

3 District III (Varanasi)

1 INR(India Rupee)= 1.57 JPY
 1 US\$= 105.5 JPY

Summary - Varanasi District 3

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit	Amount	Unit	Amount	
Varanasi District 3		LS	1				1,937,327,738	
Cost of sewer cleaning equipments, Flushing Van		LS	1				4,055,000.00	
Hiring of Godown and Site Office		LS	1				1,020,000.00	
Communication & Public Outreach		LS	1				3,500,000.00	
Environmental and Management Plan		LS	1				1,000,000.00	
Governance and Accountability Action Plan (GAAP)		LS	1				2,000,000.00	
Total							1,948,902,738	

	Items	Specification	Unit	Qty	FC Portion (₹)		LC Portion (₹)		Reference
					Unit Price	Amount	Unit Price	Amount	
<Civil/Building work>									
	1. Sewer work								
	1.1 DISMANTLING WORK								
	Dismantling manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-Charge.								
15.43.2 - DSR_2014	a) Bitumen Road		m2	8,968		159		1,426,436.06	
1266 - SOR_U.P. Jal Nigam Varanasi 2015-16	b) Cement Concrete Road		m3	4,309.34		1,013.71		4,368,418.72	
								0.00	
16.83 - DSR_2014	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.								
			m2	113,268.32		48.30		5,470,859.77	
								0.00	
	REINSTATEMENT WORK								
								0.00	
UP PWD 2013	Reinstatement of Existing Bitumen Road - Owned by Nagar Nigam								
			m2	8,968.48		3,634.00		32,591,440.69	
								0.00	
1323 - SOR_U.P. Jal Nigam Varanasi 2015-16	Providing all Materials, Labours, T & P etc & construct 100mm thick (1:2:4) Cement Concrete Road for Reinstatement of patch & trench cuts in								
			m3	4,309.34		2,228.10		9,601,635.33	
								0.00	
16.68 - DSR_2014	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.								
			m2	22,654		602.20		13,642,036.26	
								0.00	
16.84 - DSR_2014	Laying old cement concrete interlocking paver blocks of any design/shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (Old CC paver blocks shall be supplied by the								
			m2	117,739		195.70		23,041,606.58	
								0.00	
	1.2 EARTH WORK (SEWER)								
	Excavation by manually or mechanically up to following depths below G.L. for laying sewer line, in ordinary soil (earth, sand, loam & clay) including cutting of joints pits ramming dressing, leveling by manually or mechanically, refilling of trenches in 15cm layer watering and ramming the same including removal of surplus earth or other dismantled material up to a distance of 50m from the centre of trenches. (Excavation for Manhole is								
								0.00	
3001 - SOR_U.P. Jal Nigam Varanasi 2015-16	a) 0.0 to 1.5 mtr B.G.L		m3	3,442.13		184.79		636,070.28	
3002 - SOR_U.P. Jal Nigam Varanasi 2015-16	b) 1.5 to 3.0 mtr B.G.L		m3	7,974.41		231.98		1,849,902.53	
3003 - SOR_U.P. Jal Nigam Varanasi 2015-16	c) 3.0 to 4.5 mtr B.G.L		m3	16,147.96		291.27		4,703,415.11	
3004 - SOR_U.P. Jal Nigam Varanasi 2015-16	d) 4.5 to 6.0 mtr B.G.L		m3	33,186.72		340.09		11,286,470.13	
3005 - SOR_U.P. Jal Nigam Varanasi 2015-16	e) 6.0 to 7.5 mtr B.G.L		m3	73,109.60		443.48		32,422,645.60	
3006 - SOR_U.P. Jal Nigam Varanasi 2015-16	f) 7.5 to 9.0 mtr B.G.L		m3	147,071.10		583.07		85,752,747.48	
								0.00	

	Items	Specification	Unit	Qty	I/C Portion (Yen)		I/C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
RA16	Disposal of excavated excess earth away from the site including conveyance of material up to an average lead of 5km & above away from the site and corresponding required lift, loading, unloading etc complete as directed by the engineer-in-charge (The quantity is net quantity)								
	By Mechanical Transport including loading, unloading and stacking (Lead upto 5 Km away from the site)		m3	13,475.01			366.10	4,933,202.48	
								0.00	
	Filling remaining excavated earth (excluding rock, m. material, slurry)							0.00	
1003 - SOR_U.P. Jal Nigam Varanasi_2014-15	a) 0.0 to 1.5 mtr B.G.L.		m3	62,505.06			42.49	2,649,586.95	
1003 & 1006-SOR_U.P. Jal Nigam	b) 1.5 to 3.0 mtr B.G.L.		m3	192,246.90			2,247.07	229,740,436.80	
1003 & 1006-SOR_U.P. Jal Nigam	c) 3.0 to 4.5 mtr B.G.L.		m3	53,477.00			2,266.04	121,181,021.08	
1003 & 1006-SOR_U.P. Jal Nigam	d) 4.5 to 6.0 mtr B.G.L.		m3	11,663.56			2,285.01	26,514,113.54	
1003 & 1006 -SOR -U.P. Jal Nigam Varanasi_2014-15 and	e) 6.0 to 9.0 mtr B.G.L.		m3	6,129.50			2,764.78	16,946,694.49	
								0.00	
RA16	Disposal of Rock Cutting Rubbish/ Malha / similar unrecyclable		m3	12,361.02			292.85	3,619,925.70	
								0.00	
Similar Project Exp	Carting of excavated earth to identified place and returning the same where		m3	13,386.08			158.00	2,115,000.67	
								0.00	
RA13	Bailing out or pumping out water / liquid mud during trench excavation This includes providing necessary fuel, labour T&P etc. required for proper running of well point equipment of required capacity for lowering the water table during excavation and laying of		m	11,563.23			598.35	6,918,858.67	
								0.00	
	1.3 TRENCHLESS							0.00	
	Supply of precast RCC NP4 jacking pipes manufactured by centrifugal spinning or vertical casting comply to BSEN 5911, pt. 120 or EN 1916-2002 and also meet the basic concrete testing requirements specified in IS 458, IS 3597 of 1966 and IS 7596-1998. Including supply of suitable couplings (normally Built in Type collar) made of weldable structural stainless steel conforming to BS 4360 Grade 43, or relevant Code including supply of suitable rubber rings conforming to EN		m					0.00	
	150 mm dia. pipe							0.00	
	200 mm dia. pipe		m	332.00			12,066.11	4,005,949.45	
	300 mm dia. pipe		m	269.00			13,406.79	3,606,427.05	
	350 mm dia. pipe		m	145.00			14,077.13	2,041,184.08	
	400 mm dia. pipe		m	499.00			14,747.47	7,358,988.13	
	450 mm dia. pipe		m	311.00			15,417.81	4,794,939.16	
	500 mm dia. pipe		m	540.00			16,088.15	8,687,601.22	
	600 mm dia. pipe		m	368.00			18,099.17	6,660,494.27	
	700 mm dia. pipe		m	90.00			20,110.19	1,809,916.92	
	800 mm dia. pipe		m	439.00			24,450.00	10,733,550.00	
	900 mm dia. pipe		m	918.00			26,813.58	24,614,870.11	
								0.00	
	Schedule of rates from Institute of trench	Installation of product pipe by Trenchless						0.00	
		upto 300 mm dia.	m	601.00			48,200.00	28,968,200.00	
		300 to 450 mm dia.	m	955			53,000.00	50,615,000.00	
		450 to 600 mm dia.	m	908.00			58,300.00	52,936,400.00	
		600 to 900 mm dia.	m	1,447			74,500	107,801,500.00	
								0.00	
	1.4 TIMBERING WORK							0.00	
								0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Providing and fixing open timbering in trenches up to 3m deep, consisting of 40mm thick approved country wood plank for poling board, 125x75mm Indian Sal wood wallers and 100mm diameter Sal wood ballies for shuttering at 1.50m c/c including removal after laying of sewers. (Measurement to be taken of the face area timbered).							0.00	
3041 - SOR_U.P. Jal Nigam Varanasi 2015-16	1.5 to 3.0 mtr B.G.L.		m2	298,528.04			393.91	117,593,178.70	
								0.00	
	Providing and fixing close timbering in trenches for the following depths below G.L. consisting of 40mm thick approved country wood plank for poling board 125x75mm Indian Sal wood wallers and 100mm diameter Sal wood ballies for shuttering at 1.50m c/c including removal after laying of sewers (Measurement to be taken of the							0.00	
3032 - SOR_U.P. Jal Nigam Varanasi 2015-16	3.0 to 4.5 mtr B.G.L.		m2	17,938.77			649.06	11,643,335.20	
3033 - SOR_U.P. Jal Nigam Varanasi 2015-16	4.5 to 6.0 mtr B.G.L.		m2	6,871			811.40	5,575,511.13	
3034 - SOR_U.P. Jal Nigam Varanasi 2015-16	6.0 to 7.5 mtr B.G.L.		m2	2,798			935.01	2,616,192.70	
3034 - SOR_U.P. Jal Nigam Varanasi 2015-16	7.5 to 9.0 mtr B.G.L.		m2	781			935.01	730,049.73	
3034 - SOR_U.P. Jal Nigam Varanasi 2015-16	9.0 to 10.5 mtr B.G.L.		m2	0				0.00	
								0.00	
	Extra for planking and strutting in open timbering if required to be left							0.00	
3047 - SOR_U.P. Jal Nigam Varanasi 2015-16	0.0 to 3.0 mtr B.G.L.		m2	5,971			899.99	5,373,444.94	
3048 - SOR_U.P. Jal Nigam Varanasi 2013-	b) 3.0 to 6.0 mtr B.G.L.		m2					0.00	
3049 - SOR_U.P. Jal Nigam Varanasi 2013-	a) 6.0 to 9.0 mtr B.G.L.		m2					0.00	
								0.00	
	Extra for planking and strutting in close timbering if required to be left permanently in position (Face area of the timber permanently left to be measured)							0.00	
3039 - SOR_U.P. Jal Nigam Varanasi 2015-16	b) 3.0 to 6.0 mtr B.G.L.		m2	798			1,879.93	1,500,048.70	
3040 - SOR_U.P. Jal Nigam Varanasi 2015-16	a) 6.0 to 9.0 mtr B.G.L.		m2	108			2,114.32	227,922.51	
								0.00	
	BEDDING WORK							0.00	
Unit Estimate U1	Providing and laying PCC Bedding with 12-20mm gauge approved stone ballast, coarse sand and cement in M-15 (1:2:4) all work up to plinth level, including supply of all materials labour T&P etc required for proper completion of work and excluding							0.00	
								0.00	
	200 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	46			472.76	21,699.68	
	1.5 to 3.0 Mtr B.G.L.		m	4,392			484.47	2,127,768.02	
	3.0 to 4.5 Mtr B.G.L.		m	7,333			500.08	3,667,061.64	
	4.5 to 6.0 Mtr B.G.L.		m	1,719			519.59	893,019.33	
	6.0 to 7.5 mtr B.G.L.		m	214			550.81	117,983.50	
								0.00	
	250 mm Dia Sewer Pipe							0.00	
	1.5 to 3.0 Mtr B.G.L.		m	1,442			563.02	811,874.84	
	3.0 to 4.5 Mtr B.G.L.		m	1,672			581.29	971,916.88	
	4.5 to 6.0 Mtr B.G.L.		m	319			604.12	192,714.28	
								0.00	
	300 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0			628.77	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	202			644.54	130,197.08	
	3.0 to 4.5 Mtr B.G.L.		m	596			665.56	396,673.76	
				0				0.00	
	400 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	62			796.38	49,375.56	
	1.5 to 3.0 Mtr B.G.L.		m	202			816.50	164,933.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	3.0 to 4.5 Mtr B.G.L.		m	953			843.33	803,693.49	
								0.00	
	450 mm Dia Sewer Pipe							0.00	
	3.0 to 4.5 Mtr B.G.L.		m	105			936.81	98,365.05	
								0.00	
	500 mm Dia Sewer Pipe							0.00	
	3.0 to 4.5 Mtr B.G.L.		m	49			1,033.37	50,635.13	
								0.00	
	600 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0			1,166.41	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	72			1,196.10	86,119.20	
	3.0 to 4.5 Mtr B.G.L.		m	823			1,235.68	1,016,964.64	
	4.5 to 6.0 Mtr B.G.L.		m	558			1,285.16	717,119.28	
	6.0 to 7.5 mtr B.G.L.		m				1,364.33	0.00	
	7.5 to 9.0 mtr B.G.L.		m				1,463.29	0.00	
	9.0 to 10.5 mtr B.G.L.		m	0			1,562.25	0.00	
								0.00	
								0.00	
	800 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0			1,582.84	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			1,623.25	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	10			1,677.14	16,771.40	
	4.5 to 6.0 Mtr B.G.L.		m					0.00	
	6.0 to 7.5 mtr B.G.L.		m					0.00	
	7.5 to 9.0 mtr B.G.L.		m					0.00	
	9.0 to 10.5 mtr B.G.L.		m					0.00	
								0.00	
	Providing and laying RCC Bedding with 12-20mm gauge approved stone ballast, coarse sand and cement in M-15 (1:2:4) all work up to plinth level. including supply of all materials labour T&P etc. required for proper completion of work and excluding shuttering and centering with 0.4% of							0.00	
	250 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0			566.79	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			580.49	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	0			598.76	0.00	
	4.5 to 6.0 Mtr B.G.L.		m	0			621.59	0.00	
	6.0 to 7.5 mtr B.G.L.		m	600			658.13	394,878.00	
	7.5 to 9.0 mtr B.G.L.		m	0			703.81	0.00	
	9.0 to 10.5 mtr B.G.L.		m	0			749.48	0.00	
								0.00	
	300 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0			648.88	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			664.65	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	0			685.67	0.00	
	4.5 to 6.0 Mtr B.G.L.		m	462			711.95	328,920.90	
	6.0 to 7.5 mtr B.G.L.		m	575			754.00	433,550.00	
	7.5 to 9.0 mtr B.G.L.		m	0			806.57	0.00	
	9.0 to 10.5 mtr B.G.L.		m	0			859.13	0.00	
								0.00	
	350 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0			733.96	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			751.87	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	0			775.75	0.00	
	4.5 to 6.0 Mtr B.G.L.		m	103			805.59	82,975.77	
	6.0 to 7.5 mtr B.G.L.		m	0			853.35	0.00	
	7.5 to 9.0 mtr B.G.L.		m	0			913.04	0.00	
	9.0 to 10.5 mtr B.G.L.		m	0			972.74	0.00	
								0.00	
	400 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0			822.04	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			842.16	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	0			868.98	0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	4.5 to 6.0 Mtr B.G.L.		m	331			902.52	298,734.12	
	6.0 to 7.5 mtr B.G.L.		m	0			956.17	0.00	
	7.5 to 9.0 mtr B.G.L.		m	0			1,023.23	0.00	
	9.0 to 10.5 mtr B.G.L.		m	0			1,090.30	0.00	
								0.00	
	450 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0			935.51	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0.00			935.51	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	0.00			965.38	0.00	
	4.5 to 6.0 Mtr B.G.L.		m	128			1,002.72	128,348.16	
	6.0 to 7.5 mtr B.G.L.		m	0			1,062.46	0.00	
	7.5 to 9.0 mtr B.G.L.		m	0			1,137.14	0.00	
	9.0 to 10.5 mtr B.G.L.		m	0			1,211.82	0.00	
								0.00	
	500 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0			1,007.17	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			1,031.93	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	0			1,064.94	0.00	
	4.5 to 6.0 Mtr B.G.L.		m	0			1,106.20	0.00	
	6.0 to 7.5 mtr B.G.L.		m	99.00			1,172.23	116,050.77	
	7.5 to 9.0 mtr B.G.L.		m	130			1,255	163,118.80	
	9.0 to 10.5 mtr B.G.L.		m	0			1,337.29	0.00	
								0.00	
	600 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0			1,204.27	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			1,233.95	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	0			1,273.54	0.00	
	4.5 to 6.0 Mtr B.G.L.		m	0			1,323.02	0.00	
	6.0 to 7.5 mtr B.G.L.		m	46			1,402.19	64,500.74	
								0.00	
	Providing and laying Granular bedding with carefully compacted graded hard crusher broken stone of 100% passing through 20mm sieve, 20-50% passing through 10mm sieve and 100% retained on 6mm sieve and Dimensions are as per Approved Drawing for Following							0.00	
	a) 150 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m				349.15	0.00	
	1.5 to 3.0 Mtr B.G.L.		m				352	0.00	
	3.0 to 4.5 Mtr B.G.L.		m				356.12	0.00	
	4.5 to 6.0 Mtr B.G.L.		m				361.09	0.00	
	6.0 to 9.0 Mtr B.G.L.		m				379	0.00	
								0.00	
	200 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	56,281			576	32,423,512.91	
	1.5 to 3.0 Mtr B.G.L.		m	36,648			580.34	21,268,155.24	
	3.0 to 4.5 Mtr B.G.L.		m				586.00	0.00	
	4.5 to 6.0 Mtr B.G.L.		m	0			593	0.00	
	6.0 to 7.5 mtr B.G.L.		m	0			604.39	0.00	
	7.5 to 9.0 mtr B.G.L.		m	0			619	0.00	
	9.0 to 10.5 mtr B.G.L.		m	0.00			632.68	0.00	
								0.00	
	250 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	188.00			672.77	126,480.76	
	1.5 to 3.0 Mtr B.G.L.		m	79.00			677.68	53,536.72	
								0.00	
	600 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		m	0.00			1,519.04	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	1,147.00			1,529.41	1,754,233.27	
	3.0 to 4.5 Mtr B.G.L.		m				1,543.24	0.00	
	4.5 to 6.0 Mtr B.G.L.		m	0.00			1,560.53	0.00	
	6.0 to 7.5 mtr B.G.L.		m	0			1,588.19	0.00	
	7.5 to 9.0 mtr B.G.L.		m	0.00			1,622.76	0.00	
	9.0 to 10.5 mtr B.G.L.		m	0.00			1,657.34	0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
								0.00	
	700 mm Dia Sewer Pipe							9.00	
	0.0 to 1.5 Mtr B.G.L.		m	0.00			1,810.05	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	633.00			1,822.25	1,151,484.25	
	3.0 to 4.5 Mtr B.G.L.		m	223			1,839	409,987.74	
								9.00	
	1.5 LAYING OF R.C.C. PIPE							9.00	
	Supply and carting to site RCC NP3 pipes (with s/s ends) as per IS: 458 - 2003 (Amended up to date) including all taxes (Central and Local) with Rubber gaskets (EPDM/SBR) as per IS 5382-1985 or (Amended up to date), including cost of Rubber gaskets, labour required, transportation, loading, unloading & stacking etc (excluding cost of laying, jointing, testing and commissioning). The pipe shall be ISI							0.00	
	150 mm		m					0.00	
	a) 200 mm dia RCC pipe		m	106,682.30			588.57	62,789,834.89	
	b) 250 mm dia RCC pipe		m	4,360			703	3,022,301.44	
	c) 300 mm dia RCC pipe		m	1,835.0			985.45	1,808,304.05	
	d) 350 mm dia RCC pipe		m	1,155.00			1,343.40	1,551,627.46	
	e) 400 mm dia RCC pipe		m	1,548			1,617	2,503,425.10	
	f) 450 mm dia RCC pipe		m	233.00			1,749.08	407,534.59	
	g) 500 mm dia RCC pipe		m	278			2,145	596,227.40	
	h) 600 mm dia RCC pipe		m	2,646			2,711	7,173,678.66	
	i) 700 mm dia RCC pipe		m	856			3,305	2,829,259.69	
	j) 750 mm dia RCC pipe		m	10.0			3,500.00	35,000.00	
	k) 800 mm dia RCC pipe		m				3,977	0.00	
								0.00	
	Lowering in trenches, aligning, laying & jointing of RCC pipes NP3 class (with s/s ends) as per IS: 458 - 1988 (Amended up to							0.00	
	a) 150 mm dia RCC pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.							0.00	
	1.5 to 3.0 Mtr B.G.L.							0.00	
	3.0 to 4.5 Mtr B.G.L.							0.00	
	4.5 to 6.0 Mtr B.G.L.							0.00	
	6.0 to 9.0 Mtr B.G.L.							0.00	
								0.00	
	200 mm dia RCC pipe							0.00	
3198 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		m	56,326.95			356.53	20,082,247.48	
	1.5 to 3.0 Mtr B.G.L.		m	41,039.70			379.53	15,575,640.77	
	3.0 to 4.5 Mtr B.G.L.		m	7,333			403	2,955,598.04	
	4.5 to 6.0 Mtr B.G.L.		m	1,718.70			430.51	739,917.49	
	6.0 to 7.5 mtr B.G.L.		m	214.20			469.02	100,463.06	
	7.5 to 9.0 mtr B.G.L.		m	0			521	0.00	
								0.00	
								0.00	
	250 mm dia RCC pipe							0.00	
3199 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		m	188			372	69,864.56	
	1.5 to 3.0 Mtr B.G.L.		m	1,521.0			395.59	601,691.61	
	3.0 to 4.5 Mtr B.G.L.		m	1,672.0			420.12	702,434.64	
	4.5 to 6.0 Mtr B.G.L.		m	319.0			448.73	143,145.24	
	6.0 to 7.5 mtr B.G.L.		m	600			489	293,319.67	
	7.5 to 9.0 mtr B.G.L.		m	0			543	0.00	
								0.00	
								0.00	
								0.00	
	300 mm dia RCC pipe							0.00	
3200 SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		m	0			461	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	202			490.93	99,167.07	
	3.0 to 4.5 Mtr B.G.L.		m	596			521.36	310,732.94	
	4.5 to 6.0 Mtr B.G.L.		m	462			557	257,276.18	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	6.0 to 7.5 mtr B.G.L.		m	575			607	348,842.32	
	7.5 to 9.0 mtr B.G.L.		m	0.0			674.01	0.00	
								0.00	
								0.00	
	350 mm dia RCC pipe							0.00	
3201 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		m	0.0			517.22	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			551	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	0.0			584.72	0.00	
	4.5 to 6.0 Mtr B.G.L.		m	103.0			624.54	64,327.94	
	6.0 to 7.5 mtr B.G.L.		m	650			680	442,261.89	
	7.5 to 9.0 mtr B.G.L.		m	402			756	303,878.65	
								0.00	
	400 mm dia RCC pipe							0.00	
3202 SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		m	62.00			562.5	34,873.14	
	1.5 to 3.0 Mtr B.G.L.		m	202			599	120,947.36	
	3.0 to 4.5 Mtr B.G.L.		m	953			636	605,986.34	
	4.5 to 6.0 Mtr B.G.L.		m	331			679	224,809.42	
	6.0 to 7.5 mtr B.G.L.		m	0			740	0.00	
	7.5 to 9.0 mtr B.G.L.		m	0			822	0.00	
								0.00	
								0.00	
	450 mm dia RCC pipe							0.00	
3203 SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		0	0			667	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			710	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	105			754	79,206.62	
	4.5 to 6.0 Mtr B.G.L.		m	128			806	103,133.25	
	6.0 to 7.5 mtr B.G.L.		m	0			878	0.00	
	7.5 to 9.0 mtr B.G.L.		m	0			975	0.00	
								0.00	
								0.00	
	500 mm dia RCC pipe							0.00	
3204 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		0	0			744	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			792	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	49			841	41,221.82	
	4.5 to 6.0 Mtr B.G.L.		m	0			899	0.00	
	6.0 to 7.5 mtr B.G.L.		m	99			979	96,914.00	
	7.5 to 9.0 mtr B.G.L.		m	130			1,088	141,384.78	
			m					0.00	
								0.00	
	600 mm dia RCC pipe							0.00	
3205 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		m	0			841	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	1,219			895	1,090,991.62	
	3.0 to 4.5 Mtr B.G.L.		m	823			950	782,244.37	
	4.5 to 6.0 Mtr B.G.L.		m	558			1,015	566,491.48	
	6.0 to 7.5 mtr B.G.L.		m	46			1,106	50,876.91	
	7.5 to 9.0 mtr B.G.L.		m	0			1,229	0.00	
			m					0.00	
				0				0.00	
	700 mm dia RCC pipe			0				0.00	
3206 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		m	0			929	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	633			989	625,878.86	
	3.0 to 4.5 Mtr B.G.L.		m	223			1,050	234,161.96	
	4.5 to 6.0 Mtr B.G.L.		m	0			1,122	0.00	
	6.0 to 7.5 mtr B.G.L.		m	0			1,222	0.00	
	7.5 to 9.0 mtr B.G.L.		m	0			1,357	0.00	
								0.00	
								0.00	
	750 mm dia RCC pipe							0.00	
Interpolated	0.0 to 1.5 Mtr B.G.L.		m	0			1,134	0.00	
	1.5 to 3.0 Mtr B.G.L.		m	0			1,207	0.00	
	3.0 to 4.5 Mtr B.G.L.		m	10			1,282	12,815.74	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	2. MANHOLES IN BRICK MASONRY								
	2.1 CIRCULAR BRICK MANHOLE								
	CONSTRUCTION OF BRICK CIRCULAR MANHOLES in First Class Work of Following Sizes								
	a) 150 mm dia Sewer Pipe								
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No						
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No						
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No						
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No						
	6.0 to 7.5 mtr ht with 900 mm Manhole Dia		No						
	7.5 to 9.0 mtr ht with 900 mm Manhole Dia		No						
	200 mm dia Sewer Pipe								
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	2,377			15,752	37,450,214.45	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	1,652			34,397	56,808,240.57	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	301			64,027	19,265,697.08	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	72			116,838	8,441,555.50	
	6.0 to 7.5 mtr ht with 900 mm Manhole Dia		No	9			150,620	1,408,297.49	
	7.5 to 9.0 mtr ht with 900 mm Manhole Dia		No	0			274,701	0.00	
								0.00	
								0.00	
								0.00	
	250 mm dia Sewer Pipe								
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	7			15,905	111,331.77	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	59			34,446	2,032,321.95	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	67			63,857	4,278,401.77	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	12			116,527	1,398,323.53	
	6.0 to 7.5 mtr ht with 900 mm Manhole Dia		No	24			149,852	3,596,458.83	
	7.5 to 9.0 mtr ht with 900 mm Manhole Dia		No	0			273,314	0.00	
								0.00	
								0.00	
								0.00	
	300 mm dia Sewer Pipe								
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	0			16,035	0.00	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	9			34,464	310,177.42	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	24			63,647	1,527,520.50	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	18			116,191	2,091,431.86	
	6.0 to 7.5 mtr ht with 900 mm Manhole Dia		No	22			149,057	3,279,255.67	
	7.5 to 9.0 mtr ht with 900 mm Manhole Dia		No	0			271,906	0.00	
								0.00	
								0.00	
								0.00	
	350 mm dia Sewer Pipe								
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	0			16,000	0.00	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	0			34,344	0.00	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	0			63,242	0.00	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	5			115,847	579,234.32	
	6.0 to 7.5 mtr ht with 900 mm Manhole Dia		No	28			148,253	4,151,078.88	
	7.5 to 9.0 mtr ht with 900 mm Manhole Dia		No	14			270,496	3,786,947.63	
								0.00	
								0.00	
								0.00	
	400 mm dia Sewer Pipe								
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	3			16,106	48,318.18	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	9			34,357	309,215.94	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	37			62,967	2,329,787.25	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	13			115,478	1,501,213.28	
	6.0 to 7.5 mtr ht with 900 mm Manhole Dia		No	0			147,421	0.00	
	7.5 to 9.0 mtr ht with 900 mm Manhole Dia		No	0			269,065	0.00	
								0.00	
								0.00	
								0.00	
	450 mm dia Sewer Pipe								
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	0			16,048	0.00	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	0			34,232	0.00	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	5			62,668	313,341.40	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	5			115,102	575,507.66	
	6.0 to 7.5 mtr ht with 900 mm Manhole Dia		No	0			146,580	0.00	
	7.5 to 9.0 mtr ht with 900 mm Manhole Dia		No	0			267,634	0.00	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
								0.00	
								0.00	
	500 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	0			16,138	0.00	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	0			34,203	0.00	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	3			62,338	187,013.62	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	0			114,887	0.00	
	6.0 to 7.5 mtr ht with 900 mm Manhole Dia		No	4			145,912	583,647.20	
	7.5 to 9.0 mtr ht with 900 mm Manhole Dia		No	5			266,398	1,331,989.09	
								0.00	
				0				0.00	
	600 mm dia Sewer Pipe			0.000				0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	0			16,130	0.00	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	50			34,001	1,700,037.96	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	32			61,590	1,970,867.96	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	20			114,062	2,281,233.85	
	6.0 to 7.5 mtr ht with 900 mm Manhole Dia		No	2			144,148	288,295.54	
	7.5 to 9.0 mtr ht with 900 mm Manhole Dia		No	0			263,489	0.00	
								0.00	
								0.00	
	700 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 1200 mm Manhole Dia		No	0			19,345	0.00	
	1.5 to 3.0 mtr ht with 1200 mm Manhole Dia		No	23			40,541	932,446.36	
	3.0 to 4.5 mtr ht with 1200 mm Manhole Dia		No	10			72,843	728,430.80	
	4.5 to 6.0 mtr ht with 1200 mm Manhole Dia		No	0			133,285	0.00	
	6.0 to 7.5 mtr ht with 900 mm Manhole Dia		No	0			170,295	0.00	
	7.5 to 9.0 mtr ht with 900 mm Manhole Dia		No	0			307,000	0.00	
								0.00	
								0.00	
	800 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 1200 mm Manhole Dia		No	0			19,422	0.00	
	1.5 to 3.0 mtr ht with 1200 mm Manhole Dia		No	0.000			40,445	0.00	
	3.0 to 4.5 mtr ht with 1200 mm Manhole Dia		No	1			71,823	71,823.09	
	Providing uPVC drop connection for 60 cm drop from invert level of lateral/branch sewer line to maximum water line of main sewer in manhole including inspection and cleaning eye with chain and lid, drop pipe and bends, tees, encased all around with cement concrete 1:2:4 with all centering and shuttering required, cutting holes in wall and making good with brickwork in cement mortar 1:4, plastered with cement mortar 1:3 on inside of the manhole wall, stiff cement mortar 1:1 joints between uPVC (S/S) and RCC pipe (S/S), making required channels		Nos	100			7,208	720,800.00	
	Additional cost for Manhole Cover for Providing of SFRC Extra HD 35 on Major roads instead of SFRC HD 20		No	1,368			218	298,823.62	
	3. HOUSE CONNECTING CHAMBER								

	Items	Specification	Unit	Qty	P.C Portion (Yen)		L.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Construction of road side inspection chamber for multiple property connections including excavation with clear opening of 600x400mm and upto the depth of 900mm in all types of soil with 230 mm thick brick masonry (first class brick) in CM (1:4), 100 mm thick PCC of M15 in foundation 12mm thick inside and outside plastering with CM (1:3), finished with PCC M15 flooring of 75mm thick as per drawings, including covering of chamber by supplying and fixing SPRC frame and cover as per IS 12592 (Part I and II) including fixing 2 Nos 110 OD uPVC pipe pieces and plugging the same and providing, laying one no 150mm RCC NP2 pipe from road side chamber to manhole of required length including granular bedding and cost of materials, labour required, cost of specials, etc.			4,514			68,760	310,393,222.85	
	4. BARRICADING								
	16.81 - DSR 2014	Providing and erecting 2.00 metre high	m	2,000			1,467	2,934,000.00	
								0.00	
	Similar project exp	Supply of all material, lab	m	8,000			440	3,520,800.00	
	5. DESILTING OF SEWER PIPE								
Schedule of rates from Institute of Trenchless Technology 2014_1.7	Desilting the existing old sewer lines through jetting and suction machines including cleaning, barricading and reconstruction of manholes for section isolation by plugging and flow stoppage, setting up the over-pumping arrangements, traffic management, jetting and dislodging of accumulated silt from the pipelines, removal of silt through suction hose, disposal of removed silt from upto a distance of 20 km, necessary temporary repairs of sewers to stop locational collapses, ingress of ground water in desilted section of the pipelines all complete as per the instructions of the Employer's		m'	357			5,167	1,842,401.15	
	6. REPAIRS/REHABILITATION OF EXISTING MANHOLE								
		Refurbishment of existing	Nos	227			15,201	3,450,537.39	
	7. DISMANTELING OF EXISTING SEWERS								
	Excavation by manually or mechanically up to following depths below G.L. for taking out of old sewer line, in ordinary soil (earth, sand, loam & clay) including refilling of trenches in 15cm layer watering and ramming the same including supply of required earth to achieve the existing road level excluding of dismantling of old existing sewer line including supply all material, labour and T&P etc to complete the								
3001 - SOR_U.P. Jal Nigam Varanasi 2014-15	a) 0.0 to 1.5 mtr B.G.L.		m3	49,500			185	9,147,105.00	
3002 - SOR_U.P. Jal Nigam Varanasi 2014-15	a) 1.5 to 3.0 mtr B.G.L.		m3	19,500			232	4,523,610.00	
3003 - SOR_U.P. Jal Nigam Varanasi 2014-15	b) 3.0 to 4.5 mtr B.G.L.		m3				291	0.00	
	Dismantling of old existing sewer including taking out the same from the trench removal and stacking properly at site, as per direction of Engineer-in-charge of following sizes							0.00	
3117.i- SOR_U.P. Jal Nigam Varanasi 2015-16	250 mm dia		m	10,000			245	2,446,000.00	
3118.i- SOR_U.P. Jal Nigam Varanasi 2015-16	300 mm dia		m	10,000			294	2,935,600.00	
3119.i- SOR_U.P. Jal Nigam Varanasi 2015-16	400 mm dia		m				445	0.00	
3122i- SOR_U.P. Jal Nigam Varanasi 2015-16	600 mm dia		m				501	0.00	
								0.00	
3128- SOR_U.P. Jal Nigam Varanasi 2014-15	1200 mm dia		m					0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
Lump Sum	Supply of all labour, equipment and T&P for diversion of flow during dismantling work and transportation of dismantled old sewer pipe upto the required site as directed by the		LS	1			200,000	200,000.00	
	8. TRANSFER OF EXISTING HOUSE CONNECTIONS TO SEWERS								
	Transfer of existing house connection to sewers by laying of new connecting sewer of 160 mm OD HDPE pipe in suitable gradient upto the MH / House connecting chamber and repair of existing chamber / sewer line as required including supply of all materials, labour and T&P required for		No	10,533			8,000	84,264,206.32	
	9. MISCELLANEOUS								
	UPJN SOR 1005	Filling of sand for 1m for	m3	41,850.000			917	38,376,450.00	
		Provision for shifting & r	Ls						
	Similar Project Exp	Provision for Land and su	LS	1			3,142,000	3,142,000.00	

4. Dinapur STP & Bhagwanpur STP (Varanasi)

1 INR(India Rupee)= 1.57 JPY
 1 US\$= 105.5 JPY

Summary - Rehabilitation of Dinapur and Baganpur STPs

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit	Amount	Unit	Amount	
Dinarpur STP								
Civil/ Architectural work		LS	1				96,019,852	
Mechanical works		LS	1				300,757,200	
Electrical works		LS	1				71,948,500	
Baguanpur STP								
Civil/ Architectural work		LS	1				12,012,407	
Mechanical works		LS	1				47,757,420	
Electrical works		LS	1				26,367,100	
Total							554,862,479	

1 INR(India Rupee)= 1.57 JPY
 1 US\$= 105.5 JPY

Dinapur STP - Civil

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit Price	Amount	Unit Price	Amount	
[Direct Cost]								
<Civil/Building work>								
1. Dinapur STP-Civil		pc	1				96,019,852	
Total							96,019,852	

		Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
						Unit Price	Amount	Unit Price	Amount	
		<Civil/Building work>								
		1. INLET CHAMBER								
EXCAVATION		1) Excavation Work								
UPJN (Var) SOR	4001	Excavation 0.0 - 1.5m deep in ordinary soil.		m ³	2,075.00		145.09	301,061.75		
	4002	Excavation 1.5 - 3.0m deep in ordinary soil.		m ³	1,667.00		182.79	304,710.93		
	4003	Excavation 3.0 - 4.5m deep in ordinary soil.		m ³	881.00		230.86	203,387.66		
		2) Disposal								
UPPWD(Var)SOR	Item7, Pg.30	Soil disposal		m ³	3,534.00		123.85	437,685.90		
		3) Backfilling								
UPJN (Var) SOR	1005	Backfilling		m ³	707.00		75.63	53,470.41		
UPJN (Var) SOR	1006	Backfilling		m ³	328.00		94.60	31,028.80		
				m ³	54.00		113.57	6,132.78		
UPJN (Var) SOR	1024	4) RC Concrete work								
DSR2013, CPWD	item5.34.1, pg.101	RC Concrete work		m ³	1,218.81		12,862.74	15,677,175.81		
		5) Lean Concrete								
UPPWD(Var)SOR	Item7, Pg.32	plain concrete		m ³	110.69		4,600.00	509,180.57		
		6) Re-bar work								
Rate Analysis UPJN(Var) Mats Rate DSR Pattern		Re-bar Installation		ton	121.88		80,780.00	9,845,509.29		
		7) Form work								
DSR2013, CPWD	Item 4.3, pg86	Form work		m ²	3,911.82		334.50	1,308,503.09		
		8) Epoxy work								
DSR2013, CPWD	Item 13.52.2, pg.226	Epoxy painting		m ²	2,674.17		239.30	639,929.58		
		9) Cement Painting								
UPPWD(Var)SOR	Item22, pg.51	cement painting		m ²	2,177.06		42.00	91,436.64		
DSR2013, CPWD	Item 10.26, pg.179	Handrail installation		m	775.59		736.80	571,458.31		
		11) Structural steel								
UPPWD(Var)SOR	Item 3, pg.38	structural steel installation		kg	315,000.00		72.00	22,680,000.00		
		12) Dismantling R.C.C. Or R.B. Work								
UPJN (Var) SOR	1266	Dismantling R.C.C. Or R.B. Work.		m ³	1,000		827	827,450.00		
		13) Rehabilitation								
RUIDP	16.6	Rehabilitation work		m ²	30,000		564.00	16,920,000.00		

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
		Surface preparation, Filling of bug holes with Nitomortar FC/FCB, Nitoprime coat, 2mm thick Fosroc Polyurea WPE or Equivalent. -	m ²	2,197			2,643.75	5,808,318.75	
	14) Building works								
	Floor ht. 3.35 mtr. (office)		m ²	675.0			19,950.00	13,466,250.00	
	Every 0.3 mt. additional height of floor above normal floor height of 3.35 mt./ 2.90 mts.		m ²				284		
	Considering average height increase of 1.5 m		m ²	675			1,418	956,812.50	
	Resisting Earthquake forces		m ²	675			1,197	807,975.00	
	Miscellaneous & Contingencie:		LS	1.0			4,572,374	4,572,373.89	
								0.00	
								96,019,851.66	
	Total								

1 INR(India Rupee)= 1.57 JPY
1 US\$= 105.5 JPY

Dinapur STP - Civil

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit Price	Amount	Unit Price	Amount	
[Direct Cost]								
<Civil/Building work>								
1. Dinapur STP-Civil		pc	1				12,012,407	
Total							12,012,407	

		Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
						Unit Price	Amount	Unit Price	Amount	
<Civil/Building work>										
UPJN (Var) SOR	3001	1) Excavation Work								
	3002	Excavation 0.0 - 1.5m deep in ordinary soil		m ³			145.09		0.00	
	3003	Excavation 1.5 - 3.0m deep in ordinary soil		m ³			182.79		0.00	
		Excavation 3.0 - 4.5m deep in ordinary soil		m ³			230.86		0.00	
		2) Disposal								
		Soil disposal		m ³			123.85		0.00	
		3) Backfilling								
		Backfilling	0-1.5	m ³			75.63		0.00	
			1.5-3.0	m ³			94.60		0.00	
			3-4.5	m ³			113.57		0.00	
		4) RC Concrete work								
		RC Concrete work	RCC with cement, coarse sand and 20 mm stone ballast 1:1.5:3 in 1 beams, Slabs, columns	m ³			12,862.74		0.00	
		5) Plain Concrete								
		plain concrete	Concrete with 4cm. gauge approved stone ballast, approved coarse sand and cement in the	m ³			4,600.00		0.00	
		6) Re-bar work								
		Re- bar Installation		ton			80,780.00		0.00	
		7) Form work								
		Form work	Retaining walls, return walls, walls (any thickness) including attached pilasters.	m ²			334.50		0.00	
		8) Epoxy work								
		Epoxy painting	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete	m ²			239.30		0.00	
		9) Cement Painting								
		cement painting	proof cement paint of approved make and quality on new work with two coat to give an even shade including supply of all material labour and T&P etc. required for proper completion of the work.	m ²			42.00		0.00	
		10) Handrail installation								
		Handrail installation		m			736.80		0.00	
		11) Structural steel								
		structural steel installation		kg			72.00		0.00	
		12) Dismantling R.C.C. Or R.B. Work.								
		Dismantling R.C.C. Or R.B. Work		m ³			827		0.00	
		13) Rehabilitation								
RUIDP	16.6	Rehabilitation work		m ²	7,000		564.00		3,948,000.00	
Quotation			Surface preparation, Filling of bug holes with Nitomortar FC/FCB, Nitoprime coat, 2mm thick Fosroc Polyurea WPE or Equivalent. -	m ²	2,834		2,643.75		7,492,387.50	
		14) Building works								
		Floor ht. 3.35 mtr. (office)		m ²			19,950.00		0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Every 0.3 mt. additional height of floor above normal floor height of 3.35 mt. / 2.90 mts.		m ²				284		
	Considering average height increase of 1.5 m		m ²				1,418	0.00	
	Resisting Earthquake forces		m ²				1,197	0.00	
	Miscellaneous & Contingencies		%	5.0			11,440,388	572,019.38	
								0.00	
	Total							12,012,406.88	

5. Ramna STP (Varanasi)

1 INR(India Rupee)= 1.57 JPY
 1 US\$= 105.5 JPY

Summary - Ramnar STP

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit	Amount	Unit	Amount	
Civil/ Architectural work	50MLD	LS	1				729,489,869	
Mechanical work		LS	1				208,657,320	
Electrical work		LS	2				20,030,142	
Cost of sewer cleaning equipments, Flushing Van		LS	1				1,000,000	
Hiring of Godown and Site Office		LS	1				1,500,000	
Communication & Public Outreach		LS	1				1,000,000	
Environmental and Management Plan (EMP)		LS	1				67,380,000	
Governance and Accountability Action Plan (GAAP)		LS	1				500,000	
		LS	1					
		LS	1					
		LS	1					
Total							1,029,557,331	

1 INR(India Rupee)= 1.57 JPY
1 US\$= 105.5 JPY

10 MLD STP AND APPURTENANCES WORKS (Design Capacity 10MLD by A2O)

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit Price	Amount	Unit Price	Amount	
[Direct Cost]								
<Civil/Building work>								
1. INLET CHAMBER		pc	1		0		1,251,449	
2. Screen Chamber		pc	1		0		1,999,504	
3. Detritor Chamber		pc	1		0		5,398,533	
4. Detritor Inlet & Outlet Channel		pc	1		0		4,745,178	
5. Distribution Chambers		pc	1		0		3,791,258	
6. Primary Settling Tank		pc	1		0		44,615,070	
7. Secondary Settling Tank		pc	1		0		45,304,356	
8. Anaerobic Tank		pc	1		0		19,707,491	
9. Anoxic Tank		pc	1		0		33,273,322	
10. Aeration Tank		pc	1		0		60,741,362	
11. Raw Sludge Sump		pc	1		0		2,665,235	
12. Return Sludge Sump		pc	1		0		3,853,410	
13. Thickened Sludge Sump		pc	1		0		2,547,949	
14. Digested Sludge Sump		pc	1		0		2,903,119	
15. Treated Effluent Pumping Station		pc	1		0		5,102,207	
16. Sludge Drying Bed		pc	1		0		54,403,768	
17. Sludge Digester		pc	1		0		19,132,112	
18. Gas Holder and Moisture Trap Chamber		pc	1		0		10,548,931	
19. LAB EQUIPMENT & ADMINISTRATIVE BUILDING		pc	1		0		1,372,968	
20. PIPE CONNECTING TO DIFFERENT UNITS OF STP		pc	1		0		7,632,567	
21. CHLORINATION & DE-CHLORINATION SYSTEMS		pc	1		0		10,253,000	
22. PUMP HOUSE WITH CHLORONOME		pc	1		0		509,664	
23. Guard Room		pc	1		0		1,102,285	
24. RISING MAIN FROM TUBEWELL TO O.H.T & WAT		pc	1		0		812,782	
25. SOIL INVESTIGATION OF STP SITE		pc	1		0		100,000	
26. VEHICLES		pc	1		0		1,500,000	
27. HIRING OF TEMPORARY GODOWN		pc	1		0		246,240	
28. OFFICE CUM LABORATORY BUILDING		pc	1		0		8,694,000	
29. 250 KL RCC OVER HEAD TANK & APPURTENENT		pc	1		0		2,800,000	
30. 100 KL RCC OVER HEAD TANK & APPURTENENT		pc	1		0		1,500,000	
31. EFFLUENT CHANNEL BETWEEN SST & CCT		pc	1		0		1,313,064	
32. EFFLUENT DISPOSAL CONDUTE		pc	1		0		127,664,929	
33. DG PLATFORM & CONTROL ROOM		pc	1		0		7,013,455	
34. TRANSFORMER YARD		pc	1		0		679,713	
35. METERING/HT ROOM		pc	1		0		2,268,723	
36. CONTROL ROOM BUILDING		pc	1		0		4,251,503	
37. STAFF QUARTER		pc	1		0		5,692,500	
38. CAMPUS ROAD		pc	1		0		85,035,600	
39. OUTFALL STRUCTURE		pc	1		0		1,191,825	
40. Pipe Protection Wall		pc	1		0		302,813	
41. RAMP FOR ENTERING IN PLANT		pc	1		0		5,968,727	
42. EARTHEN BUNDH		pc	1		0		55,740,375	
43. PIPE PROTECTION ALONG RIVER GANGA		pc	1		0		675,517	
44. Miscellaneous Works at MPS Nagwa and Rising Main		pc	1		0		4,828,364	
45. Boundary Wall		pc	1		0		68,355,000	
Total							729,489,869	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference	
					Unit Price	Amount	Unit Price	Amount		
<Civil/Building work>										
	1. INLET CHAMBER									
	1) Excavation Work									
	Excavation	00.00m – 01.50m B.G.	m ³	60.03			184.79	11,092.94		
	2) Plain Concrete work									
	Plain concrete		m ³	3.75			6,364.94	23,881.25		
	3) RC concrete work									
	RC Concrete	Raft Foundation	m ³	18.76			12,715.80	238,548.41		
		R.C.C Columns	m ³	2.40			12,715.80	30,517.92		
		Floor Slab	m ³	12.65			12,715.80	160,829.44		
		RCC Walls x-x	m ³	17.36			12,715.80	220,746.29		
		x-y	m ³	12.04			12,715.80	153,098.23		
		R.C.C. Stairs	m ³	3.60			12,715.80	45,776.88		
	4) Form work/Shuttering									
	Form work	Raft Foundation	m ²	19.38			196.45	3,807.20		
		R.C.C Columns	m ²	3.24			453.35	1,468.85		
		Floor Slab	m ²	13.10			401.65	5,263.22		
		RCC Walls x-x	m ²	22.05			360.80	7,955.64		
		x-y	m ²	15.40			360.80	5,556.32		
		R.C.C. Stairs	m ²	3.60			395.65	1,424.34		
	5) Re-bar work									
	Raft @1.0%		kg	1,473			70.96	104,496.12		
	Wall @0.125%		kg	288			70.96	20,470.32		
	Slab @ 0.6%		kg	765			70.96	54,302.34		
	Columns @2%		kg	377			70.96	26,736.75		
	6) Epoxy painting work									
	Epoxy painting		m ²	70.0			121.15	8,480.50		
	7) Foot step installation									
	CI foot steps (PVC encapsulated)		No	12			225	2,700.00		
	8) Railing installation									
	Providing and fixing 1.00m high Railing made up of of 25mm		m	22.6			1,960	44,296.00		
	9) Weir plate installation									
	Supply and fixing of 8mm thick FRP weir plate		m ²	4.8			15,000	72,000.00		
	10) Miscellaneous work									
	Misc Unforeseen items		Ls	1.0			8,000	8,000.00		
	Total								1,251,448.96	
	2. Screen Chamber									
	1) Excavation Work									
	Excavation	00.00m – 01.50m B.G.	m ³	100.50			184.79	18,571.40		
	2) Plain Concrete work									
	Plain concrete		m ³	6.70			6,364.94	42,645.10		
	3) RC concrete work									
	RC Concrete	Raft Foundation	m ³	33.50			12,715.80	425,979.30		
		R.C.C Columns	m ³	5.76			12,715.80	73,243.01		
		Floor Slab	m ³	17.68			12,715.80	224,815.34		
		RCC Walls x-x	m ³	20.40			12,715.80	259,402.32		
		x-y	m ³	2.70			12,715.80	34,332.66		
		R.C.C. Stairs	m ³	3.60			12,715.80	45,776.88		
		Platform	m ³	4.80			12,715.80	61,035.84		
	4) Form work/Shuttering									
	Form work	Raft Foundation	m ²	16.90			196.45	3,320.01		
		R.C.C Columns	m ²	57.60			453.35	26,112.96		
		Floor Slab	m ²	56.62			401.65	22,741.42		
		RCC Walls x-x	m ²	103.20			360.80	37,234.56		
		x-y	m ²	14.40			360.80	5,195.52		
		R.C.C. Stairs	m ²	24.00			395.65	9,495.60		
		Platform	m ²	16.00			401.65	6,426.40		
	5) Re-bar work									
	Raft @1.0%		kg	2,630			70.96	186,600.22		
	Wall @0.125%		kg	3,627			70.96	257,341.20		
	Slab @ 0.6%		kg	1,228			70.96	87,161.80		
	Columns @2%		kg	904			70.96	64,168.20		
	6) Epoxy painting work									
	Epoxy painting		m ²	108.0			121.15	13,084.20		

