICK MASONARY CPWD/6.4 Superstructure above plinth and unto floor five level in cement 2 4.46 2.7 0.23 5.54 cum 1 5.54 cum 1 4.46 2.1 0.23 14.71 cum TOTAL FULL BRICK MASONARY 2 9.19 cum		SEDIMENTATION			2	5.46	2.7	0.23	6.78	cum		
PHYTORID Brick masonry with common burnt clay F.P.S. (non modular) tille bricks of class designation 7.5 in plain arch work in TOTAL FULL BRICK MASONARY 2 15.23 2.1 0.23 14.71 cum 1 4.46 2.1 0.23 2.15 cum 29.19 cum	40	TANK	CDMD /C:		2	4.46	2.7	0.23	5.54	cum		
tile bricks of class designation 7.5 in plain arch work in 1 4.46 2.1 0.23 2.15 cum TOTAL FULL BRICK MASONARY 29.19 cum	10	DUNTORID	,		2	15.23	2.1	0.23	14.71	cum		
		PHYTORID		tile bricks of class designation 7.5 in plain arch work in	1	4.46	2.1	0.23	2.15	cum		
				TOTAL FULL BRICK MASONARY					29.19	cum		
Steel Reinforcement bars				Steel Reinforcement bars								

			Providing Steel Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete Cold twisted bars/ Hot rolled deformed bars Cold twisted bars/ Hot rolled deformed bars						
11	SEDIMENTATION TANK	CPWD/ 5.22.3	R/F required 10 mm and 12 mm dia. for baffle Walls(BAFFLE WALL) (any thickness) including attach pilasters, butteresses,	2			75	00 Kg	
	PHYTORID		plinth and string courses etc.	6			150	00 kg	
	SEDIMENTATION TANK		R/F required 10 mm and 12 mm for suspended floors, roofs, landings, balconies and access platform	1			240	00 Kg	
			TOTAL STEEL REQUIRED INCLUDING 2% WASTAGE				465	00 Kg	
		CPWD/ 11.6	Cement plaster skirting/ superstructure (upto floor V height) with Cement 1:3 (1 Cement s 3 Coarse sand) finished with the floating coat of neat cement with 18 mm thick						
	SEDIMENTATION		Main Walls (RETAINING WALL) (any thickness) including attach pilasters, butteresses, plinth and string courses etc. in inner side and at both side of baffle wall	2	5.46	2.7	29	48 Sqm	
4.2	TANK		anner side and de soon side of same wan	2	4.46	2.7	24	08 sqm	
12	PHYTORID	a)	Main Walls (RETAINING WALL) (any thickness) including attach pilasters, butteresses, plinth and string courses etc. in inner side and at both side of baffle wall	2	15.23	2.1	63	97 Sqm	
				1	4.46	2.1	9	37 sqm	
	SEDIMENTATION TANK	b)	Baffle Walls(any thickness) including attach pilasters, butteresses, plinth and string courses etc.	6	4.2	2.1	52	92 Sqm	
	PHYTORID		TOTAL PLASTERING REQUIRED	13	3.5	2.1	95 275.	55 sqm	
			TOTAL LASTLINING INLIQUINED				273.	7 sqm	 J

			INTERLOCKING PAVER BLOCK						
13		CPWD/ 16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade (heavy duty) made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over 1mtr width near the phytorid treatment plant of including 50 mm thick compacted bed of PCC, coarse sand, filling the joints with sand etc. all complete, sand and paver block for this work.	1	45	1	45.00	sqm	
			Sanitary Work/ Installations						
14	CPWD/ 2.43.2	CPWD/ 2.43.2	Providing and fixing unplasticised PVC pipe clips of approved design to unplasticised - PVC rain water pipe by means of 50 x 50 x 50 mm hard wood plugs, screwed with MS screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cements 4 coarse sand) and making good the wall etc. complete.						
			a) 100 mm dia	3	50		150.00	m	
			b) 25 mm dia	3	15		45.00	m	
15		Market rate	a) Clamp required for fixing 100 mm pipe	1	101		101.00	Nos.	
15		ivial ket late	b) Clamp required for fixing 25 mm pipe	3	16		48.00	Nos.	
			Miscellaneous Works:						
16			RCC Cover - Pre-Cast RCC covers of 600 x 600 mm with MS angle frame, 70 mm thick over sedimentation tank.	2			2.00	Nos.	
17		Market rate	100 MM dia. Ductile Iron Ventilation pipe, 3 m long beside 600 mm manhole cover	2	3		6.00	m	
18		Market rate	Providing & Fixing 200 Mm Wide C.I. Rungs with Chequered/Ribbed Non Slip Surfaces I/C Fixing In Walls under M/Hole with 200 X 100 X100 mm Cement Conc.1:3:6 (1cement:3 Sand:6 Stone Aggregate 40mm Nominal Size) Blocks In All Lead & Lifts	20			20.00	Nos.	

19	Market rate	Finishing exposed/outer walls above ground level with water proofing cement paint of approved brand & manufacture & of required shade on undecorated wall surfaces (two coats) to give an even shade after thoroughly brushing the surface to remove all dirt & remains of loose powdered materials.	1	55	1	55.00	sqm		
		Removable Cover							
20	Market rate	Removable MS square bars Cover over screen chamber	1			1.00	Nos.		

GRAND TOTAL