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	7) Foot step installation								
	CI foot steps (PVC encapsulated)		No	12			225	2,700.00	
	8) Railing installation								
	Providing and fixing 1.00m high Railing made up of of 25mm		m	42.0			1,960	82,320.00	
	10) Miscellaneous work								
	Misc Unforeseen items		Ls	1.0			9,800	9,800.00	
	Total							1,999,503.94	
	3. Detritor Chamber								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.L	m ³	248.43			184.79	45,907.38	
	2) Plain Concrete work								
	Plain concrete		m ³	14.79			6,364.94	94,137.46	
	3) RC concrete work								
	RC Concrete	Raft Foundation	m ³	73.96			12,715.80	940,460.57	
		R.C.C Columns	m ³	7.68			12,715.80	97,657.34	
		Floor Slab	m ³	49.93			12,715.80	634,874.46	
		RCC Walls x-x	m ³	18.96			12,715.80	241,091.57	
		x-y	m ³	17.04			12,715.80	216,677.23	
		Platform for inspection	m ³	8.52			12,715.80	108,338.62	
	4) Form work/Shuttering								
	Form work	Raft Foundation	m ²	75.69			196.45	14,869.30	
		R.C.C Columns	m ²	11.20			453.35	5,077.52	
		Floor Slab	m ²	51.20			401.65	20,564.48	
		RCC Walls x-x	m ²	24.00			360.80	8,659.20	
		x-y	m ²	21.60			360.80	7,793.28	
		Platform for inspection	m ²	8.64			401.65	3,470.26	
	5) Re-bar work								
	Raft @1.0%		kg	5,806			70.96	411,968.73	
	Wall @0.125%		kg	3,533			70.96	250,637.02	
	Slab @ 0.6%		kg	2,753			70.96	195,338.68	
	Columns @2%		kg	1,206			70.96	85,557.59	
	6) Epoxy painting work								
	Epoxy painting		m ²	85.20			121.15	10,321.98	
	7) Foot step installation								
	CI foot steps (PVC encapsulated)		No	10.00			225.00	2,250.00	
	8) Railing installation								
	Providing and fixing 1.00m high Railing made up of of 25mm		m	96.00			1,960.00	188,160.00	
	9) Weir plate installation								
	Supply and fixing of 8mm thick FRP weir plate		m ²	25.0			15,000	375,000.00	
	Supply and fixing of 8mm thick FRP Deflector plate		m ²	4.8			16,500	79,200.00	
	10) Gate installation								
	Supply & fixing of 1.5mx1.5m CI gates with all accessories.		No	3.0			450,000	1,350,000.00	
	11) Miscellaneous work								
	Misc Unforeseen items		Ls	1.0			10,500	10,500.00	
	Total							5,398,533	
	4. Detritor Inlet & Outlet Channel								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.	m ³	95.40			184.79	17,628.97	
	2) Plain Concrete work								
	Plain concrete		m ³	6.30			6,364.94	40,099.12	
	3) RC concrete work								
	RC Concrete	Raft Foundation	m ³	27.44			12,715.80	348,921.55	
		R.C.C Columns	m ³	13.44			12,715.80	170,900.35	
		Floor Slab	m ³	36.00			12,715.80	457,768.80	
		RCC Walls x-x	m ³	72.00			12,715.80	915,537.60	
		x-y	m ³	7.20			12,715.80	91,553.76	
		Platform for inspection	m ³	30.00			12,715.80	381,474.00	

	Items	Specification	Unit	Qty	P.C Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	4) Form work/Shuttering								
	Form work	Raft Foundation	m ²	47.04			196.45	9,241.01	
		R.C.C Columns	m ²	112.00			453.35	50,775.20	
		Floor Slab	m ²	137.20			401.65	55,106.38	
		RCC Walls x-x	m ²	480.00			360.80	173,184.00	
		x-y	m ²	48.00			360.80	17,318.40	
		Platform for inspection	m ²	240.00			401.65	96,396.00	
	5) Re-bar work								
	Raft @1.0%		kg	2,154			70.96	152,845.08	
	Wall @0.125%		kg	7,772			70.96	551,445.43	
	Slab @ 0.6%		kg	3,109			70.96	220,578.17	
	Columns @2%		kg	2,110			70.96	149,725.79	
	6) Epoxy painting work								
	Epoxy painting		m ²	312.00			121.15	37,798.80	
	7) Foot step installation								
	CI foot steps (PVC encapsulated)		No	8.00			225.00	1,800.00	
	8)Railing installation								
	Providing and fixing 1.00m high Railing made up of of 25mm		m	408.00			1,960.00	799,680.00	
	11) Miscellaneous work								
	Misc Unforeseen items		Ls	1.0			5,400	5,400.00	
	Total							4,745,178.41	
	5. Distribution Chambers								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.	m ³	40.50			184.79	7,484.00	
	2) Plain Concrete work								
	Plain concrete		m ³	2.70			6,364.94	17,185.34	
	3) RC concrete work								
	RC Concrete	Raft Foundation	m ³	0.98			12,715.80	12,461.48	
		R.C.C Columns	m ³	0.80			12,715.80	10,172.64	
		Floor Slab	m ³	12.00			12,715.80	152,589.60	
		RCC Walls x-x	m ³	14.40			12,715.80	183,107.52	
		x-y	m ³	10.80			12,715.80	137,330.64	
	4) Form work/Shuttering								
	Form work	Raft Foundation	m ²	1.68			196.45	330.04	
		R.C.C Columns	m ²	5.20			453.35	2,357.42	
		Floor Slab	m ²	38.80			401.65	15,584.02	
		RCC Walls x-x	m ²	72.00			360.80	25,977.60	
		x-y	m ²	54.00			360.80	19,483.20	
	5) Re-bar work								
	Raft @1.0%		kg	76.93			70.96	5,458.75	
	Wall @0.125%		kg	2,472.75			70.96	175,459.91	
	Slab @ 0.6%		kg	565.20			70.96	40,105.12	
	Columns @2%		kg	125.60			70.96	8,912.25	
	6) Epoxy painting work								
	Epoxy painting		m ²	60.00			121.15	7,269.00	
	7) Foot step installation								
	CI foot steps (PVC encapsulated)		No	10.00			225.00	2,250.00	
	8)Railing installation								
	Providing and fixing 1.00m high Railing made up of of 25mm		m	22.60			1,960.00	44,296.00	
	9) Weir plate installation								
	Supply and fixing of 8mm thick FRP weir plate		m ²	4.8			15,000	72,000.00	
	10) Miscellaneous work								
	Misc Unforeseen items		Ls	1.0			8,000	8,000.00	
	sub-Total							947,814.53	
	Total		Ls	4			947,815	3,791,258.12	4 chambers

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	6. Primary Settling Tank								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G	m ³	1,484.70			184.79	274,357.71	
		1.50m – 3.00m B.G.L.	m ³	481.06			231.98	111,596.30	
	2) Plain Concrete work								
	Plain concrete		m ³	96.21			6,810.49	655,237.24	
	3) RC concrete work								
	RC Concrete	Raft foundation	m ³	481.06			12,715.80	6,117,030.96	
		Base Slab	m ³	380.46			12,715.80	4,837,857.42	
		RCC Walls Main wall	m ³	114.79			12,715.80	1,459,698.36	
		Laundry Wall	m ³	61.83			12,715.80	786,175.80	
		Feed Well	m ³	11.31			12,715.80	143,830.96	
	4) Form work/Shuttering								
	Form work	Raft foundation	m ²	24.50			196.45	4,813.03	
		Base Slab	m ²	380.46			401.65	152,811.89	
		RCC Walls Main wall	m ²	765.29			360.80	276,117.99	
		Laundry Wall	m ²	412.18			360.80	148,713.79	
		Feed Well	m ²	1.20			214.55	257.46	
	5) Re-bar work								
	Raft @1.0%		kg	37763.01			70.96	2,679,565.27	
	Wall @0.125%		kg	17330.91			70.96	1,229,756.40	
	Slab @ 0.6%		kg	532.76			70.96	37,803.09	
	6) Epoxy painting work								
	Epoxy painting		m ²	907.20			121.15	109,907.28	
	Epoxy painting	wall	m ²	382.65			121.15	46,358.05	
	7) Foot step installation								
	CI foot steps (PVC encapsulated)		No	12.00			225.00	2,700.00	
	8) Railing installation								
	Providing and fixing 1.00m high Railing made up of 25mm		m	110.60			1,960.00	216,776.00	
	9) Weir plate installation								
	Supply and fixing of 8mm thick FRP weir plate		m ²	106.8			15,000	1,601,400.00	
	Supply and fixing of FRP Scum plates plates		m ²	343.29			3,000	1,029,870.00	
	Fixing of 1.0m X 1.0 m CI Sluice gates for proper operation of the		No	1.0			380,000	380,000.00	
	10) Miscellaneous work								
	Misc Unforeseen items		Ls	1.0			4,900	4,900.00	
		Sub-Total					0	22,307,535.00	
		Total	Ls	2				22,307,535	44,615,070.00
									2 tanks
	7. Secondary Settling Tank								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G	m ³	1,484.70			184.79	274,357.81	
		1.50m – 3.00m B.G.L.	m ³	1,443.17			231.98	334,787.16	
	2) Plain Concrete work								
	Plain concrete		m ³	96.21			6,810.49	655,237.24	
	3) RC concrete work								
	RC Concrete	Raft foundation	m ³	481.06			12,715.80	6,117,030.96	
		Base Slab	m ³	380.46			12,715.80	4,837,857.42	
		RCC Walls Main wall	m ³	114.79			12,715.80	1,459,698.36	
		Laundry Wall	m ³	61.83			12,715.80	786,175.80	
		Feed Well	m ³	18.85			12,715.80	239,718.26	
	4) Form work/Shuttering								
	Form work	Raft foundation	m ²	24.50			196.45	4,813.03	
		Base Slab	m ²	380.46			401.65	152,811.89	
		RCC Walls Main wall	m ²	765.29			360.80	276,117.99	
		Laundry Wall	m ²	412.18			360.80	148,713.79	
		Feed Well	m ²	1.20			214.55	257.46	
	5) Re-bar work								
	Raft @1.0%		kg	37763.01			70.96	2,679,565.27	
	Wall @0.125%		kg	17330.91			70.96	1,229,756.40	
	Slab @ 0.6%		kg	887.93			70.96	63,005.15	
	6) Epoxy painting work								
	Epoxy painting		m ²	907.46			121.15	109,938.78	
	Epoxy painting	wall	m ²	343.29			121.15	41,589.45	

	Items	Specification	Unit	Qty	LC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	7) Foot step installation								
	CI foot steps (PVC encapsulated)		No	12.00			225.00	2,700.00	
	8) Railing installation								
	Providing and fixing 1.00m high Railing made up of of 25mm		m	110.60			1,960.00	216,776.00	
	9) Weir plate installation								
	Supply and fixing of 8mm thick FRP weir plate		m ²	106.76			15,000	1,601,400.00	
	Supply and fixing of FRP Scum plates plates		m ²	343.29			3,000	1,029,870.00	
	Fixing of 1.0m X 1.0 m CI Shuce gates for proper operation of the		No	1.0			380,000	380,000.00	
	10) Miscellaneous work								
	Misc Unforeseen items		Ls	1.0			10,000	10,000.00	
	Sub-Total						0	22,652,178.22	
	Total		Ls	2			22,652,178	45,304,356.44	2 tanks
	8. Anaerobic Tank								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.I	m ³	441.00			184.79	81,492.39	
		01.50m – 03.00m B.G.I	m ³	404.63			231.98	93,864.91	
		03.00m – 04.50m B.G.I	m ³	369.00			291.27	107,478.63	
		04.50m – 06.00m B.G.I	m ³	111.38			340.09	37,877.52	
	2) Drainage work								
	Making all necessary arrangements for lowering down the water table to 6.0m B.G.I. and bailing out the water from excavated sump well with the help of diesel engine		m ³	445.5			79.39	35,368.25	
	3) Plain Concrete work								
	Plain concrete	B.G.I.	m ³	24.60			7,128.73	175,366.83	
	4) RC concrete work								
	RC Concrete	Raft foundation	m ³	123.00			12,715.80	1,564,043.40	
		RCC Walls	m ³	22.18			12,715.80	281,985.58	
			m ³	156.02			12,715.80	1,983,969.98	
		Base Slab for Anaerobic	m ³	73.80			12,715.80	938,426.04	
		Path way	m ³	58.05			12,715.80	738,152.19	
	5) Form work/Shuttering								
	Form work	Raft foundation	m ²	246.00			196.45	48,326.70	
		RCC Walls	m ²	73.92			360.80	26,670.34	
			m ²	520.08			360.80	187,644.86	
		Base Slab for Anaerobic	m ²	246.00			401.65	98,805.90	
		Path way	m ²	296.70			196.45	58,286.72	
	6) Re-bar work								
	Raft @1.0%		kg	10350.23			70.96	734,425.06	
	Wall @0.125%		kg	17485.88			70.96	1,240,752.23	
	Slab @ 0.6%		kg	10350.23			70.96	734,425.06	
	7) Epoxy painting work								
	Epoxy painting		m ²	200.00			121.15	24,230.00	
	Epoxy painting	wall	m ²	528.00			121.15	63,967.20	
	Epoxy painting		m ²	66.00			121.15	7,995.90	
	8) Foot step installation								
	CI foot steps (PVC encapsulated)		No	22.00			225.00	4,950.00	
	9) Railing installation								
	Providing and fixing 1.00m high Railing made up of of 25mm		m	294.00			1,960.00	576,240.00	
	10) Miscellaneous work								
	Misc Unforeseen items		Ls	1.0			9,000	9,000.00	
	Sub-Total						0	9,853,745.69	
	Total		Ls	2			9,853,746	19,707,491.38	2 tanks
	9. Anoxic Tank								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.I	m ³	1,008.00			184.79	186,268.32	
		01.50m – 03.00m B.G.I	m ³	964.88			231.98	223,831.70	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
		03.00m – 04.50m B.G.L	m ³	922.50			291.27	268,696.58	
		04.50m – 06.00m B.G.L	m ³	176.18			340.09	59,915.36	
	2) Drainage work								
	Making all necessary arrangements for lowering down the water table to 6.0m BGL and bailing out the water from excavated sump well with the help of diesel engine.		m ³	1,057.1			79.39	83,919.20	
	3) Plain Concrete work								
	Plain concrete	B.G.L	m ³	61.50			7,128.73	438,417.07	
	4) RC concrete work								
	RC Concrete	Raft foundation	m ³	307.50			12,715.80	3,910,108.50	
		RCC Walls	m ³	56.06			12,715.80	712,898.61	
			m ³	151.30			12,715.80	1,923,849.68	
		Base Slab for Anaerobic	m ³	184.50			12,715.80	2,346,065.10	
		Path way	m ³	62.10			12,715.80	789,651.18	
	5) Form work/Shuttering								
	Form work	Raft foundation	m ²	307.50			196.45	60,408.38	
		RCC Walls	m ²	186.88			360.80	67,426.30	
			m ²	504.32			360.80	181,958.66	
		Base Slab for Anaerobic	m ²	615.00			401.65	247,014.75	
		Path way	m ²	317.40			196.45	62,353.23	
	6) Re-bar work								
	Raft @1.0%		kg	19358.10			70.96	1,373,600.44	
	Wall @0.125%		kg	20347.20			70.96	1,443,784.41	
	Slab @ 0.6%		kg	19358.10			70.96	1,373,600.44	
	7) Epoxy painting work								
	Epoxy painting		m ²	560.00			121.15	67,844.00	
	Epoxy painting	wall	m ²	512.00			121.15	62,028.80	
	Epoxy painting		m ²	179.20			121.15	21,710.08	
	8) Foot step installation								
	CI foot steps (PVC encapsulated)		No	22.00			225.00	4,950.00	
	9)Railing installation								
	Providing and fixing 1.00m high Railing made up of 25mm		m	366.00			1,960.00	717,360.00	
	10) Miscellaneous work								
	Misc Unforeseen items		Ls	1.0			9,000	9,000.00	
	Sub-Total						0	16,636,660.79	
	Total		Ls	2			16,636,661	33,273,321.58	2 tanks
	10. Aeration Tank								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.L	m ³	2,142.00			184.79	395,820.18	
		01.50m – 03.00m B.G.L	m ³	2,085.38			231.98	483,765.29	
		03.00m – 04.50m B.G.L	m ³	2,029.50			291.27	591,132.47	
		04.50m – 06.00m B.G.L	m ³	263.25			340.09	89,528.69	
	2) Drainage work								
	Making all necessary arrangements for lowering down the water table to 6.0m BGL and bailing out the water from excavated sump well with the help of diesel engine.		m ³	2,237.6			79.39	177,645.05	
	3) Plain Concrete work								
	Plain concrete	B.G.L	m ³	135.30			7,128.73	964,517.55	
	4) RC concrete work								
	RC Concrete	Raft foundation	m ³	676.50			12,715.80	8,602,238.70	
		RCC Walls	m ³	123.23			12,715.80	1,566,942.60	
			m ³	148.93			12,715.80	1,893,789.53	
		Base Slab for Anaerobic	m ³	405.90			12,715.80	5,161,343.22	
		Path way	m ³	70.20			12,715.80	892,649.16	
	5) Form work/Shuttering								
	Form work	Raft foundation	m ²	676.50			196.45	132,898.43	
		RCC Walls	m ²	410.76			360.80	148,202.21	
			m ²	496.44			360.80	179,115.55	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
		Base Slab for Anaerobic	m ²	1,353.00			401.65	543,432.45	
		Path way	m ²	358.80			196.45	70,486.26	
	6) Re-bar work								
	Raft @1.0%		kg	37373.85			70.96	2,651,951.22	
	Wall @1.25%		kg	26705.70			70.96	1,894,967.04	
	Slab @ 0.6%		kg	37373.85			70.96	2,651,951.22	
	7) Epoxy painting work								
	Epoxy painting		m ²	1,280.00			121.15	155,072.00	
	Epoxy painting	wall	m ²	504.00			121.15	61,059.60	
	Epoxy painting		m ²	403.20			121.15	48,847.68	
	8) Foot step installation								
	CI foot steps (PVC encapsulated)		No	21.00			225.00	4,725.00	
	9) Railing installation								
	Providing and fixing 1.00m high Railing made up of of 25mm		m	510.00			1,960.00	999,600.00	
	10) Miscellaneous work								
	Misc Unforeseen items		Ls	1.0			9,000	9,000.00	
		Sub-Total					0	30,370,681.10	
		Total	Ls	2				30,370,681	60,741,362.20
									2 tanks
	11. Raw Sludge Sump								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.I	m ³	59.39			184.79	10,974.31	
		01.50m – 03.00m B.G.I	m ³	34.21			231.98	7,936.51	
	Excavation-for dry well	00.00m – 01.50m B.G.I	m ⁴	54.32			184.79	10,036.87	
		01.50m – 03.00m B.G.I	m ⁴	45.54			231.98	10,564.37	
	2) Plain Concrete work								
	Plain concrete - for wet well	01.50m – 03.00m B.G.I	m ⁴	3.42			6,555.89	22,421.14	
	Plain concrete - for dry well		m ⁴	3.04			6,555.89	19,929.91	
	3) RC concrete work								
	RC Concrete- for wet well	Raft foundation	m ³	3.70			12,715.80	46,997.60	
		RCC Walls	m ⁴	31.10			12,715.80	395,484.78	
	RC Concrete- for dry well	Raft foundation	m ⁴	12.14			12,715.80	154,420.68	
		R.C.C Columns	m ³	5.04			12,715.80	64,087.63	
		RCC Walls x-x	m ³	11.88			12,715.80	151,063.70	
		x-y	m ³	7.20			12,715.80	91,553.76	
		R.C.C. Stairs	m ³	5.88			12,715.80	74,768.90	
		Platform for inspection	m ³	4.15			12,715.80	52,731.30	
	4) Form work/Shuttering								
	Form work- for wet well	Raft foundation	m ²	13.60			196.45	2,671.72	
		RCC Walls	m ²	49.76			360.80	17,954.47	
	Form work- for dry well	Raft foundation	m ²	11.20			196.45	2,200.24	
		RCC Walls x-x	m ²	15.84			360.80	5,715.07	
		x-y	m ²	11.04			360.80	3,983.23	
		R.C.C. Stairs	m ²	24.00			395.65	9,495.60	
		Platform for inspection	m ²	6.60			401.65	2,650.89	
	5) Re-bar work								
	Raft @1.0%		kg	1243.44			70.96	88,231.27	
	Wall @1.25%		kg	4924.09			70.96	349,400.84	
	Slab @ 0.6%		kg	472.27			70.96	33,510.88	
	6) Epoxy painting work								
	Epoxy painting		m ²	145.14			121.15	17,583.94	
	7) Foot step installation								
	CI foot steps (PVC encapsulated)		No	12.00			225.00	2,700.00	
	8) Railing installation								
	Providing and fixing 1.00m high Railing made up of of 25mm		m	68.20			1,960.00	133,672.00	
	9) Aluminium work								Detailed Specs are mention on DPR

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Providing and fixing aluminium work for doors, window, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions i.e. at top, bottom and sides with required EPDM rubber /neoprene gasket etc. Aluminium sections shall be smooth rust free, straight mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing /paneling ,CP. brass /stainless steel screws, all complete as per architectural drawings and the directions of Engineer/in charge . (Glazing, paneling and dash fasteners to be Powder coated aluminium (minimum thickness of powder coating 50 micron).								
	External Member		kg	13.8852			435.75	6,050.48	
	Internal Member		kg	14.2128			435.75	6,193.23	
	Aluminium snap Beading on both side		kg	2.9568			435.75	1,288.43	
	Angle cleat		kg	0.7880			435.75	343.37	
	For shutters of doors, windows & ventilators including providing and fixing hinges/pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/neoprene gasket required (Fittings shall be paid for separately).								
	Powder coated aluminium (minimum thickness of powder coating 50 micron).								
	@ 12 kg /SQMT of the Door B		m2	7.2000			435.75	3,137.40	
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item).								
	With float glass panes of 8 mm thickness		m2	4.80			1,338.40	6,424.32	
	Filling the gap in between aluminium frame & adjacent RCC /Brick /Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawing and direction of Engineer-in-charge complete.								
	Up to 5 mm depth and 5 mm width.		m	16.80			88.75	1,491.00	
	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete.								
	125 mm		each	4			66.95	267.80	
	Providing and fixing aluminium pull bolt lock ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws bolts nut and		each	8			69.80	558.40	
	10) Mild Steel work								

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Providing and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire of adequate strength conforming to IS: 4454- part 1 and M.S. top cover of required thickness for rolling shutters								
	80x125 mm M.S. laths with 125 mm thick top cover		m ²	7.5			2,142.10	16,065.75	
	Providing and fixing ball bearing for rolling shutters		each	1			438.95	438.95	
	Extra for providing mechanical device chain and crank operation for operating rolling shutters		m ²	7.5			724.85	5,436.38	
	11) Other Works								
	M.S. Gate (3.6 Mtr wide) with Wicket Gate (1.2 Mtr Wide)		No	1			69,898.00	69,898.00	
	Supply and fixing of Sluice valves		No	2			380,000.00	760,000.00	
	Misc. unforeseen items		Is	1			4,900.00	4,900.00	
	Total						0	2,665,235.12	
	12. Return Sludge Sump								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.L	m ⁴	120.18			184.79	22,207.69	
		01.50m – 03.00m B.G.L	m ⁴	108.57			231.98	25,186.93	
		03.00m – 04.50m B.G.L	m ⁴	97.56			291.27	28,415.85	
		04.50m – 06.00m B.G.L	m ⁴	58.09			340.09	19,755.21	
	Excavation-for dry well	00.00m – 01.50m B.G.L	m ⁴	110.72			184.79	20,459.02	
		01.50m – 03.00m B.G.L	m ⁴	97.44			231.98	22,604.13	
		03.00m – 04.50m B.G.L	m ⁴	84.92			291.27	24,733.19	
		04.50m – 06.00m B.G.L	m ⁴	24.38			340.09	8,291.39	
	2) Plain Concrete work								
	Plain concrete - for wet well	4.50m – 6.00m B.G.L	m ³	5.81			6,555.89	38,089.72	
	Plain concrete - for dry well	4.50m – 6.00m B.G.L	m ³	4.88			6,555.89	31,992.74	
	3) RC concrete work								
	RC Concrete- for wet well	Raft foundation	m ³	4.82			12,715.80	61,239.29	
		RCC Walls	m ³	43.90			12,715.80	558,272.70	
	RC Concrete- for dry well	Raft foundation	m ³	19.50			12,715.80	248,008.96	
		R.C.C Columns	m ³	5.04			12,715.80	64,087.63	
		RCC Walls x-x	m ³	31.80			12,715.80	404,362.44	
		x-y	m ³	7.20			12,715.80	91,553.76	
		R.C.C. Stairs	m ³	11.76			12,715.80	149,537.81	
		Platform for inspection	m ³	6.66			12,715.80	84,689.67	
	4) Form work/Shuttering								
	Form work- for wet well	Raft foundation	m ²	15.60			196.45	3,064.62	
		RCC Walls	m ²	64.84			360.80	23,395.22	
	Form work- for dry well	Raft foundation	m ²	15.20			196.45	2,986.04	
		RCC Walls x-x	m ²	0.00			360.80	0.00	
		x-y	m ²	11.04			360.80	3,983.23	
		R.C.C. Stairs	m ²	48.00			395.65	18,991.20	
		Platform for inspection	m ²	10.60			401.65	4,257.49	
	5) Re-bar work								
	Raft @1.0%		kg	1909.12			70.96	135,466.19	
	Wall @1.25%		kg	8134.94			70.96	577,234.28	
	Slab @ 0.6%		kg	867.59			70.96	61,562.00	
	6) Epoxy painting work								
	Epoxy painting		m ²	216.46			121.15	26,224.13	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	7) Foot step installation								
	CI foot steps (PVC encapsulated)		No	12.00			225.00	2,700.00	
	8) Railing installation								
	Providing and fixing 1.00m high Railing made up of of 25mm		m	105.90			1,960.00	207,564.00	
	9) Aluminium work								
	Providing and fixing aluminium work for doors, window, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions i.e. at top, bottom and sides with required EPDM rubber /neoprene gasket etc. Aluminium sections shall be smooth rust free, straight mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing /paneling ,CP brass /stainless steel screws, all complete as per architectural								
	Powder coated aluminium (minimum thickness of powder coating 50 micron).								
	External Member		kg	13.8852			435.75	6,050.48	
	Internal Member		kg	14.2128			435.75	6,193.23	
	Aluminium snap Beading on both side		kg	2.9568			435.75	1,288.43	
	Angle cleat		kg	0.7880			435.75	343.37	
	For shutters of doors, windows & ventilators including providing and fixing hinges/pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/neoprene gasket required (Fittings shall be paid for separately).								
	Powder coated aluminium (minimum thickness of powder coating 50 micron).								
	@ 12 kg /SQMT of the Door B		m2	7.2000			435.75	3,137.40	
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge.(Cost of aluminium snap beading shall be paid in basic item).								
	With float glass panes of 8 mm thickness		m2	4.80			1,338.40	6,424.32	
	Filling the gap in between aluminium frame & adjacent RCC /Brick /Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawing and direction of Engineer-in-charge complete.								
	Up to 5 mm depth and 5 mm width.		m	16.80			88.75	1,491.00	
	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete								
	125 mm		each	4			66.95	267.80	

	Item	Specification	Unit	Qty	I/C Portion (Yen)		I/C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Providing and fixing aluminium pull bolt lock ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws bolts nut and washers etc complete		each	8			69.80	558.40	
	10) Mild Steel work								
	Providing and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 2.75 cm long wire of adequate strength conforming to IS-4454- part 1 and M.S. top cover of required thickness for rolling shutters								
	80x 1.25 mm M.S. laths with 1.25 mm thick top cover		m ²	7.5			2,142.10	16,065.75	
	Providing and fixing ball bearing for rolling shutters.		each	1			438.95	438.95	
	Extra for providing mechanical device chain and crank operation for operating rolling shutters.		m ²	7.5			724.85	5,436.38	
	11) Other Works								
	M.S. Gate (3.6 Mtr wide) with Wicket Gate (1.2 Mtr. Wide)		No	1			69,898.00	69,898.00	
	Supply and fixing of Sluice valves		No	2			380,000.00	760,000.00	
	Misc. unforeseen items		Is	1			4,900.00	4,900.00	
	Total						0	3,853,410.04	
	13.Thickened Sludge Sump								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.L	m ³	43.84			184.79	8,100.66	
		01.50m – 03.00m B.G.L	m ³	24.63			231.98	5,713.70	
	Excavation-for dry well	00.00m – 01.50m B.G.L	m ³	54.32			184.79	10,036.87	
		01.50m – 03.00m B.G.L	m ³	45.54			231.98	10,564.37	
	2) Plain Concrete work								
	Plain concrete - for wet well	00.00m – 01.50m B.G.L	m ³	2.46			6,555.89	16,147.25	
	Plain concrete - for dry well	01.50m – 03.00m B.G.L	m ³	3.04			6,555.89	19,903.68	
	3) RC concrete work								
	RC Concrete- for wet well	Raft foundation	m ³	3.14			12,715.80	39,876.75	
		RCC Walls	m ³	26.39			12,715.80	335,562.84	
	RC Concrete- for dry well	Raft foundation	m ³	12.14			12,715.80	154,420.68	
		R.C.C Columns	m ³	5.04			12,715.80	64,087.63	
		RCC Walls x-x	m ³	11.88			12,715.80	151,063.70	
		x-y	m ³	7.20			12,715.80	91,553.76	
		R.C.C. Stairs	m ³	5.88			12,715.80	74,768.90	
		Platform for inspection	m ³	4.15			12,715.80	52,731.30	
	4) Form work/Shuttering								
	Form work- for wet well	Raft foundation	m ²	12.60			196.45	2,475.27	
		RCC Walls	m ²	42.22			360.80	15,234.10	
	Form work- for dry well	Raft foundation	m ²	11.20			196.45	2,200.24	
		RCC Walls x-x	m ²	15.84			360.80	5,715.07	
		x-y	m ²	11.04			360.80	3,983.23	
		R.C.C. Stairs	m ²	24.00			395.65	9,495.60	
		Platform for inspection	m ²	6.60			401.65	2,650.89	
	5) Re-bar work								
	Raft @1.0%		kg	1199.48			70.96	85,111.98	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Wall @1.25%		kg	4461.69			70.96	316,589.84	
	Slab @ 0.6%		kg	472.27			70.96	33,510.88	
	6) Epoxy painting work								
	Epoxy painting		m2	145.14			121.15	17,583.94	
	7) Foot step installation								
	CI foot steps (PVC encapsulated)		No	12.00			225.00	2,700.00	
	8) Railing installation								
	Providing and fixing 1.00m high Railing made up of 25mm diameter GI pipe		m	68.20			1,960.00	133,672.00	
	9) Aluminium work								
	Providing and fixing aluminium work for doors, window, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions i.e. at top, bottom and sides with required EPDM rubber /neoprene gasket etc. Aluminium sections shall be smooth rust free, straight mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing /paneling ,CP brass /stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in charge. (Glazing								
	Powder coated aluminium (minimum thickness of powder coating 50 micron).								
	External Member		kg	13.8852			435.75	6,050.48	
	Internal Member		kg	14.2128			435.75	6,193.23	
	Aluminium snap Beading on both side		kg	2.9568			435.75	1,288.43	
	Angle cleat		kg	0.7880			435.75	343.37	
	For shutters of doors, windows & ventilators including providing and fixing hinges/pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/neoprene gasket required (Fittings shall be paid for separately).								
	Powder coated aluminium (minimum thickness of powder coating 50 micron).								
	@ 12 kg /SQMT of the Door B		m2	7.2000			435.75	3,137.40	
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge.(Cost of aluminium snap beading shall be paid in basic item).								
	With float glass panes of 8 mm thickness		m2	4.80			1,338.40	6,424.32	
	Filling the gap in between aluminium frame & adjacent RCC /Brick /Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawing and direction of Engineer-in-charge complete.								

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Up to 5 mm depth and 5 mm width		m	16.80			88.75	1,491.00	
	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete								
	125 mm		each	4			66.95	267.80	
	Providing and fixing aluminium pull bolt lock ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws bolts nut and washers etc. complete		each	8			69.80	558.40	
	10) Mild Steel work								
	Providing and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire of adequate strength conforming to IS: 4454- part 1 and M.S. top cover of required thickness for rolling shutters.								
	80x 1.25 mm M.S. laths with 1.25 mm thick top cover		m ²	7.5			2,142.10	16,065.75	
	Providing and fixing ball bearing for rolling shutters.		each	1			438.95	438.95	
	Extra for providing mechanical device chain and crank operation for operating rolling shutters.		m ²	7.5			724.85	5,436.38	
	11) Other Works								
	M.S. Gate (3.6 Mtr wide) with Wicket Gate (1.2 Mtr. Wide)		No	1			69,898.00	69,898.00	
	Supply and fixing of Sluice valves		No	2			380,000.00	760,000.00	
	Misc. unforeseen items		Ls	1			4,900.00	4,900.00	
	Total						0	2,547,948.64	
	14. Digested Sludge Sump								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.L	m ³	59.39			184.79	10,974.31	
		01.50m – 03.00m B.G.L	m ³	51.32			231.98	11,904.76	
		03.00m – 04.50m B.G.L	m ³	43.84			291.27	12,768.43	
		04.50m – 06.00m B.G.L	m ³	24.63			340.09	8,376.47	
	Excavation-for dry well	00.00m – 01.50m B.G.L	m ³	74.12			184.79	13,695.71	
		01.50m – 03.00m B.G.L	m ³	63.84			231.98	14,809.60	
		03.00m – 04.50m B.G.L	m ³	54.32			291.27	15,820.33	
		04.50m – 06.00m B.G.L	m ³	15.18			340.09	5,162.57	
	2) Plain Concrete work								
	Plain concrete - for wet well	4.50m – 6.00m B.G.L	m ³	2.46			6,555.89	16,147.25	
	Plain concrete - for dry well	4.50m – 6.00m B.G.L	m ³	3.04			6,555.89	19,903.68	
	3) RC concrete work								
	RC Concrete- for wet well	Raft foundation	m ³	3.14			12,715.80	39,876.75	
		RCC Walls	m ³	28.59			12,715.80	363,526.41	
	RC Concrete- for dry well	Raft foundation	m ³	12.14			12,715.80	154,420.68	
		R.C.C Columns	m ³	5.04			12,715.80	64,087.63	
		RCC Walls	m ³	19.80			12,715.80	251,772.84	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
		x-y	m ³	7.20			12,715.80	91,553.76	
		R.C.C. Stairs	m ³	11.76			12,715.80	149,537.81	
		Platform for inspection	m ³	4.15			12,715.80	52,731.30	
	4) Form work/Shuttering								
	Form work- for wet well	Raft foundation	m ²	12.60			196.45	2,475.27	
		RCC Walls	m ²	42.22			360.80	15,234.10	
	Form work- for dry well	Raft foundation	m ²	11.20			196.45	2,200.24	
		RCC Walls x-x	m ²	0.00			360.80	0.00	
		x-y	m ²	11.04			360.80	3,983.23	
		R.C.C. Stairs	m ²	48.00			395.65	18,991.20	
		Platform for inspection	m ²	6.60			401.65	2,650.89	
	5) Re-bar work								
	Raft @1.0%		kg	1199.48			70.96	85,111.98	
	Wall @1.25%		kg	5454.63			70.96	387,046.18	
	Slab @ 0.6%		kg	749.22			70.96	53,162.39	
	6) Epoxy painting work								
	Epoxy painting		m ²	134.77			121.15	16,327.95	
	7) Foot step installation								
	CI foot steps (PVC encapsulated)		No	12.00			225.00	2,700.00	
	8) Railing installation								
	Providing and fixing 1.00m high Railing made up of 25mm diameter GI pipe		m	68.20			1,960.00	133,672.00	
	9) Aluminium work								
	Providing and fixing aluminium work for doors, window, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth rust free, straight mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing/paneling, CP brass/stainless steel screws, all complete as per architectural drawings and the directions of Engineer/in charge (Glazing, paneling and dash fasteners to be paid for separately)								
	Powder coated aluminium (minimum thickness of powder coating 50 micron)								
	External Member		kg	13.8852			435.75	6,050.48	
	Internal Member		kg	14.2128			435.75	6,193.23	
	Aluminium snap Beading on both side		kg	2.9568			435.75	1,288.43	
	Angle cleat		kg	0.7880			435.75	343.37	
	For shutters of doors, windows & ventilators including providing and fixing hinges/pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/neoprene gasket required (Fittings shall be paid for separately).								
	Powder coated aluminium (minimum thickness of powder coating 50 micron)								
	@ 12 kg /SQMT of the Door B		m ²	7.2000			435.75	3,137.40	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge (Cost of aluminium snap bending shall be paid in basic item)								
	With float glass panes of 8 mm thickness		m ²	4.80			1,338.40	6,424.32	
	Filling the gap in between aluminium frame & adjacent RCC /Brick /Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawing and direction of Engineer-in-charge complete								
	Up to 5 mm depth and 5 mm width		m	16.80			88.75	1,491.00	
	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade								
	125 mm		each	4			66.95	267.80	
	Providing and fixing aluminium pull bolt lock ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws bolts nut and washers etc. complete.		each	8			69.80	558.40	
	10) Mild Steel work								
	Providing and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire of adequate strength conforming to IS: 4454- part 1 and M.S. top cover of required thickness for rolling shutters.								
	80x 1.25 mm M.S. laths with 1.25 mm thick top cover		m ²	7.5			2,142.10	16,065.75	
	Providing and fixing ball bearing for rolling shutters.		each	1			438.95	438.95	
	Extra for providing mechanical device chain and crank operation for operating rolling shutters.		m ²	7.5			724.85	5,436.38	
	11) Other Works								
	M.S. Gate (3.6 Mtr wide) with Wicket Gate (1.2 Mtr. Wide)		No	1			69,898.00	69,898.00	
	Supply and fixing of Sluice valves		No	2			380,000.00	760,000.00	
	Misc. unforeseen items		Ls	1			4,900.00	4,900.00	
	Total						0	2,903,119.23	
	15. Treated Effluent Pumping Station								
	1) Excavation Work								
	Excavation	00 00m – 01 50m B.G.I	m ³	129.82			184.79	23,989.44	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
		01.50m – 03.00m B.G.L	m ³	117.75			231.98	27,315.65	
		03.00m – 04.50m B.G.L	m ³	106.27			291.27	30,953.08	
		04.50m – 06.00m B.G.L	m ³	95.38			340.09	32,436.93	
	Excavation-for dry well	00.00m – 01.50m B.G.L	m ³	126.00			184.79	23,283.54	
		01.50m – 03.00m B.G.L	m ³	111.38			231.98	25,837.93	
		03.00m – 04.50m B.G.L	m ³	97.50			291.27	28,398.83	
		04.50m – 06.00m B.G.L	m ³	42.19			340.09	14,348.40	
	Excavation-pump house, column	00.00m – 01.50m B.G.L	m ³	7.50			184.79	1,385.93	
	2) Soil transportation work								
	Excess soil transportation	2 km away from the site	m ³	625.34			216.00	135,073.44	
	Royalty for Disposing of Excavated Surplus Earth		m ³	625.34			30.00	18,760.20	
	3) Plain Concrete work								
	Plain concrete - for wet well	4.50m – 6.00m B.G.L	m ³	8.65			7,128.73	61,663.51	
	Plain concrete - for dry well	4.50m – 6.00m B.G.L	m ³	8.40			7,128.73	59,881.33	
	Pump house column		m ³	0.50			7,128.73	3,564.37	
	4) RC concrete work								
	RC Concrete- for wet well	a. Above Ground Level	m ³	8.25			12,715.80	104,905.35	
		b. upto 1.5 mtr. B.G.L	m ³	12.37			12,715.80	157,294.45	
		c. 1.5 – 3.0 mtr. B.G.L	m ³	11.66			13,097.27	152,714.21	
		e. 3.0 – 4.5 mtr. B.G.L	m ³	16.43			13,605.91	223,545.04	
		f. 4.5 – 6.0 mtr. B.G.L	m ³	13.67			14,241.70	194,683.98	
		g. Raft	m ³	14.31			14,241.70	203,798.67	
	RC Concrete- for dry well	a. Above Ground Level	m ³	2.40			12,715.80	30,517.92	
			m ³	3.69			12,715.80	46,921.30	
			m ³	1.20			12,715.80	15,258.96	
		b. upto 1.5 mtr. B.G.L	m ³	3.60			12,715.80	45,776.88	
			m ³	5.54			12,715.80	70,445.53	
			m ³	1.80			12,715.80	22,888.44	
		c. 1.5 – 3.0 mtr. B.G.L	m ³	3.60			13,097.27	47,150.19	
			m ³	5.54			13,097.27	72,558.90	
			m ³	1.80			13,097.27	23,575.09	
		e. 3.0 – 4.5 mtr. B.G.L	m ³	5.40			13,605.91	73,471.89	
			m ³	8.40			13,605.91	114,289.61	
			m ³	2.70			13,605.91	36,735.95	
		f. 4.5 – 6.0 mtr. B.G.L	m ³	1.20			14,241.70	17,090.04	
			m ³	1.89			14,241.70	26,916.81	
			m ³	0.60			14,241.70	8,545.02	
		g. Raft	m ³	33.60			14,241.70	478,520.99	
	RC Concrete- pump house	Column	m ³	5.63			12,715.80	71,589.95	
			m ³	7.50			12,715.80	95,368.50	
		Beam	m ³	4.98			12,715.80	63,324.68	
			m ³	5.60			12,715.80	71,208.48	
		Slab	m ³	10.77			12,715.80	136,949.17	
	RC Concrete- Stairs	Riser and tread	m ³	0.76			12,715.80	9,664.01	
		waist slab	m ³	1.91			12,715.80	24,287.18	
	4) Form work/Shuttering								
	Form work- for wet well	a. Above Ground Level	m ²	27.48			360.80	9,912.98	
		b. upto 1.5 mtr. B.G.L	m ²	41.21			360.80	14,869.47	
		c. 1.5 – 3.0 mtr. B.G.L	m ²	38.86			360.80	14,019.79	
		e. 3.0 – 4.5 mtr. B.G.L	m ²	36.50			360.80	13,170.10	
		f. 4.5 – 6.0 mtr. B.G.L	m ²	22.77			360.80	8,213.61	
		g. Raft	m ²	14.31			196.45	2,811.20	
	Form work- for dry well	a. Above Ground Level	m ²	8.00			360.80	2,886.40	
			m ²	12.30			360.80	4,437.84	
			m ²	4.00			360.80	1,443.20	
		b. upto 1.5 mtr. B.G.L	m ²	12.00			360.80	4,329.60	
			m ²	18.45			360.80	6,656.76	
			m ²	6.00			360.80	2,164.80	
		c. 1.5 – 3.0 mtr. B.G.L	m ²	12.00			360.80	4,329.60	
			m ²	18.45			360.80	6,656.76	

	Items	Specification	Unit	Qty	I/C Portion (Yen)		L.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
			m ²	6.00			360.80	2,164.80	
		s. 3.0 - 4.5 mtr. B.G.L.	m ²	12.00			360.80	4,329.60	
			m ²	18.68			360.80	6,737.94	
			m ²	6.00			360.80	2,164.80	
		f. 4.5 - 6.0 mtr. B.G.L.	m ²	2.00			360.80	721.60	
			m ²	3.15			360.80	1,136.52	
			m ²	1.00			360.80	360.80	
		g. Raft	m ²	84.00			196.45	16,501.80	
	Form work- pump house	Column	m ²	30.00			453.35	13,600.50	
			m ²	40.00			453.35	18,134.00	
		Beam	m ²	17.01			332.15	5,649.87	
			m ²	19.35			332.15	6,427.10	
		Slab	m ²	2.35			401.65	944.68	
	Form work- Stairs	Riser and tread	m ²	7.60			395.65	3,006.94	
		waist slab	m ²	12.75			401.65	5,121.04	
	5) Re-bar work								
	Re-bar installation		kg	15448.80			70.96	1,096,206.68	
	6) Masonary work								
	Masonry work	Brick	m ³	35.96			5,819.30	209,251.55	
	7) Finishing Work								
	1st Class Single Brickwork in 1:6 Cement & Local Sand Mortar in		m ²	238.19			167.23	39,832.85	
	8) Epoxy painting work								
	Epoxy painting		m ²	208.81			121.15	25,297.33	
	One prime coat and two coat of dry distemper on new work		m ²	257.51			60.36	15,543.42	
	Cement concrete with 20 mm gauge approved stone ballast, coarse sand and cement in the proportion of 4:2:1 including supply of all materials, labour, T&P etc. required for proper completion of the work.	40mm thick with 20 mm nominal size stone aggregate	m ²	2.12			8,557.16	18,103.53	
	Cement plaster skirting upto 30 cm height, with cement mortar 1:3 (1 cement :3 coarse sand), finished with a floating coat of neat cement.	20 mm thick	m ²	7.35			441.31	3,243.63	
	9) Aluminium work								
	Providing and fixing aluminium work for doors, window, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions i.e. at top, bottom and sides with required EPDM rubber /neoprene gasket etc. Aluminium sections shall be smooth rust free, straight mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing /paneling ,CP. brass /stainless steel screws, all complete as per architectural drawings and the directions of Engineer/in charge . (Glazing, paneling and dash fasteners to be paid for separately).								
	Powder coated aluminium (minimum thickness of powder coating 50 micron).								
	External Member		kg	13,885.2			435.75	6,050.48	
	Internal Member		kg	14,212.8			435.75	6,193.23	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Aluminium snap Beading on both side		kg	2.9568			435.75	1,288.43	
	Angle cleat		kg	0.7880			435.75	343.37	
	For shutters of doors, windows & ventilators including providing and fixing hinges/pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/neoprene gasket required (Fittings shall be paid for separately).								
	Powder coated aluminium (minimum thickness of powder coating 50 micron).								
	@ 12 kg /SQMT of the Door B		m2	6.4800			435.75	2,823.66	
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge (Cost of aluminium snap beading shall be paid in basic item).								
	With float glass panes of 8 mm thickness		m2	4.32			1,338.40	5,781.89	
	Filling the gap in between aluminium frame & adjacent RCC /Brick /Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawing and direction of Engineer-in-charge complete.								
	Up to 5 mm depth and 5 mm width.		m	16.80			88.75	1,491.00	
	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete.								
	125 mm		each	4			66.95	267.80	
	Providing and fixing aluminium pull bolt lock ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws bolts nut and washers etc. complete.		each	8			69.80	558.40	
	10) Mild Steel work								
	Providing and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire of adequate strength conforming to IS: 4454- part 1 and M.S. top cover of required thickness for rolling shutters.								
	80x 1.25 mm M.S. laths with 1.25 mm thick top cover.		m2	7.5			2,142.10	16,065.75	
	Providing and fixing ball bearing for rolling shutters.		each	1			438.95	438.95	
	Extra for providing mechanical device chain and crank operation for operating rolling shutters.		m2	7.5			724.85	5,436.38	
	11) Foot step installation								

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	GI foot steps (PVC encapsulated)		No	18.00			225.00	4,050.00	
	12) Railing installation								
	Providing and fixing 1.00m high Railing made up of 25mm diameter GI pipe		m	134.82			1,960.00	264,247.20	
	13) Other Works								
	M/S Gate (3.6 Mtr wide) with Wicket Gate (1.2 Mtr Wide)		No	1			69,898.00	69,898.00	
	Total						0	5,102,207.40	
	16. Sludge Drying Bed								
	1) Excavation Work								
	Excavation	Walls	m ³	237.60			184.79	43,906.10	
		Walls	m ³	268.80			184.79	49,671.55	
		Beds	m ³	6,758.40			184.79	1,248,884.74	
		for pipe laying 200 mm dia	m ³	120.96			184.79	22,352.20	
		for pipe laying 250 mm dia	m ³	243.66			184.79	45,025.93	
	2) Plain Concrete work								
	Plain concrete	M15 Grade	m ²	15.84			8,557.16	135,545.41	
			m ²	17.92			8,557.16	153,344.31	
	3) Masonary Work								
	First class brick work in 1:4 cement and coarse sand mortar in Super structure		m ²	41.58			5,925.29	246,373.56	
			m ²	109.50			5,925.29	647,610.50	
			m ²	47.04			5,925.29	278,725.64	
			m ²	123.65			5,925.29	732,650.26	
	4) Concrete work								
	Cement concrete with 20 mm gauge approved stone ballast, coarse sand and cement in the proportion of	for wall coping	m ³	4.55			9,440.74	42,993.13	
			m ³	5.15			9,440.74	48,638.69	
	5) Plastering work								
	12mm thick plaster with cement	X - X	m ²	1,188.00			174.17	206,913.96	
		X - Y	m ²	1,344.00			174.17	234,084.48	
	6) RC concrete work								
	RC concrete installation	for walkway slab	m ³	16.50			12,715.80	209,810.70	
	7) Re-bar work								
	for walkway slab @ 1%		kg	1295.25			70.96	91,907.57	
	8) Painting work								
	One priming coat and two coats of water proof cement on new outer surface of buildings		m ²	1,188.00			111.31	132,236.28	
			m ²	1,344.00			111.31	149,600.64	
	9) Sludge disposal pipe, valve and media								
	Supply & Fixing of 250mm Ø DI pipes for sludge disposal.		m	350.00			5,000.00	1,750,000.00	
	Supply and fixing of 200mm Ø sluice valve		m ²	13.00			55,000.00	715,000.00	
	Supply & Filling of filter media	50-90 mm broken stone	m ³	1,267.20			2,310.00	2,927,232.00	
		40-63 mm broken stone	m ³	1,267.20			3,450.00	4,371,840.00	
		25-40 mm broken stone	m ³	8,448.00			3,450.00	29,145,600.00	
		10-25 mm broken stone	m ³	1,267.20			2,600.00	3,294,720.00	
		Coarse Sand	m ³	2,534.40			2,375.00	6,019,200.00	
	10) Pipe installation work								
	RC pipe material cost	150 mm dia	m	384.00			391.34	150,274.56	
		200 mm dia	m	300.00			502.71	150,813.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
		250 mm dia	m	200.00			578.51	115,702.00	
	RC pipe installation	150 mm dia	m	384.00			275.49	105,788.16	
		200 mm dia	m	300.00			356.53	106,959.00	
		250 mm dia	m	200.00			371.62	74,324.00	
	11) Manhole installation work								
	Manhole installation	A-Type Manhole 900 mm Dia depth 1.2m to 1.65m	No.	18.00			19,780.00	356,040.00	
	Misc. unforeseen items		Ls	1			400,000.00	400,000.00	
	Total						0	54,403,768.37	
	17. Sludge Digester								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.L	m ³	864.77			184.79	159,800.44	
		01.50m – 03.00m B.G.L	m ³	833.15			231.98	193,274.58	
	2) Drainage work								
	Making all necessary arrangements for lowering down the water table to 3.0m BGL and bailing out the water from excavated sump well with the help of diesel engine.		m ³	452.8			79.39	35,947.00	
	3) Plain Concrete work								
	Plain concrete	1.50m – 4.50m B G L	m ³	50.65			6,555.89	332,055.83	
	4) RC concrete work								
	RC Concrete	Raft foundation	m ³	199.50			12,715.80	2,536,855.08	
		RCC Walls Main wall	m ³	193.23			12,715.80	2,457,112.18	
		Launder Wall	m ³	5.66			12,715.80	71,915.48	
		R.C.C. Stairs	m ³	2.40			12,715.80	30,517.92	
		Feed Well	m ³	18.85			12,715.80	239,718.26	
	5) Form work/Shuttering								
	Form work	Raft foundation	m ²	39.56			196.45	7,772.35	
		RCC Walls Main wall	m ²	492.00			360.80	177,513.60	
		Launder Wall	m ²	60.00			360.80	21,648.00	
		R.C.C. Stairs	m ²	24.00			395.65	9,495.60	
		Feed Well	m ²	50.40			214.55	10,813.32	
	6) Re-bar work								
	Raft @1.0%		kg	15661.08			70.96	1,111,269.31	
	Wall @0.125%		kg	19515.94			70.96	1,384,800.64	
	Slab @ 0.6%		kg	1000.97			70.96	71,026.17	
	7) Epoxy painting work								
	Epoxy painting		m ²	926.93			121.15	112,297.57	
	8) Steel work								
	Providing and fixing Mild steel ladders, grills, frames etc. as per satisfaction of Engineer incharge including supply of all materials labour and T&P etc for proper completion of work		kg	1000.00			98.50	98,500.00	
	9) Railing installation								
	Providing and fixing 1.00m high Railing made up of 25mm diameter GI pipe		m	79.18			1,960.00	155,192.80	
	10) Other works								
	Construction cost of Digester dome		m	39.56			3,000.00	118,680.00	
	Supply and fixing of 500 mm Ø Sluice valve for proper operation of the Digester		No.	1.00			220,000.00	220,000.00	
	Misc. unforeseen items		Ls	1.0			9,850	9,850.00	
	Sub-Total						0	9,566,056.13	
	Total		Ls	2			9,566,056	19,132,112.26	2 tanks
	18. Gas Holder and Moisture Trap Chamber								

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference	
					Unit Price	Amount	Unit Price	Amount		
	1) Excavation Work									
	Excavation	00.00m – 01.50m B.C.I	m ³	169.56			184.79	31,332.99		
		01.50m – 03.00m B.C.I	m ³	28.26			231.98	6,555.75		
	2) Plain Concrete work									
	Plain concrete		m ³	11.30			6,364.94	71,923.82		
	3) RC concrete work									
	RC Concrete		m ³	154.00			12,715.80	1,958,233.20		
	4) Form work/Shuttering									
	Form work		m ²	555.00			360.80	200,244.00		
	5) Re-bar work									
	Rebar @1.0%		kg	12,089			70.96	857,804.01		
	6) Masonry work									
	Masonry work	Brick	m ³	15.94			5,925.29	94,449.12		
	7) Gas dome installation									
	Provision for 6mm thick Gas dome including supply of all labour, T&P etc. required for proper completion		kg	57			90.73	5,171.61		
	8) HDPE Tank installation									
	Provision for 800mm dia. and 1.00m height H D P E. tank		No	1			9,000.00	9,000.00		
	9) Railing installation									
	Supply & fixing of G.I railing one metre height with 50x50x6 mm angle iron post		m	92.93			1,960.00	182,142.80		
	10) Steel work									
	Supply and fixing of 8.0m long MS ladder made of angle iron and chequer plate foot steps		kg	300.00			98.50	29,550.00		
	Provision for 6mm thick M.S. in chequered plate		m ²	30.32			5,000.00	151,593.75		
	Provision of following MS work	80mmx 10m flats		5.04			650.00	3,276.00		
		100x100x10mm angle iron	m	1,401.69			960.00	1,345,619.52		
		ISMB 100x75	m	8.69			1,450.00	12,606.30		
		125mm dia. MS Tubes (M)	m	78.75			1,470.00	115,762.50		
		80mm dia. MS Tube (L)	m	157.50			740.00	116,550.00		
		80mm dia. MS Tube(M)	m	39.38			880.00	34,650.00		
	11) Pipe Installation									
	Revision for connection of gas pipe in dome including supply of all materials, labour T&P etc. required for proper completion of work.		No.	5.00			9,000.00	45,000.00		
	12) Other Works									
	Site clearance & unforeseen items.		Ls	1.00			3,000.00	3,000.00		
	Sub-Total						0	5,274,465		
	Total			2				5,274,465	10,548,930.74	
	19. LAB EQUIPMENT & ADMINISTRATIVE BUILDING FURNITURE									
	GLASSWARE FOR LABORATORY									
	Beakers	1000 ml	No.	10				1,243	12,430.00	
	Beakers	Beakers 500ml	No.	10				418	4,180.00	
	Beakers	Beakers 250ml	No.	10				14,520	145,200.00	
	Bottles Reagents	1000ml	No.	18				1,243	22,374.00	
	Bottles Reagents	500ml	No.	18				924	16,632.00	
	Bottles Reagents	250ml	No.	18				825	14,850.00	
	Bottles BOD	300ml	No.	18				1,034	18,612.00	
	Bottles Amber	250ml	No.	18				847	15,246.00	
	Burettes	50ml	No.	9				847	7,623.00	
	Burettes	10ml	No.	9				825	7,425.00	
	Cylinders Graduated	1000ml	No.	9				2,068	18,612.00	
	Cylinders Graduated	500ml	No.	9				1,551	13,959.00	
	Cylinders Graduated	250ml	No.	9				1,243	11,187.00	
	Cylinders Graduated	100ml	No.	18				726	13,068.00	
	Cylinders Graduated	50ml	No.	18				616	11,088.00	
	Cylinders Graduated	10ml	No.	15				418	6,270.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Condensers Allhin	400ml	No.	6			1,650	9,900.00	
	Bottles Aspirator	10 lt.	No.	6			10,318	61,908.00	
	Bottles Aspirator	5 lt.	No.	6			7,216	43,296.00	
	Descicator	200ml	No.	6			13,409	80,454.00	
	Funnel	100mm	No.	12			330	3,960.00	
	Funnel	75mm	No.	12			264	3,168.00	
	Flasks Erlenmeyer conical	500ml	No.	12			330	3,960.00	
	Flasks Erlenmeyer conical	250ml	No.	12			253	3,036.00	
	Flasks Erlenmeyer conical	100ml	No.	24			143	3,432.00	
	with inter changeable joints		No.	12			583	6,996.00	
	Flask Kjeldhal	500ml	No.	6			616	3,696.00	
	Flask Flat Bottom	2000ml	No.	6			924	5,544.00	
	Flask Flat bottom	1000ml	No.	6			495	2,970.00	
	Diiches Evaporat9ng 30x45mm		No.	24			231	5,544.00	
	Imhoff Cones 1 lt		No.	2			5,368	10,736.00	
	Nesslerers Tue	100ml	No.	24			308	7,392.00	
	Pipettes volumetric	100ml	No.	3			495	1,485.00	
	Pipettes volumetric	50ml	No.	6			264	1,584.00	
	Pipettes volumetric	25ml	No.	6			231	1,386.00	
	Pipettes volumetric	10ml	No.	6			187	1,122.00	
	Pipettes Graduated Serlogical	10ml x 0.5	No.	24			231	5,544.00	
	Pipettes Graduated Serlogical	5ml x 0.5	No.	24			209	5,016.00	
	Pipettes Graduated Serlogical	1mlx0.1	No.	12			165	1,980.00	
	FURNITURE FOR THE LABORATORY							0.00	
	Steel AlmiraH 6.5' high		No.	2			13,500	27,000.00	
	Storwell for chemicals		No.	2			16,500	33,000.00	
	Office Tables (steel) 5'x3'x2.5' with sunmica top & drawers		No.	2			10,500	21,000.00	
	Revolving stools with steel tops		No.	4			2,530	10,120.00	
	Office Tables(steel)3'x2.5'x2.5' with sunmica top & drawers		No.	2			7,200	14,400.00	
	Chair(steel) with Arms		No.	12			2,500	30,000.00	
	Wooden stools 2.5' high		No.	2			950	1,900.00	
	LAB EQUIPMENT							0.00	
	BOD Incubator with voltage stablizer		No.	1			61,875	61,875.00	
	Refrigerator with voltage stablizer 286 lt. capacity		No.	1			25,784	25,784.00	
	Incubator		No.	1			30,943	30,943.00	
	Hot Air Oven 0-250°C		No.	1			36,091	36,091.00	
	Muffle Furnace Complete with Pyrometer 50x50x50mm		No.	1			22,693	22,693.00	
	Water Distillation Apparatus		No.	1			12,375	12,375.00	
	Rectangular water bath		No.	1			4,642	4,642.00	
	pH meter Digital		No.	1			17,017	17,017.00	
	Balance Moncpan Electrical		No.	1			25,267	25,267.00	
	Balance Dumping bouble pan		No.	1			3,608	3,608.00	
	Heating Plates 8" dia.		No.	1			3,608	3,608.00	
	Conductivity meter Digital		No.	1			12,375	12,375.00	
	Lovibond Comparator with Phenol Red & Universal Indicat		No.	1			4,125	4,125.00	
	Heating Mantles		No.	1			1,551	1,551.00	
	Digestion & Distillation Assembly		No.	1			18,568	18,568.00	
	Bacteriological Incubator A		No.	1			47,190	47,190.00	
	Bacteriological Incubator B		No.	1			42,702	42,702.00	
	Auto Clave		No.	1			22,561	22,561.00	
	MPN Count Instrument		No.	1			28,028	28,028.00	
	Air Condition Capacity 2 Tonne		No.	1			39,600	39,600.00	
	Microscope		No.	1			4,290	4,290.00	
	Hot Air Oven Capacity 0-150°C		No.	1			30,844	30,844.00	
	MISCELLANEOUS ITEMS							0.00	
	H.T Megger		No.	2			10,318	20,636.00	
	LT Megger		No.	2			10,318	20,636.00	
	Tong Tester		No.	2			10,318	20,636.00	
	Fire Extinguisher 4.5 kg Co2		No.	4			2,068	8,272.00	
	PVC/Rubber Matings		No.	2			4,125	8,250.00	
	Techno meter		No.	2			10,318	20,636.00	
	Wall clock		No.	2			520	1,040.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	First Aid Box		No.	2			3,100	6,200.00	
	Water cooler		No.	2			10,320	20,640.00	
	Total							1,372,968.00	
20. PIPE CONNECTING TO DIFFERENT UNITS OF STP INCLUDING OVERFLOW PIPES AND VALVES									
	1) pipe installation								
	400mm dia. RCC NP3		m	1,200			1,345.31	1,614,372.00	
	300mm dia. HDPE pipe		m	200			1,320.00	264,000.00	
	250mm dia. HDPE pipe		m	200			1,100.00	220,000.00	
	200mm dia. HDPE Tyton pipe		m	400			880.00	352,000.00	
	150mm dia. CI Tyton pipe		m	300			2,060.69	618,207.00	
	Supply of spools for above CI/RCC pipes at Jal Nigam store, Varnansi including all Central/State and local taxes, loading, unloading, carting and stacking as directed by Engineer-in-charge		ls	1			306,857.9	306,857.9	10% of total pipe installation cost
	2) Earth work								
	Excavation		m ³	3,450			111.42	384,399.0	
	3) Material transportation cost								
	1100 mm RCC NP3 pipe		m	400			1,200.00	480,000.00	
	400mm dia. RCC NP3		m	1,200			350.00	420,000.00	
	300mm dia. HDPE pipe		m	200			300.00	60,000.00	
	250mm dia. HDPE pipe		m	200			165.00	33,000.00	
	200mm dia. HDPE Tyton pipe		m	400			140.00	56,000.00	
	150mm dia. CI Tyton pipe		m	300			100	30,000.00	
	4) Valve Material cost								
	400mm dia.		No.	4			82,500	330,000.00	
	300mm dia.		No.	4			50,000	200,000.00	
	250mm dia.		No.	20			45,000	900,000.00	
	200mm dia.		No.	4			40,000	160,000.00	
	150mm dia.		No.	4			30,000	120,000.00	
	5) Valve installation cost								
	Valve installation		No.	36			30,000	1,080,000.00	
	6) Miscellaneous work								
	Site clearance		ls	1			3,731	3,731.00	
	Total							7,632,567	
21. CHLORINATION & DE-CHLORINATION SYSTEMS									
	1) Chlorination/De-Chlorination system installation								
	GASEOUS CHLORINATION SYSTEMS		No.	1			700,000	700,000.00	
	DE-CHLORINATION SYSTEMS (SULPHONATOR)		No.	1			840,000	840,000.00	
	Chlorine Mixer/Diffuser System		No.	1			739,000	739,000.00	
	Chlorine gas INJECTOR SYSTEM		No.	1			609,000	609,000.00	
	CHLORINE CONTACT BASINE		No.	1			700,000	700,000.00	
	Safety Equipments Breathing apparatus		Job	1			140,000	140,000.00	
	Caustic pit for dumping the leakage of cylinder for Chlorine absorption.		No.	2			147,000	294,000.00	
	Automatic Chlorine leakage detector & Alarm system.		No.	1			287,000	287,000.00	
	Emergency Kit Repair of damaged valves of cylinder equipment conforming to ISI:3324 and approved by Chief Controller of		No.	1			84,000	84,000.00	
	Water sprinkler system		No.	1			112,000	112,000.00	
	Chlorine sprinkler system		Job	1			350,000	350,000.00	
	Chlorine Feeding Station		No.	1			133,000	133,000.00	
	Sulphur Dioxide Storage Facilities		No.	1			336,000	336,000.00	
	Chlorine Residual Analyzer		No.	1			301,000	301,000.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Programmable logic controller (PLC)		No.	1			567,000	567,000.00	
	Accessories Supply of empty cylinder for Chlorine approx. 1.0MT		No.	20			126,000	2,520,000.00	
	Cylinder loding/unloading and other handling kits misc.		No.	1			455,000	455,000.00	
	Pipe line assembling, fitting & connection and misc. water work		Job	1			490,000	490,000.00	
	Electric/electronic type panel Board & controlling unit.		No.	1			546,000	546,000.00	
	2) Other works								
	Unforeseen		Job	1			50,000	50,000.00	
	Total							10,253,000	
	22. PUMP HOUSE WITH CHLORONOME								
	1) Excavation Work								
	Excavation		m ³	11.16			184.79	2,062.26	
	2) Plain Concrete work								
	Plain concrete		m ³	0.65			6,364.94	4,137.21	
	3) Masonary work								
	Masonry work	Brick	m ³	12.80			5,203.66	66,606.85	
		Brick	m ³	23.50			5,203.66	122,286.01	
	4) Water proof work								
	Water proof installation		m ²	6.20			270.73	1,678.53	
	5) RC concrete work								
	RC Concrete		m ³	5.00			12,798.59	63,992.95	
	6) Wooden work								
	Wooden work		m ³	0.40			77,359.00	30,943.60	
	Sheesham wood 40mm thick fully paneled door shutters		m ²	4.25			3,677.53	15,629.50	
	Sheesham wood 40mm thick fully paneled door shutters, partly paneled and partly glazed window shutters.		m ²	6.75			3,684.10	24,867.68	
	40mm thick (1:2:4) PCC floor with cement approved coarse sand and 20mm gauge approved stone ballast laid in panels finished with 3mm floating coat of neat cement or cement and marble dust in ratio 1:5 as specified over and including 7.5 cm thick base concrete consisting of cement, local sand and 4cm gauge brick ballast in the proportion of 1:4:8 and removing and over lapping or mortar at joints of panels if any and giving them uniform finish including supply of all materials, labour, T&P etc. required for proner completion of the work		m ³	16.50			544.18	8,978.97	
	7) Plastering work								
	Plastering work		m ²	256.00			126.92	32,491.52	
	8) Utility work								
	Supply and fixing of 100mm dia. AC. pipe for gravel pouring .		Ls	1			900.00	900.00	
	Supply and fixing of 100mm CI rain water pipe with clamps etc.		m ²	8			200.00	1,600.00	
	Supply and fabrication of MS grill for window & verandah including fixing in position as per direction of Engineer-in-charge		kg	102			85.00	8,670.00	
	Supply of oxidized iron fittings for doors and windows.		m ²	16			125.00	2,000.00	
	Supply and fittings of hold fasts for door and windows frames		Each	32			60.00	1,920.00	
	9) Other works								
	Site clearance and Unforeseen items		Ls	1			3,284.00	3,284.00	
	Sub-Total							392,049	
	Total							509,664	Add 30%

	Items	Specification	Unit	Qty	FC Portion (Yen)		L.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	23 Guard Room								
	1) Excavation Work								
	Excavation		m ³	9.06			184.79	1,674.20	
	2) Plain Concrete work								
	Plain concrete		m ³	2.72			6,364.94	17,312.64	
	3) Masonary work								
	Masonary work	Brick	m ³	3.37			5,925.29	19,968.23	
			m ³	3.33			5,925.29	19,731.22	
	4) Water proofing work								
	water proof installation		m ²	1.84			275.36	506.66	
	5) RC concrete work								
	RC Concrete		m ¹	0.07			12,715.80	890.11	
		for slabs.	m ¹	1.12			12,715.80	14,241.70	
	6) Re-bar work								
	Re-bar installation		kg	140			70.96	9,934.04	
	Mild steel or iron work in heavy sizes, such as tresses built up gates, door frames records racks, roof work, gates window grills, etc		kg	514			95.12	4,889.17	
	7) Plastering work								
	Plastering work		m ²	23.15			167.23	3,871.37	
	engraving lines in the plaster of outer face wall, vertically and horizontally to display the surface as stone facing		m	23.15			15.00	347.25	
	Plastering work	plaster in 1:4 cement and medium sand mortar	m ²	20.65			174.17	3,596.61	
	Making drip course in 1:2 with cement and coarse sand		m	25.00			55.00	1,375.00	
	2.5cm thick 1:2:4 PCC floor		m ²	9.51			567.31	5,395.12	
	2.5cm thick 1:2:4 PCC floor	without base concrete.	m ²	9.51			434.07	4,128.01	
	20mm thick cement plaster in Dado skirting in 1:2 consisting of cement and coarse sand mortar laid in panels finished with 3mm floating coat of neat cement and marble dust including supply of all materials, labour, T&P etc. required for proper completion of the work.		m ²	0.92			416.28	380.90	
	Providing and fixing of glass strips, of 6mm thickness in joints in floor including supply of all materials, labour, T&P etc. required for proper completion of the work.		m	33.76			10.00	337.60	
	Supply fabrication and fixing of MS i ¹ grill made with 20x4mm MS flat as per approved design & drawing by Engineer-in-charge for window & ventilator including painting with two coat of red oxide as required for proper completion of		kg	94.15			84.00	7,908.60	
	Fabrication, supply & fixing of steel framed glazed window & C.S. window wrought to required shape and frame with 2 section of heavy quality including supply & fixing of steel handles bolts with hinges holdfast and stags but excluding cost of plane glass panes grouting with		kg	57.50			98.00	5,635.00	
	1:2:4 PCC cement, coarse sand, stone grit 20mm gauge including painting with two coat of red oxide ; as required for proper completion of work.		kg	115.40			94.00	10,847.60	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Fabrication supply & fixing of M.S. : door made with 12mm gauge of MS sheet MS angle iron 40x40x5 MS ! flat 50x5x10 mm square bar fixing with .sample iron 50x50x6 door i chaukhat frame including cost of steel all carriage welding, cutting labour grinding to smooth finishing : at necessary hinges & hold fast grouting with PCC 1:2:4 cement, coarse sand and 20mm gauge stone grit including drilling, threading of all screws, nuts, bolts locking arrangement including one coat of red		kg	160.00			106.00	16,960.00	
	Supply & fixing of 3mm thick plane glass panes in window and ventilation with, putty including supply of all materials, labour, T&P etc. required for proper completion of the work.		m2	7.00			62.50	437.50	
	Painting or varnishing on new iron work in small areas or new wood work with one coat of ready mixed priming paint and two coats of approved superior quality ready mixed enamel paint or clear synthetic varnish including supply of all materials, labour, T&P etc. required for proper completion of the work.		m2	2.40			140.45	337.08	
	White wash in three coats including supply of all materials, labour, T&P etc. required for proper completion of the, work.		m2	43.80			15.32	671.06	
	One priming coat and two coat of dry distemper on new work including supply of all materials, labour, T&P etc. required for proper completion of the work.		m2	20.65			54.00	1,115.10	
	Finishing of walls with water proofing cement paint (super snowcem) with three coat on new work including supply of all materials, labour, T&P etc required for proper completion of the work		m2	23.15			50.60	1,171.54	
	Supply and fixing of 100mm A.C rain water or air vent pipe with cowel, bends, tees clamps and fitting etc. complete including supply of all materials, labour, T&P etc. required for proper completion of the work.		m	3.00			55.50	166.50	
	Unforeseen items		Ls	1			1,293.00	1,293.00	
	Sub-Total							155,122.81	
	Total							310,245.62	
	23 FIRE FIGHTING SYSTEM								
	Supply & installation of ISI marked single headed 63mm dia. gunmetal lading valve, Flanged Inlet with 63mm female instantaneous outlet confirming to IS 5290 on the fire wet riser/down comer including making 80b Nb pipe connection with riser fixing the landing valves in proper positions including supply of nuts, bolts, gaskets caps, chain etc. testing the hydrant and completing the work in all respect as per direction of the Engineer-in-charge (Make Fires/Safes/Minimax/		No.	8			5,900.00	47,200.00	

	Item	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	MIS pipe installation 25mm	25mm	m	12			320.00	3,840.00	
		65 mm	m	25			580.00	14,500.00	
		80mm	m	75			725.00	54,375.00	
		100mm	m	100			940.00	94,000.00	
		150NB	m	100			1,410.00	141,000.00	
	Supply & fixing in position ISI marked cast iron double flanged sluice valves with gun metal as per IS 780 class PN 16 including transporting to work site supply and fixing nuts, bolts, gaskets and washer etc including testing complete as per drawing as per the Engineer-in-charge make (Kirloskar/ Castle/Sir/Kalpana)		No	12			4,750.00	57,000.00	
	100 NB		No	8			5,840.00	46,720.00	
	150NB		No	8			8,450.00	67,600.00	
	Supply, fixing in position ISI marked cast iron double flanged non return valves as per IS 5312, including transportation to worksite, supply & fixing nuts bolts gasket and washers etc complete with testing as per direction of the Engineer-in-charge make (Kirloskar/ Castle/Sir/Kalpana)		No	1			3,620.00	3,620.00	
	100NB		No	1			4,720.00	4,720.00	
	150NB		No	2			7,920.00	15,840.00	
	Supply, installation and testing of cylindrical type air cushion/vessel tank, 250mm dia. 1.0 m long and of thickness 6mm MS. on top of wet riser and with the pump set including flanged connection etc. The air cushion tank shall be providing with an automatic air release valve, safety valve pressure gauge etc. complete as per supply & fixing testing			1			25,000.00	25,000.00	
	Commissioning of 20mm bore and 30meter long hose (Rubber lined Dunlop pipe) and hose reel for first lid fire fighting, conforming to IS 384, with full swing drum fixing brackets, 5mm dia. shut off gun metal nozzle 25mm dia. GI pipe including 25mm dia. GI pipe through 25mm dia. GI pipe including 25mm dia. GI pipe length with sockets, elbow nipples etc. including providing operating instruction on a metal plate and fixing it near hose reel. The system shall be complete in all		No	2			7,200.00	14,400.00	
	Providing gun metal IS marked 63mm dia. branch pipes & 20mm dia. nozzle near wet riser as required (Make: Minimax/ Firex/ Saex/)		No	2			2,000.00	4,000.00	
	Providing IS marked R.R.L. (IS.636 Type II) Fire hose pipe 1.5 m long and 63mm dia. with IS1 marked (IS: 903 gun metal make and female" coupling complete as required near wet riser make		No	4			6,500.00	26,000.00	

		Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
						Unit Price	Amount	Unit Price	Amount	
		Providing and fixing on fire plate at appropriate place to restrict the pressure at different floor on the wet riser system and yard hydrant it shall be inserted between the tee and hydrant valve, the size of plate being 100mm or 80mm (as the case may be) the hole not less than 50mm and the thickness shall not be		No.	1			550.00	550.00	
		Providing and fixing of draining arrangement to the vertical wet riser system/sprinklers system with necessary 50mm GI pipe complete with 50mm dia stop valve S.I.T.C. weather proof standard fire hose cabinet "0.9m x 0.9m x 0.45m" out door type suitable for accommodating yard hydrant made for not less than 16 swg MS sheet having central opening glass door (5mm thick clear glass) including necessary locking arrangement with hanger for housing two nos. 15m long fire hoe pipe branch pipe and hydrant valve as required including painting (one coat primer and two coat a fire rate paint by the fire rate color, the cabinet shall be mounted		No.	1			1,600.00	1,600.00	
		S.I.T.C. standard fire hose cabinet door (1.0, * 1.8m) suitable to fit in the ; just made of not less than 16 SWG MS sheet having central opening ;lass door (5mm thick clear glass) including necessary locking Tangement & handle as required including necessary locking arrangement & handle as required including painting)one coat primer i & two coats of fire red color) by the fire red color, the door shall be fixed in the masonry wall as		No.	2			4,800.00	9,600.00	
		considering wood, HOSE masonry chamber 60*60*100 cm inside the 75 class designation FPS brick work in cement mortar 1:5(1 cement : 5 fine sand) for sluice valve with CI cover and frame (medium duty) 500mm internal diameter total weight of cover and frame to be not less than 116 kg (weight of cover 58kg and weight of frame 58kg) . with chained lid and RCC top slab 1:2:4 mix(1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) necessary excavation, foundation, concrete 1:5:10 (1 cement: 5 fine sand : 10 graded stone		No.	2			3,750.00	7,500.00	
		S.I.T.C. for 4 way 65mm instantaneous inlet for fire brigade connection including provision for 150mm dia sluice valve and non return valve (the cost of sluice and non return valve shall be under separate item) and making connection with 150 NB fire fighting wet riser pipe or under ground water tank and fixing inlet with caps and chains in a 5mm thick glass, fronted box of 16 GWG MS sheet, fixing it on the ground level on concrete base, painting with fire		No.	1			14,000.00	14,000.00	
		S.I.T.C. of TAG approved electrical motor driven fire pump suitable for automatic operation consisting of blowing (main pump for hydrant >ystem) Kirloskar made		No.	1			22,500	22,500.00	
				No.	1			250,000	250,000.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Horizontally mounted split casing centrifugal fire pump complete for delivery of under mentioned discharge against desired mentioned head so as to insure of minimum pressure of thirty mtr. At highest and arthrest out let at the specified flow complete with necessary strainers, pressure gauge including bypass arrangement for periodic testing of le working of the pump set as well as testing of automation with required length and size of medium class GI pipe and control valves for proper completion of work. the pump shall be capable of giving 150% of rated discharge at head not less than 65% of rated head the pump shall be provided with mechanical seal, the impeller shall be enclosed type and accurately		No.	1			18,000	18,000.00	
	Squirrel case TEFC induction motor suitable for 415V 3 phase having IP 55 protection and class B insulation for the above pump and flexible coupling with the pump. the motor shall be rated for continuous duty and shall have IP rating necessary to drive to pump at 150% of its							0.00	
	S.I.T.C. of TAC approved diesel engine driven fire pump suitable for automatic operation consisting of following (standby pump)			1			46,000	46,000.00	
	S.I.T.C. of TAC approved electrical motor driven fire pump suitable for automatic operation consisting of following (Jockey pump)			1			54,000	54,000.00	
	Fabricating supply fixing testing & commissioning of cubical type flow mounted electrical control panel of 2mm thick CRCA sheet for fire fighting pump with suitable relays. S/F unit with HRC fuses for incoming and outgoing feeders contactor, star delta starters including land ammeter, voltmeter, selector. switches, CTs, PTs protective fuses indicating light for incoming and out going feeders auxiliary switches dry section cutoff, single phase presenter, suitable capacity copper bus bars etc. The panel, shall be provided with inter locking arrangement between electric motor driven and diesel engine driven pump so that only one pump can operate at one time, and in case of any failure in electrical motor driven pump the diesel engine driven pump shall operate							0.00	
								0.00	
	1 No. Electric motor driven		No.	1			13,500	13,500.00	
	1 No. Diesel pump		No.	1			10,500	10,500.00	
	1 No. Jockey pump		No.	1			12,000	12,000.00	
	C02 gas type 4.5 kg capacity		No.	2			7,800	15,600.00	
	Foam AFFF type 9 litre capacity		No.	4			1,780	7,120.00	
		Total						1,102,285.00	
	24. RISING MAIN FROM TUBEWELL TO O.H.T & WATER SUPLY IN THE STP CAMPUS								

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Supply of following sizes of pipes at site of work inclusive of all taxes, carting, loading, unloading and 1 proper stacking etc. all								
	150mm dia. CI Tyton class LA		m	50			1,600.00	80,000.00	
	150mm dia. PVC pipe (6kg/cm2)		m	380			400.00	152,000.00	
	110mm dia. PVC pipe (6kg/cm2)		m	1,000			160.00	160,000.00	
	Cost of specials & fittings @ 10%		Ls	1			39,200.00	39,200.00	
	Excavation in ordinary soil for pipe line (loam, clay or sand) for lead upto 50m and lift upto 1.5m including filling, watering, ramming of excavated earth and disposal of surplus earth upto a		m3	1,150			184.79	212,508.50	
	Laying & jointing and fixing of following size of pipes. 150mm dia.		m	30			40.58	1,217.40	
	150mm dia PVC pipe (6kg/cm2)		m	380			25.91	9,845.80	
	110mm dia. PVC pipe (6kg/cm2)		m	1,000			23.71	23,710.00	
	Supply & fixing of Fire hydrant as per IS 909-1969 consisting of 65mm dia. duck foot bend with standard make coupling and CI cap hinged to P/E bend by chain for destination including all taxes etc. complete. Hydrant 80x65mm dia.		No.	3			7,800.00	23,400.00	
	Supply and fixing of plain ended sluice valve with cap of following sizes for destination suitable for working pressure of 10kg/cm2 ; including cost of its chamber. 150mm dia.		No.	3			7,200.00	21,600.00	
	100mm dia.		No.	4			3,200.00	12,800.00	
	Supply & fixing of 20mm dia. single screwed working pressure 10kg/cm2 FOR site including construction of its chamber etc.		No.	3			10,500.00	31,500.00	
	Supply of all materials, labour, T&P construction of pillar type stand post as per type design.		No.	6			6,500.00	39,000.00	
	Unforeseen items		Ls	1			6,000.00	6,000.00	
	Total							812,781.70	
	25. SOIL INVESTIGATION OF STP SITE								
	Provision for soil investigation.		Ls	1			100,000	100,000.00	
	26. VEHICLES								
	Multipurposes Vehicle		No	1			1,500,000	1,500,000.00	
	27. HIRING OF TEMPORARY GODOWN								
	Provision for hiring of godown for 36 months. 200 m2 @ Rs 120.00/ m2 for 36 months.		month	36			6,840	246,240.00	
	28. OFFICE CUM LABORATORY BUILDING								
	Construction of doubled storied office cum laboratory building to be finalised at the time of execution of project including supply of all materials, labour, T&P etc. all		m2	300			20,700	6,210,000.00	
	Supply of all materials and complete internal water supply and sanitary installations of office cum laboratory buildings including cost of pipe, fittings, labour, T&P etc. complete required for proper completion of						931,500.00	931,500.00	
	Supply of all materials, wire, plug, switches and bulb holders, fans etc. and wiring etc complete as per electrical specifications including arrangement for inverter all labour T&P etc. required for proper						931,500.00	931,500.00	
	Supply of all kinds of furniture including Almira, Table, Chairs						621,000.00	621,000.00	
	Total							8,694,000.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	29. 250 KI. RCC OVER HEAD TANK & APPURTENENT WORKS								
	Design and construction of 250 KI. RCC O.H.T. at a staging of 15.0m excluding cost of all pipes sluice valves and specials but inclusive of all other works and fixing of pipes including cost of all labour, materials, T&P etc. complete		liter	250,000			10	2,500,000	
	Cost of inlet pipe 150mm dia outlet pipe 150mm dia overflow pipe 150mm dia and washout pipe 100mm dia with CI duck foot bends and sluice valve of each size including cost of sluice valve chambers etc. all complete		Ls	1			300,000	300,000	
	Total							2,800,000.00	
	30. 100 KI. RCC OVER HEAD TANK & APPURTENENT WORKS								
	Design and construction of 100 KI. RCC O.H.T. at a staging of 15.0m excluding cost of all pipes sluice valves and specials but inclusive of all other works and fixing of pipes including cost of all labour, materials, T&P etc. complete		liter	100,000			10	1,000,000	
	Cost of inlet pipe 1200mm dia outlet pipe 1200mm dia overflow pipe 500mm dia and washout pipe 100mm dia with CI duck foot bends and sluice valve of each size including cost of sluice valve chambers etc. all complete		Ls	1			500,000	500,000	
	Total							1,500,000.00	
	31. EFFLUENT CHANNEL BETWEEN SST & CCT								
	1) Excavation Work								
	Excavation		m ³	75.60			184.79	13,970.12	
	2) Plain Concrete work								
	Plain concrete		m ³	5.46			6,364.94	34,752.57	
	3) RC concrete work								
	RC Concrete	RCC Walls	m ²	10.00			12,715.80	127,158.00	
			m ²	0.80			12,715.80	10,172.64	
		Platform for inspection	m ³	7.50			12,715.80	95,368.50	
	4) Form work/Shuttering								
	Form work	RCC walls x-x	m ²	80.00			360.80	28,864.00	
		x-y	m ²	6.40			360.80	2,309.12	
		R.C.C. Stairs	m ²	0.00			395.65	0.00	
		Platform for inspection	m ²	30.00			401.65	12,049.50	
	5) Re-bar work								
	Wall @1.25%		kg	1,059.75			70.96	75,197.10	
	6) Epoxy painting work								
	Epoxy painting		m ²	32.00			121.15	3,876.80	
	Epoxy painting	channel	m ²	40.00			121.15	4,846.00	
	7) Gate installation								
	Providing and fixing 1.5m x 1.50 CI sluice gates at exit of each SST.		No.	2.00			450,000.00	900,000.00	
	8) Miscellaneous work								
	Misc Unforeseen items		Ls	1.0			4,500	4,500.00	
	Total							1,313,064	
	32. EFFLUENT DISPOSAL CONDUITE								
	1) Dismantling work								
	Dismantling of Bituminous road surface		m ³	7,500.00			159.05	1,192,875.00	
	2) Excavation Work								
	Excavation	00 00m - 01 50m B G I	m ³	20,625.00			184.79	3,811,293.75	

	Items	Specification	Unit	Qty	FC Portion (Yen)		L.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
		01.50m – 03.00m B.G.I	m ³	9,900.00			231.98	2,296,602.00	
	3) Earth filling								
	Earth filling	01.50m – 03.00m B.G.I	m ³	3,300.00			945.01	3,118,533.00	
	4) Pipe and valve installation work								
	PSC pipe 1200mm diameter (8Kg/sqm)		m	5,500.00			14,627.25	80,449,875.00	
	C.I. double ball orifice type 200 mm dia Air Valve		No	6			24,375	146,250.00	
	1000 mm dia Scour/Drain Valve		No	2			1,097,161	2,194,321.94	
	5) Thrust Block installation								
	30.00° bend		No	2			144,200	288,400.00	
	45.00° bend		No	4			258,900	1,035,600.00	
	60.00° bend		No	1			306,200	306,200.00	
	75.00° bend		No	1			472,250	472,250.00	
	90.00° bend		No	4			617,900	2,471,600.00	
	6) Road work								
	Re-instatement of Bituminous road surface including its sub grade.		m ³	7,500			3,634	27,255,000.00	
	Total							127,664,929	
	33. DG PLATFORM & CONTROL ROOM								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.I	m ³	136.80			184.79	25,279.27	
	2) Plain Concrete work								
	Plain concrete		m ³	9.90			6,364.94	63,012.91	
	3) RC concrete work								
	RC Concrete	Strip raft Foundation	m ³	30.25			12,715.80	384,652.95	
		Horizontal Frames (Beams) At Plinth level x-y	m ³	7.43			12,715.80	94,414.82	
			m ³	3.00			12,715.80	38,147.40	
			m ³	10.50			12,715.80	133,515.90	
		At Lintel level x-x	m ³	7.43			12,715.80	94,414.82	
		x-y	m ³	3.00			12,715.80	38,147.40	
		At Top slab level x-x	m ³	6.35			12,715.80	80,681.75	
		x-y	m ³	3.00			12,715.80	38,147.40	
		Cannterver beam for fixing girder for movement of crane	m ³	2.88			12,715.80	36,621.50	
		Beams in roof slab	m ³	15.00			12,715.80	190,737.00	
		vertical frames (Columns) x-z	m ³	26.40			12,715.80	335,697.12	
			m ³	2.64			12,715.80	33,569.71	
		y-z	m ³	5.28			12,715.80	67,139.42	
		R.C.C. wall for cable duct	m ³	13.20			12,715.80	167,848.56	
		x-x	m ³	2.40			12,715.80	30,517.92	
		x-y	m ³	2.40			12,715.80	30,517.92	
		Floor Slab	m ³	26.40			12,715.80	335,697.12	
		Roof Slab	m ³	29.74			12,715.80	378,117.03	
		R.C.C. Stairs	m ³	6.00			12,715.80	76,294.80	
	4) Form work/Shuttering								
	Form work	Strip raft Foundation	m ²	35.00			196.45	6,875.75	
		Horizontal Frames (Beams) At Plinth level x-x	m ²	64			332.15	21,373.85	
		x-y	m ²	26.00			332.15	8,635.90	
			m ²	91			332.15	30,225.65	
		At Lintel level x-x	m ²	64.35			332.15	21,373.85	
		x-y	m ²	26			332.15	8,635.90	
		At top slab level x-x	m ²	54.99			332.15	18,264.93	
		x-y	m ²	26			332.15	8,635.90	
		Cannterver beam for fixing girder for movement of crane	m ²	27.00			332.15	8,968.05	
		Beams in roof slab	m ²	130			332.15	43,179.50	
		vertical frames (Columns) x-z	m ²	176.00			453.35	79,789.60	
		y-z	m ²	35			453.35	15,957.92	
		R.C.C. wall for cable duct	m ²	66.00			360.80	23,812.80	
		x-x	m ²	12			360.80	4,329.60	
		Floor Slab	m ²	165.00			401.65	66,272.25	
		Roof Slab	m ²	177			401.65	71,092.05	
		R.C.C. Stairs	m ²	32.00			395.65	12,660.80	

	Items	Specification	Unit	Qty	P.C Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	5) Re-bar work								
	Strip (mft) Foundation @ 0.8%		kg	1,899.70			70.96	134,797.77	
	Wall @ 1.25%		kg	1,530.75			70.96	108,618.04	
	Slab @ 0.6%		kg	2,926.61			70.96	207,664.32	
	Beam @ 1.25%		kg	5,747.67			70.96	407,839.85	
	Columns @ 2%		kg	5,388.24			70.96	382,335.50	
	6) Masonry work								
	Brick work		m ³	98.64			5,925.29	584,470.61	
	7) Plastering work								
	12mm thick plaster with cement and coarse sand mortar in 1:4 over brick work		m ²	453.69			174.17	79,019.19	
	Struck pointing with cement mortar consisting cement and local sand in 1:2 including supply of all materials, labour, T&P etc. required for proper completion of work		m ²	428.85			166.18	71,266.29	
	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5cm long wire springs grade no.2 and M.S. top cover of required thickness for rolling shutters		m ²	36.00			2,528.62	91,030.32	
	Construction of pit for installation of 10KL capacity underground oil tank		No	1			140,000.00	140,000.00	
	Construction of pillars for installation of cooling towers.		No	5			50,000.00	250,000.00	
	Supply and fixing of ISMB 400 section on projected beams for movement of cranes including cost of labour, materials, T&P etc.		kg	2,033			60.00	121,968.00	
	Supply and fixing of Lightning conductor.		Ls	1			45,000.00	45,000.00	
	Providing and fixing ISI marked steel glazed doors, windows and ventilators of standard rolled steel sections, joints mitred and welded with 15x3mm lugs, 10cm long, embedded in cement concrete blocks 15x10x10m of 1:3:6 (1 cem:3nt: 3 coarse sand, 6 grades stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of glass panes with glazing clips and special metal sash putty of approved make complete including applying a priming coat of approved steel primer, excluding the cost of metal beading and other fitting except		m ²	25.2			2,265.12	57,081.02	
	Construction of machine foundation/ fixing arrangements for various machinaries etc.		No	4			15,000	60,000.00	
	Painting or Varnishing new iron work in small area or new wood work with one coat priming and two coat of approved paint or varnish including supply of all materials, labour and T&P etc. required for proper completion of work.	Door	m ²	72			152.16	10,955.52	
		Windows	m ²	50			152.16	7,668.86	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	One priming coat and two coat of dry distemper on new work including supply of all materials, labour, T&P etc. required for proper		m ²	97.80			111.31	10,886.12	
	One priming coat and two coats of water proof cement on new outer surface of buildings including supply of all materials, labour and T&P etc. required for proper		m ²	626.25			57.85	36,228.56	
	Providing and laying Water proofing treatment on roofs of slabs by applying cement slurry mixed with Armourcrete or Tapecrete or any other approved quality admixture as per specification laid down in DSR 2002 and covering it with brick masonry work 5 cm thick with tile bricks in cement mortar 1:3 (1:1)			194			820	158,883.20	
	Providing and fixing 1.00m high Railing made up of of 25mm diameter GI pipe (In three rows) fixed with 75x50x6 MS angles includingsupply of all materials labour and T&P etc for proper			160			1,960	313,600.00	
	Provision for water supply, drainage & sewerage arrangement in the building and nearby area includingsupply of all materials labour and T&P etc for proper completion of work. (@ 10% of the			1			637,203	637,202.56	
	Misc unforeseen items			1			4,200	4,200.00	
	Total							7,013,454.83	
	34. TRANSFORMER YARD								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.L	m ³	18.38			184.79	3,396.44	
	2) RC concrete work								
	RC Concrete	Foundation raft	m ³	10.80			12,715.80	137,330.64	
		Platform Slab	m ³	7.20			12,715.80	91,553.76	
		Columns	m ³	2.00			12,715.80	25,431.60	
	3) Form work/Shuttering								
	Form work	Foundation raft	m ²	60.00			196.45	11,787.00	
		Platform Slab	m ²	14			401.65	5,783.76	
		Columns	m ²	176.00			453.35	79,789.60	
	4) Re-bar work								
	Foundation raft @ 0.8%		kg	678.24			70.96	48,126.15	
	Platform Slab @ 0.6%		kg	339.12			70.96	24,063.07	
	Columns @ 2%		kg	314.00			70.96	22,280.62	
	5) Masonary work								
	Brick work		m ³	5.64			5,925.29	33,389.01	
	6) Plastering work								
	12mm thick plaster with cement and Coarse sand mortar in 1:4 over brick work		m ²	58.80			174.17	10,241.20	
	7) Other works								
	Provision for pathways & drainage arrangement in the building and nearby area includingsupply of all materials labour and T&P etc for proper completion of work. (@ 10% of total cost)		Ls	1			50,000.00	50,000.00	
	Providing and fixing 1.00m high Railing made up of of 25mm diameter GI pipe (In three rows) fixed with 75x50x6 MS angles includingsupply of all materials labour and T&P etc for proper completion of work.		m	49			1,960	96,040.00	
	Provision for Cable trench.		m	50			800	40,000.00	
	Misc unforeseen items		Ls	1			500	500.00	
	Total							679,712.85	
	35. METERING/HT ROOM								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.L	m ³	67.50			184.79	12,473.33	

	Items	Specification	Unit	Qty	FC Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	2) Plain Concrete work								
	Plain concrete		m ³	6.02			6,364.94	38,316.94	
	3) RC concrete work								
	RC Concrete	Strip (raft) Foundation	m ³	11.61			12,715.80	147,630.44	
		Horizontal Frames (Beams) At Plinth level x-x	m ³	2.70			12,715.80	34,332.66	
			m ³	1.17			12,715.80	14,877.49	
			m ³	2.34			12,715.80	29,754.97	
			m ³	2.70			12,715.80	34,332.66	
			m ³	1.17			12,715.80	14,877.49	
			m ³	2.70			12,715.80	34,332.66	
			m ³	1.17			12,715.80	14,877.49	
			m ³	2.25			12,715.80	28,610.55	
			m ³	4.32			12,715.80	54,932.26	
			m ³	0.86			12,715.80	10,986.45	
			m ³	4.50			12,715.80	57,221.10	
			m ³	1.95			12,715.80	24,795.81	
			m ³	19.50			12,715.80	247,958.10	
			m ³	18.71			12,715.80	237,925.33	
	4) Form work/Shuttering								
	Form work	Foundation raft	m ²	65.04			196.45	12,777.11	
		Horizontal Frames (Beams) At Plinth level x-x	m ²	40.50			332.15	13,452.08	
		x-x	m ²	11.70			332.15	3,886.16	
			m ²	23.40			332.15	7,772.31	
		At 1st floor level x-x	m ²	27.00			332.15	8,968.05	
		x-x	m ²	11.70			332.15	3,886.16	
		At 1st floor level x-x	m ²	27.00			332.15	8,968.05	
		x-x	m ²	11.70			332.15	3,886.16	
		Beams in roof slab Vertical Frames (Columns) x-x	m ²	25.50			332.15	8,469.83	
		x-x	m ²	36.00			453.35	16,320.60	
		y-z	m ²	7.20			453.35	3,264.12	
		Walls in roof slab x-x	m ²	4.50			360.80	1,623.60	
		x-x	m ²	1.95			360.80	703.56	
		Floor Slab	m ²	97.50			401.65	39,160.88	
		Roof Slab	m ²	105.30			401.65	42,293.75	
	5) Re-bar work								
	Strip (raft) Foundation @ 0.8%		kg	729.11			70.96	51,735.61	
	Wall @ 1.25%		kg	632.91			70.96	44,909.38	
	Slab @ 0.6%		kg	1,799.74			70.96	127,704.74	
	Beam @ 1.25%		kg	1,589.63			70.96	112,795.66	
	Columns @ 1.5%		kg	813.89			70.96	57,751.38	
	5) Masonary work								
	Brick work		m ³	32.71			5,925.29	193,816.24	
	6) Plastering work								
	12mm thick plaster with cement and Coarse sand mortar in 1:4 over brick work		m ²	167.04			174.17	29,093.36	
	Struck pointing with cement mortar consisting cement and local sand in 1:2 including supply of all materials, labour,, T&P etc. required for proper completion of work.		m ²	142.20			166.18	23,630.80	
	7) Steel works								
	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5cm long wire springs made no.2 and M.S. top cover of		m ²	7.20			2,528.62	18,206.06	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Providing and fixing ISI marked steel glazed doors, windows and ventilators of standard rolled steel sections, joints mitred and welded with 15x3mm lugs, 10cm long, embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cem:3nt: 3 coarse sand: 6 grades stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of glass panes with glazing clips and special metal sash putty of approved make complete including applying a priming coat of approved steel primer, excluding the cost of metal heading and other fitting except		m2	21.60			2,265.12	48,926.59	
	Painting or Varnishing new iron work in small area or new wood work with one coat priming and two coat of approved paint or varnish including supply of all materials, labour and T&P etc. required for proper completion of work.	Door	m2	14.40			152.16	2,191.10	
		Windows	m2	43.20			152.16	6,573.31	
	6) Epoxy painting work								
	Epoxy painting		m ²	97.80			111.31	10,886.12	
	Epoxy painting		m ²	339.60			57.85	19,645.86	
	Water proofing		m ²	121.66			820.00	99,761.20	
	8) Other works								
	Provision for water supply, drainage & sewerage arrangement in the building and nearby area including supply of all materials labour and T&P etc for proper completion of work. (@ 10% of the cost of buildind)		Ls	1			206,127.18	206,127.18	
	Misc unforeseen items		Ls	1			1,300.00	1,300.00	
		Total						2,268,722.74	
	36. CONTROL ROOM BUILDING								
	1) Excavation Work								
	Excavation	00.00m – 01.50m B.G.L	m ³	67.40			184.79	12,454.85	
	2) Plain Concrete work								
	Plain concrete		m ³	10.40			6,364.94	66,195.38	
	3) RC concrete work								
	RC Concrete	Strip (raft) Foundation	m ³	32.50			12,715.80	413,263.50	
		Horizontal Frames (Beams) At Plinth level x-x	m ³	7.80			12,715.80	99,183.24	
		x-y	m ³	2.10			12,715.80	26,703.18	
			m ³	5.25			12,715.80	66,757.95	
		At plinth level x-x	m ³	7.80			12,715.80	99,183.24	
		x-y	m ³	1.95			12,715.80	24,795.81	
		At top slab level x-x	m ³	7.20			12,715.80	91,553.76	
		x-y	m ³	2.10			12,715.80	26,703.18	
		Beams in roof slab	m ³	3.68			12,715.80	46,730.57	
		Vertical Frames (Columns) x-z	m ³	11.76			12,715.80	149,537.81	
		y-z	m ³	1.68			12,715.80	21,362.54	
		R.C.C. wall for cable duct. x-x	m ³	7.80			12,715.80	99,183.24	
		x-y	m ³	2.10			12,715.80	26,703.18	
		Floor Slab	m ³	36.40			12,715.80	462,855.12	
		Roof Slab	m ³	33.46			12,715.80	425,419.80	
	4) Form work/Shuttering								
	Form work	Foundation raft	m ²	13.00			196.45	2,553.85	
		Horizontal Frames (Beams) At Plinth level x-x	m ²	101.40			332.15	33,680.01	
		x-y	m ²	18			332.15	6,045.13	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
			m ²	46			332.15	15,112.83	
			m ²	68			332.15	22,453.34	
			m ²	18			332.15	6,045.13	
			m ²	62			332.15	20,726.16	
			m ²	18			332.15	6,045.13	
			m ²	42			332.15	13,834.05	
			m ²	78			453.35	35,542.64	
			m ²	11			453.35	5,077.52	
			m ²	52			360.80	18,761.60	
			m ²	14			360.80	5,051.20	
			m ²	169			401.65	67,878.85	
			m ²	223			401.65	89,584.02	
	5) Re-bar work								
		Strip (raft) Foundation @ 0.8%	kg	2,041.00			70.96	144,824.05	
		Wall @ 1.25%	kg	971.44			70.96	68,930.68	
		Slab @ 0.6%	kg	3,290.22			70.96	233,465.29	
		Beam @ 1.25%	kg	3,716.48			70.96	263,712.07	
		Columns @ 2%	kg	2,110.08			70.96	149,725.79	
	5) Masonary work								
		Brick work	m ³	27.76			5,925.29	164,486.05	
	6) Plastering work								
		12mm thick plaster with cement and Coarse sand mortar in 1:4 over brick work	m ²	145.54			174.17	25,348.70	
		Struck pointing with cement mortar consisting cement and local sand in 1:2 including supply of all materials, labour, T&P etc. required for proper completion of work.	m ²	120.70			166.18	20,057.93	
	7) Steel works								
		Supplying and fixing rolling shutters of approved make, made of required size M.S. laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5cm long wire springs	m ²	7.20			2,528.62	18,206.06	
		providing and fixing ten rows of steel glazed doors, windows and ventilators of standard rolled steel sections, joints mitred and welded with 15x3mm lugs, 10cm long, embedded in cement concrete blocks 15x10x10m of 1:3:6 (1 cem:3nt: 3 coarse sand: 6 grades stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of glass panes with glazing clips and special metal sash putty of approved make complete including applying a	m ²	21.60			2,265.12	48,926.59	
		Painting or Varnishing new iron work in small area or new wood work with one coat priming and two coat of approved paint or varnish including supply of all materials, labour and T&P etc. required for	m ²	14.40			152.16	2,191.10	
		Door	m ²	43.20			152.16	6,573.31	
		Windows	m ²	43.20			152.16	6,573.31	
	6) Epoxy painting work								
		Epoxy painting	m ²	97.80			111.31	10,886.12	
		Epoxy painting	m ²	318.00			57.85	18,396.30	
		Water proofing	m ²	219.76			820.00	180,203.20	
	8) Other works								

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Provision for water supply, drainage & sewerage arrangement in the building and nearby area including supply of all materials labour and T&P etc for proper completion of work (@ 10% of the		Ls	1			386,292.28	386,292.28	
	Misc unforeseen items		Ls	1			2,300.00	2,300.00	
	Total							4,251,503.33	
	37. STAFF QUARTER								
	A type quarters		m ²	25.00			20,700.00	517,500.00	
	B type quarters		m ²	42.00			20,700.00	869,400.00	
	C type quarters		m ²	80.00			20,700.00	1,656,000.00	
	D type quarters		m ²	128.00			20,700.00	2,649,600.00	
	Total							5,692,500	
	38. CAMPUS ROAD								
	Construction of Bituminous road including GSB, WBM, BM &		m ²	23,400.00			3,634.00	85,035,600.00	
	39. OUTFALL STRUCTURE								
	1) Excavation Work								
	Excavation		m ³	29.70			138.82	4,122.95	
	2) Plain Concrete work								
	Plain concrete		m ³	1.35			3,634.00	4,905.90	
			m ³	1.35			3,634.00	4,905.90	
	3) RC concrete work								
	RC Concrete	for Block	m ³	55.77			8,557.16	477,219.98	
		Deduction for pipe	m ³	-18.57			8,557.16	-158,879.25	
		Wall	m ³	19.89			8,557.16	170,201.91	
		Wall	m ³	9.00			8,557.16	77,014.44	
		raft	m ³	5.96			8,557.16	51,022.07	
	5) Re-bar work								
	@ 100Kg per CU M		kg	7,205.42			70.96	511,277.73	
	4) Form work/Shuttering								
	Form work	Foundation raft	m ²	91.80			360.80	33,121.44	
		Dry stone pitching 22.5 cm thick	m ²	40.00			422.80	16,912.00	
	Total							1,191,825	
	40. Pipe Protection Wall								
	1) Excavation Work								
	Excavation		m ³	9.00			138.82	1,249.38	
	2) Plain Concrete work								
	Plain concrete		m ³	0.30			3,483.63	1,045.09	
	3) RC concrete work								
	RC Concrete	for Wall	m ³	5.40			8,557.16	46,208.66	
		Deduction for pipe	m ³	-1.21			8,557.16	-10,354.16	
	5) Re-bar work								
	@ 100Kg per CU M		kg	419.42			70.96	29,760.95	
	4) Form work/Shuttering								
	Form work		m ²	18.00			360.80	6,494.40	
			m ²	3.60			360.80	1,298.88	
	Sub-total							75,703.20	
	Total		pc	4.00			75,703.20	302,812.80	
	41. RAMP FOR ENTERING IN PLANT								
	1) Earth work								

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m		m ²	20.00			1,245.75	24,915.00	
	Supply of good soil		m ³	2,812.50			163.11	458,746.88	
	Soil transportation	upto 10km	m ³	2,812.50			210.77	592,790.63	
	Embankment		m ³	2,812.50			241.70	679,781.25	
	2) Masonary work								
	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete		m ²	830.00			422.80	350,924.00	
	1:4 cement mortar in proportion of 1:4 cement & local sand over brick-work in foundation & plinth including supply of all materials, labour, T&P etc. required for proper completion		m ²	34.50			5,925.29	204,422.51	
	12mm thick plaster with cement mortar in proportion (1:4) cement & local sand over brick-work minimum thickness not to be less than 10mm, including supply of all materials, labour and T&P etc. required for proper completion of work	in parapet wall (sides)	m ²	300.00			145.30	43,590.00	
		in parapet wall (Top)	m ²	46.00			145.30	6,683.80	
	3) Concrete work								
	Concrete with 40 mm gauge brick ballast, local sand and cement in proportion of (10:5:1) in foundations and floors including supply of all materials, labour, T&P etc. required for proper completion of the work	in road	m ²	35.04			3,483.63	122,066.40	
	Cement concrete with cement, coarse sand and approved stone ballast in the proportion of 1:2:4 (1 Cement 2 coarse sand 4 graded stone aggregate 20 mm nominal size) including supply of all materials, labour, T&P etc. required for proper completion of the work.		m ²	52.55			8,557.16	449,678.76	
	Brick soling with straight over burnt bricks & dry with brick edging laid vertical on either side, filling the joints with local earth.		m ²	150.15			338.09	50,764.21	
	Sub-Total							2,984,363	
	Total			2.00			2,984,363.44	5,968,726.88	
	42. EARTHEN BUNDH								
	1) Earth work								
	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m		m ³	0.20			1,245.75	249.15	
	Supply of good soil		m ³	0.04			163.11	6.52	
	Soil transportation	upto 10km	m ³	0.04			210.77	8.43	
	Embankment		m ³	0.04			241.70	9.67	
	2) Masonary work								
	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete.		m ²	8.30			422.80	3,509.24	
	Concrete with 40 mm gauge brick ballast, local sand and cement in proportion of (10:5:1) in foundations and floors including supply of all materials, labour, T&P etc. required for proper completion		m ³	0.62			3,483.63	2,159.85	
			m ³	0.15			3,483.63	522.54	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Cement concrete with cement, coarse sand and approved stone ballast in the proportion of 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including supply of all materials, labour, T&P etc. required		m ³	1.25			8,557.16	10,696.45	
			m ³	0.30			8,557.16	2,567.15	
			m ³	0.30			8,557.16	2,567.15	
	Cost per meter							22,296	
		Total	m	2,500.00			22,296.15	55,740,375.00	
	43. PIPE PROTECTION ALONG RIVER GANGA								
	1) Pile Installation								
	Pile Installation	Dia. 300mm	m	200.00			2,123.15	424,630.00	
	2) RC Concrete work								
	RC Concrete	i. in Cradle/Cantilever beam	m ³	7.60			12,715.80	96,640.08	
	3) Re-bar installation work								
	Re-bar installation	i. in pile	kg	1,413.80			70.96	100,319.57	
		ii. in Cradle/Cantilever beam	kg	760.00			70.96	53,927.62	
	total							675,517	
	44. Miscellaneous Works at MPS Nagwa and Rising Main								
	A MPS NAGWA								
	Cleaning of silt from screening channel at Nagwa MPS and provision for fixing of mechanical screens and other related works.		Ls	1			550,000.00	550,000.00	
	B Rising Main								
	Cleaning of silt from 1000mm Dia Rising main		m ³	117.81			5,683.70	669,596.70	
	Excavation	00.00m – 01.50m B.G.I	m ³	517.50			184.79	95,628.83	
		01.50m – 03.00m B.G.I	m ³	189.00			231.98	43,844.22	
	Pipe installation	PSC pipe 1000mm diameter (8Kg/sqm)	m ³	150.00			14,107.50	2,116,125	
	Valve installation	C.I. double ball orifice type 200 mm dia Air Valve	No	2			24,375.00	48,750	
		600 mm dia Scour/Drain Valve	No	2			314,448.02	628,896	
	C Rising Main Protection work along River Ganga		Ls	1.00			675,522.93	675,523	
	Total							4,828,364	
	45. Boundary Wall								
	Construction of boundary wall		m	4,500.00			14,330.00	64,485,000.00	
	3.6m wide gate		No	3.00			90,000.00	270,000.00	
	site development and land scaping		m ²	80,000.00			45.00	3,600,000.00	
								68,355,000	

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit Price	Amount	Unit Price	Amount	
<Electrical/ Mechanical work>								
Mechanical works								
INLET GATE	Equipment cost	No.	3			600,000	1,800,000.00	
	Installation cost	No.	3			12,000	36,000.00	
							0.00	
FINE SCREEN (MECHANICAL)	Equipment cost	No.	2			3,360,000	6,720,000.00	
	Installation cost	No.	2			67,200	134,400.00	
							0.00	
FINE SCREEN (MANUAL)	Equipment cost	No.	1			500,000	500,000.00	
	Installation cost	No.	1			10,000	10,000.00	
							0.00	
BELT CONVEYOR	Equipment cost	No.	1			400,000	400,000.00	
	Installation cost	No.	1			8,000	8,000.00	
							0.00	
GRIT CHAMBER	Equipment cost	No.	2			1,700,000	3,400,000.00	
	Installation cost	No.	2			34,000	68,000.00	
							0.00	
PRIMARY CLARIFIER	Equipment cost	No.	2			4,460,000	8,920,000.00	
	Installation cost	No.	2			89,200	178,400.00	
							0.00	
PRIMARY SLUDGE PUMP	Equipment cost	No.	4			300,000	1,200,000.00	
	Installation cost	No.	4			6,000	24,000.00	
							0.00	
MIXER FOR ANOXIC TANK	Equipment cost	No.	8			890,000	7,120,000.00	
	Installation cost	No.	8			17,800	142,400.00	
							0.00	
DIFFUSER	Equipment cost	No.	2			3,321,000	6,642,000.00	
	Installation cost	No.	2			66,420	132,840.00	
							0.00	
AIR BLOWER	Equipment cost	No.	4			756,000	3,024,000.00	
	Installation cost	No.	4			15,120	60,480.00	
							0.00	
CIRCULATION PUMP	Equipment cost	No.	6			1,100,000	6,600,000.00	
	Installation cost	No.	6			22,000	132,000.00	
							0.00	
RAS Pump	Equipment cost	No.	6			720,000	4,320,000.00	
	Installation cost	No.	6			14,400	86,400.00	
							0.00	
SAS Pump	Equipment cost	No.	4			340,000	1,360,000.00	
	Installation cost	No.	4			6,800	27,200.00	
							0.00	
HAND OPERATED CHAIN BLOC	Equipment cost	No.	3			100,000	300,000.00	

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit Price	Amount	Unit Price	Amount	
	Installation cost	No.	3			2,000	6,000.00	
							0.00	
SECONDARY CLARIFIER	Equipment cost	No.	2			8,400,000	16,800,000.00	
	Installation cost	No.	2			168,000	336,000.00	
							0.00	
CHLORINATOR	Equipment cost	No.	2			4,500,000	9,000,000.00	
	Installation cost	No.	2			90,000	180,000.00	
							0.00	
BOOSTER PUMP FOR CHLORINATOR	Equipment cost	No.	2			4,500,000	9,000,000.00	
	Installation cost	No.	2			90,000	180,000.00	
							0.00	
CHLORINE TONNERS	Equipment cost	No.	11			160,000	1,760,000.00	
	Installation cost	No.	11			3,200	35,200.00	
							0.00	
EVAPOLATOR	Equipment cost	No.	1				0.00	
	Installation cost	No.	1				0.00	
							0.00	
ELECTRIC HOIST	Equipment cost	No.	1			400,000	400,000.00	
	Installation cost	No.	1			8,000	8,000.00	
							0.00	
SLUDGE THICKENER	Equipment cost	No.	2			2,200,000	4,400,000.00	
	Installation cost	No.	2			44,000	88,000.00	
							0.00	
AIR BLOWER THICKENED SLUDGE SUMP	Equipment cost	No.	2			150,000	300,000.00	
	Installation cost	No.	2			3,000	6,000.00	
							0.00	
THICKENED SLUDGE FEED PUMP	Equipment cost	No.	4			340,000	1,360,000.00	
	Installation cost	No.	4			6,800	27,200.00	
							0.00	
MIXER FOR DIGESTER	Equipment cost	No.	2			11,400,000	22,800,000.00	
	Installation cost	No.	2			228,000	456,000.00	
							0.00	
BIOGAS POWER GENERATOR	Equipment cost	No.	2			26,000,000	52,000,000.00	
	Installation cost	No.	2			520,000	1,040,000.00	
							0.00	
DESULFURIZATION EQUIPMENT	Equipment cost	No.	2			10,000,000	20,000,000.00	
	Installation cost	No.	2			200,000	400,000.00	
							0.00	
BIOGAS HOLDER	Equipment cost	No.	2			6,000,000	12,000,000.00	
	Installation cost	No.	2			120,000	240,000.00	
							0.00	
BIOGAS FLARE	Equipment cost	No.	2			1,000,000	2,000,000.00	

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit Price	Amount	Unit Price	Amount	
	Installation cost	No.	2			20,000	40,000.00	
							0.00	
FILTRATE TRANSFER PUMP	Equipment cost	No.	2			220,000	440,000.00	
	Installation cost	No.	2			4,400	8,800.00	
							0.00	
							208,657,320.00	
Electrical works								
Electrical Substation for Headworks and primary clarifiers								
Inlet Flow Meter	Equipment cost	No.	1			162,500	162,500.00	
Ultrasonic type level transmitter with level-flow converter Partial flume	Installation cost	No.	1			16,300	16,300.00	
							0.00	
Level Meter in Inlet Chamber	Equipment cost	No.	1			74,800	74,800.00	
Submersible hydrostatic type, range: 0-10m, accuracy: less than +0.5% FS	Installation cost	No.	1			7,500	7,500.00	
							0.00	
Level Meter at Pre-fine screen	Equipment cost	No.	2			105,000	210,000.00	
Ultrasonic type, range: 0-10m, accuracy: less than +0.5%FS	Installation cost	No.	2			10,500	21,000.00	
							0.00	
Level Meter at Post-fine screen	Equipment cost	No.	2			105,000	210,000.00	
Ultrasonic type, range: 0-10m, accuracy: less than +0.5%FS	Installation cost	No.	2			10,500	21,000.00	
							0.00	
Level Meter at Primary Sump	Equipment cost	No.	1			105,000	105,000.00	
Ultrasonic type, range: 0-10m, accuracy: less than +0.5%FS	Installation cost	No.	1			10,500	10,500.00	
							0.00	
Primary Sludge Flow Meter	Equipment cost	No.	1			424,600	424,600.00	
Electromagnetic type, 200mm dia., accuracy: less than +0.5% of rate range: 0-10 m/sec	Installation cost	No.	1			42,500	42,500.00	
							0.00	
PLC Panel at Substation	Equipment cost	No.	1			750,000	750,000.00	
Redundant hot standby configuration, LCD 14" touch panel IP 62, AI: 10, AO: -, DI: 120, DO:40, Pulse input:4	Installation cost	No.	1			15,000	15,000.00	
							0.00	
UPS	Equipment cost	No.	1			150,000	150,000.00	
IP52, Inverter 5kVA, Battery 100AH Lead sealed type, Industrial use,	Installation cost	No.	1			15,000	15,000.00	
							0.00	
Cables and others	Equipment cost	No.	1			250,000	250,000.00	
	Installation cost	No.	1			25,000	25,000.00	
Blower House								
for liquid process								
DO Analyser	Equipment cost	No.	2			319,670	639,340	
On-line, LDO type, range: 0-1 mg/l, accuracy: less than +0.5%FS	Installation cost	No.	2			32,000	64,000	

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit Price	Amount	Unit Price	Amount	
MLSS Analyser	Equipment cost	No.	1			335,000	335,000	
On-line, Transmitted light detective type	Installation cost	No.	1			33,500	33,500	
MLR Flow Meter	Equipment cost	No.	2			515,200	1,030,400	
Electromagnetic type, 500mm dia., accuracy: less than +0.5% of rate range: 0-10 m/sec	Installation cost	No.	2			51,600	103,200	
RAS Flow Meter	Equipment cost	No.	2			515,201	1,030,402	
Electromagnetic type, 500mm dia., accuracy: less than +0.5% of rate range: 0-10 m/sec	Installation cost	No.	2			51,600	103,200	
Air blowe flow	Equipment cost	No.	1			302,700	302,700	
Ultrasonic type, range: 0-10m/s, accuracy: less than +1.0%FS	Installation cost	No.	1			30,300	30,300	
Air blowe pressure	Equipment cost	No.	2			142,200	284,400	
Diaphram range: 0-2 bar	Installation cost	No.	2			14,300	28,600	
Effluent Flow Meter at chlorine contact tank	Equipment cost	No.	1			162,500	162,500	
Ultrasonic type level transmitter with level-flow converter Weir	Installation cost	No.	1			16,300	16,300	
Residual Chlorine Analyser	Equipment cost	No.	1			425,000	425,000	
Polarographic type, range: 0-3 mg/l, accuracy: less than +1.0% continuous self cleaning system	Installation cost	No.	1			42,500	42,500	
Level Meter in SAS Feed Sump	Equipment cost	No.	1			205,000	205,000	
Ultrasonic type, range: 0-10m, accuracy: less than +0.5%FS	Installation cost	No.	1			20,500	20,500	
PLC Panel at Substation	Equipment cost	No.	1			850,000	850,000	
Redundant hot standby configuration, LCD 14" touch panel IP 62, AI: 10, AO8; -, DI: 100, DO:40, Pulse input:4	Installation cost	No.	1			17,000	17,000	
UPS	Equipment cost	No.	1			150,000	150,000	
IP52, Inverter 5kVA, Battery 100AH Lead sealed type, Industrial use,	Installation cost	No.	1			15,000	15,000	
Cables and others	Equipment cost	No.	1			350,000	350,000	
	Installation cost	No.	1			35,000	35,000	
Solid Process								
SAS Flow Meter	Equipment cost	No.	1			424,600.00	424,600	
Electromagnetic type, 400mm dia., accuracy: less than +0.5% of rate range: 0-10 m/sec	Installation cost	No.	1			42,500	42,500	
Thickener Feed Flow Meter	Equipment cost	No.	2			219,900.00	439,800	

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit Price	Amount	Unit Price	Amount	
Electromagnetic type, 200mm dia., accuracy: less than +0.5% of rate range: 0-10 m/sec	Installation cost	No.	2			22,000	44,000	
Level Meter in Thickened Sludge Feed Sump	Equipment cost	No.	1			97,500.00	97,500	
Ultrasonic type, range: 0-10m, accuracy: less than +0.5%FS	Installation cost	No.	1			9,800	9,800	
Level Meter in Digester Feed Sump	Equipment cost	No.	2			97,500.00	195,000	
Ultrasonic type, range: 0-10m, accuracy: less than +0.5%FS	Installation cost	No.	2			9,800	19,600	
Digester Feed Flow Meter	Equipment cost	No.	2			302,700	605,400	
Electromagnetic type, 300mm dia., accuracy: less than +0.5% of rate range: 0-10 m/sec	Installation cost	No.	2			30,300	60,600	
Level Meter in Digester	Equipment cost	No.	2			325,000	650,000	
Differential Pressure type, range: 0-10m, accuracy: less than +0.5%FS	Installation cost	No.	2			32,500	65,000	
Temperature in Digester	Equipment cost	No.	6			56,700.00	340,200	
Resistance Temperature Detector type, PT100	Installation cost	No.	6			5,700	34,200	
Generated Biogas Flow Meter	Equipment cost	No.	1			568,700.00	568,700	
Ultrasonic type, 500mm dia., accuracy: less than +0.5% of rate range: 0-10 m/sec	Installation cost	No.	1			56,900	56,900	
Biogas Pressure Meter	Equipment cost	No.	1			142,200.00	142,200	
Diaphragm range: 0-2 bar	Installation cost	No.	1			14,300	14,300	
Filtrate Flow Meter	Equipment cost	No.	1			302,700.00	302,700	
Electromagnetic type, 300mm dia., accuracy: less than +0.5% of rate range: 0-10 m/sec	Installation cost	No.	1			30,300	30,300	
PLC Panel for solid process	Equipment cost	No.	1			750,000	750,000	
Redundant hot standby configuration, LCD 14" touch panel IP 62, AI: 20, AO: 5, DI: 90, DO: 50, Pulse input:-	Installation cost	No.	1			15,000	15,000	
UPS	Equipment cost	No.	1			150,000.00	150,000	
IP52, Inverter 5kVA, Battery 100AH Lead sealed type, Industrial use,	Installation cost	No.	1			15,000	15,000	
Cables and others	Equipment cost	No.	1			250,000	250,000	
	Installation cost	No.	1			25,000	25,000	
SCADA System							0	
Operator Station		No.	2			1,500,000	3,000,000	
OS: Lates windows, Main memory: 64 GB, HDD, 1 TB Monitor: dual LCD 32", CPU: Intel iCore 7, required software		No.	2			30,000	60,000	

6. Mirzapur

1 INR(India Rupee)= 1.57 JPY
 1 US\$= 105.5 JPY

Summary - Mirzapur Comprehensive

Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
				Unit	Amount	Unit	Amount	
Sewer and appurtenance work		LS	1				2,194,414,622	
14MLD STP Civil work		LS	1				45,329,460	
14MLD STP Mechanical work		LS	1				52,530,000	
14MLD STP Electrical work		LS	1				23,019,100	
18 MLD STP Civil works		LS	1				170,329,805	
18 MLD STP Mechanical works		LS	1				88,199,600	
18 MLD STP Electrical works		LS	1				35,359,400	
MPS Civil works		LS	1				30,974,468	
IPS-1		LS	1				14,764,850	
IPS-2		LS	1				26,085,150	
IPS-3		LS	1				7,262,405	
MPS-4		LS	1				10,096,024	
6 MLD		LS	1				57,466,915	
IPS-5		LS	1				13,784,840	
IPS-6		LS	1				19,806,958	
IPS-7		LS	1				23,209,172	
IPS-8		LS	1				22,727,669	
Hiring of Godown and Site Office		LS	1				4,000,000	
Communication & Public Outreach		LS	1				8,000,000	
Environmental and Management Plan (EMP)		LS	1				1,000,000	
Governance and Accountability Action Plan (GAAP)		LS	1				26,000,000	
Cost of sewer cleaning equipments, Flushing Van		LS	1				1,848,000	
Total							2,876,208,438	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
<Civil/Building work>									
1.1 Sewer Laying									
	Dismantling manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-Charge.								
15 43 2 - DSR 2014	a) Bitumen Road		m2	117,214			159	18,642,964	
1266 - SOR_U.P. Jal Nigam Varanasi 2014-15	b) Cement Concrete Road		m3	8,791			1,014	8,911,612	
								0	
16 83 - DSR_2014	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of		m2	39,071			48	1,887,153	
11.2-DSR_2014	Dry brick on edge flooring in required pattern with bricks of class designation 7.5 on a bed of 12mm mud mortar, including filling joints with jumuna sand, with common burnt clay non		m2	78,143			499	38,989,444.86	
								0.00	
REINSTATEMENT WORK									
UP PWD 2013	Reinstatement of Existing Bitumen Road - Owned by Nagar Nigam		m2	117,214			3,634.00	425,957,438.49	
								0.00	
1323 - SOR_U.P. Jal Nigam Varanasi 2014-15	Providing all Materials, Labours, T & P etc & construct 100mm thick (1:2:4) Cement Concrete Road for Reinstatement of patch & trench cuts in		m3	8,791			2,041	17,944,453.42	
								0.00	
16 68 - DSR_2014	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the		m2	7,814			602	4,705,770.86	
								0.00	
16 84 - DSR_2014	Laying old cement concrete interlocking paver blocks of any design/shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge (Old CC paver blocks shall be supplied by the		m2	31,257			196	6,117,033.26	
	Total							523,155,870	
1.2 EARTH WORK (SEWER)									
2.9-& 2.26.2_DSR_2014	Excavation work 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 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50 m							0.00	
2.9.1 & 2.26.2 DSR 2014	Ordinary Rock							0.00	
	a) 0.0 to 1.5 mtr B.G.L		CUM	22,124			264	5,829,623.13	
	b) 1.5 to 3.0 mtr B.G.L		CUM	16,161			346	5,598,827.74	
	c) 3.0 to 4.5 mtr B.G.L		CUM	9,509			429	4,083,150.72	
	d) 4.5 to 6.0 mtr B.G.L		CUM	5,600			512	2,869,075.88	
	e) 6.0 to 9.0 mtr B.G.L		CUM	5,619			595	3,344,914.32	
								0.00	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Excavation by manually or mechanically up to following depths below G.L. for laying sewer line, in ordinary soil (earth, sand, loam & clay) including cutting of joints pits ramming dressing, leveling by manually or mechanically, refilling of trenches in 15cm layer watering and ramming the same including removal of surplus earth or other dismantled material up to a distance of 50m from the centre of trenches (Excavation for Manhole is							0.00	
3001 - SOR_U.P. Jal Nigam Varanasi 2014-15	a) 0.0 to 1.5 mtr B.G.L.		CUM	277,837		184.79	51,341,473.91		
3002 - SOR_U.P. Jal Nigam Varanasi 2014-15	b) 1.5 to 3.0 mtr B.G.L.		CUM	238,219		232	55,261,953.59		
3003 - SOR_U.P. Jal Nigam Varanasi 2014-15	c) 3.0 to 4.5 mtr B.G.L.		CUM	189,196		291	46,368,937.57		
3004 - SOR_U.P. Jal Nigam Varanasi 2014-15	d) 4.5 to 6.0 mtr B.G.L.		CUM	124,551		340	42,358,615.49		
3006 - SOR_U.P. Jal Nigam Varanasi 2014-15	e) 6.0 to 9.0 mtr B.G.L.		CUM	103,710		443	45,993,250.57		
	Disposal of excavated excess earth away from the site including conveyance of material up to an average lead of 2 Km away from the site and corresponding required lift, loading, unloading etc complete as directed by the engineer-in-charge (The quantity is net quantity of capacity of tractor after deduction of 20% for								
	By Mechanical Transport including loading, unloading and stacking (Lead upto 1 Km away from the site)		CUM	35,995		247	8,879,517.58		
								0.00	
	Disposal of Road Cutting Rubbish / Malba / similar unserviceable dismantled or waste material by mechanical means, including loading, transportation, unloading to approved municipal dumping ground or as approved by Engineer - in charge, within 1 km initial lead, for all leads		CUM	29,108		306	8,911,937.45		
								0.00	
Similar Project Exp	Carting of excavated earth to identified place and recarting the same where sufficient width of road is not available for stacking of excavated earth average lead 500 mtr.		CUM	45,176		158	7,137,746.80		
	Total						287,979,025		
	1.3 TIMBERING WORK								
	Providing and fixing open timbering in trenches up to 3m deep, consisting of 40mm thick approved country wood plank for poling board, 125x75mm Indian Sal wood wallers and 100mm diameter Sal wood ballies for shuttering at 1.50m c/c including removal after laying of sewers. (Measurement to be taken of the face area timbered)							0.00	
3041 - SOR_U.P. Jal Nigam Varanasi 2014-15	a) 1.5 to 3.0 mtr B.G.L.		SQMT	259,089		389	100,671,509.12		
3042 - SOR_U.P. Jal Nigam Varanasi 2013-2014	b) 3.0 to 6.0 mtr B.G.L.		SQMT	0		469.61	0.00		
3043 - SOR_U.P. Jal Nigam Varanasi 2013-2014	a) 6.0 to 9.0 mtr B.G.L.		SQMT	0		575.93	0.00		
								0.00	
	Providing and fixing close timbering in trenches for the following depths below G.L. consisting of 40mm thick approved country wood plank for poling board 125x75mm Indian Sal wood walers and 100mm diameter Sal wood ballies for shuttering at 1.50m c/c including removal after laying of sewers (Measurement to be taken of the							0.00	
3032 - SOR_U.P. Jal Nigam Varanasi 2014-15	3.0 to 4.5 mtr B.G.L.		SQMT	88,391		644	56,898,755.44		
3033 - SOR_U.P. Jal Nigam Varanasi 2014-15	4.5 to 6.0 mtr B.G.L.		SQMT	53,019		817	43,339,016.56		
3034 - SOR_U.P. Jal Nigam Varanasi 2014-15	6.0 to 9.0 mtr B.G.L.		SQMT	44,665		940	41,972,567.21		
								0.00	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Extra for planking and strutting in open timbering if required to be left permanently in position (Face area of the timber permanently left to be							0.00	
3047 - SOR_U.P. Jal Nigam Varanasi 2014-15	a) 0.0 to 3.0 mtr B.G.L.		SQMT	5,182			886	4,590,326.49	
3048 - SOR_U.P. Jal Nigam Varanasi 2013-2014	b) 3.0 to 6.0 mtr B.G.L.		SQMT	0			1,090	0.00	
3049 - SOR_U.P. Jal Nigam Varanasi 2013-2014	a) 6.0 to 9.0 mtr B.G.L.		SQMT	0			1,314	0.00	
								0.00	
	Extra for planking and strutting in close timbering if required to be left permanently in position (Face area of the timber permanently left to be measured)							0.00	
3038 - SOR_U.P. Jal Nigam Varanasi 2014-15	a) 0.0 to 3.0 mtr B.G.L.		SQMT	0			1,528	0.00	
3039 - SOR_U.P. Jal Nigam Varanasi 2013-2014	b) 3.0 to 6.0 mtr B.G.L.		SQMT	2,828			1,896	5,361,782.94	
3040-SOR_U.P. Jal Nigam Varanasi 2014-15	a) 6.0 to 9.0 mtr B.G.L.		SQMT	893			2,127	1,899,800.12	
	Total							254,733,757.88	
	1.4 BEDDING WORK							0.00	
	Providing and laying PCC Bedding with 12-20mm gauge approved stone ballast, coarse sand and cement in M-15 (1:2:4) all work up to plinth level, including supply of all materials labour T&P etc. required for proper completion of work and excluding							0.00	
	a) 150 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				386	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				398	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				413	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm				432	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm				502	0.00	
								0.00	
	a) 200 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm	48			533	25,564.32	
	1.5 to 3.0 Mtr B.G.L.		Rm	17,876			546	9,762,083.60	
	3.0 to 4.5 Mtr B.G.L.		Rm	23,265			564	13,123,786.50	
	4.5 to 6.0 Mtr B.G.L.		Rm	16,715			587	9,805,019.00	
	6.0 to 9.0 Mtr B.G.L.		Rm	6,700			623	4,171,487.00	
								0.00	
	b)250 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm	160			532	85,042.26	
	1.5 to 3.0 Mtr B.G.L.		Rm	590,000			635	374,738.50	
	3.0 to 4.5 Mtr B.G.L.		Rm	856			656	561,724.32	
	4.5 to 6.0 Mtr B.G.L.		Rm	194			683	132,416.64	
	6.0 to 9.0 Mtr B.G.L.		Rm				725	0.00	
								0.00	
	c) 300 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm	0			709	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm	0			728	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm	1,383			752	1,039,739.32	
	4.5 to 6.0 Mtr B.G.L.		Rm	99			782	77,429.02	
	6.0 to 9.0 Mtr B.G.L.		Rm	1,215			831	1,009,190.61	
								0.00	
	d) 350 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				803	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				823	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm	116			851	98,698.10	
	4.5 to 6.0 Mtr B.G.L.		Rm	93			885	82,330.02	
	6.0 to 9.0 Mtr B.G.L.		Rm	1,334			940	1,254,422.00	
								0.00	
	e)400 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				899	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm	356			922	328,380.15	
	3.0 to 4.5 Mtr B.G.L.		Rm	0			953	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm				992	0.00	

	Items	Specification	Unit	Qty	P.C Portion (Yen)		L.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	6.0 to 9.0 Mtr B.G.L.		Rm	3,219			1,054	3,392,531.07	
								0.00	
	f) 450 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				999	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm	0			1,025	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm	529			1,059	560,385.26	
	4.5 to 6.0 Mtr B.G.L.		Rm	430			1,192	474,029.15	
	6.0 to 9.0 Mtr B.G.L.		Rm	0			1,171	0.00	
								0.00	
	g) 500 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				1,102	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm	0.000			1,131	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm	505			1,169	590,227.53	
	4.5 to 6.0 Mtr B.G.L.		Rm	235			1,216	285,868.94	
	6.0 to 9.0 Mtr B.G.L.		Rm	367			1,293	396,800.06	
								0.00	
	e) 600 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				1,318	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm	43			1,352	58,152.43	
	3.0 to 4.5 Mtr B.G.L.		Rm	73			1,398	102,056.60	
	4.5 to 6.0 Mtr B.G.L.		Rm	29			1,455	42,197.97	
	6.0 to 9.0 Mtr B.G.L.		Rm	402			1,546	621,656.58	
								0.00	
	f) 700 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm	0			1,547	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm	86			1,587	136,507.82	
	3.0 to 4.5 Mtr B.G.L.		Rm	64			1,641	105,054.62	
	4.5 to 6.0 Mtr B.G.L.		Rm	135			1,708	230,640.08	
	6.0 to 9.0 Mtr B.G.L.		Rm	700			1,816	1,270,928.13	
								0.00	
	h) 800 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				1,789	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				1,836	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				1,898	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm	242			1,976	478,149.24	
	6.0 to 9.0 Mtr B.G.L.		Rm	0			2,100	0.00	
								0.00	
	i) 1000 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				2,313	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				2,373	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				2,454	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm	570			2,554	1,455,889.55	
	6.0 to 9.0 Mtr B.G.L.		Rm	299			2,715	811,792.48	
								0.00	
	i) 1200 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				2,889	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				2,964	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				3,065	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm				3,190	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm				3,391	0.00	
								0.00	
	Providing and laying RCC Bedding with 12-20mm gauge approved stone ballast, coarse sand and cement in M-15 (1:2:4) all work up to plinth level, including supply of all materials labour T&P etc. required for proper completion of work and excluding							0.00	
	a) 150 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				548	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				561	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				579	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm				602	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm				683	0.00	
								0.00	
	a) 200 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				549	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				565	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				587	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm				615	0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	6.0 to 9.0 Mtr B.G.L.		Rm	1,959			683	1,337,115.45	
								0.00	
	b) 250 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm	0			637	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				653	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				674	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm	86			700	60,202.48	
	6.0 to 9.0 Mtr B.G.L.		Rm	635			795	504,727.84	
								0.00	
	c) 300 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm	0			729	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				748	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				772	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm	1,970			802	1,580,371.63	
	6.0 to 9.0 Mtr B.G.L.		Rm	4,474			911	4,077,335.58	
								0.00	
	d) 350 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				825	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				846	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm	104			874	90,862.84	
	4.5 to 6.0 Mtr B.G.L.		Rm	69			908	62,659.21	
	6.0 to 9.0 Mtr B.G.L.		Rm	0			1,032	0.00	
								0.00	
	e) 400 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				925	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				948	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				979	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm	579			1,018	589,239.68	
	6.0 to 9.0 Mtr B.G.L.		Rm	65			1,157	75,199.29	
								0.00	
	f) 450 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				1,028	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				1,053	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				1,088	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm	169			1,131	191,132.38	
	6.0 to 9.0 Mtr B.G.L.		Rm	0			1,286	0.00	
								0.00	
	g) 500 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				1,134	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				1,162	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				1,200	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm				1,248	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm	691			1,419	980,712.38	
								0.00	
	h) 600 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				1,356	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				1,390	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				1,436	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm				1,493	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm	39			1,698	66,237.59	
								0.00	
	i) 700 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				1,592	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				1,632	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				1,686	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm				1,753	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm	1,614			1,994	3,218,824.80	
								0.00	
	j) 800 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				1,841	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				1,888	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				1,950	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm				2,027	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm	957			2,307	2,207,810.38	
								0.00	
	k) 900 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.						2,104	0.00	
	1.5 to 3.0 Mtr B.G.L.						2,157	0.00	
	3.0 to 4.5 Mtr B.G.L.						2,228	0.00	
	4.5 to 6.0 Mtr B.G.L.						2,317	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm	970			2,636	2,557,394.99	
								0.00	
	l) 1000 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				2,380	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				2,440	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm				2,520	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm				2,621	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm	668			2,983	1,992,476.08	
								0.00	
								0.00	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Providing and laying Granular bedding with carefully compacted graded hard crusher broken stone of 100% passing through 20mm sieve, 20-50% passing through 10mm sieve and 100% retained on 6mm sieve and Dimensions are as per Approved Drawing for Following								0.00
	n) 150 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm				349		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm	0			352		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm	0			356		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm	0			361		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm	0			379		0.00
				0					0.00
	n) 200 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm	47,014			576		27,084,701.46
	1.5 to 3.0 Mtr B.G.L.		Rm	103,604			573		59,353,579.52
	3.0 to 4.5 Mtr B.G.L.		Rm	0			578		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm	0			585		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm	0			609		0.00
				0					0.00
	b) 250 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm	244			673		164,156.46
	1.5 to 3.0 Mtr B.G.L.		Rm	1,049			669		701,845.07
	3.0 to 4.5 Mtr B.G.L.		Rm	0			675		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm	0			683		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm	0			711		0.00
									0.00
	c) 300 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm				778		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm	0			773		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm				780		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm				789		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm				821		0.00
									0.00
	c) 350 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm				888		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm				883		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm				891		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm				901		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm				937		0.00
									0.00
	c) 400 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm				1,003		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm				997		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm				1,006		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm				1,018		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm				1,058		0.00
									0.00
	d) 450 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm				1,126		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm	147			1,120		164,664.56
	3.0 to 4.5 Mtr B.G.L.		Rm				1,130		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm				1,143		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm				1,187		0.00
									0.00
	e) 500 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm				1,252		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm	155			1,245		193,019.42
	3.0 to 4.5 Mtr B.G.L.		Rm	0			1,256		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm				1,270		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm				1,319		0.00
									0.00
	f) 600 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm				1,519		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm				1,511		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm				1,524		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm	0			1,541		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm				1,600		0.00
									0.00
	g) 700 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm				1,810		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm				1,801		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm				1,816		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm	0			1,836		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm				1,905		0.00
									0.00
	h) 800 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm				2,125		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm				2,114		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm	0			2,132		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm				2,154		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm				2,235		0.00
									0.00
	i) 900 mm Dia Sewer Pipe								0.00
	0.0 to 1.5 Mtr B.G.L.		Rm				2,458		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm	0			2,446		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm	0			2,466		0.00

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	4.5 to 6.0 Mtr B.G.L.		Rm	0			2,492	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm				2,584	0.00	
								0.00	
	j) 1000 mm Dia Sewer Pipe							0.00	
	0.0 to 1.5 Mtr B.G.L.		Rm				2,815	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm	0			2,801	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm	0			2,824	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm	0			2,853	0.00	
	6.0 to 9.0 Mtr B.G.L.		Rm				2,958	0.00	
								160,199,187.96	
								0.00	
	1.5 SUPPLY & LAYING OF R.C.C. PIPE							0.00	
	Supply and carting to site RCC NP3 pipes (with s/s ends) as per IS: 458 - 2003 (Amended up to date) including all taxes (Central and Local) with Rubber gaskets (EPDM/SBR) as per IS: 5382-1985 or (Amended up to date), including cost of Rubber gaskets, labour required, transportation, loading, unloading & stacking etc (excluding cost of laying, jointing, testing and commissioning). The pipe shall be ISI								
		150 mm	Rm						
		a) 200 mm dia RCC pipe	Rm	217,181			589	127,825,882.37	
		b) 250 mm dia RCC	Rm	3,814			703	2,680,711.09	
		c) 300 mm dia RCC pipe	Rm	9,141			985	9,008,014.90	
		d) 350 mm dia RCC	Rm	1,716			1,343	2,305,275.09	
		e) 400 mm dia RCC pipe	Rm	4,219			1,617	6,822,965.45	
		f) 450 mm dia RCC pipe	Rm	1,275			1,749	2,230,071.24	
		g) 500 mm dia RCC	Rm	1,908			2,145	4,092,093.10	
		h) 600 mm dia RCC	Rm	586			2,711	1,588,728.53	
		i) 700 mm dia RCC pipe	Rm	1,899			3,305	6,276,593.64	
		j) 800 mm dia RCC pipe	Rm	1,199			3,977	4,768,601.08	
		k) 900 mm dia RCC	Rm	970			4,535	4,398,950.00	
		l) 1000 mm dia RCC	Rm	1,537			5,705	8,769,122.15	
								0.00	
	Cartage of RCC hume pipe NP3 class and specials from store to the site of work, laying of the same pipe in to the trenches in various depth, true to alignment checking the point laying sewer pipe with rubber ring and Jointing materials including excavation of the below invert level of pipe and testing of laid pipe line complete excluding the cost of excavation of earth and refilling of trenches from							0.00	
	a) 200 mm dia RCC pipe							0.00	
3198- SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		Rm	57,714			357	20,576,772.42	
	1.5 to 3.0 Mtr B.G.L.		Rm	113,922			380	43,236,382.05	
	3.0 to 4.5 Mtr B.G.L.		Rm	21,802			403	8,787,452.31	
	4.5 to 6.0 Mtr B.G.L.		Rm	15,871			431	6,832,623.81	
	6.0 to 9.0 Mtr B.G.L.		Rm	7,872			521	4,101,851.98	
								0.00	
	a) 250 mm dia RCC pipe							0.00	
3199 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		Rm	913			372	339,289.06	
	1.5 to 3.0 Mtr B.G.L.		Rm	1,190			396	470,751.49	
	3.0 to 4.5 Mtr B.G.L.		Rm	796			420	334,412.66	
	4.5 to 6.0 Mtr B.G.L.		Rm	280			449	125,644.72	
	6.0 to 9.0 Mtr B.G.L.		Rm	635			543	344,882.87	
								0.00	
								0.00	
	a) 300 mm dia RCC pipe							0.00	
3200 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		Rm				461	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm				491	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm	1,482			521	772,661.43	
	4.5 to 6.0 Mtr B.G.L.		Rm	2,047			557	1,139,922.82	
	6.0 to 9.0 Mtr B.G.L.		Rm	5,612			674	3,782,569.77	
								0.00	
	b) 350 mm dia RCC pipe							0.00	
3201- SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		Rm	0			517	0.00	
	1.5 to 3.0 Mtr B.G.L.		Rm	0			551	0.00	
	3.0 to 4.5 Mtr B.G.L.		Rm	249			585	145,594.59	
	4.5 to 6.0 Mtr B.G.L.		Rm	266			625	166,128.48	
	6.0 to 9.0 Mtr B.G.L.		Rm	1,201			756	907,856.35	
								0.00	
	c) 400 mm dia RCC pipe							0.00	
3202- SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		Rm	46			562	25,873.62	
	1.5 to 3.0 Mtr B.G.L.		Rm	310			599	185,612.50	
	3.0 to 4.5 Mtr B.G.L.		Rm				636	0.00	
	4.5 to 6.0 Mtr B.G.L.		Rm	579			679	393,246.68	
	6.0 to 9.0 Mtr B.G.L.		Rm	3,284			822	2,699,611.89	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
									0.00
									0.00
3203 - SOR_U.P. Jal Nigam Varanasi 2014-15	d) 450 mm dia RCC pipe								
	0.0 to 1.5 Mtr B.G.L.		Rm	0			667		0.00
3196 & 3205 - SOR_U.P. Jal Nigam Varanasi 2014-15	1.5 to 3.0 Mtr B.G.L.		Rm	180			716		127,855.66
3196 & 3206 - SOR_U.P. Jal Nigam Varanasi 2014-15	3.0 to 4.5 Mtr B.G.L.		Rm	753			754		568,024.60
3196 & 3207-SOR_U.P. Jal Nigam Varanasi 2014-15	4.5 to 6.0 Mtr B.G.L.		Rm	342			806		275,559.16
3196 & 3209 - SOR_U.P. Jal Nigam Varanasi 2014-15	6.0 to 9.0 Mtr B.G.L.		Rm				975		0.00
									0.00
									0.00
	e) 500 mm dia RCC pipe								
3204- SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		Rm	6			744		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm	183			792		144,963.02
	3.0 to 4.5 Mtr B.G.L.		Rm	492			841		413,900.69
	4.5 to 6.0 Mtr B.G.L.		Rm	336			899		301,916.54
	6.0 to 9.0 Mtr B.G.L.		Rm	897			1,088		975,554.98
									0.00
									0.00
	f) 600 mm dia RCC pipe								
3205- SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		Rm	0			841		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm	43			895		38,484.53
	3.0 to 4.5 Mtr B.G.L.		Rm	73			950		69,384.98
	4.5 to 6.0 Mtr B.G.L.		Rm	29			1,015		29,441.31
	6.0 to 9.0 Mtr B.G.L.		Rm	441			1,229		541,887.90
									0.00
									0.00
	g) 700 mm dia RCC pipe								
3206 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		Rm	0			929		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm	0			989		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm	64			1,050		67,203.43
	4.5 to 6.0 Mtr B.G.L.		Rm	221			1,122		247,867.92
	6.0 to 9.0 Mtr B.G.L.		Rm	1,614			1,357		2,191,004.45
									0.00
									0.00
	h) 800 mm dia RCC pipe								
3207- SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		Rm	0			1,338		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm	0			1,425		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm	0			1,513		0.00
	4.5 to 6.0 Mtr B.G.L.		Rm	242			1,616		391,109.32
	6.0 to 9.0 Mtr B.G.L.		Rm	957			1,956		1,872,002.48
									0.00
									0.00
	i) 900 mm dia RCC pipe								
3208 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.						1,510		0.00
	1.5 to 3.0 Mtr B.G.L.						1,607		0.00
	3.0 to 4.5 Mtr B.G.L.						1,707		0.00
	4.5 to 6.0 Mtr B.G.L.						1,823		0.00
	6.0 to 9.0 Mtr B.G.L.		Rm	970			2,207		2,140,446.40
									0.00
									0.00
	j) 1000 mm dia RCC pipe								
3209 - SOR_U.P. Jal Nigam Varanasi 2014-15	0.0 to 1.5 Mtr B.G.L.		Rm	0			1,707		0.00
	1.5 to 3.0 Mtr B.G.L.		Rm				1,817		0.00
	3.0 to 4.5 Mtr B.G.L.		Rm	137			1,929		264,303.26
	4.5 to 6.0 Mtr B.G.L.		Rm	433			2,061		892,249.72
	6.0 to 9.0 Mtr B.G.L.		Rm	967			2,494		2,411,774.37
	Total								290,101,085
	1.6 MICRO TUNNELING								
	Supply of NP4 Class RCC Jacking Pipes with stain less steel collar								
	a) 200 mm dia pipe		Rm	110			11,128		1,224,040.11
	b) 250 mm dia pipe		Rm				12,066		0.00
	c) 300 mm dia pipe		Rm	25			13,407		335,169.80
	d) 350 mm dia pipe		Rm				15,418		0.00
	e) 400 mm dia pipe		Rm	30			16,088		482,644.51
	f) 450 mm dia pipe		Rm	25			16,758		418,962.25
	g) 500 mm dia pipe		Rm				17,429		0.00
	h) 600 mm dia pipe		Rm	20			18,635		372,708.82

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	i) 700 mm dia pipe		Rm				20,781	0.00	
	j) 800 mm dia pipe		Rm				28,154	0.00	
	k) 1000 mm dia. pipe		Rm	20			29,495	589,898.85	
	l) 1200 mm dia. pipe		Rm	30			42,902	1,287,052.03	
								0.00	
	Installation of product pipe by Micro Tunneling method including making of entry and exit pits all related civil works like excavation, shoring/shuttering etc. and Ground Penetrating Radar Survey to protect any existing utilities at the pipe installation location and restoration of site after completion. (upto 100 meter of							0.00	
	a) upto 300 mm dia.		Rm	135			87,624	11,829,240.00	
	b) 300 to 450 mm dia.		Rm	55			96,387	5,301,285.00	
	c) 450 to 600 mm dia.		Rm	20			106,025	2,120,500.00	
	d) 600 to 900 mm dia.		Rm				106,025	0.00	
	e) 900 to 1000 mm dia.		Rm	50			121,076	6,053,800.00	
								30,015,301.37	
	2. MANHOLES IN BRICK MASONARY							0.00	
	2.1 CIRCULAR BRICK MANHOLE							0.00	
	Construction of Brick Circular Manhole in first Class Brick of following Sizes in cement mortar 1:4, C.C. top slab with 1:1.5:3, Bed concrete 1:1.5:3, PCC 1:3:6, inside and outside plastering 12 mm thick with cement mortar 1:3 finished with floating coat of neat cement and making channels in Cement concrete with 1:1.5:3., finished with Floating coat of neat cement complete with including Plastic Encapsulated M.S foot Rest staggered at 0.375 mtr interval, including excavation, reinforcement and Formwork, SFRC							0.00	
	a) 150 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No				12,382	0.00	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No				32,312	0.00	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No				58,901	0.00	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No				106,066	0.00	
	6.0 to 9.0 mtr ht with 900 mm Manhole Dia		No				243,282	0.00	
								0.00	
	b) 200 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	2,596			13,233	34,354,089.24	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	4,885			35,204	171,973,978.78	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	935			64,733	60,525,096.47	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	663			117,221	77,717,296.30	
	6.0 to 9.0 mtr ht with 900 mm Manhole Dia		No	332			156,015	51,796,859.31	
								0.00	
	c) 250 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	38			13,231	502,783.85	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	23			35,089	807,038.65	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	29			64,565	1,872,372.67	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	10			116,911	1,169,111.35	
	6.0 to 9.0 mtr ht with 900 mm Manhole Dia		No	27			155,249	4,191,713.75	
								0.00	
	d) 300 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	0			13,367	0.00	

	Items	Specification	Unit	Qty	P.C Portion (Yen)		L.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No				35,149	0.00	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	54			64,357	3,475,253.04	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	82			116,576	9,559,271.87	
	6.0 to 9.0 mtr ht with 900 mm Manhole Dia		No	220			154,455	33,989,078.77	
								0.00	
	e) 350 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No				13,341	0.00	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No				35,147	0.00	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	6			63,954	383,721.21	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	9			116,234	1,046,109.11	
	6.0 to 9.0 mtr ht with 900 mm Manhole Dia		No	40			153,652	6,146,090.66	
								0.00	
	f) 400 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No	2			13,454	26,908.41	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	13			35,156	457,033.06	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	0			63,681	0.00	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	19			115,867	2,201,474.51	
	6.0 to 9.0 mtr ht with 900 mm Manhole Dia		No	130			152,822	19,866,841.12	
				0				0.00	
	g) 450 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No				13,407	0.00	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	5			35,031	175,152.79	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	22			63,384	1,394,452.06	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No	2			115,492	230,984.64	
	6.0 to 9.0 mtr ht with 900 mm Manhole Dia		No				151,983	0.00	
								0.00	
	h) 500 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No				13,506	0.00	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No				34,998	0.00	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	4			63,056	252,223.18	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No				115,280	0.00	
	6.0 to 9.0 mtr ht with 900 mm Manhole Dia		No	41			151,316	6,203,960.67	
								0.00	
	i) 600 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 900 mm Manhole Dia		No				13,520	0.00	
	1.5 to 3.0 mtr ht with 900 mm Manhole Dia		No	2			34,791	69,582.62	
	3.0 to 4.5 mtr ht with 900 mm Manhole Dia		No	3			62,312	186,934.75	
	4.5 to 6.0 mtr ht with 900 mm Manhole Dia		No				114,457	0.00	
	6.0 to 9.0 mtr ht with 900 mm Manhole Dia		No	18			149,555	2,691,995.86	
								0.00	
	j) 700 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 1200 mm Manhole Dia		No				16,331	0.00	
	1.5 to 3.0 mtr ht with 1200 mm Manhole Dia		No				41,506	0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	3.0 to 4.5 mtr ht with 1200 mm Manhole Dia		No				73,486	0.00	
	4.5 to 6.0 mtr ht with 1200 mm Manhole Dia		No	6			133,465	800,789.43	
	6.0 to 9.0 mtr ht with 1200 mm Manhole Dia		No	72			175,981	12,670,600.91	
								0.00	
	k) 800 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 1200 mm Manhole Dia		No				16,276	0.00	
	1.5 to 3.0 mtr ht with 1200 mm Manhole Dia		No				41,197	0.00	
	3.0 to 4.5 mtr ht with 1200 mm Manhole Dia		No				72,471	0.00	
	4.5 to 6.0 mtr ht with 1200 mm Manhole Dia		No	5			132,468	662,339.53	
	6.0 to 9.0 mtr ht with 1200 mm Manhole Dia		No	37			173,959	6,436,472.39	
								0.00	
	l) 900 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 1200 mm Manhole Dia		No				16,171	0.00	
	1.5 to 3.0 mtr ht with 1200 mm Manhole Dia		No				40,824	0.00	
	3.0 to 4.5 mtr ht with 1200 mm Manhole Dia		No				71,318	0.00	
	4.5 to 6.0 mtr ht with 1200 mm Manhole Dia		No				131,575	0.00	
	6.0 to 9.0 mtr ht with 1200 mm Manhole Dia		No	21			172,045	3,612,950.75	
								0.00	
	m) 1000 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 1200 mm Manhole Dia		No				19,723	0.00	
	1.5 to 3.0 mtr ht with 1200 mm Manhole Dia		No				48,165	0.00	
	3.0 to 4.5 mtr ht with 1200 mm Manhole Dia		No	2			82,774	165,548.02	
	4.5 to 6.0 mtr ht with 1200 mm Manhole Dia		No	2			151,359	302,717.38	
	6.0 to 9.0 mtr ht with 1200 mm Manhole Dia		No	17			199,434	3,390,372.41	
								0.00	
	k) 1200 mm dia Sewer Pipe							0.00	
	0.0 to 1.5 mtr ht with 1200 mm Manhole Dia		No				19,292	0.00	
	1.5 to 3.0 mtr ht with 1200 mm Manhole Dia						47,327	0.00	
	3.0 to 4.5 mtr ht with 1200 mm Manhole Dia						79,759	0.00	
	4.5 to 6.0 mtr ht with 1200 mm Manhole Dia		No				148,937	0.00	
	6.0 to 9.0 mtr ht with 1200 mm Manhole Dia		No				194,774	0.00	
								0.00	
	Providing uPVC drop connection for 60 cm drop from invert level of lateral/branch sewer line to maximum water line of main sewer in manhole including inspection and cleaning eye with chain and lid, drop pipe and bends, tees, encased all around with cement concrete 1:2:4 with all centering and shuttering required, cutting holes in wall and making good with brickwork in cement mortar 1:4, plastered with cement mortar 1:3 on inside of the manhole wall, stiff cement mortar 1:1 joints between uPVC (S/S) and RCC pipe (S/S), making required channels		Nos	1,358			7,443	10,107,594.00	
								0.00	
	Additional cost for Manhole Cover for Providing of SFRC Extra HD 35 on Major roads in stead of SFRC HD 20.		No	2,500			218	546,000.00	
	Total							531,953,794	
	3. HOUSE CONNECTING CHAMBER								

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Construction of road side inspection chamber for multiple property connections including excavation with clear opening of 600x400mm and upto the depth of 900mm in all types of soil with 230 mm thick brick masonry (first class brick) in CM (1:4), 100 mm thick PCC of M15 in foundation. 12mm thick inside and outside plastering with CM (1:3), finished with PCC M15 flooring of 75mm thick as per drawings, including covering of chamber by supplying and fixing SPRC frame and cover as per IS 12592 (Part I and II) including fixing 2 Nos. 110 OD uPVC pipe pieces and plugging the same and providing, laying one no. 150mm RCC NP2 pipe from road side chamber to manhole of required length including granular bedding and cost of materials, labour required, cost of specials, etc.		No.	3,726			12,672	112,638,467.64	
	4. BARRICADING								
16.81 - DSR_2013	Providing and erecting 2.00 metre high temporary barricading at site as per drawing/ direction of Engineer-in-Charge which includes writing and painting, arrangement for traffic diversion such as traffic signals during construction at site for day and night, glow lamps, reflective signs, marking flags, caution tape as directed by the Engineer-in-Charge. The barricading provided shall be retained in position at site continuously i.e. shifting of barricading from one location to another location as many times as required during the execution of the entire work till its completion. Rate include its maintenance for damages, painting, all incidentals, labour materials, equipments and works required to execute the job. The		Rm	1,000			1,467	1,467,000.00	
	Supply of all material, labour and T&P to provide the barricading along trench during excavation and laying of pipe with eucalyptus ballies of 100mm dia in horizontal section in two rows and vertical post of 125 mm dia at 2 m C/C fastened with Naroyal rope including provision of eacution board. (50% of		Rm	300			440	132,030.00	
	5. MISCELLANEOUS								
	Provision for shifting & reinstatement of utilities e.g. electric & telephone cable/ poles, water lines drains etc. during excavation & laying of sewers		LS	1			100,000	100,000.00	
	Provision for Land and supervision charges to railways for laying sewer crossing railway track		LS	1			2,071,134	2,071,134.24	
								2,171,134	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
Rehabilitation of Existing Sewage Pumping Station IPS-1 Near Ghegunj Tiraha									
Rehabilitation of Sewage Pumping Station-1									
Civil work									
	Removal of Corroded Steel & replacing with new steel with primer coating on the steel		MT	0.1			80,000	32,000.00	
	Providing Epoxy Concrete of 50 mm thick with Required primer etc		Sqm	30.0			2,000.00	60,000.00	
	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq. metres and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 m lead ; With cement mortar 1:4 (1 cement: 4		Sqm	100			109.00	10,900.00	
	Structural Steel Sections for ladders etc		MT	1			75,000.00	75,000.00	
	Repair of door, window shutters including cost of material and labour for change of damaged Style / rail of teak wood 30mm thick/ Aluminum Section								
	4"wide		Rmt	10			200.00	2,000.00	
	Plain Glass Panes 4mm thick		Sqm	10			325	3,250.00	
	Finishing wall with water proofing cement paint of approved brand and manufacture and or required shade to give an even shade including all Old Work(Old Finish)		Sqm	200			30.00	6,000.00	0.00
	Restoration of Cement Flooring		Sqm	79			500.00	39,269.91	
	Miscellaneous Repair Works		IS	1			20,000.00	20,000.00	
	Construction of New Concrete work for pumping station		IS	1			30,000.00	30,000.00	
	Internal development		IS	1			13,921.00	13,921.00	
	Total							278,419.91	
Mechanical work									
Inlet Coarse Bar Screens									
	Mechanical Step type Screens SS304 1 m wide 1 m depth with bar clear bar spacing 20 mm		no	1			299,196.18	299,196.18	
	Supply and installation of one set of complete Manuall cleaned coarse screen in the inlet chamber having the apperture size as 20mm. Screens shall be installed at an inclination of 700		no	1			153,433.94	153,433.94	
	Belt Conveyor -500 mm width		no	1			178,114	178,113.64	
	Screen Collection bin Trolley		no	1			243,178.32	243,178.32	0.00
Pumping Plants and Its Accessories									
	Non-clog, single stage, bottom suction submersible pump of Capacity =255 cum/hrs. and head 20 m. at Peak Flows		nos	3			1,376,927.61	4,130,782.82	
	Non-clog, single stage, bottom suction submersible pump of Capacity =155 cum/hrs. and head 16 m. at non Peak		nos	2			1,169,234.62	2,338,469.23	
	Supplying, erecting, testing & commissioning of Manually Operated Crane (single bridge girder carrying two wheels , complete with chain pulley block, load chain of welded construction of alloy steel as per IS 2429, hand chains for hoisting & Providing, installation, testing and commissioning of glycerin filled Tools and Tackles (As Per enclosed list)		no.	1			184,965	184,964.78	
			no.	3			1,168.13	3,504.39	0.00
	a. Chain wrench		No	1			7,500.00	7,500.00	
	b. Pipe wrench		No	1			1,100.00	1,100.00	
	c. Screw wrench		No	1			700.00	700.00	
	d. Ring spanners		No	1			2,000.00	2,000.00	
	e. Double ended spanners		Set	1			1,000.00	1,000.00	
	f. Insulation pliers		No	1			250.00	250.00	
	g. Hammer with handle		No	1			400.00	400.00	
	h. Hexa blade frame		No	1			150.00	150.00	
	i. Measuring tape of different size		Set	1			500.00	500.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	j. Spirit level set comprising of		No.	1			1,000.00	1,000.00	
	- Filler gauge		No.	1				0.00	
	- Steel scale		No.	1				0.00	
	- Chisel (150, 200 mm)		No.	1				0.00	
	- File (Flat, half round, round and triangular)		Set	1				0.00	
	k. Maggor HT & LT		No.	1			15,000.00	15,000.00	
	l. Crimping Tools		No.	1			30,000	30,000.00	
	m. Multimeter		No.	1			3,000.00	3,000.00	
	n. Power Drill		No.	1			5,000	5,000.00	
	Installation of all the equipments etc.		job	1			150,000.00	150,000.00	
	Commissioning of pumping station.		job	1			25,000	25,000.00	
	Testing of pumping plants.		job	1			25,000	25,000.00	
	Painting of all equipment and drives etc.		job	1			35,000	35,000.00	
	Valves and Fittings								
	Sluice valve	Manually operated Sluice Valve(DI) with H/w, PN10 conforming							
		200 mm dia.	No.	5			92,310	461,552.27	
		300 mm dia.	No.	1			209,484	209,483.79	
	Non-Return valve	C.I.D/F Swing type Non-Return Valves as per IS:5312, (Part-1 & 2) Single/Multidoor type (with Lever & counterweight 400 mm & above) 700 mm & above Dual Plate Check Valves as per API-594,							
		200 mm dia	No.	5			49,284	246,419.53	
		300 mm dia	No.	1			195,436	195,436.18	
	D.F.C.I Pipes and D.F. C.I. Specials		kg	12,325			60	739,500.00	
	Providing, installation, testing and commissioning of following Stain less steel AISI 304 Expansion bellows of 10 bar rating with tie rods as per technical specifications and layout drawings including jointing material like nuts, bolts, rubber gaskets etc. complete in all respect as per technical specification and as per								
	200 mm dia.		No.	5			1,000	5,000.00	
	Nuts & bolts of SS and rubber insertion /packing etc @ 5% of the weight of CI piping and fittings		Kg	616.25			100	61,625.00	
	Total							9,753,260.07	
	Electrical work								
	DG Set								

	Items	Specification	Unit	Qty	I/C Portion (Yen)		L/C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of DG Set complete with 1500 RPM Diesel Engine of suitable BHP & AC Brush less SPDP Alternator mounted on a common base frame & coupled through a flexible coupling or close coupled Alternator shall be self regulated with standard Alternator Protection(Over voltage , over speed & under voltage) Engine shall have residential silencer, up to 10 M exhaust piping , electronic / Mechanical governor, Manual & electric Start ,Batteries, Fuel tank (with Stand) & piping , control panel (16 G) with MCCB (4P; 25 KA), Ammeter, Voltmeter, Frequency Meter, Energy Meter & Hour Meter, Engine instruments panel, AVM and with Weatherproof, powder coated Acoustic enclosure for DG set for sound attenuation fabricated from 2.0 mm CRCA sheet steel (structure) with side wall fabricated from 2.0 mm CRCA sheet & filled with 100mm thick glass wool(96Kg/m3) as per IS 8183 the doors of 100 mm thick and fabricated from 1.0mm CRCA sheet coated with acoustic material flow set.								
	Air Cooled & Naturally Aspirated- Along with AMF Panel							0.00	
	200 KVA at 0.8 pf 415V 50Hz 3-Ø		no	1			2,475,000	2,475,000.00	
	SITC of AUTO MAINS FAILURE (AMF) Panel fabricated from CRCA sheet steel 2mm Thick , Powder coated finish , Engine START & STOP commands, control RELAYS, selector switches for Ammeter & Voltmeter, Ammeter & Voltmeter , Control & Power Contactors, Timers, Electronic Hooter , Visual & Alarm indication for faults. UPS, operator interface panel complete							0.00	
	200 KVA at 0.8 pf 415V 50Hz 3-Ø		no	1			300,000	300,000.00	
	Complete power wiring along with cables & materials from D.G. set to the Incoming Panel of L.T. panel as per I.E.		LS	1			40,000	40,000.00	
	Complete earthing of the D.G. set, including supply of all materials, construction of earth pits as per I.E.		Job	1			16,000	16,000.00	
	Supply of 12mm thick PVC rubber matting of 1M x 1M size and with ISI		sqm	6			1,231	7,383.20	
	First filling of Mobile oil		Job	1			5,000	5,000.00	
	Installation of D.G. set complete with construction of foundation etc		Job	1			25,000	25,000.00	
	Commissioning of the D.G. set including fuel for a max. period of 8 hours.		Job	1			20,000	20,000.00	
	Testing of the D.G. set		Job	1			15,000	15,000.00	
								0.00	
	Electro- Magnetic Flow meter							0.00	
	Direct on line Full Bore electro-magnetic Flow meter for sewage application. The flow meter shall be suitable for bi directional flow measurement This shall be having protection category of the sensor shall be IP68 and protection category for the transmitter shall be IP- 65. Accuracy shall be of +/- 5% of measured value without being affected by variation in the line pressure. Equipment should be complete with converter, transmitting device and should be fully programmable with digital flow indicator & integrator etc. The sensor		no	1			65,760	65,760.00	
								0.00	
	Internal and External Lighting							0.00	
	Internal							0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Point Wiring in surface rigid P.V.C. conduit system with Flush type Accessories Point wiring including metallic switch box, sheet, switches, sockets, lamp holders/ceiling roses etc with 1.5 Sq. mm PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per specification for Light Point/Fan Points.							0.00	
								0.00	
	Medium point (up to 6 mtr.)		nos.	4			583	2,333.10	
	Long point (up to 10 mtr.)		nos.	4			894	3,575.88	
	3 Pin 6 Amp socket outlet on Separate Board							0.00	
	Medium point (up to 6 mtr.)		nos.	4			595	2,379.30	
	Circuit Wiring - Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) of ISI marked suitable size including painting etc. as required as per specification 2x2.5 Sq.mm		m	30			104	3,120.00	
	METALLIC SWITCH BOXES - Supplying and fixing factory fabricated hot dip galvanised switch box for normal flush type accessories of minimum 1.2 mm (18 swg gauge) thickness with earth terminal stud with nut and washer, with 3 mm thick synthetic phenolic resin bonded laminated sheet conforming to grade PI of IS.2036-1974 on surface / concealed including painting etc. as required as per specification- MS Box 200 mm X		nos	4			232	928.62	
	Supplying of ISI Marked Switch Fuse Unit (rewirable type) triple pole with neutral link, 415 Volt having conduit / cable gland entry with two earthing terminals conforming to IS . 13947(Part I & III) - 63Amp		nos	2			3,576	7,151.76	
	Supplying, fixing & testing of approved make of low watt surface mounting luminaire, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray including fixing on wall/ Ceiling on wooden round block including wiring & connection as required and suitable for 2 no 18 watt CFL		nos	4			1,677	6,708.24	
	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per 18 Watt		nos	8			236	1,884.96	
	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, delux type, including fixing on wall as required, with necessary material complete Fitting(suitable for GLS w/o lamp upto 11 watt Retorted CFL)		nos.	4			589	2,356.20	
	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete as required confirming to IS :374/1979 with upto date ammendments Ceiling Fan (Energy		nos	2			1,983	3,966.27	

Items	Specification	Unit	Qty	I.C Portion (Yen)		I.C Portion (INR)		Reference
				Unit Price	Amount	Unit Price	Amount	
Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc complete finished and as required 300mm sweep 900 RPM		nos	2			2,972	5,943.63	
External							0.00	
Providing, erecting, testing and commissioning solar street light system on 80 mm heavy duty galvanised iron pipe 6 meter high with 30cm x 30cm x 2mm base plate installed own cement concrete pedestal casing complete with solar panel, solar battery with charger, other accessories with control panel in weather proof pole box, solar fitting LED type or CFL type 18 watt to 20 watt (set of 2 nos)		nos	2			53,188	106,375.50	
							0.00	
Switchgear with Transformer							0.00	
Double pole structure, complete with Isolator, Insulators, Lightning arrestor, H/G Fuses, operating handle etc		No	1			187,500	187,500.00	
150 KVA, ONAN, 11KV/0.415 V pole mounted Transformer		No	1			341,550	341,550.00	
L.T. Control Switch Gear Panel Board							0.00	
SITC of wall free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc rich oxide primer followed by two coats of synthetic enamel paint for powder coating in grey or required shade after rising. The panel having PU/Neoprene rubber gasket of not less than 3mm thickness, separate detachable, gland plate M.S. base channel, hinged door with locking arrangement for equipment/switchgear. Thickness of sheet shall not be less than 2.0mm. Load bearing structure shall be of 2.0mm thick sheet supported by base M.S. channel if required. Side walls and cable alley compartments having bolted type doors with detachable		Sq m	12			3,840	46,080.00	
Supplying and fixing of electrolytic grade Aluminium bus bar by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending, cutting in required shape and size and colour coding with heat shrinkable PVC		kg	10			525	5,250.00	
Incoming Panel							0.00	
SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release, 250 Amp, 25/35 kA, adjustable O/L &		No	1			38,700	38,700.00	
Supply and fixing of following accessories for MCCB :							0.00	
Shunt trip Release		No	3			1,740	5,220.00	
Under Voltage Release		No	3			2,590	7,770.00	
Earth Fault Module		No	3			1,650	4,950.00	
Outgoing Panels							0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release. up to 100 Amp, 16 kA, adjustable O/L &		No.	6			19,950	119,700.00	
	Supply and fixing of following accessories for MCCB :							0.00	
	Shunt trip Release		No.	6			1,740	10,440.00	
	Under Voltage Release		No.	6			2,590	15,540.00	
	Earth Fault Module		No.	6			1,650	9,900.00	
	SITC of S/D with panel conforming to applicable standards, with Graphical Display with atleast display of 5 different parameters at a time and display of 2 parameters with Bargraph, digital and analogue I/O, relay outputs, adjustable Accel/ Decel times, motor protection, RS 485 serial link for connections to Modbus. 30 KW		No.	5			42,900	214,500.00	
	Level transmitters ultrasonic type - 8 meters liquid		No.	1			110,490	110,490.00	
	Automatic start / stop device according to prefixed level in the pump with timer and audio-visual signal or circuit such as hooter arrangement for lowest and highest allowable level in the sump		No.	6			5,000	30,000.00	
	Moisture sensing relay. Sensing device to signal and trip the motor against of water into oil chamber		No.	6			5,000	30,000.00	
	Device for taking signal from the thermister in motor winding and tripping the circuit on reaching pre-set		No.	6			5,000	30,000.00	
	Single phasing preventor		No.	6			2,500	15,000.00	
	Reverse rotation trip device for motor.		No.	5			1,500	7,500.00	
	SITC of self healing MPP/MP type shunt capacitor (banks) conforming to IS:13340-41 / IEC .831-1&2 in existing panel or parallel with load terminals, the capacitor shall be fitted with discharge resistors, pressure sensitive disconnecter (PSD) and shall have dissipation factor less than 0.0025 at 50 Hz and total wattage loss less than 0.5 Watt per KVAR. including making connections with suitable capacity conductors/cables testing as required. Heavy duty Three phase 440 V		KVAr	40			1,169	46,740.00	
	SITC of microprocessor based intelligent power factor correction relay having following sensing capacity secondary current, self analysing auto c/k setting according to targeted power factor setting, the relay shall have minimum three digit display unit for display of real power factor, targeted power factor, lag/lead capacitor switching status, alarm output for under current, over current, insufficient compensation, indication of switching on units, auto/manual status, and shall have over load protection, no volt release etc. as required. 6 to 8 stage.		No.	1			27,006	27,006.08	
	SF of Current Transformer, with all necessary support in existing panel including connection etc. as required up to 150 / 5 Ratio, 5 VA, class 1		No.	6			437	2,620.95	
	SF of CT linked selector switch of 10 A for Ampere meter (4 position) including making connection etc as		No.	6			408	2,449.65	

Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
				Unit Price	Amount	Unit Price	Amount	
SP of 240/220 V, LBD (22.5 mm dia) Pilot lamp with integral circuit, terminal block, including connection etc. as required. Red/ yellow / Green colour		Set	15			286	4,282.60	
Auxiliary Outgoing panels. These shall be required for the following purposes							0.00	
Flow meter, Level Indicator, Pressure Indicating Devices etc.							0.00	
For miscellaneous works such as welding, Dewatering pumps etc.							0.00	
Spare Panel							0.00	
SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release up to 100 Amp, 16 kA, adjustable O/L &		No.	6			19,950	119,700.00	
P.Laying XLPE insulated / P.V.C sheathed cable of 11 KV grade with aluminium conductor Armoured of IS:7098-1/1554-1 approved make in ground as per IS 1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, IInd class bricks covering, refilling compaction of earth, making necessary connection, testing etc. as required of		m	50			692	34,617.69	
P & Laying XLPE insulated IS:7098 II 85 of Group I and approved make HT cable for working voltage 11 K.V. Earthed direct in ground including excavation of 30cm x100cm size trench, 25cm layer of river sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc. as required of		m	50			1,113	55,673.82	
Providing & making heat shrinkable type or/ outdoor/ straight through terminations/joint kit of Group I and approved make suitable for XLPE insulated 11 KV cable, with required components, preparation of cable ends, testing etc. as required of		No.	2			12,073	24,146.00	
Supplying and making one end termination with heavy duty single		Set	2.0			408.27	816.55	
Plate Earthing as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm by embodying 3 to 4 mtr. below the ground level with 20 mm dia G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete with alternate layers of salt and coke/charcoal, testing of earth resistance as required.		Set	4.0			6,745.10	26,980.39	
S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required. 10 SWG G.I. Wire		m	100			6	642.39	
Power and Control cables for connecting motors of various drives		Lot	1			45,000.00	45,000.00	
Rubber matting of 12 mm thickness and I.S.I. marked and suitable for 0.415		sqm	4			1,231	4,306.87	
							4,733,169.65	

Sl. No.	Items	Specification	Unit	Qty	I.C Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
Rehabilitation of Sewage Pumping Station-2									
Rehabilitation of Sewage Pumping Station-2									
	Removal of Corroded Steel & replacing with new steel with primer coating on the steel		MT	0.5			80,000	40,000.00	
	Providing Epoxy Concrete of 50 mm thick with Required primer etc.		Sqm	40.0			2,000.00	80,000.00	
	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq metres and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 m lead. With cement mortar 1:4 (1 cement:4)		Sqm	100			109.00	10,900.00	
	Structural Steel Sections for ladders etc.		MT	1			75,000	75,000.00	
	Repair of door, window shutters including cost of material and labour for change of damaged							0.00	
	Style /rail of teak wood 30mm thick/ Aluminium Section							0.00	
	4"wide		Rmt	10.00			200.00	2,000.00	
	Plain Glass Panes 4mm thick		Sqm	10			325	3,250.00	
	Finishing wall with water proofing cement paint of approved brand and manufacture and or required shade to give an even shade including all		Sqm	200			30.00	6,000.00	
	Old Work/ Old Finish							0.00	
	Restoration of Cement Flooring		Sqm	80			500.00	40,000.00	
	Miscellaneous Repair Works		IS	1			20,000.00	20,000.00	
	Construction of New Concrete work for pumping station		IS	1			30,000.00	30,000.00	
	Internal development		IS	1			15,357.50	15,357.50	
	Total							322,507.50	
Mechanical work									
Inlet Coarse Bar Screens									
	Mechanical Step type Screens SS304 1 m wide 1 m depth with bar clear bar spacing 20 mm		no	1			299,196.18	299,196.18	
	Supply and installation of one set of complete Manual cleaned coarse screen in the inlet chamber having the aperture size as 20mm. Screens shall be installed at an inclination of 700		no	1			153,433.94	153,433.94	
	Belt Conveyor -500 mm width		no	1			178,113.64	178,113.64	
	Screen Collection bin Trolley		no	1			243,178.32	243,178.32	
Pumping Plants and Its Accessories									
	Non-clog, single stage, bottom suction submersible pump of Capacity =765cum/hrs. and head 13 m. at Peak Flows		nos	3			2,807,701.55	8,423,104.64	
	Non-clog, single stage, bottom suction submersible pump of Capacity =410 cum/hrs. and head 12 m. at non Peak		nos	2			1,807,698.26	3,615,396.51	
	Supplying, erecting, testing & commissioning of Manually Operated Crane (single bridge girder carrying two wheels, complete with chain pulley block, load chain of welded construction of alloy steel as per IS 2429, hand chains for hoisting &		no	1			184,964.78	184,964.78	
	Providing, installation, testing and commissioning of glycerin filled Pressure gauge of following ranges with isolation valve and tap off pipe complete in all respect as per technical specification and as per direction of Tools and Tackles (As Per enclosed list)		no	3			1,168.13	3,504.39	
	a. Chain wrench		No	1			7,500.00	7,500.00	
	b. Pipe wrench		No	1			1,100.00	1,100.00	
	c. Screw wrench		No.	1			700.00	700.00	
	d. Ring spanners		No	1			2,000.00	2,000.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	e Double ended spanners		Set	1			1,000.00	1,000.00	
	f Insulation pliers		No	1			250.00	250.00	
	g Hammer with handle		No	1			400.00	400.00	
	h. Hexa blade frame		No	1			150.00	150.00	
	i. Measuring tape of different size		Set	1			500.00	500.00	
	j. Sprit level set comprising of		No	1			1,000.00	1,000.00	
	- Filler gauge		No	1				0.00	
	- Steel scale		No	1				0.00	
	- Chisel (150, 200 mm)		No	1				0.00	
	- File (Flat, half round, round and triangular)		Set	1				0.00	
	k. Maggor HT & LT		No.	1			15,000.00	15,000.00	
	l. Crimping Tools		No	1			30,000	30,000.00	
	m. Multimeter		No.	1			3,000.00	3,000.00	
	n. Power Drill		No.	1			5,000	5,000.00	
	Installation of all the equipments etc.		job	1			150,000.0	150,000.00	
	Commissioning of pumping station.		job	1			25,000	25,000.00	
	Testing of pumping plants		job	1			25,000.00	25,000.00	
	Painting of all equipment and drives etc.		job	1			35,000	35,000.00	
								0.00	
	Valves and Fittings							0.00	
	Sluice valve							0.00	
	Manually operated Sluice Valve(DI) with H/w, PN10 conforming IS 1538							0.00	
	500 mm dia.		No	5			209,483.79	1,047,418.94	
	700 mm dia.		No	1			1,766,527.19	1,766,527.19	
	Non-Return valve							0.00	
	C I D/F Swing type Non-Return Valves as per IS 5312, (Part-1 & 2) Single/Multidoor type (with Lever & counterweight 400 mm & above) 700 mm & above Dual Plate Check Valves							0.00	
	500 mm dia.		No	5			195,436	977,180.88	
	700 mm dia.		No	1			322,894.55	322,894.55	
	D.F.C.I. Pipes and D.F. C.I. Specials		Kg	12,325.00			60.00	739,500.00	
	Providing, installation, testing and commissioning of following Stain less steel AISI 304 Expansion bellows of 10 bar rating with tie rods as per technical specifications and layout drawings including jointing material like nuts, bolts, rubber gaskets etc complete in all respect as per technical specification and as per							0.00	
	500 mm dia.		nos	5.00			11,998.08	59,990.41	
	Nuts & bolts of SS and rubber insertion /packing etc @ 5% of the weight of CI piping and fittings		kg	616.25			100.00	61,625.00	
	Total							18,378,629.37	
	Electrical & Instrumentation Works								

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of DG set complete with 1500 RPM Diesel Engine of suitable BHP & AC Brush less SPDP Alternator mounted on a common base frame & coupled through a flexible coupling or close coupled Alternator shall be self regulated with standard Alternator Protection(Over voltage , over speed & under voltage) Engine shall have residential silencer, up to 10 M exhaust piping , electronic / Mechanical governor, Manual & electric Start , Batteries, Fuel tank (with Stand) & piping , control panel (16 C) with MCCB (4P, 25 KA), Ammeter, Voltmeter, Frequency Meter, Energy Meter & Hour Meter, Engine instruments panel, AVM and with Weatherproof, powder coated Acoustic enclosure for DG set for sound attenuation fabricated from 2.0 mm CRCA sheet steel (structure) with side wall fabricated from 2.0 mm CRCA sheet & filled with 100mm thick glass wool(96Kg/m ³) as per IS 8183 the doors of 100 mm thick and fabricated from 1.6mm CRCA sheet powder coated. Heat of								
	Air Cooled & Naturally Aspirated- Along with AMF Panel								
	360 KVA at 0.8 pf 415V 50Hz 3-Ø		no	1			3,294,000.00	3,294,000.00	
	SITC of AUTO MAINS FAILURE (AMF) Panel fabricated from CRCA sheet steel 2mm thick , Powder coated finish , Engine START & STOP commands, control RELAYS, selector switches for Ammeter & Voltmeter, Ammeter & Voltmeter , Control & Power Contactors, Timers, Electronic Hooter , Visual & Alarm indication for faults, UPS, operator interface panel complete							0.00	
	360 KVA at 0.8 pf 415V 50Hz 3-Ø		no	1			375,000.00	375,000.00	
	Complete power wiring along with cables & materials from D.G. set to the Incoming Panel of L.T. panel as per I.E.		I.S	1			30,000.00	30,000.00	
	Complete earthing of the D.G. set, including supply of all materials, construction of earth pits as per I.E.		Job	1			16,745.10	16,745.10	
	Supply of 12mm thick PVC rubber matting of 1M x 1M size and with ISI		sqm	6			1,230.53	7,383.20	
	First filling of Mobile oil		Job	1			6,000.00	6,000.00	
	Installation of D.G. set complete with construction of foundation etc		Job	1			35,000.00	35,000.00	
	Commissioning of the D.G. set including fuel for a max. period of 8		Job	1			25,000.00	25,000.00	
	Testing of the D.G. set.		Job	1.00			15,000.00	15,000.00	
	Electro- Magnetic Flow meter								
	Direct on line Full Bore electro-magnetic Flow meter for sewage application. The flow meter shall be suitable for bi directional flow measurement. This shall be having protection category of the sensor shall be IP68 and protection category for the transmitter shall be IP- 65. Accuracy shall be of +/- 5% of measured value without being affected by variation in the line pressure. Equipment should be complete with converter, transmitting device and should be fully programmable with digital flow indicator & integrator etc. The sensor		no.	1.00			953,760.00	953,760.00	
	Internal and External Lighting								
	Internal							0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Point Wiring in surface rigid P.V.C. conduit system with Flush type Accessories Point wiring including metallic switch box, sheet, switches, sockets, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per							0.00	
	Light Point/Fan Points.							0.00	
	Medium point (up to 6 mtr.)		nos	5.00			583.28	2,916.38	
	Long point (up to 10 mtr.)		nos	5.00			893.97	4,469.85	
	3 Pin 6 Amp socket outlet on Separate Board							0.00	
	Medium point (up to 6 mtr.)		nos	5.00			594.83	2,974.13	
	Circuit Wiring - Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) of ISI marked suitable size including painting etc. as required as per specification							0.00	
	2x2.5 Sq.mm.		m	45.00			104.00	4,680.00	
	METALLIC SWITCH BOXES - Supplying and fixing factory fabricated hot dip galvanised switch box for normal flush type accessories of minimum 1.2 mm (18 swg gauge) thickness with earth terminal stud with nut and washer, with 3 mm thick synthetic phenolic resin bonded laminated sheet conforming to grade PI of IS:2036-1974 on surface / concealed including painting etc. as required as per specification- MS Box 200 mm X		nos	5.00			232.16	1,160.78	
	Supplying of ISI Marked Switch Fuse Unit (rewirable type) triple pole with neutral link, 415 Volt having conduit / cable gland entry with two earthing terminals confirming to IS : 13947(Part							0.00	
	63Amp		nos	4.00			3,575.88	14,303.52	
	Supplying, fixing & testing of approved make of low watt surface mounting luminaire, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray including fixing on wall/ Ceiling on wooden round block including wiring & connection as required and suitable for							0.00	
	2 no 18 watt CFL		nos	4.00			1,677.06	6,708.24	
	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per							0.00	
	18 Watt		nos	8.00			235.62	1,884.96	
	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, delux type, including fixing on wall as required, with necessary material complete Fitting(suitable for GLS w/o lamp upto 11 watt Retorted CFL)		nos	4.00			589.05	2,356.20	
	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete as required confirming to IS :374/1979 with upto date ammendments Ceiling Fan (Energy		nos	2.00			1,983.14	3,966.27	

Sl. No.	Item	Specification	Unit	Qty	TC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fasteners etc complete finished and as required. 300mm sweep 900 RPM		nos	2.00			2,971.82	5,943.63	
	External							0.00	
	Providing, erecting, testing and commissioning solar street light system on 80 mm heavy duty galvanized iron pipe 6 meter high with 30cm x 30cm x 2mm base plate installed own cement concrete pedestal casing complete with solar panel, solar battery with charger, other accessories with control panel in weather proof pole box, solar fitting LED type or CFL type 18 watt to 20 watt (set)		nos	2			54,110	108,219.34	
	Switchgear with Transformer								
	Double pole structure, complete with Isolator, Insulators, Lightning arrestor, HGFuses operating handle etc.		No	1.0			187,500.00	187,500.00	
	315 KVA ONAN, 11KV/0.415 V pole mounted Transformer		No	1			741,900	741,900.00	
	L.T. Control Switch Gear Panel Board							0.00	
	SITC of wall free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc/ed oxide primer followed by two coats of synthetic enamel paint for powder coating in grey or required shade after rising. The panel having PU/Neoprene rubber gasket of not less than 3mm thickness, separate detachable, gland plate M.S. base channel, hinged door with locking arrangement for equipment/switchgear. Thickness of sheet shall not be less than 2.0mm Load bearing structure shall be of 2.0mm thick sheet supported by base M.S. channel if required. Side walls and cable alley compartments having bolted type doors with detachable		Sq m	14			3,840	53,760.00	
	Supplying and fixing of electrolytic grade Aluminium bus bar by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending, cutting in required shape and size and colour coding with heat shrinkable PVC		kg	12			525	6,300.00	
	Incoming Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc as required With Microprocessor based Release. 600 Amp, 25/35 kA, adjustable O/L & adjustable S/C setting		No	3.0			42,450.00	127,350.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No	3			1,740	5,220.00	
	Under Voltage Release		No	3			2,590.00	7,770.00	
	Earth Fault Module		No	3			1,650	4,950.00	
	Outgoing Panels							0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release up to 100 Amp, 16 kA, adjustable O/L &		No	8.00			19,950.00	159,600.00	
	Supply and fixing of following accessories for MCCB.							0.00	
	Shunt trip Release		No	6.00			1,740.00	10,440.00	
	Under Voltage Release		No	6.00			2,590.00	15,540.00	
	Earth Fault Module		No	6.00			1,650.00	9,900.00	
	SITC of S/D with panel conforming to applicable standards, with Graphical Display with atleast display of 5 different parameters at a time and display of 2 parameters with Bargraph, digital and analogue I/O, relay outputs, adjustable Accel/ Decel times, motor protection, RS 485 serial link for connections to Modbus, 45 KW		No	6.00			67,350.00	404,100.00	
	Level transmitters ultrasonic type - 10 meters liquid		No	1.00			110,490.00	110,490.00	
	Automatic start / stop device according to prefixed level in the pump with timer and audio-visual signal or circuit such as hooter arrangement for lowest and highest allowable level in the sump.		No	6.00			5,000.00	30,000.00	
	Moisture sensing relay. Sensing device to signal and trip the motor against of water into oil chamber.		No	6			5,000	30,000.00	
	Device for taking signal from the thermister in motor winding and tripping the circuit on reaching pre-set		No	6			5,000.00	30,000.00	
	Single phasing preventor		No	6			2,500.00	15,000.00	
	Reverse rotation trip device for motor.		No	6			1,500.00	9,000.00	
	SITC of self healing MPP/MP type shunt capacitor (banks) conforming to IS:13340-41 / IEC :831-1&2 in existing panel or parallel with load terminals, the capacitor shall be fitted with discharge resistors, pressure sensitive disconnecter (PSD) and shall have dissipation factor less than 0.0025 at 50 Hz and total wattage loss less than 0.5 Watt per KVAR. including making connections with suitable capacity conductors/cables testing as required. Heavy duty Three phase 440 V		KVAR	80.00			1,168.50	93,480.00	
	SITC of microprocessor based intelligent power factor correction relay having following sensing capacity secondary current, self analysing auto c/k setting according to targeted power factor setting, the relay shall have minimum three digit display unit for display of real power factor, targeted power factor, lag/lead capacitor switching status, alarm output for under current, over current, insufficient compensation, indication of switching on units, auto/manual status, and shall have over load protection, no volt release etc. as required. 6 to 8 stage.		No	1.00			27,000.00	27,000.00	
	SF of Current Transformer, with all necessary support in existing panel including connection etc. as required up to 150 / 5 Ratio, 5 VA, class 1		No	6.00			436.83	2,620.95	
	SF of CT linked selector switch of 10 A for Ampere meter (4 position) including making connection etc. as		No	6.00			408.27	2,449.65	
	SF of 240/220 V, LED (22.5 mm dia) Pilot lamp with integral circuit, terminal block, including connection etc. as equred Red/ yellow / Green colour		Set	20.00			285.51	5,710.14	
	Auxiliary Outgoing panels These shall be required for the following purposes							0.00	

	Items	Specification	Unit	Qty	I.C Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Flow meter, Level Indicator, Pressure Indicating Devices etc							0.00	
	For miscellaneous works such as welding, Dewatering pumps etc.							0.00	
	Spuro Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L, & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release up to 100 Amp, 16 kA, adjustable O/L & adjustable S/C setting.		No	5.00		19,995.00		99,975.00	
	P/Laying XLPE insulated / PVC sheathed cable of 11 KV grade with aluminium conductor Armoured of IS 7098-I/IS54-1 approved make in ground as per IS 1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand and class bricks covering, refilling, compaction of earth, making necessary connection, testing etc. as required of		m	60.00		692.35		41,541.23	
	P & Laying XLPE insulated IS 7098 II-85 of Group I and approved make HT cable for working voltage 11 KV Earthed direct in ground including excavation of 30cm x100cm size trench, 25cm layer of river sand, and class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc as required of		m	60.00		1,113.48		66,808.58	
	Providing & making heat shrinkable type or outdoor straight through terminations joint kit of Group I and approved make suitable for XLPE insulated 11 KV cable, with required components, preparation of cable ends, testing etc. as required of		No	4.00		15,844.50		63,378.00	
	Supplying and making one end termination with heavy duty single compression brass gland SIBG type, aluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt		Set	4.00		623.03		2,492.11	
	Plate Earthing as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm by embodying 3 to 4 mtr. below the ground level with 20 mm dia. G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete with alternate layers		Set	6.00		6,745.10		40,470.58	
	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required. 10 SWG		m	100		6		642.39	
	Power and Control cables for connecting motors of various drives		Lot	1.00		55,000.00		55,000.00	
	Rubber matting of 12 mm thickness and I.S.I. marked and suitable for 0.415		sqm	5.00		1,230.53		6,152.67	
								7,384,012.90	

	Items	Specification	Unit	Qty	I/C Portion (Yen)		I/C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
Rehabilitation of Existing Sewage Pumping Station IPS-3									
Civil work									
	Removal of Corroded Steel & replacing with new steel with primer coating on the steel		MT	02			80,000.00	16,000.00	
	Providing epoxy Concrete of 50mm thick with Required primer etc		Sqm	20			2,000.00	40,000.00	
	Complete Allot Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq. metres and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 m lead With cement mortar 1:4 (1 cement : 4		Sqm	59			109.00	5,450.00	
	Structural Steel Sections for ladders etc		MT	1			75,000	75,000.00	
	Repair of door, window shutters including cost of material and labour for change of damaged							0.00	
	Style / rail of teak wood 30mm thick/ Aluminium Section							0.00	
	4"wide		Rmt	10			200	2,000.00	
	Plain Glass Panes 4mm thick		Sqm	16			325	3,250.00	
	Finishing wall with water proofing cement paint of approved brand and manufacture and or required shade to give an even shade including all		Sqm	200			30	6,000.00	
	Old Work(Old Finish)							0.00	
	Restoration of Cement Flooring		Sqm	78.54			500	39,269.91	
	Miscellaneous Repair Works		I.S	1			20,000	20,000.00	
	Construction of New Concrete work for pumping station		I.S	1			30,000	30,000.00	
	Internal development		I.S	1			11,848.50	11,848.50	
	Total							248,818.41	
Mechanical work									
Inlet Coarse Bar Screens									
	Mechanical Step type Screens SS304 1 m wide 1 m depth with bar clear bar spacing 20 mm		no	1			299,196.18	299,196.18	
	Supply and installation of one set of complete Manuall cleaned coarse screen in the inlet chamber having the apperture size as 20mm. Screens shall be installed at an inclination of 700		no	1			153,433.94	153,433.94	
	Belt Conveyor -500 mm width		no	1			178,113.64	178,113.64	
	Screen Collection bin Trolley		no	1			243,178.32	243,178.32	
								0.00	
	Pumping Plants and Its Accessories							0.00	
PUMPING PLANTS									
	Non-clog, single stage, bottom suction submersible pump of Capacity =35 cum/hrs and head 8 m. at Peak Flows		nos	3			172,159.53	516,478.58	
	Non-clog, single stage, bottom suction submersible pump of Capacity =15cum/hrs and head 8 m. at non Peak		nos	2			151,813.40	303,626.80	
	Supplying, erecting, testing & commissioning of Manually Operated Crane (single bridge girder carrying two wheels , complete with chain pulley block, load chain of welded construction of alloy steel as per IS:2429, hand chains for hoisting &		no.	1			184,964.78	184,964.78	
	Providing, installation, testing and commissioning of glycerin filled Pressure gauge of following ranges with isolation valve and tap off pipe complete in all respect as per technical specification and as per direction of Tools and Tackles (As Per enclosed list)		no.	3			1,168.13	3,504.39	
								0.00	
	a Chain wrench		No.	1			7,500.00	7,500.00	
	b. Pipe wrench		No	1			1,100.00	1,100.00	
	c. Screw wrench		No	1			700.00	700.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	d. Ring spanners		No.	1			2,000.00	2,000.00	
	e. Double ended spanners		Set	1			1,000.00	1,000.00	
	f. Insulation pliers		No.	1			250.00	250.00	
	g. Hammer with handle		No.	1			400.00	400.00	
	h. Hexa blade frame		No.	1			150.00	150.00	
	i. Measuring tape of different size		Set	1			500.00	500.00	
	j. Sprit level set comprising of		No.	1			1,000.00	1,000.00	
	- Filler gauge		No.	1				0.00	
	- Steel scale		No.	1				0.00	
	- Chisel (150, 200 mm)		No.	1				0.00	
	- File (Flat, half round, round and triangular)		Set	1				0.00	
	k. Maggor HT & LT		No.	1			15,000.00	15,000.00	
	l. Crimping Tools		No.	1			30,000.00	30,000.00	
	m. Multimeter		No.	1			3,000.00	3,000.00	
	n. Power Drill		No.	1			5,000.00	5,000.00	
	Installation of all the equipments etc.		job	1			150,000.00	150,000.00	
	Commissioning of pumping station.		job	1			25,000.00	25,000.00	
	Testing of pumping plants		job	1			25,000.00	25,000.00	
	Painting of all equipment and drives etc.		job	1			35,000.00	35,000.00	
								0.00	
	Valves and Fittings							0.00	
	Sluice valve							0.00	
	Manually operated Sluice Valve(DI) with H/w, PN10 conforming IS 1538							0.00	
	100 mm dia.		No.	5			18,641	93,206.06	
	150 mm dia.		No.	1			31,334.37	31,334.37	
	Non-Return valve							0.00	
	C.I.D/F Swing type Non-Return Valves as per IS 5312, (Part-1 & 2) Single/Multidoor type (with Lever & counterweight 400 mm & above) 700 mm & above Dual Plate Check Valves							0.00	
	100 mm dia.		No.	5			7,817.45	39,087.24	
	150 mm dia.		No.	1			23,792.23	23,792.23	
	D F C I Pipes and D F. C.I. Specials							0.00	
	Delivery piping shall commence from 90° discharge duck foot bend of individual pump up to the start of rising main This shall include column pipe, distance pieces, common header, bends and tees etc. as per following details:-		kg	12,325.00			60.00	739,500.00	
	Providing, installation, testing and commissioning of following Stain less steel AISI 304 Expansion bellows of 10 bar rating with tie rods as per technical specifications and layout drawings including jointing material like nuts, bolts, rubber gaskets etc. complete in all respect as per technical specification and as per								
	100 mm dia.		nos	5.00			11,998.08	59,990.41	
	Nuts & bolts of SS and rubber insertion /packing etc @ 5% of the weight of CI piping and fittings		kg	616.25			100.00	61,625.00	
								0.00	
								0.00	
	Rising Main							0.00	
	Mechanical							0.00	
	Supply of DI K9 Pipe 200 mm Dia.		RM	250.00			2,619.10	654,775.00	
	Spacials @ 10% of Cost of pipe		LS	10%			654,775.00	65,477.50	
	Civil							0.00	
	Excavation for pipe line in ordinary soil with lift upto 1.5 m and lead upto 50 m including refilling , watering and ramming of excavated earth in trenches after laying pipe line, removal and disposal of surplus material upto a		cum	337.5			183.40	61,897.50	
	Laying Of pipe		RM	250			1,547.54	386,885.87	
	Total							4,402,667.81	

	Items	Specification	Unit	Qty	I.C Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Electrical & Instrumentation Works								
	DG Sets								
	STC of 30 KVA set complete with 1500 RPM Diesel Engine of suitable BHP & AC Brush less SPDP Alternator mounted on a common base Frame & coupled through a flexible coupling or close coupled Alternator shall be self regulated with standard Alternator Protection(Over voltage , over speed & under voltage). Engine shall have residential silencer, up to 10 M exhaust piping , electronic / Mechanical governor, Manual & electric Start , Batteries, Fuel tank (with Stand) & piping , control panel (16 C) with MCCB (4P, 25 KA), Ammeter, Voltmeter, Frequency Meter, Energy Meter & Hour Meter, Engine instruments panel, AVM and with Weatherproof, powder coated Acoustic enclosure for DG set for sound attenuation fabricated from 2.0 mm CRCA sheet steel (structure) with side wall fabricated from 2.0 mm CRCA sheet & filled with 100mm thick glass wool(96Kg/m ³) as per IS 8183 the doors of 100 mm thick and fabricated from 1.6mm CRCA sheet								
	Air Cooled & Naturally Aspirated-								0.00
	30 KVA at 0.8 pf 415V 50Hz 3-Ø		no	1			683,250.00	683,250.00	
	STC of AUTO MAINS FAILURE (AMF) Panel fabricated from CRCA sheet steel 2mm Thick . Powder coated finish . Engine START & STOP commands control RELAYS selector switches for Ammeter & Voltmeter, Ammeter & Voltmeter , Control & Power Contactors, Timers Electronic Hooter . Visual & Alarm indication for faults UPS, operator interface panel complete								0.00
	30 KVA at 0.8 pf 415V 50Hz 3-Ø		no	1			112,500	112,500.00	
	Complete earthing of the D.G. set, including supply of all materials, construction of earth pits as per I.E.		Job	1			8,351.07	8,351.07	
	Supply of 12mm thick PVC rubber matting of 1M x 1M size and with ISI		sqm	6			1,406	8,437.95	
	First filling of Mobile oil		Job	1			3,000.00	3,000.00	
	Installation of D.G. set complete with construction of foundation etc		Job	1			25,000.00	25,000.00	
	Commissioning of the D.G. set including fuel for a max. period of 8		Job	1			10,000	10,000.00	
	Testing of the D.G. set.		Job	1			10,000	10,000.00	
									0.00
	Electro- Magnetic Flow meter								0.00
	Direct on line Full Bore electro-magnetic Flow meter for sewage application. The flow meter shall be suitable for bi directional flow measurement. This shall be having protection category of the sensor shall be IP68 and protection category for the transmitter shall be IP- 65. Accuracy shall be of +/- 5% of measured value without being affected by variation in the line pressure.Equipment should be complete with converter, transmitting device and should be fully programmable with digital flow indicator & integrator etc. The sensor		no	1.0			285,624.00	285,624.00	
									0.00
	Internal and External Lighting								0.00
	Internal								0.00

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Point Wiring in surface rigid P.V.C. conduit system with Flush type Accessories Point wiring including metallic switch box, sheet, switches, sockets, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per							0.00	
	Light Point/Fan Points.							0.00	
	Medium point (up to 6 mtr.)		nos.	3.00			583.00	1,749.00	
	Long point (up to 10 mtr.)		nos.	3.00			894.00	2,682.00	
	3 Pin 6 Amp socket outlet on Separate Board							0.00	
	Medium point (up to 6 mtr.)		nos.	3.00			595.00	1,785.00	
	Circuit Wiring - Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) of ISI marked suitable size including painting etc. as required as per specification							0.00	
	2x2.5 Sq.mm.		m	27.00			104.06	2,809.62	
	METALLIC SWITCH BOXES - Supplying and fixing factory fabricated hot dip galvanized switch box for normal flush type accessories of minimum 1.2 mm (18 swg gauge) thickness with earth terminal stud with nut and washer, with 3 mm thick synthetic phenolic resin bonded laminated sheet conforming to grade PI of IS.2036-1974 on surface / concealed including painting etc. as required as per specification- MS Box 200 mm X		nos.	3			243	729.63	
	Supplying of ISI Marked Switch Fuse Unit (rewirable type) triple pole with neutral link, 415 Volt having conduit / cable gland entry with two earthing terminals conforming to IS . 13947(Part							0.00	
	63Amp		nos.	2.00			3,746.16	7,492.32	
	Supplying, fixing & testing of approved make of low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray including fixing on wall/ Ceiling on wooden round block including wiring & connection as required and suitable for							0.00	
	2 no. 18 watt CFL		nos.	4.00			1,756.92	7,027.68	
	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per							0.00	
	18 Watt		nos.	4.00			246.84	987.36	
	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, delux type, including fixing on wall as required, with necessary material complete Fitting(suitable for GLS w/o		nos.	2.00			617.10	1,234.20	
	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete as required confirming to IS 374/1979 with upto date amendments. Ceiling Fan (Energy		nos.	2.00			2,078.00	4,156.00	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fasteners etc complete finished and as required 300mm sweep 900 RPM		nos	2			3,113.00	6,226.00	
	External							0.00	
	Providing, erecting, testing and commissioning solar street light system on 80 mm heavy duty galvanised iron pipe 6 meter high with 30cm x 30cm x 2mm base plate installed on cement concrete pedestal casing complete with solar panel, solar battery with charger, other accessories with control panel in weather proof pole box, solar fitting LED type or CFL type 18 watt to		nos	2.00			37,147.00	74,294.00	
								0.00	
	Switchgear with Transformer							0.00	
	Double pole structure, complete with Isolator, Insulators, Lightning arrestor, H/G Fuses operating handle etc		No	1.00			187,500.00	187,500.00	
	25 KVA, ONAN, 11KV/0.415 V pole mounted Transformer		No	1.00			94,200.00	94,200.00	
	L.T. Control Switch Gear Panel Board							0.00	
	SITC of wall/Free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc/red oxide primer followed by two coats of synthetic enamel paint for powder coating in grey or required shade after using. The panel having PU/Neoprene rubber gasket of not less than 3mm thickness, separate detachable, gland plate M.S. base channel, hinged door with locking arrangement for equipment/switchgear. Thickness of sheet shall not be less than 2.0mm. Load bearing structure shall be of 2.0mm thick sheet supported by base M.S. channel if required. Side walls and cable alley compartments having bolted type doors with detachable extension type structure (only outer		Sq m	8.00			3,840.00	30,720.00	
	Supplying and fixing of electrolytic grade Aluminium bus bar by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending, cutting in required shape and size and colour coding with heat shrinkable PVC		kg	8.00			525.00	4,200.00	
	Incoming Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release. 400 Amp, 25/35 kA, adjustable O/L & adjustable S/C setting		No.	3			38,700	116,100.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No.	3			1,740	5,220.00	
	Under Voltage Release		No.	3			2,590.0	7,770.00	
	Earth Fault Module		No.	3.00			1,650.00	4,950.00	
	Outgoing Panels							0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc as required With Microprocessor based Release. up to 100 Amp, 16 kA, adjustable O/L & adjustable S/C setting		No.	6			19,950	119,700.00	
	Supply and fixing of following accessories for MCCB .							0.00	
	Shunt trip Release		No.	6			1,740	10,440.00	
	Under Voltage Release		No.	6			2,590	15,540.00	
	Earth Fault Module		No.	6			1,650	9,900.00	
	SITC of DOL with panel conforming to applicable standards, with Graphical Display with atleast display of 5 different parameters at a time and display of 2 parameters with Bargraph, digital and analogue I/O, relay outputs, adjustable Accel/ Decel times, motor protection, RS 485 serial link for connections to Modbus 1.1 KW		No.	5			42,900	214,500.00	
	Level transmitters ultrasonic type - 8 meters liquid		No.	1			110,490	110,490.00	
	Automatic start / stop device according to prefixed level in the pump with timer and audio-visual signal or circuit such as hooter arrangement for lowest and highest allowable level in the sump.		No.	5.0			5,000.00	25,000.00	
	Moisture sensing relay. Sensing device to signal and trip the motor against of water into oil chamber.		No.	5.0			5,000.00	25,000.00	
	Device for taking signal from the thermister in motor winding and tripping the circuit on reaching pre-set		No.	5			5,000	25,000.00	
	Single phasing preventor.		No.	5			2,500.00	12,500.00	
	Reverse rotation trip device for motor.		No.	5			1,500	7,500.00	
	SITC of self healing MPP/MP type shunt capacitor (banks) conforming to IS 13340-41 / IEC :831-1&2 in existing panel or parallel with load terminals, the capacitor shall be fitted with discharge resistors, pressure sensitive disconnecter (PSD) and shall have dissipation factor less than 0.0025 at 50 Hz and total wattage loss less than 0.5 Watt per KVAR. including making connections with suitable capacity conductors/cables testing as required Heavy duty Three phase 440 V		KVAR	15.00			1,168.50	17,527.50	
	SITC of microprocessor based intelligent power factor correction relay having following sensing capacity secondary current, self analysing auto c/k setting according to targeted power factor setting, the relay shall have minimum three digit display unit for display of real power factor, targeted power factor, lag/lead capacitor switching status, alarm output for under current, over current, insufficient compensation, indication of switching on units, auto/manual status, and shall have over load protection, no volt release etc as required. 6 to 8 stage.		No.	1.00			27,006.08	27,006.08	
	SF of Current Transformer, with all necessary support in existing panel including connection etc. as required up to 150 / 5 Ratio, 5 VA, class 1		No.	5.00			436.83	2,184.13	
	SF of CT linked selector switch of 10 A for Ampere meter (4 position) including making connection etc. as		No.	5.00			408.27	2,041.37	
	SF of 240/220 V, LED (22.5 mm dia) Pilot lamp with integral circuit, terminal block, including connection etc. as required. Red/ yellow / Green colour		Set	15.00			285.51	4,282.60	
	Auxiliary Outgoing panels. These shall be required for the following purposes							0.00	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Flow meter, Level Indicator, Pressure Indicating Devices etc							0.00	
	For miscellaneous works such as welding, Dewatering pumps etc							0.00	
	Spare Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-1 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push test to trip, including making connections with lugs / spreaders etc as required With Microprocessor based Release up to 100 Amp, 16 kA, adjustable O/L & adjustable S/C setting		No	5			19,350	99,750.00	
	P/Laying XLPE insulated / PVC sheathed cable of 11 KV grade with aluminium conductor Armoured of IS 7098-1/1554-1 approved make in ground as per IS 1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, 11nd class bricks covering, refilling, compaction of earth, making necessary connection, testing etc. as required of		m	30.00			692.00	20,760.00	
	P & Laying XLPE insulated IS.7098/1185 of Group1 and approved make H.T.cable for working voltage 11 K.V. Earthen direct in ground including excavation of 30cm x100cm size trench, 25cm layer of river sand, 11nd class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc. as required of		m	30.00			1,113.48	33,404.29	
	Providing & making heat shrinkable type or/ outdoor/ straight through terminations, joint kit of Group1 and approved make suitable for XLPE insulated 11 KV cable, with required components, preparation of cable ends, testing etc. as required of		No	2.00			12,073.00	24,146.00	
	Supplying and making one end termination with heavy duty single compression brass gland SIBG type, aluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt		Set	26.00			408.27	10,615.14	
	Plate Earthing as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm by embodying 3 to 4 mtr. below the ground level with 20 mm dia. G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete with alternate layers of salt and		Set	6.00			6,745.10	40,470.58	
	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required. 10 SWG		m	50.00			6.42	321.20	
	Power and Control cables for connecting motors of various drives		Lot	1.00			35,000.00	35,000.00	
	Rubber matting of 12 mm thickness and I.S.I. marked and suitable for 0.415		sqm	8.00			1,230.53	9,844.27	
								2,610,918.99	

	Items	Specification	Unit	Qty	P.C Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
Rehabilitation of Existing Sewage Pumping Station IPS-4									
Civil work									
	Removal of Corroded Steel & replacing with new steel with primer coating on the steel		MT	0.4			80,000.00	32,000.00	
	Providing Epoxy Concrete of 50 mm thick with Required primer etc		Sqm	20			2,000.00	40,000.00	
	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq metres and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 m lead. With cement mortar 1:4 (1 cement:4)		Sqm	50			109.00	5,450.00	
	Structural Steel Sections for ladders etc		MT	1			75,000	75,000.00	
	Repair of door, window shutters including cost of material and labour for change of damaged							0.00	
	Style / rail of teak wood 30mm thick/ Aluminum Section 4" wide		Rmt	10			200	2,000.00	
	Plain Glass Panes 4mm thick		Sqm	10			325	3,250.00	
	Finishing wall with water proofing cement paint of approved brand and manufacture and or required shade to give an even shade including all (Old Work/ Old Finish)		Sqm	200			30	6,000.00	
	Restoration of Cement Flooring		Sqm	78.54			500	39,269.91	
	Miscellaneous Repair Works		IS	1			20,000	20,000.00	
	Construction of New Concrete work for pumping station		IS	1			30,000	30,000.00	
	Total							252,969.91	
Mechanical work									
Inlet Coarse Bar Screens									
	Mechanical Step type Screens SS304 1 m wide 1 m depth with bar clear bar spacing 20 mm		no	1			299,196.18	299,196.18	
	Supply and installation of one set of complete Manuall cleaned coarse screen in the inlet chamber having the aperture size as 20mm. Screens shall be installed at an inclination of 700 (max) to the horizontal.		no	1			153,433.94	153,433.94	
	Belt Conveyor -500 mm width		no	1			178,113.64	178,113.64	
	Screen Collection bin Trolley		no	1			243,178.32	243,178.32	
	Pumping Plants and Its Accessories							0.00	
PUMPING PLANTS									
	Non-clog, single stage, bottom suction submersible pump of Capacity =150 cum/hrs. and head 10m. at Peak Flows		nos.	6			563,431.18	3,380,587.06	
	Non-clog, single stage, bottom suction submersible pump of Capacity =40 cum/hrs. and head 11 m. at non Peak		nos.	0			156,508.66	0.00	
	Supplying, erecting, testing & commissioning of Manually Operated Crane (single bridge girder carrying two wheels, complete with chain pulley block, load chain of welded construction of alloy steel as per IS:2429, hand chains for hoisting &		no.	1			184,964.78	184,964.78	
	Providing, installation, testing and commissioning of glycerin filled Pressure gauge of following ranges with isolation valve and tap off pipe complete in all respect as per technical specification and as per direction of Tools and Tackles (As Per enclosed list)		no.	3			1,168.13	3,504.39	
	a. Chain wrench		No.	1			7,500.00	7,500.00	
	b. Pipe wrench		No.	1			1,100.00	1,100.00	
	c. Screw wrench		No.	1			700.00	700.00	
	d. Ring spanners		No.	1			2,000.00	2,000.00	
	e. Double ended spanners		Set	1			1,000.00	1,000.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	f. Insulation pliers		No.	1			250.00	250.00	
	g. Hammer with handle		No.	1			400.00	400.00	
	h. Hexa blade frame		No.	1			150.00	150.00	
	i. Measuring tape of different size		Set	1			500.00	500.00	
	j. Spirit level set comprising of		No.	1			1,000.00	1,000.00	
	- Filler gauge		No.	1				0.00	
	- Steel scale		No.	1				0.00	
	- Chisel (150, 200 mm)		No.	1				0.00	
	- File (Flat, half round, round and triangular)		Set	1				0.00	
	k. Maggor HT & LT		No.	1			15,000.00	15,000.00	
	l. Crimping Tools		No.	1			30,000.00	30,000.00	
	m. Multimeter		No.	1			3,000.00	3,000.00	
	n. Power Drill		No.	1			5,000.00	5,000.00	
	Installation of all the equipments etc.		job	1			150,000.00	150,000.00	
	Commissioning of pumping station.		job	1			25,000.00	25,000.00	
	Testing of pumping plants.		job	1			25,000.00	25,000.00	
	Painting of all equipment and drives etc.		job	1			35,000.00	35,000.00	
								0.00	
	Valves and Fittings							0.00	
	Sluice valve							0.00	
	Manually operated Sluice Valve(DI) with H/w, PNI0 conforming IS 1538							0.00	
	150 mm dia.		No.	6			47,008.35	282,050.09	
	300 mm dia.		No.	1			92,310.45	92,310.45	
	Non-Return valve							0.00	
	C.I.D/F Swing type Non-Return Valves as per IS:5312, (Part-1 & 2) Single/Multidoor type (with Lever & counterweight 400 mm & above) 700 mm & above Dual Plate Check Valves							0.00	
	150 mm dia.		No.	5			23,792.23	118,961.15	
	300 mm dia.		No.	1			49,283.91	49,283.91	
	D.F.C.I. Pipes and D.F.C.I. Specials							0.00	
	Delivery piping shall commence from 90° discharge duck foot bend of individual pump up to the start of rising main. This shall include column pipe, distance pieces, common header, bends and tees etc. as per following details:-		kg	12,325			60.00	739,500.00	
								0.00	
	Providing, installation, testing and commissioning of following Stan less steel AISI 304 Expansion bellows of 10 bar rating with tie rods as per technical specifications and layout drawings including jointing material like nuts, bolts, rubber gaskets etc. complete in all respect as per technical specification and as per							0.00	
	150 mm dia.		nos.	5			8,599.19	42,995.96	
	Nuts & bolts of SS and rubber insertion /packing etc. @ 5% Of the weight of CI piping and fittings		kg	616			100.00	61,625.00	
								0.00	
								6,132,304.87	
	Electrical work								

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of D.G set complete with 1500 RPM Diesel Engine of suitable BHP & AC Brush less SPDP Alternator mounted on a common base Frame & coupled through a flexible coupling or close coupled Alternator shall be self regulated with standard Alternator Protection (Over voltage, over speed & under voltage) Engine shall have residential silencer, up to 10 M exhaust piping, electronic / Mechanical governor, Manual & electric Start, Batteries, Fuel tank (with Stand) & piping, control panel (16 G) with MCCB (4P, 25 KA), Ammeter, Voltmeter, Frequency Meter, Energy Meter & Hour Meter, Engine instruments panel, AVM and with Weatherproof, powder coated Acoustic enclosure for D.G set for sound attenuation fabricated from 2.0 mm CRCA sheet steel (structure) with side wall fabricated from 2.0 mm CRCA sheet & filled with 100mm thick glass wool (96Kg/m ³) as per IS 8183 the doors of 100 mm thick and fabricated from 1.6mm CRCA sheet coated with powder coated finish of An Coated & Naturally Aspiration- Along with AMF Panel								
	100/125 KVA at 0.8 pf 415V 50Hz 3-Ø		no	1			1,317,600.00	1,317,600.00	
	SITC of AUTO MAINS FAILURE (AMF) Panel fabricated from CRCA sheet steel 2mm Thick, Powder coated finish, Engine START & STOP commands, control RELAYS, selector switches for Ammeter & Voltmeter, Ammeter & Voltmeter, Control & Power Contactors, Timers, Electronic Hooter, Visual & Alarm indication for faults, UPS, operator interface panel complete								
	100 KVA at 0.8 pf 415V 50Hz 3-Ø		no	1			225,000.00	225,000.00	
	Complete power wiring along with cables & materials from D.G. set to the Incoming Panel of L.T. panel as per I.E.		I.S	1			30,000.00		
	Complete earthing of the D.G. set, including supply of all materials, construction of earth pits as per I.E. rules.		Job	1			16,745.10	16,745.10	
	Supply of 12mm thick PVC rubber matting of 1M x 1M size and with ISI		sqm	6			1,230.53		
	First filling of Mobile oil		Job	1			6,000.00	6,000.00	
	Installation of D.G. set complete with construction of foundation etc.		Job	1			35,000.00		
	Commissioning of the D.G. set including fuel for a max. period of 8		Job	1			25,000.00	25,000.00	
	Testing of the D.G. set.		Job	1.00			15,000.00	15,000.00	
								0.00	
	Electro- Magnetic Flow meter							0.00	
	Direct on line Full Bore electro-magnetic Flow meter for sewage application. The flow meter shall be suitable for bi directional flow measurement. This shall be having protection category of the sensor shall be IP68 and protection category for the transmitter shall be IP- 65. Accuracy shall be of +/- 5% of measured value without being affected by variation in the line pressure. Equipment should be complete with converter, transmitting device and should be fully programmable with digital flow indicator & integrator etc. The sensor housing and junction box should be of SS 316.		no.	1			598,159.50	598,159.50	
								0.00	
	Internal and External Lighting							0.00	
	Internal							0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Point Wiring in surface rigid P V C conduit system with Flush type Accessories. Point wiring including metallic switch box, sheet, switches, sockets, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P V C conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per							0.00	
	Light Point/Fan Points.							0.00	
	Medium point (up to 6 mtr)		nos.	5			583	2,916.38	
	Long point (up to 10 mtr)		nos.	5			894	4,469.85	
	3 Pin 6 Amp socket outlet on Separate Board							0.00	
	Medium point (up to 6 mtr)		nos.	5			595	2,974.13	
	Circuit Wiring - Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P V C. conduit (MMS) of ISI marked suitable size including painting etc. as required as per specification							0.00	
	2x2.5 Sq.mm.		m	45.0			104.00	4,680.00	
	METALLIC SWITCH BOXES - Supplying and fixing factory fabricated hot dip galvanised switch box for normal flush type accessories of minimum 1.2 mm (18 swg gauge) thickness with earth terminal stud with nut and washer, with 3 mm thick synthetic phenolic resin bonded laminated sheet conforming to grade PI of IS:2036-1974 on surface / concealed including painting etc. as required as per specification- MS Box 200 mm X		nos.	5			232	1,160.78	
	Supplying of ISI Marked Switch Fuse Unit (rewirable type) triple pole with neutral link ,415 Volt having conduit / cable gland entry with two earthing terminals confirming to IS 13947(Part I & III) -							0.00	
	63Amp		nos.	4			3,576	14,303.52	
	Supplying, fixing & testing of approved make of low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete							0.00	
	2 no. 18 watt CFL		nos.	4.00			1,677.06	6,708.24	
	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per							0.00	
	18 Watt		nos.	8.00			235.62	1,884.96	
	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, delux type, including fixing on wall as required, with necessary material complete Fitting(suitable for GLS w/o lamp upto 11 watt Retorted CFL)		nos.	4.00			589.05	2,356.20	
	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete as required confirming to IS :374/1979 with upto date ammendments Ceiling Fan (Energy		nos.	2.00			1,983.14	3,966.27	
	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc. complete finished and as required 300mm sweep 900 RPM		nos.	2.00			2,971.82	5,943.63	
	External							0.00	

	Items	Specification	Unit	Qty	I/C Portion (Yen)		L/C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Providing, erecting, testing and commissioning solar street light system on 80 mm heavy duty galvanized iron pipe 6 meter high with 30cm x 30cm x 2mm base plate installed on cement concrete pedestal casing complete with solar panel, solar battery with charger, other accessories with control panel in weather proof pole box, solar fitting L.H.D type or C.P.L type 18 watt to 20 watt (set)		nos	2.00			54,109.67	108,219.34	
								0.00	
	Switchgear with Cabling							0.00	
	L.T. Control Switch Clear Panel Board							0.00	
	SITC of wall/ free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc/ red oxide primer followed by two coats of synthetic enamel paint for powder coating in grey or required shade after using. The panel having PU/ Neoprene rubber gasket of not less than 3mm thickness, separate detachable gland plate M.S. base channel, hinged door with locking arrangement for equipment/ switchgear. Thickness of sheet shall not be less than 2.0mm. Load bearing structure shall be of 2.0mm thick sheet supported by base M.S. channel if required. Side walls and cable alley compartments having bolted type doors with detachable		Sq.m	12.00			3,840.00	46,080.00	
	Supplying and fixing of electrolytic grade Aluminium bus bar by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending, cutting in required shape and size and colour coding with heat shrinkable PVC		kg	10.00			525.00	5,250.00	
	Incoming Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release. 200 Amp, 25/35 kA, adjustable O/L & adjustable S/C setting		No.	3.00			38,700.00	116,100.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No.	3.00			1,740.00	5,220.00	
	Under Voltage Release		No.	3.00			2,590.00	7,770.00	
	Earth Fault Module		No.	3.00			1,650.00	4,950.00	
	Outgoing Panels							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release. up to 100 Amp, 16 kA, adjustable O/L &		No.	8.00			19,950.00	159,600.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No.	6			1,740	10,440.00	
	Under Voltage Release		No.	6.00			2,590.00	15,540.00	
	Earth Fault Module		No.	6			1,650	9,900.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of S/D with panel conforming to applicable standards, with Graphical Display with atleast display of 5 different parameters at a time and display of 2 parameters with Bargraph, digital and analogue I/O, relay outputs, adjustable Accel/ Decel times, motor protection, RS 485 serial link for connections to Modbus. 7.5 KW		No.	6			17,400.0	104,400.00	
	Level transmitters ultrasonic type - 10 meters liquid		No.	1.00			112,405.16	112,405.16	
	Automatic start / stop device according to prefixed level in the pump with timer and audio-visual signal or circuit such as hooter arrangement for lowest and highest allowable level in the sump.		No.	6.00			5,000.00	30,000.00	
	Moisture sensing relay Sensing device to signal and trip the motor against of water into oil chamber.		No.	6			5,000	30,000.00	
	Device for taking signal from the thermister in motor winding and tripping the circuit on reaching pre-set		No.	6.0			5,000.00	30,000.00	
	Single phasing preventor.		No.	6			2,500	15,000.00	
	Reverse rotation trip device for motor.		No.	6			1,500	9,000.00	
	SITC of self healing MPP/MP type shunt capacitor (banks) conforming to IS:13340-41 / IEC :831-1&2 in existing panel or parallel with load terminals , the capacitor shall be fitted with discharge resistors, pressure sensitive disconnecter (PSD) and shall have dissipation factor less than 0.0025 at 50 Hz and total wattage loss less than 0.5 Watt per KVAR. including making connections with suitable capacity conductors/cables testing as required. Heavy duty Three phase 440 V		KVAR	60			1,169	70,149.01	
	SITC of microprocessor based intelligent power factor correction relay having following sensing capacity secondary current , self analysing auto c/k setting according to targeted power factor setting, the relay shall have minimum three digit display unit for display of real power factor, targeted power factor, lag/lead capacitor switching status, alarm output for under current, over current, insufficient compensation, indication of switching on units, auto/manual status, and shall have over load protection, no volt release etc. as required. 6 to 8 stage		No.	1			27,000	27,000.00	
	SF of Current Transformer , with all necessary support in existing panel including connection etc as required up to 150 / 5 Ratio , 5 VA , class 1		No.	6			437	2,620.95	
	SF of CT linked selector switch of 10 A for Ampere meter (4 position) including making connection etc. as		No.	6.0			408.27	2,449.65	
	SF of 240/220 V, LED (22.5 mm dia) Pilot lamp with integral circuit, terminal block, including connection etc. as required. Red/ yellow / Green colour		Set	20.0			285.51	5,710.14	
	Auxiliary Outgoing panels. These shall be required for the following purposes							0.00	
	Flow meter, Level Indicator, Pressure Indicating Devices etc.							0.00	
	For miscellaneous works such as welding, Dewatering pups etc.							0.00	
	Spare Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR , shunt trip , earth fault trip, push (test) to trip , including making connections with lugs / spreaders etc as required With Microprocessor based Release up to 100 Amp , 16 kA, adjustable O/L & adjustable S/C setting.		No.	5.00			19,950.00	99,750.00	

	Items	Specification	Unit	Qty	P/C Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	P/Laying XLPE insulated / P V C sheathed cable of 11 KV grade with aluminium conductor Armoured of IS:7098-II/554-1 approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand/11nd class bricks covering, refilling compaction of earth, making necessary connection, testing etc. as required of		m	60.00			692.35	41,541.23	
	P & Laying XLPE insulated IS 7098/II/85 of Group I and approved make 11 T cable for working voltage 11 K.V. Earthed direct in ground including excavation of 30cm x100cm size trench, 25cm layer of river sand, 11nd class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc. as required of		m	60.00			1,113.48	66,808.58	
	Providing & making bent shrinkable type or / outdoor/ straight through termination joint kit of Group I and approved make suitable for XLPE insulated 11 KV cable, with required components, preparation of cable ends, testing etc. as required of		No	4.00			12,073.00	48,292.00	
	Supplying and making one end termination with heavy duty single compression brass gland SIBG type aluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed XLPE aluminium conductor cable of 1100 volt		Set	4.00			623.03	2,492.11	
	Plate Earthing as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm by embedding 3 to 4 mtr. below the ground level with 20 mm dia. 'G.I.' 'B' class watering Pipe including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete with alternate layers		Set	6.00			6,745.10	40,470.58	
	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required. 10 SWG		m	100.00			6.42	642.39	
	Power and Control cables for connecting motors of various drives		Lot	1.00			40,000.00	40,000.00	
	Rubber matting of 12 mm thickness and ISI marked and suitable for 0.415		sqm	5			1,231	6,152.67	
	Total							3,528,822.37	
	Rising Main								
	Mechanical								
	Supply of DI K9 Pipe 300 mm Dia.		RM	30.00			4,269.10	128,073.00	
	Spacials @ 10% of Cost of pipe		LS					0.00	
	Total Mech. Cost							0.00	
	Civil							0.00	
	Excavation for pipe line in ordinary soil with lift upto 1.5 m and lead upto 50 m including refilling, watering and ramming of excavated earth in trenches after laying pipe line, removal and disposal of surplus material upto a distance of 50 m.		cum	40.50			183.40	7,427.70	
	Laying Of pipe		RM	30			1,547.54	46,426.30	
								181,927.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
Rehabilitation and Upgradation of Existing 6 MLD Sewage Treatment Plant									
								0.00	
	Civil work for 6MLD STP		Ls	1.0			7,000,000.00	7,000,000.00	
								0.00	
INTERNAL DEVELOPEMNT OF THE ROADS									
	Construction of Bitumen Road		SQMT	250.0			1,921.07	480,267.86	
	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer in		SQMT	15.0			557.45	8,361.75	
								0.00	
								0.00	
	Landscaping and Protection Works							0.00	
								0.00	
	Grassing with selection No. 1 grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the good earth shall be paid for separately).							0.00	
	In rows 5 cm apart in both directions		SQMT	300.0			841.25	252,375.00	
								0.00	
								0.00	
								0.00	
	Specification							0.00	
	Electrical fitting		Ls	1.0			200,000.00	200,000.00	
	Mechanical Fittings		Ls	1.0			200,000.00	200,000.00	
								0.00	
								0.00	
								8,141,004.61	
								0.00	
	Mechanical work								
	INLET GATE	EQUIPMENT COST	No.	2			230,000	460,000.00	
		INSTALLATION COST	No.	2			4,600	9,200.00	
								0.00	
	FINE SCREEN (MECHANICAL)	EQUIPMENT COST	No.	1			2,000,000	2,000,000.00	
		INSTALLATION COST	No.	1			40,000	40,000.00	
								0.00	
	FINE SCREEN (MANUAL)	EQUIPMENT COST	No.	1			250,000	250,000.00	
		INSTALLATION COST	No.	1			5,000	5,000.00	
								0.00	
	BELT CONVEYOR	EQUIPMENT COST	No.	1			400,000	400,000.00	
		INSTALLATION COST	No.	1			8,000	8,000.00	
								0.00	
	GRIT CHAMBER	EQUIPMENT COST	No.	2			1,100,000	2,200,000.00	
		INSTALLATION COST	No.	2			22,000	44,000.00	
								0.00	
	CHLORINE DOSING PUMP	EQUIPMENT COST	No.	3			100,000	300,000.00	
		INSTALLATION COST	No.	3			2,000	6,000.00	
								0.00	
	MIXERS FOR CLORINE SOLUTION	EQUIPMENT COST	No.	2			150,000	300,000.00	
		INSTALLATION COST	No.	2			3,000	6,000.00	
								0.00	
	DECHLORINE DOSING PUMP	EQUIPMENT COST	No.	3			100,000	300,000.00	

	Items	Specification	Unit	Qty	P.C Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
SEWAGE PUMPING STATION IPS-5									
	Civil work								
	Excavation								
	Excavation for following depth B.G.L. for construction of sump-cum-pump house in ordinary soil including filling watering ramming and disposal of surplus soil upto a distance of 50 M in wet condition.								
UPJN SOR_2014-15_3001	0.00 - 1.50 M		M3	75.36			184.79	13,925.77	
UPJN SOR_2014-15_3002	1.50 - 3.00 M		M3	75.36			231.00	17,408.16	
UPJN SOR_2014-15_3003	3.00 - 4.50 M		M3	75.36			291.00	21,929.76	
UPJN SOR_2014-15_3004	4.50 - 6.00 M		M3	75.36			340.00	25,622.40	
UPJN SOR_2014-15_3005	6.00 M - 7.5 M		M3	75.36			443.00	33,384.48	
UPJN SOR_2014-15_3006	7.5 M - 9.0 M		M3	75.36			583.00	43,934.88	
	Same as above but in soil mixed with kankar etc.		1S	1			46,861.64	46,861.64	
	Sheet piling & timbering during the excavation and construction of works including all material, labour, T&P etc. complete required for proper completion of the work and its dismantling after completion of work.							0.00	
UPJN SOR_2014-15_3050	0.00 - 3.00 M		M3	61.23			1,899	116,275.77	
UPJN SOR_2014-15_3051	3.00 - 6.00 M		M3	61.23			2,625	160,728.75	
UPJN SOR_2014-15_3052	6.00- 8.00M		M3	40.82			3,417	139,481.94	
								0.00	
UPJN SOR_2014-15_1017	Supply and lay P.C.C 1:4:8 in cement fine sand and 40mm brick ballast in foundation including supply of all labour, T&P in wet condition.		M3	9.95			6,354.00	63,221.51	
								0.00	
	Reinforced cement concrete work 1:1 ½:3 in raft foundation side wall excluding cost of centering and							0.00	
UPJN SOR_2014-15_1023	Raft		M3	2.45			12,715.00	31,191.48	
UPJN SOR_2014-15_1023	0.00 - 1.50 M		M3	7.36			13,097.00	96,385.73	
3 % above item 1023	1.50 - 3.00 M		M3	7.36			13,882.82	102,168.88	
6 % above item 1023	3.00 - 4.50 M		M3	7.36			15,132.27	111,364.08	
8 % above item 1023	4.50 - 6.00 M		M3	7.36			16,645.50	122,500.49	
8 % above item 1023	6.00 - 7.50 M		M3	7.36			18,310.05	134,750.53	
								0.00	
UPJN SOR_2014-15_1022	Same as above but in ring beam at plinth level and floor level.		M3	12			12,904.00	158,275.63	
	Screen Slab		M3	28			12,904.00	364,667.04	
								0.00	
UPJN SOR_2014-15_1022	R.C.C. 1:1½:3 in floor slab of pump house Less: for opening		M3	4.4			12,904.00	56,725.98	
								0.00	
UPJN SOR_2014-15_1022	R.C.C. 1:1½:3 in roof slab.		M3	15.07			12,904.00	194,489.09	
								0.00	
UPJN SOR_2014-15_1025	R.C.C. 1:1½:3 in cement coarse sand and 10-20mm grit for Staircase		M3	3.00			12,715.00	38,145.00	
								0.00	
DSR_2013_4.3.2	Centering and shuttering including strutting propping etc. and removal of form.		M3	431.88			367.40	158,670.88	
								0.00	
UPJN SOR_2014-15_1031	Brick work in 1:6 in pump house.		M3	15.63			5,819.00	90,934.60	
								0.00	
UPJN SOR_2014-15_1190	12mm thick plaster in 1:6 in pump house.		M3	281.53			151.33	42,603.93	
								0.00	
	Supply and fixing of I.S.M.B. 250 @ Kg/M 37.30 and M.S. grill, door including one coat of redoxide and two coats of black Japan paint including fabrication, supply and fixing of Provision for water proofing compound		Kg	300.00			90.60	27,180.00	
			Kg	500			75.00	37,500.00	
								0.00	
	Providing and fixing M.S. angle iron door frame including frame 50x50x6 mm including all labour and material etc. complete.		No	1			3,000.00	3,000.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
								0.00	
	Providing and fixing steel shutters including cost of all labour and material etc. complete		M2	4.68			3,900.00	18,252.00	
								0.00	
	Supply of rubber matting.		Kg	402			60.00	24,115.20	
								0.00	
UPJN_SOR_2014-15_1253	Supply of all materials and painting snow-cem paint inside and outside the							0.00	
	Inside & Outside 1x3.14x6.5x5		M2	267			18.24	4,868.26	
								0.00	
	Enamel painting in door & windows including labour and material costs.		M2	7.74			134.83	1,043.58	
								0.00	
								0.00	
	Other Building Works Based in area rate.							0.00	
CPWD_1.1.1 (B)	a) Operation Room		sqm	9			21,760	195,840.00	
CPWD_1.1.1 (B)	b) HT Room		sqm	9			21,760	195,840.00	
CPWD_1.1.1 (B)	c) Transformer Yard and Generator Room		sqm	16			21,760	348,160.00	
								0.00	
								0.00	
	Site clearance and other unforeseen items		LS	1			10,000.00	10,000.00	
								0.00	
	Other Works							0.00	
	Construction of boundary Wall in Brick Masonary - (230 mm thick, 1 mtr in Length and 1.8 mtr in Height)		RM	80.00			5,792.08	463,366.47	
	M.S. Gate (3.6 Mtr Wide) with Wicket Gate (1.2 Mtr Wide)		no	1.00			71,347.98	71,347.98	
								0.00	
	Total							3,786,161.89	
	Mechanical work								
	Inlet Coarse Bar Screens							0.00	
	Mechanical Step type Screens SS304 1 m wide 1 m depth with bar clear bar spacing 20 mm		no.	1			299,196.18	299,196.18	
	Supply and installation of one set of complete Manual cleaned coarse screen in the inlet chamber having the aperture size as 20mm. Screens shall be installed at an inclination of 700		no	1			153,433.94	153,433.94	
	Belt Conveyor -500 mm width		no	1			178,113.64	178,113.64	
	Screen Collection bin Trolley		no.	1			243,178.32	243,178.32	
	Pumping Plants and Its Accessories							0.00	
	Non-clog, single stage, bottom suction submersible pump of Capacity =145 cum/hrs. and head 14 m. at Peak Flows		nos	3			398,060	1,194,179.25	
	Non-clog, single stage, bottom suction submersible pump of Capacity =60 cum/hrs. and head 11 m. at non Peak		nos	2			383,035	766,069.61	
	Supplying, erecting, testing & commissioning of Manually Operated Crane (single bridge girder carrying two wheels, complete with chain pulley block, load chain of welded construction of alloy steel as per IS:2429, hand chains for hoisting &		no.	1			243,178	243,178.32	
	Providing, installation, testing and commissioning of glycerin filled Pressure gauge of following ranges with isolation valve and tap off pipe complete in all respect as per technical specification and as per direction of 10015 and 1ackles (As Per enclosed list)		no.	6			1,022	6,132.69	
								0.00	
	a. Chain wrench		No.	2			7,500	15,000.00	
	b. Pipe wrench		No.	3			1,100	3,300.00	
	c. Screw wrench		No.	3			700	2,100.00	
	d. Ring spanners		No.	1			2,000	2,000.00	
	e. Double ended spanners		Set	1			1,000	1,000.00	
	f. Insulation pliers		No	1			250	250.00	
	g. Hammer with handle		No.	2			400	800.00	
	h. Hexa blade frame		No	2			150	300.00	

	Items	Specification	Unit	Qty	I/C Portion (Yen)		L.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	i. Measuring tape of different size		Set	1			500	500.00	
	j. Spirit level set comprising of		No	1			1,000	1,000.00	
	- Filler gauge		No	1				0.00	
	- Steel scale		No	1				0.00	
	- Chisel (150, 200 mm)		No	1				0.00	
	- File (Flat, half round, round and triangular)		Set	1				0.00	
	k. Manggot III & LT		No.	1			15,000	15,000.00	
	l. Crimping Tools		No	1			30,000	30,000.00	
	m. Multimeter		No	1			3,000	3,000.00	
	n. Power Drill		No	1			5,000	5,000.00	
	Installation of all the equipments etc.		job	1			150,000	150,000.00	
	Commissioning of pumping station		job	1			25,000	25,000.00	
	Testing of pumping plants		job	1			25,000	25,000.00	
	Painting of all equipment and drives etc		job	1			35,000	35,000.00	
								0.00	
	Valves and Fittings							0.00	
	Sluice valve							0.00	
	Manually operated Sluice Valve(DI) with H/w. PN10 conforming IS 1538							0.00	
	150 mm dia		No	6.00			26,323.07	157,938.41	
	200 mm dia		No	1.00			77,540.78	77,540.78	
	Non-Return valve							0.00	
	C.I.D.F Swing type Non-Return Valves as per IS-5312, (Part-1 & 2) Single Multidoor type (with Lever & counterweight 400 mm & above) 700 mm & above Dual Plate Check Valves							0.00	
	150 mm dia.		No	6.00			6,566.66	39,399.93	
	200 mm dia		No	1.00			41,398.48	41,398.48	
	D.F.C.I. Pipes and D.F. C.I. Specials							0.00	
	Delivery piping shall commence from 90° discharge duck foot bend of individual pump up to the start of rising main. This shall include column pipe, distance pieces, common header, bends and tees etc. as per following details:-		Kg	20,197.00			60.00	1,211,820.00	
								0.00	
	Providing, installation, testing and commissioning of following Stain less steel AISI 304 Expansion bellows of 10 bar rating with tie rods as per technical specifications and layout drawings including jointing material like nuts, bolts, rubber gaskets etc. complete in all respect as per technical specification and as per							0.00	
	150 mm dia.		No	6			24,525	147,150.18	
	Nuts & bolts of SS and rubber insertion /packing etc. @ 5% of the weight of CI piping and fittings		Kg	1,009.85			300.00	302,955.00	
								0.00	
	Rising Main							0.00	
	Mechanical							0.00	
	Supply of DI K9 Pipe , 200 mm Dia.		RM	335			3,169	1,061,648.50	
	Specials @ 10% of Cost of pipe		LS	1			106,165	106,164.85	
	Total Mech. Cost							0.00	
	Civil							0.00	
	Excavation for pipe line in ordinary soil with lift upto 1.5 m and lead upto 50 m including refilling , watering and		cum	502.5			183.40	92,158.50	
	Laying Of pipe		RM	335			1,548	518,427.07	
								0.00	
	Total							7,154,333.65	
	Electrical work								
	DG Sets								

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of DG Set complete with 1500 RPM Diesel Engine of suitable BHP & AC Brush less SPDP Alternator mounted on a common base Frame & coupled through a flexible coupling or close coupled. Alternator shall be self regulated with standard Alternator Protection(Over voltage , over speed & under voltage). Engine shall have residential silencer, up to 10 M exhaust piping , electronic / Mechanical governor, Manual & electric Start , Batteries, Fuel tank (with Stand) & piping , control panel (16 G) with MCCB (4P; 25 KA), Ammeter, Voltmeter, Frequency Meter, Energy Meter & Hour Meter, Engine instruments panel, AVM and with Weatherproof, powder coated Accoustic enclosure for DG set for sound attenuation fabricated from 2.0 mm CRCA sheet steel (structure) with side wall fabricated from 2.0 mm CRCA sheet & filled with 100mm thick glass wool(96Kg/m3) as per IS 8183 the doors of 100 mm thick and fabricated from 1.6mm CRCA sheet sealed with acoustic material. floor of Air Cooled & Naturally Aspirated- Along with AMF Panel								
								0.00	
	63 KVA at 0.8 pf 415V 50Hz 3-Ø		no.	1.0			946,050.00	946,050.00	
	SITC of AUTO MAINS FAILURE (AMF) Panel fabricated from CRCA sheet steel 2mm Thick , Powder coated finish , Engine START & STOP commands, control RELAYS, selector switches for Ammeter & Voltmeter, Ammeter & Voltmeter , Control & Power Contactors, Timers, Electronic Hooter , Visual & Alarm indication for faults, UPS, operator interface panel complete							0.00	
	63 KVA at 0.8 pf 415V 50Hz 3-Ø		no.	1			150,000.00	150,000.00	
	Complete power wiring along with cables & materials from D G set to the Incoming Panel of L.T panel as per I E		LS	1			30,000	30,000.00	
	Complete earthing of the D.G. set, including supply of all materials, construction of earth pits as per I E		Job	1.00			16,000.00	16,000.00	
	Supply of 12mm thick PVC rubber matting of 1M x 1M size and with ISI		sqm	6.00			1,230.53	7,383.20	
	First filling of Mobile oil		Job	1.00			5,000.00	5,000.00	
	Installation of D G set complete with construction of foundation etc		Job	1.00			25,000.00	25,000.00	
	Commissioning of the D G set including fuel for a max. period of 8		Job	1.00			15,000.00	15,000.00	
	Testing of the D G. set		Job	1.00			15,000.00	15,000.00	
								0.00	
	Electro- Magnetic Flow meter							0.00	
	Direct on line Full Bore electro-magnetic Flow meter for sewage application. The flow meter shall be suitable for bi directional flow measurement. This shall be having protection category of the sensor shall be IP68 and protection category for the transmitter shall be IP- 65. Accuracy shall be of +/- 5% of measured value without being affected by variation in the line pressure. Equipment should be complete with converter, transmitting device and should be fully programmable with digital flow indicator & integrator etc. The sensor		no.	1.00			598,159.50	598,159.50	
								0.00	
	Internal and External Lighting							0.00	
	Internal							0.00	

	Items	Specification	Unit	Qty	I/C Portion (Yen)		L/C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Point Wiring in surface rigid P.V.C conduit system with flush type Accessories Point wiring including metallic switch box, sheet, switches, sockets, lamp holders/ceiling roses etc with 1.5 Sq mm. PVC insulated cable PR with copper multi strand conductor ISI marked in Surface rigid P.V.C conduit (MMS) ISI Marked of suitable size and 1.5 Sq mm PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per specification for							0.00	
	Light Point/Fan Point							0.00	
	Medium point (up to 6 mtr)		nos	4.00			583.28	2,333.10	
	Long point (up to 10 mtr)		nos	4.00			893.97	3,575.88	
	3 Pin 6 Amp socket outlet on Separate Board							0.00	
	Medium point (up to 6 mtr)		nos	4.00			594.83	2,379.40	
	Circuit Wiring - Wiring for circuit wiring with PVC insulated cable PR with copper multi strand conductor ISI marked in Surface rigid P.V.C conduit (MMS) of ISI marked suitable size including painting etc. as required as per specification							0.00	
	2x2.5 Sq mm		m	30.00			104.00	3,120.00	
	METALLIC SWITCH BOXES - Supplying and fixing factory fabricated hot dip galvanised switch box for normal flush type accessories of minimum 1.2 mm (18 swg gauge) thickness with earth terminal stud with nut and washer, with 4 mm thick synthetic phenolic resin bonded laminated sheet conforming to grade PI of IS 2036-1974 on surface / concealed including painting etc. as required as per specification- MS Box 200 mm X		nos	4			232.16	928.62	
	Supplying of ISI Marked Switch Fuse Unit (rewirable type) triple pole with neutral link ,415 Volt having conduit / cable gland entry with two earthing terminals conforming to IS . 13947(Part I & III) -							0.00	
	63Amp		nos	2.00			3,575.88	7,151.76	
	Supplying, fixing & testing of approved make of low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray including fixing on wall/ Ceiling on wooden round block including wiring & connection as required and suitable for							0.00	
	2 no. 18 watt CFL		nos	4.00			1,677.06	6,708.24	
	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per							0.00	
	18 Watt		nos	8.00			235.62	1,884.96	
	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, deluxe type, including fixing on wall as required, with necessary material complete Fitting(suitable for GLS w/o lamp upto 11 watt Retorted CFL)		nos	4			589	2,356.20	
	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete as required confirming to IS :374/1979 with upto date ammendments. Ceiling Fan (Energy		nos	2.00			1,983.14	3,966.27	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc. complete finished and as required. 300mm sweep 900 RPM		nos	2.00			2,971.82	5,943.63	
	External							0.00	
	Porviding, erecting, testing and commissioning solar street light system on 80 mm heavy duty galvanised iron pipe 6 meter high with 30cm x 30cm x 2mm base plate installed own cement concrete padestal casing complete with solar panel, solar battery with charger, other accessories with control panel in weather proof pole box, solar fitting LED type or CFL type 18 watt to 20 watt (set of 2 nos.)		nos.	2.00			54,109.67	108,219.34	
								0.00	
	Switchgear with Cabling							0.00	
	L.T. Control Switch Gear Panel Board							0.00	
	SITC of wall/free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc/red oxide primer followed by two coats of synthetic enamel paint for powder coating in grey or required shade after rising. The panel having PU/Neoprene rubber gasket of not less than 3mm thickness, separate detachable, gland plate M.S. base channel, hinged door with locking arrangement for equipment/switchgear. Thickness of sheet shall not be less than 2.0mm. Load bearing structure shall be of 2.0mm thick sheet supported by base M.S. channel if required. Side walls and cable alley compartments having bolted type doors with detachable extension type structure (only outer area on all sides shall be measured).		Sq m	8.00			3,840.00	30,720.00	
	Supplying and fixing of electrolytic grade Aluminium bus bar by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending, cutting in required shape and size and colour coding with heat shrinkable PVC sleeves		kg	8			525	4,200.00	
	Incoming Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release 160 Amp, 25/35 kA, adjustable O/L & adjustable S/C setting		No.	1			26,700	26,700.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No.	1			1,740	1,740.00	
	Under Voltage Release		No.	1.0			2,590.00	2,590.00	
	Earth Fault Module		No.	1			1,650	1,650.00	
	Outgoing Panels							0.00	

	Items	Specification	Unit	Qty	I/C Portion (Yen)		L/C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L, & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangability, having positive isolation capability, provision for LVVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc as required With Microprocessor based Release up to 100 Amp, 16 kA, adjustable O/L, & adjustable S/C setting		No	6.00			19,950.00	119,700.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No	6			1,740	10,440.00	
	Under Voltage Release		No	6.00			2,590.00	15,540.00	
	Earth Fault Module		No	6.00			1,650.00	9,900.00	
	SITC of DOI with panel conforming to applicable standards, with Graphical Display with atleast display of 5 different parameters at a time and display of 2 parameters with Bargraph, digital and analogue I/O, relay outputs, adjustable Accel/ Decel times, motor protection, RS 485 serial link for connections to Modbus 11 KW		No	5.00			17,250.00	86,250.00	
	Level transmitters ultrasonic type - 8 meters liquid		No	1.00			110,490.00	110,490.00	
	Automatic start / stop device according to prefixed level in the pump with timer and audio-visual signal or circuit such as hooter arrangement for lowest and highest allowable level in the sump.		No	6			5,000.00	30,000.00	
	Moisture sensing relay. Sensing device to signal and trip the motor against of water into oil chamber.		No	6.00			5,000.00	30,000.00	
	Device for taking signal from the thermister in motor winding and tripping the circuit on reaching pre-set		No	6.00			5,000.00	30,000.00	
	Single phasing preventor.		No	6.00			2,500.00	15,000.00	
	Reverse rotation trip device for motor.		No	5			1,500	7,500.00	
	SITC of self healing MPP/MP type shunt capacitor (banks) conforming to IS:13340-41 / IEC :831-1&2 in existing panel or parallel with load terminals, the capacitor shall be fitted with discharge resistors, pressure sensitive disconnecter (PSD) and shall have dissipation factor less than 0.0025 at 50 Hz and total wattage loss less than 0.5 Watt per KVAR, including making connections with suitable capacity conductors/cables testing as required. Heavy duty Three phase 440 V		KVAR	15.00			1,168.50	17,527.50	
	SITC of microprocessor based intelligent power factor correction relay having following sensing capacity secondary current, self analysing auto c/k setting according to targeted power factor setting, the relay shall have minimum three digit display unit for display of real power factor, targeted power factor, lag/lead capacitor switching status, alarm output for under current, over current, insufficient compensation, indication of switching on units, auto/manual status, and shall have over load protection, no volt release etc. as required. 6 to 8 stage.		No	1.00			27,000.00	27,000.00	
	SF of Current Transformer, with all necessary support in existing panel including connection etc. as required up to 150 / 5 Ratio, 5 VA, class 1 accuracy		No	6			437	2,620.95	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SF of CT linked selector switch of 10 A for Ampere meter (4 position) including making connection etc. as required.		No	6			408.3	2,449.65	
	SF of 240/220 V, LED (22.5 mm dia.) Pilot lamp with integral circuit, terminal block, including connection etc. as required. Red/yellow/ Green colour		Set	15			286	4,282.60	
	Auxiliary Outgoing panels. These shall be required for the following purposes							0.00	
	Flow meter, Level Indicator, Pressure Indicating Devices etc.							0.00	
	For miscellaneous works such as welding, Dewatering pups etc.							0.00	
	Spare Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release up to 100 Amp, 16 kA, adjustable O/L & adjustable S/C setting		No	60			19,950.00	119,700.00	
	P/Laying XLPE insulated / P V C sheathed cable of 1.1 KV grade with aluminium conductor Armoured of IS:7098-I/1554-J approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, II nd class bricks covering, refilling compaction of earth, making necessary connection, testing etc. as required of		m	50			692	34,617.69	
	P & Laying XLPE insulated IS:7098/II/85 of Group I and approved make H.T. cable for working voltage 11 K.V. Earthed direct in ground including excavation of 30cm x100cm size trench, 25cm layer of river sand, II nd class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc. as required of		m	50			1,113	55,673.82	
	Providing & making heat shrinkable type or/ outdoor/ straight through terminations/joint kit of Group I and approved make suitable for XLPE insulated 11 KV cable, with required components, preparation of cable ends, testing etc. as required of		No.	2			12,073	24,146.00	
	Supplying and making one end termination with heavy duty single compression brass gland SIBG type, aluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt grade as required of		Set	2			408	816.55	
	Plate Earthing as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm by embodying 3 to 4 mtr. below the ground level with 20 mm dia. G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete with alternate layers of salt and coke/charcoal, testing of earth resistance as required		Set	4			6,745.10	26,980.39	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required 10 SWG G.I Wire		m	100			6	642.39	
	Power and Control cables for connecting motors of various drives		Lot	1			35,000	35,000.00	
	number of wires and I.S.I marked and suitable for 0.415		sqm	4			1,230.53	4,306.87	
								2,844.344	

	Item#	Specification	Unit	Qty	I/C Portion (Yen)		I/C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
SEWAGE PUMPING STATION IPS-6									
Civil work									
		Excavation for depth as given below in ordinary soil (loam, clay and sand) for foundation including lift upto 1.5 M and lead upto 50 M watering, filling and ramming the excavated earth into the trenches or foundation and removal surplus earth upto distance of 50 M from the foundation trenches.							
	UPJN_SOR_2014-15_3001	0.0 - 1.50 M	m ³	70.91			184.79	13,102.76	
	UPJN_SOR_2014-15_3002	1.50 - 3.00 M	m ³	70.91			231.00	16,379.34	
								0.00	
		Sinking of 7 m external dia well true to vertical, through all types of soil and rock, as shown against each case, (other than pneumatic method of sinking) complete as per drawing and technical specifications including all material, labour, machinery, lighting, guarding and maintenance of diversion complete as per clause 1200 of MoR&T&I						0.00	
	RUDIP_SOR_2013_13.11.1	3.00 - 10.00 m	M	9.3			15,720.00	146,196.00	
	RUDIP_SOR_2013_13.11.2	10.00-11.00 m	M	1.0			18,864	18,864.00	
	RUDIP_SOR_2013_13.11.3	11.00-12.00 m	M	1.0			22,637	22,636.80	
	RUDIP_SOR_2013_13.11.4	12.00-13.00 m	M	1.0			27,164	27,164.16	
								0.00	
		PCC work in 1:2:4 (M-15) cement coarse sand and 20 mm gauge approved stone ballast including supply of all materials, labour, T&P etc. required for proper completion of work.						0.00	
	UPJN_SOR_2014-15_1015	(I) Concrete plug at bottom	m ³	39.77			8,557	340,348.66	
	UPJN_SOR_2014-15_1015	(II) Concrete curb at the bottom	m ³	10.02			8,557	85,747.36	
								0.00	
	UPJN_SOR_2014-15_1017	PCC 1:4:8 in cement Coarse sand and 40mm stone ballast below concrete plugging	m ³	12.07			6,364.00	76,832.88	
								0.00	
		Supply and laying R.C.C. 1:1½:3 in cement and coarse sand and 10-20 mm gauge stone ballast, including labour T&P etc. excluding supply of reinforcement and including fixing and binding required for proper completion of work and supply necessary centering						0.00	
	UPJN_SOR_2014-15_1025	0.00 -1.50 M $0.785 \times (D1^2 - D2^2) \times 1.50$	m ³	17.98			12,715.00	228,555.23	
	UPJN_SOR_2014-15_1025	1.50 -3.00 M	m ³	17.98			13,096.45	235,411.88	
	UPJN_SOR_2014-15_1025	3.00 -4.50 M	m ³	17.98			13,605.05	244,554.09	
	UPJN_SOR_2014-15_1025	4.50 -6.00 M	m ³	17.98			14,240.80	255,981.85	
	UPJN_SOR_2014-15_1025	6.00 -7.50 M	m ³	17.98			15,258.00	274,266.27	
	UPJN_SOR_2014-15_1025	7.50 -9.00 M	m ³	17.98			16,529.50	297,121.80	
	UPJN_SOR_2014-15_1025	9.00-10.50 M	m ³	17.98			18,055.30	324,548.42	
	UPJN_SOR_2014-15_1025	10.50-12.0 M	m ³	11.98			19,962.55	239,221.14	
	UPJN_SOR_2014-15_1025	12.5-13.0 M	m ³					0.00	
								0.00	
		Same as Item No. 5 but for the following:						0.00	
	UPJN_SOR_2014-15_1020	Floor for Pump House	m ³	29.33			10,992.00	322,400.73	
	UPJN_SOR_2014-15_1020	Roof Slab	m ³	29.33			10,992.00	322,400.73	
	UPJN_SOR_2014-15_1020	Ring Beam	m ³	19.32			10,992.00	212,331.12	

		Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
						Unit Price	Amount	Unit Price	Amount	
	UPJN_SOR_2014-15_1020	Beams at floor		m3	33.00			10,992.00	362,736.00	
	UPJN_SOR_2014-15_1020	Lintal Door 2 nos.		m3	2.00			10,992.00	21,984.00	
	UPJN_SOR_2014-15_1020	Lintal windows 4 nos.		m3	6.00			10,992.00	65,952.00	
	UPJN_SOR_2014-15_1020	Ventilators 2 nos.		m3	1.50			10,992.00	16,488.00	
	UPJN_SOR_2014-15_1020	Sunshade							0.00	
	UPJN_SOR_2014-15_1019	(a) Door		m3	0.09			10,992.00	989.28	
	UPJN_SOR_2014-15_1019	(b) Windows		m3	0.29			10,992.00	3,187.68	
	UPJN_SOR_2014-15_1019	Gantry Beam		m3	9.65			10,992.00	106,072.80	
	UPJN_SOR_2014-15_1019	Stairs		m3	7.8			10,992.00	85,957.44	
									0.00	
		Same as item No. 5 but in 1. 1½:3 for							0.00	
	UPJN_SOR_2014-15_1023	Raft		m3	24			12,715.00	303,246.70	
		(ii) Well Curb 3.14x9.30x0.5x0.30x1.00		m3					0.00	
		0.785x9.30x9.30x0.30		m3					0.00	
	UPJN_SOR_2014-15_1091			m3					0.00	
		Screen Platform		m3	4.24			12,715.00	53,898.89	
		Pumping and bailing out of sub-soil water including supply of all labour, T&P fuel etc. during construction		L.S.	1			60,000.00	60,000.00	
									0.00	
	UPJN_SOR_2014-15_1027+1035	First Class brick work in 1:6 cement and local sand mortar in superstructure including supply of all material, labour, T&P etc. for proper completion of		m3	53.81			5,453.00	293,409.79	
									0.00	
		Mild steel of iron work in plain work such as in R.C.C. and R.B. work (when not including in overall rates) wrought required shape as necessary including bending for completion of work and including supply of steel wastage of the							0.00	
	UPJN_SOR_2014-15_1150	Raft @2%		Qtl.	11			9,511.00	108,229.09	
	UPJN_SOR_2014-15_1149	Beam (including ring and gantry beam) @2%		Qtl.	38.86			8,912.00	346,279.78	
	UPJN_SOR_2014-15_1149	Slab and Roof Slab @1%		Qtl.	17.52			8,912	156,148.93	
	UPJN_SOR_2014-15_1149	Lintals and Sunshades @1%		Qtl.	23.55			8,912.00	209,877.60	
	UPJN_SOR_2014-15_1149	Staircase @1%		Qtl.	6.14			8,912.00	54,708.09	
	UPJN_SOR_2014-15_1151	Stening Wall @2%		Qtl.	324.54			9,511.00	3,086,728.76	
	UPJN_SOR_2014-15_1150	Cutting Edge @60kg/m		Ton	13.49			9,511.00	128,298.06	
									0.00	
									0.00	
		Providing and fixing steel glazed doors, windows and ventilaotr of standard rolled steel section joint welded with 15% 3 mm tuge. 10 mm long with steel tuges embeded in cement concrete blocks 15x10x10 cm of 1:3:6 or with fixing slips or with bolts and nuts as required including providing and fixing glass panes with glaging chip sand spuds metal such putty of approved made complete cost of approved steel primer excluding the cost of metal beading and other fitting except		M2	25.40			2,805.00	71,247.00	
									0.00	
		Supply of oxidised iron fitting for doors and windows.		M2	23.00			430.00	9,890.00	
									0.00	
		Supply and fix iron grill including all labour T&P etc. as per design and direction of Engineer Incharge complete in all respoect of work.		M2	22			4,500.00	99,000.00	
									0.00	

		Items	Specification	Unit	Qty	P/C Portion (Yen)		L/C Portion (INR)		Reference
						Unit Price	Amount	Unit Price	Amount	
	UPJN_SOR_2014-15_1235	Painting new iron work in small areas or over new wood work with one coat of primary and two coats of approved enamel including supply of all material, labour, T&P etc. required for proper		M2	398			101.60	40,391.08	
									0.00	
	UPJN_SOR_2014-15_1187.1	12 mm thick cement plaster with 1/6 cement and local sand mortar including supply of all materials labour T&P etc. required for proper completion of work.		M2	256			181.00	46,376.54	
									0.00	
	UPJN_SOR_2014-15_1253	Snowcem painting two coats of required shade including supply of all material and labour, T&P etc. required for proper completion of work on outside the pump house sunshade etc.		M2	333			18.24	6,078.39	
									0.00	
	UPJN_SOR_2013-14_1219	Granolythic marble 25 mm thick consisting of 20 mm thick layer of cement approved coarse sand and 12 mm thick surface coat with ordinary black or grey of mixed marbles chips 8 mm in approved of 1:2 and polished by hand or by machine and finally finished with french mension polish or any other approved polish excluding base concrete and including supply of all materials, labour, T&P etc. required for		M2	40			1,089.00	43,825.17	
									0.00	
		Supply and fix 25 mm GI Pipe railing on angle iron post including supply of all materials, labour, T&P required for proper completion of work							0.00	
		Angle iron 50 mm x 50 mm x 6 mm		M	197			336.00	66,114.72	
		GI Pipe 20 mm dia in three rows		M	285			190.00	54,172.80	
									0.00	
		Supply and fix chequered plates including cost of all materials, labour,		M2	41			2,100.00	86,625.00	
									0.00	
		25 mm thick in 1:2:4 plain cement concrete floor with cement approved C.S. and 3/6 graded approved stone laid in pannel finished with 3 mm floating coat of neat cement or cement and marble dust in ratio of 1:5 specified overlap including 75 mm thick base concrete of brick ballast 40 mm with local sand and cement in ratio of 8:4:1 and removing any overlapping materials at the joints of panels if and giving there including supply of all material,		M2	32			572	18,405.51	
		Other Building Works Based in area rate							0.00	
	CPWD_1.1.1 (B)	a) Operation Room		sqm	9			21,760	195,840.00	
	CPWD_1.1.1 (B)	b) HT Room		sqm	9			21,760	195,840.00	
	CPWD_1.1.1 (B)	c) Transformer Yard and Generator Room		sqm	16			21,760	348,160.00	
									0.00	
									0.00	
		Site clearance and other unforeseen items.							0.00	
									0.00	
		Other works		LS	1			10,000.00	10,000.00	
									0.00	
	Unit Estimate attached	Construction of boundary Wall in Brick Masonary - (230 mm thick, 1 mtr in Length and 1.8 mtr in Height)		Rm	80			5,792.08	463,366.47	
	Unit Estimate attached	M.S. Gate (3.6 Mtr Wide) with Wicket Gate (1.2 Mtr Wide)		No	1			71,348	71,347.98	
									10,994,938.77	
									0.00	
		Mechanical work							0.00	
		Inlet Coarse Bar Screens							0.00	
									0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Mechanical Step type Screens SS304 1 m wide 1 m depth with bar clear bar spacing 20 mm		no	1			299,196.18	299,196.18	
	Supply and installation of one set of complete Manuall cleaned coarse screen in the inlet chamber having the apperture size as 20mm. Screens shall be installed at an inclination of 700		no	1			153,433.94	153,433.94	
	Belt Conveyor -500 mm width		no	1			178,114	178,113.64	
	Screen Collection bin Trolley		no	1			243,178.32	243,178.32	
								0.00	
	Pumping Plants and Its Accessories							0.00	
	Non-clog, single stage, bottom suction submersible pump of Capacity =125 cum/hrs. and head 13m. at Peak Flows		nos	3			456,924.58	1,370,773.74	
	Non-clog, single stage, bottom suction submersible pump of Capacity =50 cum/hrs. and head 13m. at non Peak Flows		nos	2			169,231.33	338,462.65	
	Supplying, erecting, testing & commissioning of Manually Operated Crane (single bridge girder carrying two wheels , complete with chain pulley block, load chain of welded construction of alloy steel as per IS:2429, hand chains for hoisting & traverse mechanism		no	1			239,031.41	239,031.41	
	Providing, installation, testing and commissioning of glycerin filled Pressure gauge of following ranges with isolation valve and tap off pipe complete in all respect as per technical specification and as per direction of Engineer		no	6			1,022.11	6,132.69	
	Tools and Tackles (As Per enclosed list)							0.00	
	a. Chain wrench		No	2			7,500.00	15,000.00	
	b. Pipe wrench		No	3			1,100.00	3,300.00	
	c. Screw wrench		No	3			700.00	2,100.00	
	d. Ring spanners		No.	1			2,000.00	2,000.00	
	e. Double ended spanners		Set	1			1,000.00	1,000.00	
	f. Insulation pliers		No.	1			250.00	250.00	
	g. Hammer with handle		No	2			400.00	800.00	
	h. Hexa blade frame		No	2			150	300.00	
	i. Measuring tape of different size		Set	1			500.00	500.00	
	j. Sprit level set comprising of		No.	1			1,000	1,000.00	
	- Filler gauge		No.	1				0.00	
	- Steel scale		No.	1				0.00	
	- Chisel (150, 200 mm)		No.	1				0.00	
	- File (Flat, half round, round and triangular)		Set	1				0.00	
	k. Maggor HT & LT		No	1			15,000.00	15,000.00	
	l. Crimping Tools		No	1			30,000	30,000.00	
	m. Multimeter		No	1			3,000	3,000.00	
	n. Power Drill		No.	1			5,000	5,000.00	
	Installation of all the equipments etc		job	1			150,000	150,000.00	
	Commissioning of pumping station.		job	1			25,000	25,000.00	
	Testing of pumping plants.		job	1			25,000	25,000.00	
	Painting of all equipment and drives etc.		job	1			35,000	35,000.00	
								0.00	
	Valves and Fittings							0.00	
	Sluice valve							0.00	
	Manually operated Sluice Valve(DI) with H/w, PN10 conforming IS 1538							0.00	
	150 mm dia.		No	6			39,487	236,922.07	
	200 mm dia.		No	1.00			19,985.47	19,985.47	
	Non-Return valve							0.00	

	Items	Specification	Unit	Qty	P.C Portion (₹)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	C.I D/P Swing type Non-Return Valves as per IS 5312, (Part-1 & 2) Single/Multidoor type (with Lever & counterweight 400 mm & above) 700 mm & above Dual Plate Check Valves as per API-594, PN-1.0							0.00	
	150 mm dia		No	6.00			2,630.94	15,785.67	
	200 mm dia		No	1.00			19,985.47	19,985.47	
	D.F.C.I. Pipes and D.F.C.I. Specials							0.00	
	Delivery piping shall commence from 90° discharge duck foot bend of individual pump up to the start of rising main. This shall include column pipe, distance pieces, common header, bends and tees etc. as per following details:-		kg	30,317.00			60.00	1,819,020.00	
								0.00	
	Providing, installation, testing and commissioning of following Stainless steel AISI 304 Expansion bellows of 10 bar rating with tie rods as per technical specifications and layout drawings including jointing material like nuts, bolts, rubber gaskets etc. complete in all respect as per technical specification and as per direction of Engineer							0.00	
	150 mm dia		No	6			6,567	39,399.93	
	Nuts & bolts of SS and rubber insertion packing etc @ 5% of the weight of C.I piping and fittings		Kg	1,515.85			300.00	454,755.00	
								0.00	
	Rising Main							0.00	
	Mechanical							0.00	
	Supply of DI K9 Pipe 200mm Dia		RM	40.00			3,169.10	126,764.00	
	Spacers @ 10% of Cost of pipe		IS	1.00			12,676.40	12,676.40	
	Total Mech. Cost							0.00	
	Civil							0.00	
	Excavation for pipe line in ordinary soil with lift upto 1.5 m and lead upto 50 m including refilling, watering and ramming of excavated earth in trenches after laying pipe line, removal and disposal of surplus material upto a distance of 50 m.		cum	66.00			183.40	12,104.40	
	Laying Of pipe		RM	40.00			1,547.54	61,901.74	
	Total							5,961,872.72	
								0.00	
	DG Sets							0.00	
	SITC or DG Set complete with 1500 RPM Diesel Engine of suitable BHP & AC Brush less SPDP Alternator mounted on a common base Frame & coupled through a flexible coupling or close coupled. Alternator shall be self regulated with standard Alternator Protection(Over voltage, over speed & under voltage). Engine shall have residential silencer, up to 10 M exhaust piping, electronic / Mechanical governor, Manual & electric Start, Batteries, Fuel tank (with Stand) & piping, control panel (16 G) with MCCB (4P, 25 KA), Ammeter, Voltmeter, Frequency Meter, Energy Meter & Hour Meter, Engine instruments panel, AVM and with Weatherproof, powder coated Accoustic enclosure for DG set for sound attenuation fabricated from 2.0 mm CRCA sheet steel (structure) with side wall fabricated from 2.0 mm CRCA sheet & filled with 100mm thick glass wool(96Kg/m3) as per IS 8183 the doors of 100 mm thick and fabricated from 1.6mm CRCA sheet packed with accoustic material. floor of							0.00	
	Air Cooled & Naturally Aspirated-							0.00	
	63 KVA at 0.8 pf 415V 50Hz 3-Ø		no	1.00			946,050.00	946,050.00	

	Items	Specification	Unit	Qty	FC Portion (₹)		LC Portion (₹)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of AUTO MAINS FAILURE (AMF) Panel fabricated from CRCA sheet steel 2mm Thick, Powder coated finish, Engine START & STOP commands, control RELAYS, selector switches for Ammeter & Voltmeter, Ammeter & Voltmeter, Control & Power Contactors, Timers, Electronic Hooter, Visual & Alarm indication for faults, UPS, operator interface panel complete in all respect suitable for following capacity DG sets:							0.00	
	63 KVA at 0.8 pf 415V 50Hz 3-Ø		no.	1.00			150,000.00	150,000.00	
	Complete earthing of the D.G. set, including supply of all materials, construction of earth pits as per I.E rules		Job	1			8,351	8,351.07	
	Supply of 12mm thick PVC rubber matting of 1M x 1M size and with ISI marking.		sqm	6.00			1,406.32	8,437.95	
	First filling of Mobile oil		Job	1.00			5,000.00	5,000.00	
	Installation of D.G. set complete with construction of foundation etc		Job	1.00			35,000.00	35,000.00	
	Commissioning of the D.G. set including fuel for a max. period of 8 hours.		Job	1.00			15,000.00	15,000.00	
	Testing of the D.G. set.		Job	1.00			15,000.00	15,000.00	
								0.00	
	Electro- Magnetic Flow meter							0.00	
	Direct on line Full Bore electro-magnetic Flow meter for sewage application. The flow meter shall be suitable for bi directional flow measurement. This shall be having protection category of the sensor shall be IP68 and protection category for the transmitter shall be IP-65 Accuracy shall be of +/- 5% of measured value without being affected by variation in the line pressure. Equipment should be complete with converter, transmitting device and should be fully programmable with digital flow indicator & integrator etc. The sensor housing and junction box should be of SS 316.		no.	1.00			470,961.00	470,961.00	
								0.00	
	Internal and External Lighting							0.00	
	Internal							0.00	
	Point Wiring in surface rigid P.V.C. conduit system with Flush type Accessories. Point wiring including metallic switch box, sheet, switches, sockets, lamp holders/ceiling roses etc with 1.5 Sq. mm PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per specification for :-							0.00	
	Light Point/Fan Points							0.00	
	Medium point (up to 6 mtr.)		nos	3			583.00	1,749.00	
	Long point (up to 10 mtr.)		nos	3			894	2,682.00	
	3 Pin 6 Amp socket outlet on Separate Board							0.00	
	Medium point (up to 6 mtr.)		nos	3			595.00	1,785.00	
	Circuit Wiring - Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) of ISI marked suitable size including painting etc. as required as per specification							0.00	

	Items	Specification	Unit	Qty	P.C Portion (Yen)		L.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	2x2.5 Sq.mm.		m	30			104	3,121.80	
	METALLIC SWITCH BOXES - Supplying and fixing factory fabricated hot dip galvanised switch box for normal flush type accessories of minimum 1.2 mm (18 swg gauge) thickness with earth terminal stud with nut and washer, with 3 mm thick synthetic phenolic resin bonded laminated sheet conforming to grade P1 of IS 2036-1974 on surface / concealed including painting etc as required as per specification- MS Box 200 mm X 150 mm X 60 mm Deep)		nos.	3			243.21	729.63	
	Supplying of ISI Marked Switch Fuse Unit (rewirable type) triple pole with neutral link, 415 Volt having conduit / cable gland entry with two earthing terminals conforming to IS : 13947(Part I & III) -							0.00	
	63Amp)		nos.	2			3,746.16	7,492.32	
	Supplying, fixing & testing of approved make of low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray including fixing on wall / Ceiling on wooden round block including wiring & connection as required and suitable for CFL as following :- (without lamp)							0.00	
	2 no 18 watt CFL		nos.	4			1,756.92	7,027.68	
	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per specification							0.00	
	18 Watt		nos.	4			246.84	987.36	
	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, delux type, including fixing on wall as required, with necessary material complete Fitting(suitable for GLS w/o lamp upto 11 watt Retorted CFL)		nos.	2			617.10	1,234.20	
	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete as required conforming to IS :374/1979 with upto date ammendments. Ceiling Fan (Energy Saver 50 W)-1200 mm Sweep		nos.	2			2,078	4,155.14	
	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc. complete finished and as required. 300mm sweep 900 RPM		nos.	2			3,113.33	6,226.66	
	External							0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Porviding,erecting, testing and commissioning solar street light system on 80 mm heavy duty galvanised iron pipe 6 meter hight with 30cm x 30cm x 2mm base plate installed own cement concrete padestal casing complete with solar panel, solar battery with charger,other accessories with control panel in weather proof pole box,solar fitting LED type or CFL type 18 watt to 20 watt (set of 2 nos)		nos	2			37,147	74,294.00	
								0.00	
	Switchgear with Cabling							0.00	
	L.T. Control Switch Gear Panel Board.							0.00	
	SITC of wall/free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc/red oxide primer followed by two coats of synthetic enamel paint for powder coating in grey or required shade after rising. The panel having PU/Neoprene rubber gasket of not less than 3mm thickness, separate detachable, gland plate M.S. base channel, hinged door with locking arrangement for equipment/switchgear. Thickness of sheet shall not be less than 2.0mm . Load bearing structure shall be of 2.0mm thick sheet supported by base M.S. channel if required. Side walls and cable alley compartments having bolted type doors with detachable extension type structure (only outer area on all sides shall be measured).Dimensions - 2250(W)X2200(H)X600(D)		Sq m	12			3,840	44,160.00	
	Supplying and fixing of electrolytic grade Aluminium bus bar by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending , cutting in required shape and size and colour coding with heat shrinkable PVC sleeves.		kg	10.0			525.00	5,250.00	
	Incoming Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR , shunt trip ,earth fault trip, push (test) to trip , including making connections with lugs / spreaders etc. as required With Microprocessor based Release. 100 Amp, 25/35 kA, adjustable O/L & adjustable S/C setting		No.	3.0			26,700.00	80,100.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No.	3			1,740	5,220.00	
	Under Voltage Release		No.	3			2,590	7,770.00	
	Earth Fault Module		No.	3			1,650	4,950.00	
	Outgoing Panels							0.00	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release up to 100 Amp, 16 kA, adjustable O/L, & adjustable S/C setting		No	8			19,950	189,600.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No	8			1,740.00	13,920.00	
	Under Voltage Release		No	8			2,590.00	20,720.00	
	Earth Fault Module		No	8			1,650	13,200.00	
	SITC of DOL with panel conforming to applicable standards, with Graphical Display with atleast display of 5 different parameters at a time and display of 2 parameters with Bar graph, digital and analogue I/O, relay outputs, adjustable Accel/ Decel times, motor protection, RS-485 serial link for connections to Modbus 3.7 KW		No	6			17,250	103,500.00	
	Level transmitters ultrasonic type - 8 meters liquid		No	10			110,490.00	110,490.00	
	Automatic start/stop device according to prefixed level in the pump with timer and audio-visual signal or circuit such as hooter arrangement for lowest and highest allowable level in the sump		No	6.00			5,000.00	30,000.00	
	Moisture sensing relay. Sensing device to signal and trip the motor against of water into oil chamber.		No.	6			5,000	30,000.00	
	Device for taking signal from the thermister in motor winding and tripping the circuit on reaching pre-set temperature.		No.	6.00			5,000.00	30,000.00	
	Single phasing preventor.		No.	6.0			2,500.00	15,000.00	
	Reverse rotation trip device for motor		No.	6			1,500	9,000.00	
	SITC of self healing MPP/MP type shunt capacitor (banks) conforming to IS:13340-41 / IEC :831-1&2 in existing panel or parallel with load terminals, the capacitor shall be fitted with discharge resistors, pressure sensitive disconnecter (PSD) and shall have dissipation factor less than 0.0025 at 50 Hz and total wattage loss less than 0.5 Watt per KVAR. including making connections with suitable capacity conductors/cables testing as required. Heavy duty Three phase 440 V, 50 Hz capacitor (Bank)		KVA r	15.0			1,168.50	17,527.50	
	SITC of microprocessor based intelligent power factor correction relay having following sensing capacity secondary current, self analysing auto c/k setting according to targeted power factor setting, the relay shall have minimum three digit display unit for display of real power factor, targeted power factor, lag/lead capacitor switching status, alarm output for under current, over current, insufficient compensation, indication of switching on units, auto/manual status, and shall have over load protection, no volt release etc. as required. 6 to 8 stage. sensitivity more than 50 milli Amp		No	1.0			30,864.10	30,864.10	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SF of Current Transformer , with all necessary support in existing panel including connection etc. as required up to 150 / 5 Ratio , 5 VA , class 1 accuracy		No	5			541	2,704.16	
	SF of CT linked selector switch of 10 A for Ampere meter (4 position) including making connection etc. as required		No.	5			505	2,527.41	
	SF of 240/220 V, LED (22.5 mm dia) Pilot lamp with integral circuit, terminal block, including connection etc. as required. Red/ yellow / Green colour		Set	15			299	4,486.53	
	Auxiliary Outgoing panels. These shall be required for the following purposes :-							0.00	
	Flow meter, Level Indicator, Pressure Indicating Devices etc.							0.00	
	For miscellaneous works such as welding, Dewatering pups etc.							0.00	
	Spare Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR , shunt trip ,earth fault trip, push (test) to trip , including making connections with lugs / spreaders etc. as required With Microprocessor based Release up to 100 Amp , 16 kA, adjustable O/L & adjustable S/C setting		No.	5			23,418	117,091.76	
	P & Laying XLPE insulated / PVC sheathed cable of 1.1 KV grade with aluminium conductor Armoured of IS:7098-II/1554-1 approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, IInd class bricks covering, refilling compaction of earth, making necessary connection, testing etc. as required of size 3 core 50.0 Sq.mm		m	30			857	25,710.00	
	P & Laying XLPE insulated IS:7098-II/85 of Group I and approved make H.T. cable for working voltage 11 K.V. Earthed direct in ground including excavation of 30cm x100cm size trench, 25cm layer of river sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc as required of size.3 core 50.0 Sq.mm		m	30			2,068	62,040.00	
	Providing & making heat shrinkable type or/ outdoor/ straight through terminations/joint kit of Group I and approved make suitable for XLPE insulated 11 KV cable, with required components, preparation of cable ends,testing etc. as required of following sizes 50 sqmm.		No	2			12,073	24,146.00	
	Supplying and making one end termination with heavy duty single compression brass gland SIBG type, aluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt grade as required of size 95sqmm		Set	26			505	13,130.00	

	Items	Specification	Unit	Qty	I/C Portion (Yen)		L/C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Plate Earthing as per IS 3043 with copper earth plate of size 600mm x 600mm x 3.0mm by embodying 3 to 4 mtr below the ground level with 20 mm dia G.I 'B' class watering Pipe including all accessories like nut, bolts, reducer, nipple, wire meshed funnel and C.C finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete with alternate layers of salt and coke/charcoal, testing of earth resistance as required.		Set	6			8,351	50,106.44	
	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc as required 10 SWG G.I Wire		m	50			8	397.67	
	Power and Control cables for connecting motors of various drives.		Lot	1			40,000	40,000.00	
	Rubber matting of 12 mm thickness and ISI marked and suitable for 0.415 KV		sqm	8			1,406	11,250.60	
								2,850,147	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
SEWAGE PUMPING STATION IPS-7									
Civil work									
		Excavation up to following depths below G.L. for laying sewer line, manholes in ordinary soil (earth, sand, loam & clay) including cutting of joints pits ramming dressing, leveling, refilling of trenches in 20cm layer watering and ramming the same including removal of surplus earth or other dismantled material up to a							
UPJN_SOR_2014-15_3001	0.00 - 1.50 M		m3	51.66			184.79	9,546.25	
UPJN_SOR_2014-15_3002	1.50 - 3.00 M		m3	46.22			231.98	10,720.96	
UPJN_SOR_2014-15_3003	3.00 - 4.50 M		m3	41			291	11,953.72	
UPJN_SOR_2014-15_3004	4.50 - 6.00 M		m3	36.14			340.09	12,289.15	
UPJN_SOR_2014-15_3005	6.00 M - 7.5 M		m3	46			443.48	20,395.65	
UPJN_SOR_2014-15_3006	7.5 M - 9.0 M		m3	6			583	3,672.90	
								0.00	
UPJN_SOR_2014-15_1017	Supply and lay PCC 1:4:8 in cement, fine sand and 40mm brick ballast in foundation including supply of all labour, T&P in wet condition		m3	6			8,274	52,128.85	
UPJN_SOR_2014-15_1025	Reinforced cement concrete work 1:1 1/2:3 in raft foundation side wall excluding cost of centering and							0.00	
	Raft/slab		m3	21.00			12,715	267,015.00	
	Walls-Longer							0.00	
	0.00 - 1.50 M		m3	15.75			12,715	200,261.25	
	1.50 - 3.00 M		m3	15.75			13,097.27	206,282.00	
	3.00 - 4.50 M		m3	15.75			13,605.91	214,293.08	
	4.50 - 6.00 M		m3	15.75			14,241.70	224,306.78	
	6.00 M - 7.5 M		m3	15.75			15,258.96	240,328.62	
	7.5 M - 9.0 M		m3	23.00			16,530.54	380,119.77	
								0.00	
	Walls- Shorter							0.00	
	0.00 - 1.50 M		m3	4.50			12,715.00	57,217.50	
	1.50 - 3.00 M		m3	4.50			13,097.27	58,937.72	
	3.00 - 4.50 M		m3	4.50			13,605.91	61,226.60	
	4.50 - 6.00 M		m3	4.50			14,241.70	64,087.65	
	6.00 M - 7.5 M		m3	4.50			15,258.96	68,665.32	
	7.5 M - 9.0 M		m3	6.57			16,530.54	108,605.65	
								0.00	
	Reinforcement of R.C.C. work including, Straightening, cutting, binding in position complete and mild @2% of RCC qty		kg	11,917.48				0.00	
			Qtl	119.17			9,511.00	1,133,471.29	
								0.00	
UPJN_SOR_2014-15_1253	Supply of all materials and painting snow-cem paint inside and outside							0.00	
	Walls-Longer		m2	92.12			18.24	1,680.27	
	Walls- Shorter		m2	52.64			18.24	960.15	
								0.00	
								0.00	
WET WELL									
		Excavation up to following depths below G.L. for laying sewer line, manholes in ordinary soil (earth, sand, loam & clay) including cutting of joints pits ramming dressing, leveling, refilling of trenches in 20cm layer watering and ramming the same including removal of surplus earth or other dismantled material up to a						0.00	
UPJN_SOR_2014-15_3001	0.00 - 1.50 M		m3	85.56			184.79	15,810.63	
UPJN_SOR_2014-15_3002	1.50 - 3.00 M		m3	78.77			231.98	18,271.90	
UPJN_SOR_2014-15_3003	3.00 - 4.50 M		m3	72.24			291.27	21,041.34	
UPJN_SOR_2014-15_3004	4.50 - 6.00 M		m3	66.0			340.09	22,440.84	

		Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
						Unit Price	Amount	Unit Price	Amount	
	UPJN_SOR_2014-15_3005	6.00 M - 7.5 M		m3	88			443.48	38,848.85	
	UPJN_SOR_2014-15_3006	7.5 M - 9.0 M		m3	12			583.00	6,996.00	
									0.00	
	UPJN_SOR_2014-15_1017	Supply and lay PCC 1:4:8 in cement, fine sand and 40mm brick ballast in foundation including supply of all labour, T&P in wet condition.		m3	12			8,274.42	99,293.04	
									0.00	
	UPJN_SOR_2014-15_1025	Reinforced cement concrete work 1:1 ½:3 in raft foundation side wall excluding cost of centering and Raft/slab		m3	40.00			12,715.00	508,600.00	
		Walls-Longer							0.00	
		0.00 - 1.50 M		m3	18.00			12,715.00	228,870.00	
		1.50 - 3.00 M		m3	18.00			13,097.27	235,750.86	
		3.00 - 4.50 M		m3	18.00			13,605.91	244,906.38	
		4.50 - 6.00 M		m3	18.00			14,241.70	256,350.60	
		6.00 M - 7.5 M		m3	18			15,258.96	274,661.28	
		7.5 M - 9.0 M		m3	26.28			16,530.54	434,422.59	
									0.00	
		Walls- Shorter							0.00	
		0.00 - 1.50 M		m3	7.50			12,715.00	95,362.50	
		1.50 - 3.00 M		m3	7.50			13,097.27	98,229.53	
		3.00 - 4.50 M		m3	7.50			13,605.91	102,044.33	
		4.50 - 6.00 M		m3	7.50			14,241.70	106,812.75	
		6.00 M - 7.5 M		m3	7.50			15,258.96	114,442.20	
		7.5 M - 9.0 M		m3	10.95			16,530.54	181,009.41	
									0.00	
		Reinforcement of R.C.C. work including, Straightening, cutting, binding in position complete and mild @2% of RCC qty		kg	16,071.31				0.00	
				Qtl	161			9,511.00	1,528,541.82	
									0.00	
									0.00	
	UPJN_SOR_2014-15_1253	Supply of all materials and painting snow-cem paint inside and outside							0.00	
		Walls-Longer		m2	92			18.24	1,680.27	
		Walls- Shorter		m2	53			18.24	960.15	
									0.00	
	DSR_2013_4.3.2	Centering and shuttering including strutting propping etc. and removal of Screen Chamber							0.00	
		Walls-Longer (Inside/outside)		m2	407			367.40	149,524.45	
		Walls-Short		m2	174			367.40	64,081.91	
		Roof/slab		m2	84			367.40	30,861.60	
		Wet Well						367.40	0.00	
		Walls-Longer (Inside/outside)		m2	465			367.40	170,885.09	
		Walls-Short		m2	291			367.40	106,803.18	
		Roof/slab		m2	160			367.40	58,784.00	
									0.00	
		Pump House							0.00	
	UPJN_SOR_2014-15_1031	Brick work in 1:6 in pump house.		m3	38			5,819	218,212.50	
									0.00	
	UPJN_SOR_2014-15_1025	Reinforced cement concrete work 1:1 ½:3 in raft foundation side wall excluding cost of centering and							0.00	
		Floor for Pump House/ Roof		m3	50			12,715	635,750.00	
									0.00	
		Reinforcement of R.C.C. work including, Straightening, cutting, binding in position complete and mild @2% of RCC qty		kg	3,925				0.00	
				Qtl	39			9,511	373,306.75	
									0.00	
									0.00	
									0.00	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
UPJN SOR_2014-15_1190+1191	12mm thick plaster in 1:6 in pump house							0.00	
	Inner & Outer		m2	150			151	22,699.50	
								0.00	
	Supply and fixing of 1 S.M.B. 250 @ Kg/M 37.30 and M.S. grill, door including one coat of redoxide and two coats of black Japan paint including fabrication, supply and fixing of		Kg	300			90.6	27,180.00	
								0.00	
	Other Building Works Based in area rate	Other Building Works Based in area rate						0.00	
		a) Operation Room	m2	9			21,760	195,840.00	
		b) HT Room	m2	9			21,760	195,840.00	
		c) Transformer Yard and Generator Room	m2	16			21,760	348,160.00	
CPWD_1.1.1 (B)								0.00	
								0.00	
	Site clearance and other unforeseen items	Site clearance and other unforeseen items	LS	1			10,000	10,000.00	
								0.00	
								0.00	
	Construction of boundary Wall in Brick Masonry - (230 mm thick, 1 mtr in Length and 1.8 mtr in Height)	Construction of boundary Wall in Brick Masonry - (230 mm thick, 1 mtr in Length and 1.8 mtr in Height)	RM	80			5,792	463,366.47	
	M.S. Gate (3.6 Mtr Wide) with Wicket Gate (1.2 Mtr Wide)	M.S. Gate (3.6 Mtr Wide) with Wicket Gate (1.2 Mtr Wide)	no	1			71,348	71,347.98	
								11,186,156.83	
	Mechanical work								
	Mechanical Step type Screens SS304 1 m wide 1 m depth with bar clear bar spacing 20 mm		no	1			299,196	299,196.18	
	Supply and installation of one set of complete Manual cleaned coarse screen in the inlet chamber having the aperture size as 20mm. Screens shall be installed at an inclination of 700		no	1			153,433.94	153,433.94	
	Belt Conveyor -500 mm width		no	1			178,113.64	178,113.64	
	Screen Collection bin Trolley		no	1			243,178.32	243,178.32	
								0.00	
	Pumping Plants and Its Accessories							0.00	
	PUMPING PLANTS							0.00	
	Non-clog, single stage, bottom suction submersible pump of Capacity =280cum/hrs and head 13 m. at Peak Flows		nos.	3			1,244,243.85	3,732,731.54	
	Non-clog, single stage, bottom suction submersible pump of Capacity =150 cum/hrs. and head 13 m. at non Peak		nos.	2			657,336	1,314,672.74	
	Supplying, erecting, testing & commissioning of Manually Operated Crane (single bridge girder carrying two wheels, complete with chain pulley block, load chain of welded construction of alloy steel as per IS:2429, hand chains for hoisting & traverse mechanism		no.	1			184,964.78	184,964.78	
	Providing, installation, testing and commissioning of glycerin filled Pressure gauge of following ranges with isolation valve and tap off pipe complete in all respect as per technical specification and as per direction of Tools and Tackles (As Per enclosed list)		no	3			1,168.13	3,504.39	
								0.00	
	a. Chain wrench		No	1			7,500.00	7,500.00	
	b. Pipe wrench		No	1			1,100.00	1,100.00	
	c. Screw wrench		No	1			700.00	700.00	
	d. Ring spanners		No.	1			2,000.00	2,000.00	
	e. Double ended spanners		Set	1			1,000.00	1,000.00	
	f. Insulation pliers		No.	1			250.00	250.00	
	g. Hammer with handle		No	1			400.00	400.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	h. Hexa blade frame		No.	1			150.00	150.00	
	i. Measuring tape of different size		Set	1			500.00	500.00	
	j. Spirit level set comprising of		No.	1			1,000.00	1,000.00	
	- Filler gauge		No.	1				0.00	
	- Steel scale		No.	1				0.00	
	- Chisel (150, 200 mm)		No.	1				0.00	
	- File (Flat, half round, round and triangular)		Set	1				0.00	
	k. Maggor HT & LT		No.	1			15,000.00	15,000.00	
	l. Crimping Tools		No.	1			30,000	30,000.00	
	m. Multimeter		No.	1			3,000.0	3,000.00	
	n. Power Drill		No.	1			5,000.00	5,000.00	
	Installation of all the equipments etc.		job	1			150,000.00	150,000.00	
	Commissioning of pumping station		job	1			25,000	25,000.00	
	Testing of pumping plants		job	1			25,000.00	25,000.00	
	Painting of all equipment and drives		job	1			35,000	35,000.00	
								0.00	
	Valves and Fittings							0.00	
	Sluice valve							0.00	
	Manually operated Sluice Valve(DI) with H/w, PN10 conforming IS 1538							0.00	
	200 mm dia		No.	5			92,310	461,552.27	
	300 mm dia.		No.	1			209,484	209,483.79	
	Non-Return valve							0.00	
	C.I.D/F Swing type Non-Return Valves as per IS 5312, (Part-1 & 2)							0.00	
	Single/Multidoor type (with Lever & counterweight 400 mm & above) 700 mm & above Dual Plate Check Valves							0.00	
	200 mm dia		No.	5			49,284	246,419.53	
	300 mm dia.		No.	1			118,961.15	118,961.15	
	D.F.C.I. Pipes and D.F.C.I. Specials							0.00	
	Delivery piping shall commence from 90° discharge duck foot bend of individual pump up to the start of rising main. This shall include column pipe, distance pieces, common header, bends and tees etc. as per following details:-		kg	12,325.00			60.00	739,500.00	
								0.00	
	Providing, installation, testing and commissioning of following Stain less steel AISI 304 Expansion bellows of 10 bar rating with tie rods as per technical specifications and layout drawings including jointing material like nuts, bolts, rubber gaskets etc. complete in all respect as per technical specification and as per							0.00	
	200 mm dia.		No.	5.00			3,169.10	15,845.50	
	Nuts & bolts of SS and rubber insertion /packing etc @ 5% Of the weight of CI piping and fittings		Kg	616.25			300.00	184,875.00	
								0.00	
	Rising Main							0.00	
	Mechanical							0.00	
	Supply of DI K9 Pipe 300 mm Dia.		RM	40.00			4,269.10	170,764.00	
	Spacials @ 10% of Cost of pipe		LS				17,076	0.00	
	Total Mech. Cost							0.00	
	Civil							0.00	
	Excavation for pipe line in ordinary soil with lift upto 1.5 m and lead upto 50 m including refilling, watering and ramming of excavated earth in trenches after laying pipe line, removal and disposal of surplus material upto a		cum	54.00			183.40	9,903.60	
	Laying Of pipe		RM	40.00			1,547.54	61,901.74	
	Total Mech. Cost							8,631,602.11	
								0.00	
	Electrical work							0.00	
	DG Sets							0.00	

	Items	Specification	Unit	Qty	P.C Portion (Yen)		L.C Portion (INR)		Reference	
					Unit Price	Amount	Unit Price	Amount		
	STTC of DG Set complete with 1500 RPM Diesel Engine of suitable BHP & AC Brush less SPDP Alternator mounted on a common base Frame & coupled through a flexible coupling or close coupled Alternator shall be self regulated with standard Alternator Protection(Over voling , over speed & under voltage) Engine shall have residential silencer, up to 10 M exhaust piping , electronic / Mechanical governor, Manual & electric Start ,Batteries, Fuel tank (with Stand) & piping , control panel (16 G) with MCCB (4P, 25 KA), Ammeter, Voltmeter, Frequency Meter, Energy Meter & Hour Meter, Engine instruments panel, AVM and with Weatherproof, powder coated Accoustic enclosure for DG set for sound attenuation fabricated from 2.0 mmCRCA sheet steel (structure) with side wall fabricated from 2.0 mm CRCA sheet & filled with 100mm thick glass wool(96Kg/m ³) as per IS 8183 the doors of 100 mm thick and fabricated from 1.6mm CRCA sheet							0.00		
	Auto Cooled & Naturally Aspirated- 125 KVA at 0.8 pf 415V 50Hz 3-Ø		no.	1			1,317,600.00	1,317,600.00	0.00	
	STTC of AUTO MAINS FAILURE (AMF) Panel fabricated from CRCA sheet steel 2mm Thick , Powder coated finish. Engine START & STOP commands control RELAYS, selector switches for Ammeter & Voltmeter, Ammeter & Voltmeter , Control & Power Contactors, Timers, Electronic Hooter ,Visual & Alarm indication for faults, UPS, operator interface panel complete								0.00	
	125 KVA at 0.8 pf 415V 50Hz 3-Ø		no.	1			225,000.00	225,000.00		
	Complete earthing of the D.G. set, including supply of all materials, construction of earth pits as per I.E.		Job	1			8,351.07	8,351.07		
	Supply of 12mm thick PVC rubber matting of 1M x 1M size and with ISI		sqm	6			1,406.32	8,437.95		
	First filling of Mobile oil		Job	1			5,000.00	5,000.00		
	Installation of D.G. set complete with construction of foundation etc.		Job	1			35,000.00	35,000.00		
	Commissioning of the D.G. set including fuel for a max period of 8		Job	1			15,000.00	15,000.00		
	Testing of the D.G. set.		Job	1			15,000	15,000.00		
								0.00		
	Electro- Magnetic Flow meter							0.00		
	Direct on line Full Bore electro-magnetic Flow meter for sewage application. The flow meter shall be suitable for bi directional flow measurement. This shall be having protection category of the sensor shall be IP68 and protection category for the transmitter shall be IP- 65 Accuracy shall be of +/- 5% of measured value without being affected by variation in the line pressure. Equipment should be complete with converter, transmitting device and should be fully programmable with digital flow indicator & integrator etc. The sensor		no.	1			616,566.00	616,566.00		
								0.00		
	Internal and External Lighting							0.00		
	Internal							0.00		
	Point Wiring in surface rigid P.V.C. conduit system with Flush type							0.00		
	Light Point/Fan Points.							0.00		
	Medium point (up to 6 mtr.)		nos.	3			583	1,749.00		
	Long point (up to 10 mtr.)		nos.	3			894.00	2,682.00		
	3 Pin 6 Amp socket outlet on Separate Board							0.00		
	Medium point (up to 6 mtr.)		nos.	3			595	1,785.00		

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Circuit Wiring - Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) of ISI marked suitable size including painting etc. as required as per specification							0.00	
	2x2.5 Sq.mm		m	30			104.06	3,121.80	
	METALLIC SWITCH BOXES - Supplying and fixing factory fabricated hot dip galvanised switch box for normal flush type accessories of minimum 1.2 mm (18 swg gauge) thickness with earth terminal stud with nut and washer, with 3 mm thick synthetic phenolic resin bonded laminated sheet conforming to grade PI of IS:2036-1974 on surface / concealed including painting etc. as required as per specification- MS Box 200 mm X		nos	3			243	729.63	
	Supplying of ISI Marked Switch Fuse Unit (rewirable type) triple pole with neutral link ,415 Volt having conduit / cable gland entry with two earthing terminals confirming to IS : 13947(Part							0.00	
	63Amp		nos	2			3,746.16	7,492.32	
	Supplying, fixing & testing of approved make of low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray including fixing on wall/ Ceiling on wooden round block including wiring & connection as required and suitable for							0.00	
	2 no 18 watt CFL		nos	4			1,757	7,027.68	
	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per							0.00	
	18 Watt		nos	4			246.84	987.36	
	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, deluxe type, including fixing on wall as required, with necessary material complete Fitting/suitable for GLS w/o		nos	2			617.10	1,234.20	
	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete as required confirming to IS :374/1979 with upto date amendments Ceiling Fan (Energy		nos.	2			2,077.57	4,155.14	
	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc complete finished and as required 300mm sweep 900 RPM		nos.	2			3,113.33	6,226.66	
	External							0.00	
	Porviding, erecting, testing and commissioning solar street light system on 80 mm heavy duty galvanised iron pipe 6 meter high with 30cm x 30cm x 2mm base plate installed own cement concrete pedestal casing complete with solar panel, solar battery with charger, other accessories with control panel in weather proof pole box, solar fitting LED type or CFL type 18 watt to		nos.	2			37,147.00	74,294.00	
								0.00	
	Switchgear with cabling							0.00	
	L.T. Control Switch Gear Panel Board							0.00	

	Items	Specification	Unit	Qty	PC Portion (Yen)		L.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SITC of wall/free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc/red oxide primer followed by two coats of synthetic enamel paint for powder coating in grey or required shade after rising. The panel having PU/Neoprene rubber gasket of not less than 3mm thickness, separate detachable, gland plate M.S. base channel, hinged door with locking arrangement for equipment/switchgear. Thickness of sheet shall not be less than 2.0mm. Load bearing structure shall be of 2.0mm thick sheet supported by base M.S. channel if required. Side walls and cable alley compartments having bolted type doors with detachable extension type structure (only outer		Sqm	11.30			3,840.00	44,160.00	
	Supplying and fixing of electrolytic grade Aluminium bus bar by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending, cutting in required shape and size and colour coding with heat shrinkable PVC		kg	10			509	5,090.18	
	Incoming Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release 100 Amp, 25/35 kA, adjustable O.L. & adjustable S/C setting		No	3			19,950	59,850.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No.	3			1,740	5,220.00	
	Under Voltage Release		No	3.0			2,590.00	7,770.00	
	Earth Fault Module		No	3.0			1,650.00	4,950.00	
	Outgoing Panels							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release up to 100 Amp, 16 kA, adjustable O/L & adjustable S/C setting		No	6			19,950	119,700.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No.	5			1,740	8,700.00	
	Under Voltage Release		No	5			2,590	12,950.00	
	Earth Fault Module		No	5			1,650.00	8,250.00	
	SITC of S/D with panel conforming to applicable standards, with Graphical Display with atleast display of 5 different parameters at a time and display of 2 parameters with Bargraph, digital and analogue I/O, relay outputs, adjustable Accel/ Decel times, motor protection, RS 485 serial link for connections to Modbus. 18.5KW		No.	5			24,900	124,500.00	
	Level transmitters ultrasonic type - 8 meters liquid		No.	1			110,040	110,040.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Automatic start / stop device according to prefixed level in the pump with timer and audio-visual signal or circuit such as hooter arrangement for lowest and highest allowable level in the sump.		No.	6			5,000.00	30,000.00	
	Moisture sensing relay. Sensing device to signal and trip the motor against of water into oil chamber.		No.	6			5,000.00	30,000.00	
	Device for taking signal from the thermister in motor winding and tripping the circuit on reaching pre-set		No.	6			5,000	30,000.00	
	Single phasing preventor.		No.	6			2,500	15,000.00	
	Reverse rotation trip device for motor.		No.	6.0			1,500.00	9,000.00	
	SITC of self healing MPP/MP type shunt capacitor (banks) conforming to IS:13340-41 / IEC :831-1&2 in existing panel or parallel with load terminals , the capacitor shall be fitted with discharge resistors, pressure sensitive disconnecter (PSD) and shall have dissipation factor less than 0.0025 at 50 Hz and total wattage loss less than 0.5 Watt per KVAR including making connections with suitable capacity conductors/cables testing as required Heavy duty Three phase 440 V		KVAR	30.00			1,168.50	35,055.00	
	SITC of microprocessor based intelligent power factor correction relay having following sensing capacity secondary current , self analysing auto c/k setting according to targeted power factor setting, the relay shall have minimum three digit display unit for display of real power factor, targeted power factor, lag/lead capacitor switching status, alarm output for under current, over current, insufficient compensation, indication of switching on units, auto/manual status, and shall have over load protection, no volt release etc. as required. 6 to 8 stage		No	1			31,399	31,399.07	
	SF of Current Transformer , with all necessary support in existing panel including connection etc. as required up to 150 / 5 Ratio , 5 VA , class 1		No.	5.00			540.83	2,704.16	
	SF of CT linked selector switch of 10 A for Ampere meter (4 position) including making connection etc. as		No	5.0			505.48	2,527.41	
	SF of 240/220 V, LED (22.5 mm dia) Pilot lamp with integral circuit, terminal block, including connection etc. as required Red/ yellow / Green colour		Set	15			299	4,486.53	
	Auxiliary Outgoing panels. These shall be required for the following purposes							0.00	
	Flow meter, Level Indicator, Pressure Indicating Devices etc.							0.00	
	For miscellaneous works such as welding, Dewatering pups etc							0.00	
	Spare Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR , shunt trip ,earth fault trip, push (test) to trip , including making connections with lugs / spreaders etc. as required With Microprocessor based Release up to 100 Amp , 16 kA, adjustable O/L & adjustable S/C setting		No.	5			19,950	99,750.00	
	P/Laying XLPE insulated / P V C sheathed cable of 1.1 KV grade with aluminium conductor Armoured of IS:7098-1/1554-1 approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, 11nd class bricks covering, refilling compaction of earth, making necessary connection, testing etc as required of		m	30			857	25,716.00	

	Item	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
SEWAGE PUMPING STATION IPS-7									
Civil work									
		Excavation for depth as given below in ordinary soil (loam, clay and sand) for foundation including lift upto 1.5 M and lead upto 50 M watering, filling and ramming the excavated earth into the trenches or foundation and removal surplus earth upto distance of 50 M from the foundation trenches							
UPJN_SOR_2014-15_3001	0.0 - 1.50 M		m ³	71.13			184.79	13,143.32	
UPJN_SOR_2014-15_3002	1.50 - 3.00 M		m ³	71.13			231.00	16,430.03	
								0.00	
		Sinking of 7 m external dia well true to vertical, through all types of soil and rock, as shown against each case, (other than pneumatic method of sinking) complete as per drawing and technical specifications including all material, labour, machinery, lighting, guarding and maintenance of diversion complete as per clause 1200 of MoRT&I specification in clayey soil						0.00	
RUDIP_SOR_2013_13.11.1	3.00 - 10.00 m		M				15,720.00	0.00	
RUDIP_SOR_2013_13.11.2	10.00-11.00 m		M				18,864	0.00	
RUDIP_SOR_2013_13.11.3	11.00-12.00 m		M				22,637	0.00	
RUDIP_SOR_2013_13.11.4	12.00-13.00 m		M				27,164	0.00	
								0.00	
		PCC work in 1:2:4 (M-15) cement coarse sand and 20 mm gauge approved stone ballast including supply of all materials, labour, T&P etc. required for proper completion of work						0.00	
UPJN_SOR_2014-15_1015	(I) Concrete plug at bottom.		m ³	41.00			8,557	350,852.52	
UPJN_SOR_2014-15_1015	(II) Concrete curb at the bottom		m ³	10.23			8,557	87,542.82	
								0.00	
UPJN_SOR_2014-15_1017	PCC 1:4:8 in cement, Coarse sand and 40mm stone ballast below concrete plugging		m ³	12.11			6,364.00	77,090.64	
								0.00	
		Supply and laying R.C.C. 1:1½:3 in cement and coarse sand and 10-20 mm gauge stone ballast, including labour T&P etc. excluding supply of reinforcement and including fixing and binding required for proper completion of work and supply necessary centering and shuttering in string wall.						0.00	
UPJN_SOR_2014-15_1025	0.00 -1.50 M 0.785x(D1 ² -D2 ²)x1.50		m ³	18.18			12,715.00	231,130.16	
UPJN_SOR_2014-15_1025	1.50 -3.00 M		m ³	18.18			13,096.45	238,064.06	
UPJN_SOR_2014-15_1025	3.00 -4.50 M		m ³	18.18			13,605.05	247,309.27	
UPJN_SOR_2014-15_1025	4.50 -6.00 M		m ³	18.18			14,240.80	258,865.78	
UPJN_SOR_2014-15_1025	6.00 -7.50 M		m ³	18.18			15,258.00	277,356.19	
UPJN_SOR_2014-15_1025	7.50 -9.00 M		m ³	18.18			16,529.50	300,469.20	
UPJN_SOR_2014-15_1025	9.00-10.50 M		m ³	18.18			18,055.30	328,204.82	
UPJN_SOR_2014-15_1025	10.50-12.0 M		m ³	12.12			19,962.55	241,916.23	
UPJN_SOR_2014-15_1025	12.5-13.0 M		m ³					0.00	
								0.00	
		Same as Item No. 5 but for the following:						0.00	
UPJN_SOR_2014-15_1020	Floor for Pump House		m ³	29.39			10,992.00	323,094.44	
UPJN_SOR_2014-15_1020	Roof Slab		m ³	29.39			10,992.00	323,094.44	
UPJN_SOR_2014-15_1020	Ring Beam		m ³	19.38			10,992.00	213,043.44	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
UPJN_SOR_2014-15_1020	Beams at floor		m3	33.00			10,992.00	362,736.00	
UPJN_SOR_2014-15_1020	Lintal Door 2 nos.		m3	2.00			10,992.00	21,984.00	
UPJN_SOR_2014-15_1020	Lintal windows 4 nos.		m3	6.00			10,992.00	65,952.00	
UPJN_SOR_2014-15_1020	Ventilators 2 nos.		m3	1.50			10,992.00	16,488.00	
UPJN_SOR_2014-15_1020	Sunshade							0.00	
UPJN_SOR_2014-15_1019	(a) Door		m3	0.09			10,992.00	989.28	
UPJN_SOR_2014-15_1019	(b) Windows		m3	0.29			10,992.00	3,187.68	
UPJN_SOR_2014-15_1019	Gantry Beam		m3	9.65			10,992.00	106,072.80	
UPJN_SOR_2014-15_1019	Stairs		m3	7.8			10,992.00	85,957.44	
	Same as item No. 5 but in 1. 1½, 3 for							0.00	
UPJN_SOR_2014-15_1023	Raft		m3	25			12,715.00	313,627.03	
	(ii) Well Curb 3.14x9.3x0.5x0.30x1.00		m3					0.00	
	0.785x9.30x9.30x0.30		m3					0.00	
UPJN_SOR_2014-15_1091			m3					0.00	
	Screen Platform		m3	4.24			12,715.00	53,898.89	
	Pumping and bailing out of sub-soil water including supply of all labour, T&P fuel etc. during construction		Job	1.00			6,000.00	6,000.00	
								0.00	
UPJN_SOR_2014-15_1027+1035	First Class brick work in 1:6 cement and local sand mortar in superstructure including supply of all material, labour, T&P etc. for proper completion of		m3	53.89			5,453.00	293,841.27	
								0.00	
	Mild steel of iron work in plain work such as in R.C.C. and R.B. work (when not including in overall rates) wrought required shape as necessary including bending for completion of work and including supply of steel wastage of the							0.00	
UPJN_SOR_2014-15_1150	Raft @2%		Qtl.	11			9,511.00	108,587.47	
UPJN_SOR_2014-15_1149	Beam (including ring and gantry beam) @2%		Qtl.	38.86			8,912.00	346,279.78	
UPJN_SOR_2014-15_1149	Slab and Roof Slab @1%		Qtl.	17.54			8,912.00	156,316.84	
UPJN_SOR_2014-15_1149	Lintals and Sunshades @1%		Qtl.	23.55			8,912.00	209,877.60	
UPJN_SOR_2014-15_1149	Staircase @1%		Qtl.	6.14			8,912.00	54,708.09	
UPJN_SOR_2014-15_1151	Stening Wall @2%		Qtl.	328.20			9,511.00	3,121,504.20	
UPJN_SOR_2014-15_1150	Cutting Edge @60kg/m		Ton	13.51			9,511.00	128,513.09	
								0.00	
								0.00	
	Providing and fixing steel glazed doors, windows and ventilator of standard rolled steel section joint welded with 15% 3 mm tuge. 10 mm long with steel tuges embedded in cement concrete blocks 15x10x10 cm of 1:3:6 or with fixing slips or with bolts and nuts as required including providing and fixing glass panes with glazing chip sand spuds metal such putty of approved made complete cost of approved steel primer excluding the cost of metal beading and other fitting except		M2	25.40			2,805.00	71,247.00	
								0.00	
	Supply of oxidised iron fitting for doors and windows		M2	23.00			430.00	9,890.00	
								0.00	
	Supply and fix iron grill including all labour T&P etc. as per design and direction of Engineer Incharge complete in all respect of work.		M2	22			4,500.00	99,000.00	
								0.00	

		Items	Specification	Unit	Qty	P.C. Portion (Yen)		L.C. Portion (INR)		Reference
						Unit Price	Amount	Unit Price	Amount	
	UPJN_SOR_2014-15_1235	Painting new iron work in small areas or over new wood work with one coat of primary and two coats of approved enamel including supply of all material, labour, T&P etc. required for proper		M2	398			101.60	40,391.08	
									0.00	
	UPJN_SOR_2014-15_1187i	12 mm thick cement plaster with 1:6 cement and local sand mortar including supply of all materials labour T&P etc required for proper completion of work		M2	257			181.60	46,444.74	
									0.00	
	UPJN_SOR_2014-15_1253	Snowcem painting two coats of required shade including supply of all material and labour, T&P etc. required for proper completion of work on outside the pump house sunshade etc.		M2	333			18.24	6,079.76	
									0.00	
	UPJN_SOR_2014-14_1219	Granolytic marble 25 mm thick consisting of 20 mm thick layer of cement approved coarse sand and 12 mm thick surface coat with ordinary black or grey of mixed marbles chips 8 mm in approved of 1:2 and polished by hand or by machine and finally finished with french menson polish or any other approved polish excluding base concrete and including supply of all materials, labour, T&P etc. required for		M2	40			1,089.00	43,972.19	
									0.00	
		Supply and fix 25 mm G.I. Pipe railing on angle iron post including supply of all materials, labour, T&P required for proper completion of work							0.00	
		Angle iron 50 mm x 50 mm x 6 mm		M	197			336.00	66,114.72	
		G.I. Pipe 20 mm dia in three rows		M	285			190.00	54,172.80	
									0.00	
		Supply and fix chequered plates including cost of all materials, labour,		M2	41			2,100.00	86,625.00	
		25 mm thick in 1:2:4 plain cement concrete floor with cement approved		M2	32			572	18,467.25	
		Other Building Works Based in area rate							0.00	
	CPWD_1.1.1 (B)	a) Operation Room		sqm	9			21,760	195,840.00	
	CPWD_1.1.1 (B)	b) HT Room		sqm	9			21,760	195,840.00	
	CPWD_1.1.1 (B)	c) Transformer Yard and Generator		sqm	16			21,760	348,160.00	
									0.00	
		Site clearance and other unforeseen items		Job	1			10,000	10,000.00	
									0.00	
		Other works							0.00	
									0.00	
		Construction of boundary Wall in Brick Masonry - (230 mm thick, 1 mtr in Length and 1.8 mtr in Height)		Rm	80			5,792.08	463,366.47	
		M.S. Gate (3.6 Mtr Wide) with Wicket Gate (1.2 Mtr Wide)		No	1			71,348	71,347.98	
									10,811,087.81	
		Mechanical work								
		Mechanical Step type Screens SS304 1 m wide 1 m depth with bar clear bar spacing 20 mm		no	1			299,196	299,196.18	
		Supply and installation of one set of complete Manual cleaned coarse screen in the inlet chamber having the aperture size as 20mm. Screens shall be installed at an inclination of 700		no	1			153,433.94	153,433.94	
		Belt Conveyor -500 mm width		no	1			178,113.64	178,113.64	
		Screen Collection bin Trolley		no	1			243,178.32	243,178.32	
									0.00	
		Pumping Plants and Its Accessories							0.00	
		Non-clog, single stage, bottom suction submersible pump of Capacity =160 cum/hrs. and head 21 m. at Peak Flows		nos.	3			707,694.64	2,123,083.91	
		Non-clog, single stage, bottom suction submersible pump of Capacity =65 cum/hrs. and head 17 m. at non Peak		nos.	2			600,001.97	1,200,003.95	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Supplying, erecting, testing & commissioning of Manually Operated Crane (single bridge girder carrying two wheels, complete with chain pulley block, load chain of welded construction of alloy steel as per IS:2429, hand chains for hoisting &		no.	1			239,031	239,031.41	
	Providing, installation, testing and commissioning of glycerin filled Pressure gauge of following ranges with isolation valve and tap off pipe complete in all respect as per technical specification and as per direction of Tools and Tackles (As Per enclosed list)		no.	6			1,022.11	6,132.69	
								0.00	
	a. Chain wrench		No.	2			7,500.00	15,000.00	
	b. Pipe wrench		No.	3			1,100.00	3,300.00	
	c. Screw wrench		No.	3			700.00	2,100.00	
	d. Ring spanners		No.	1			2,000.00	2,000.00	
	e. Double ended spanners		Set	1			1,000.00	1,000.00	
	f. Insulation pliers		No.	1			250.00	250.00	
	g. Hammer with handle		No.	2			400.00	800.00	
	h. Hexa blade frame		No.	2			150.00	300.00	
	i. Measuring tape of different size		Set	1			500.00	500.00	
	j. Spirit level set comprising of		No.	1			1,000.00	1,000.00	
	- Filler gauge		No.	1				0.00	
	- Steel scale		No.	1				0.00	
	- Chisel (150, 200 mm)		No.	1				0.00	
	- File (Flat, half round, round and triangular)		Set	1				0.00	
	k. Maggor HT & LT		No.	1			15,000	15,000.00	
	l. Crimping Tools		No.	1			30,000.00	30,000.00	
	m. Multimeter		No.	1			3,000	3,000.00	
	n. Power Drill		No.	1			5,000.0	5,000.00	
	Installation of all the equipments etc		job	1			150,000.00	150,000.00	
	Commissioning of pumping station.		job	1			25,000.00	25,000.00	
	Testing of pumping plants.		job	1			25,000	25,000.00	
	Painting of all equipment and drives etc		job	1			35,000.00	35,000.00	
								0.00	
								0.00	
	Valves and Fittings							0.00	
	Sluice valve							0.00	
	Manually operated Sluice Valve(DI) with H/w, PN10 conforming IS 1538							0.00	
	150 mm dia.		No	6			26,321	157,925.21	
	200 mm dia.		No	1			77,541	77,540.78	
	Non-Return valve							0.00	
	C I D/F Swing type Non-Return Valves as per IS 5312, (Part-1 & 2) Single/Multidoor type (with Lever & counterweight 400 mm & above) 700 mm & above Dual Plate Check Valves							0.00	
	150 mm dia		No	6			6,567	39,399.93	
	200 mm dia.		No	1			41,398.48	41,398.48	
	D.F.C.I. Pipes and D.F. C.I. Specials							0.00	
	Delivery piping shall commence from 90° discharge duck foot bend of individual pump up to the start of rising main. This shall include column pipe, distance pieces, common header, bends and tees etc. as per following details:-		kg	30,317.00			60.00	1,819,020.00	
								0.00	
	Providing, installation, testing and commissioning of following Stain less steel AISI 304 Expansion bellows of 10 bar rating with tie rods as per technical specifications and layout drawings including jointing material like nuts, bolts, rubber gaskets etc. complete in all respect as per technical specification and as per							0.00	
	150 mm dia		nos.	6.00			4,863.61	29,181.65	
	Nuts & bolts of SS and rubber insertion /packing etc. @ 5% of the weight of CI piping and fittings		kg	1,515.85			300.00	454,755.00	
								0.00	

	Item	Specification	Unit	Qty	I/C Portion (Yen)		L/C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Ring Main							0.00	
	Mechanical							0.00	
	Supply of DI K9 Pipe 200mm Dia		RM	260			3,169	82,966.00	
	Specials @ 10% of Cost of pipe		LS	1.00			82,396.60	82,396.60	
	Civil							0.00	
	Excavation for pipe line in ordinary soil with lift upto 1.5 m and lead upto 50 m including refilling, watering and ramming of excavated earth in trenches after laying pipe line, removal and disposal of surplus material upto a		cum	429.00			183.40	78,678.60	
	Laying Of pipe		RM	260.00			1,547.54	402,361.31	
	Total							8,763,047.60	
	Electrical work							0.00	
	SITE OF D.G. SET complete with 1500 RPM Diesel Engine of suitable BHP & AC Brush less SPDP Alternator mounted on a common base Frame & coupled through a flexible coupling or close coupled Alternator shall be self regulated with standard Alternator Protection (Over voltage, over speed & under voltage) Engine shall have residential silencer, up to 10 M exhaust piping, electronic Mechanical governor, Manual & electric Start, Batteries, Fuel tank (with Stand) & piping, control panel (16 G) with MCCB (4P, 25 KA), Ammeter, Voltmeter, Frequency Meter, Inergy Meter & Hour Meter, Engine instruments panel, AVM and with Weatherproof, powder coated Acoustic enclosure for DG set for sound attenuation fabricated from 2.0 mm CRCA sheet steel (structure) with side wall fabricated from 2.0 mm CRCA sheet & filled with 100mm thick glass wool(96Kg/m3) as per IS 8183 the doors of 100 mm thick and fabricated from 1.6mm CRCA sheet coated with acoustic material. Rest of Air Cooled & Naturally Aspirated- Along with AMF Panel							0.00	
	75KVA at 0.8 pf 415V 50Hz 3-Ø SITE OF AUTO MAINS FAILURE (AMF) Panel fabricated from CRCA sheet steel 2mm Thick, Powder coated finish, Engine START & STOP commands, control RELAYS, selector switches for Ammeter & Voltmeter, Ammeter & Voltmeter, Control & Power Contactors, Timers, Electronic Hooter, Visual & Alarm indication for faults, UPS, operator interface panel complete in all respect suitable for following capacity D.G. sets.		no.	1.00			1,108,200.00	1,108,200.00	
	75 KVA at 0.8 pf 415V 50Hz 3-Ø Complete power wiring along with cables & materials from D.G. set to the Incoming Panel of L.T. panel as per I.E.		LS	1			25,000.00	25,000.00	
	Complete earthing of the D.G. set, including supply of all materials, construction of earth pits as per I.E.		Job	1			16,000.00	16,000.00	
	Supply of 2mm thick PVC rubber matting of 1M x 1M size and with ISI		sqm	6			1,230.53	7,383.20	
	First filling of Mobile oil		Job	1			5,000.00	5,000.00	
	Installation of D.G. set complete with construction of foundation etc		Job	1			25,000.00	25,000.00	
	Commissioning of the D.G. set including fuel for a max. period of 8		Job	1			15,000.00	15,000.00	
	Testing of the D.G. set		Job	1			15,000	15,000.00	
	Electro- Magnetic Flow meter							0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Direct on line Full Bore electro-magnetic Flow meter for sewage application. The flow meter shall be suitable for bi directional flow measurement. This shall be having protection category of the sensor shall be IP68 and protection category for the transmitter shall be IP- 65. Accuracy shall be of +/- 5% of measured value without being affected by variation in the line pressure. Equipment should be complete with converter, transmitting device and should be fully programmable with digital flow indicator & integrator etc. The sensor		no.	1			598,159.50	598,159.50	
								0.00	
	Internal and External Lighting							0.00	
	Internal							0.00	
	Point Wiring in surface rigid P V C conduit system with Flush type Accessories Point wiring including metallic switch box, sheet, switches, sockets, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P V C. conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per							0.00	
	Light Point/Fan Points							0.00	
	Medium point (up to 6 mtr.)		nos.	4			583	2,333.10	
	Long point (up to 10 mtr.)		nos.	4			893.97	3,575.88	
	3 Pin 6 Amp socket outlet on Separate Board							0.00	
	Medium point (up to 6 mtr.)		nos.	4			595	2,379.30	
	Circuit Wiring - Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P V C. conduit (MMS) of ISI marked suitable size including painting etc. as required as per specification							0.00	
	2x2.5 Sq.mm.		m	30			104.00	3,120.00	
	METALLIC SWITCH BOXES - Supplying and fixing factory fabricated hot dip galvanised switch box for normal flush type accessories of minimum 1.2 mm (18 swg gauge) thickness with earth terminal stud with nut and washer, with 3 mm thick synthetic phenolic resin bonded laminated sheet conforming to grade PI of IS 2036-1974 on surface / concealed including painting etc. as required as per specification- MS Box 200 mm X		nos.	4			232	928.62	
	Supplying of ISI Marked Switch Fuse Unit (rewirable type) triple pole with neutral link, 415 Volt having conduit / cable gland entry with two earthing terminals confirming to IS . 13947(Part I & III) -							0.00	
	63Amp		nos.	2			3,575.88	7,151.76	
	Supplying, fixing & testing of approved make of low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray including fixing on wall/ Ceiling on wooden round block including wiring & connection as required and suitable for							0.00	
	2 no 18 watt CFL		nos.	4			1,677	6,708.24	
	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per							0.00	
	18 Watt		nos.	8			235.62	1,884.96	

	Items	Specification	Unit	Qty	I/C Portion (Yen)		I.C Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, deluxe type, including fixing on wall as required, with necessary material complete fitting (suitable for GLS w/o lamp upto 11 watt Retorted CFL)		nos	2			589.05	1,178.10	
	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete as required conforming to IS :374/1979 with upto date amendments. Ceiling Fan (Energy		nos	2			1,983.14	3,966.27	
	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc complete finished and as required 300mm sweep, 900 RPM		nos	2			2,971.82	5,943.63	
	External							0.00	
	Providing, erecting, testing and commissioning solar street light system on 80 mm heavy duty galvanised iron pipe 6 meter light with 30cm x 30cm x 2mm base plate installed own cement concrete pedestal casing complete with solar panel, solar battery with charger, other accessories with control panel in weather proof pole box, solar fitting LED type or CFL type 18 watt to		nos	2			53,187.75	106,375.50	
								0.00	
	Switchgear with Cabling							0.00	
	L.T Control Switch Gear Panel Board.							0.00	
	SITC of wall/free standing floor mounted dust and vermin proof compartmentalised cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc/red oxide primer followed by two coats of synthetic enamel paint for powder coating in grey or required shade after rising. The panel having PU/Neoprene rubber gasket of not less than 3mm thickness, separate detachable, gland plate M.S. base channel, hinged door with locking arrangement for equipment/switchgear. Thickness of sheet shall not be less than 2.0mm. Load bearing structure shall be of 2.0mm thick sheet supported by base M.S. channel if required. Side walls and cable alley compartments having bolted type doors with detachable		Sq m	10.00			3,840.00	38,400.00	
	Supplying and fixing of electrolytic grade Aluminium bus bar by means of SMC / DMC type insulator, high tensile nuts and bolts spring washers in existing panel including bending, cutting in required shape and size and colour coding with heat shrinkable PVC		kg	8			411	3,289.04	
	Incoming Panel							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required. With Microprocessor based Release. 200 Amp, 25/35 kA, adjustable O/L & adjustable S/C setting.		No.	3			33,000	99,000.00	
	Supply and fixing of following accessories for MCCB							0.00	

	Items	Specification	Unit	Qty	FC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	Shunt trip Release		No.	3			1,740	5,220.00	
	Under Voltage Release		No.	3.0			2,590.00	7,770.00	
	Earth Fault Module		No.	3.0			1,650.00	4,950.00	
	Outgoing Panels							0.00	
	SITC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc. as required With Microprocessor based Release up to 100 Amp, 16 kA, adjustable O/L & adjustable S/C setting		No.	6			19,950	119,700.00	
	Supply and fixing of following accessories for MCCB							0.00	
	Shunt trip Release		No.	6			1,740	10,440.00	
	Under Voltage Release		No.	6			2,590	15,540.00	
	Earth Fault Module		No.	6			1,650.00	9,900.00	
	SITC of DOL with panel conforming to applicable standards, with Graphical Display with atleast display of 5 different parameters at a time and display of 2 parameters with Bargraph, digital and analogue I/O, relay outputs, adjustable Accel/Decel times, motor protection, RS 485 serial link for connections to Modbus. 3.7/5.5KW		No.	5			17,250	86,250.00	
	Level transmitters ultrasonic type - 8 meters liquid		No.	1			110,490	110,490.00	
	Automatic start / stop device according to prefixed level in the pump with timer and audio-visual signal or circuit such as hooter arrangement for lowest and highest allowable level in the sump.		No.	6			5,000.00	30,000.00	
	Moisture sensing relay. Sensing device to signal and trip the motor against of water into oil chamber		No.	6			5,000.00	30,000.00	
	Device for taking signal from the thermister in motor winding and tripping the circuit on reaching pre-set		No.	6			5,000	30,000.00	
	Single phasing preventor		No.	6			2,500	15,000.00	
	Reverse rotation trip device for motor.		No.	6.0			1,500.00	9,000.00	
	SITC of self healing MPP/MP type shunt capacitor (banks) conforming to IS:13340-41 / IEC :831-1&2 in existing panel or parallel with load terminals, the capacitor shall be fitted with discharge resistors, pressure sensitive disconnecter (PSD) and shall have dissipation factor less than 0.0025 at 50 Hz and total wattage loss less than 0.5 Watt per KVAR. including making connections with suitable capacity conductors/cables testing as required. Heavy duty Three phase 440 V		KVA r	20.00			1,168.50	23,370.00	
	SITC of microprocessor based intelligent power factor correction relay having following sensing capacity secondary current, self analysing auto c/k setting according to targeted power factor setting, the relay shall have minimum three digit display unit for display of real power factor, targeted power factor, lag/lead capacitor switching status, alarm output for under current, over current, insufficient compensation, indication of switching on units, auto/manual status, and shall have over load protection, no volt release etc. as required. 6 to 8 stage.		No.	1			27,006	27,006.08	
	SF of Current Transformer, with all necessary support in existing panel including connection etc. as required up to 150 / 5 Ratio, 5 VA, class 1		No.	6.00			436.83	2,620.95	
	SF of CT linked selector switch of 10 A for Ampere meter (4 position) including making connection etc. as		No.	6.0			408.27	2,449.65	

	Items	Specification	Unit	Qty	PC Portion (Yen)		LC Portion (INR)		Reference
					Unit Price	Amount	Unit Price	Amount	
	SP of 240/220 V, LED (22.5 mm dia) Pilot lamp with integral circuit, terminal block, including connection etc as required. Red/ yellow/ Green colour Auxiliary Outgoing panels. These shall be required for the following purposes		Set	15			286	4,282.60	
	Flow meter, Level Indicator, Pressure Indicating Devices etc							0.00	
	For miscellaneous works such as welding, Dewatering pumps etc							0.00	
	Spare Panel							0.00	
	SFTC of quick make and quick break 4 POLE current limiting MCCB having following current rating, short circuit breaking capacity at 440-415 V, 50 Hz, O/L & S/C settings and conforming to IS 13947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangability, having positive isolation capability, provision for VVR, shunt trip, earth fault trip, push (test) to trip, including making connections with lugs / spreaders etc as required With Microprocessor based Release up to 100 Amp, 16 kA, adjustable O/L & adjustable S/C setting		No.	5			19,950	99,750.00	
	P/Laying XLPE insulated / PVC sheathed cable of 11 KV grade with aluminium conductor Armoured of IS.7098-1/1554-1 approved make in ground as per IS 1785 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, 11nd class bricks covering, refilling compaction of earth, making necessary connection, testing etc. as required of		m	50			692	34,617.69	
	P & Laying XLPE insulated IS:7098 11/85 of Group1 and approved make 11 K.V. Earthed direct in ground including excavation of 30cm x100cm size trench, 25cm layer of river sand, 11nd class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc.as required of		m	50			1,113	55,673.82	
	Providing & making heat shrinkable type or 'outdoor/ straight through terminations/joint kit of Group1 and approved make suitable for XLPE insulated 11 KV cable, with required components, preparation of cable ends,testing etc. as required of		No.	2.00			12,073.0	24,146.00	
	Supplying and making one end termination with heavy duty single compression brass gland SIBG type, aluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt grade as required of		Set	6			408	2,449.65	
	Plate Earthing as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm by embodying 3 to 4 mtr below the ground level with 20 mm dia. G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete with alternate layers of salt and		Set	4			6,745	26,980.39	
	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required. 10 SWG G.I. Wire		m	100			6	642.39	
	Power and Control cables for connecting motors of various drives		Lot	1			35,000	35,000.00	
	Rubber matting of 12 mm thickness and ISI marked and suitable for 0.415		sqm	4			1,231	4,306.87	
								3,153,533	

