

"Un-Priced Bid Format" Cum "Schedule of Quantity" Volume-II of NIT
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Abstract of the sheet	
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Name of the Work:: “E&C works for Mechanical & Electrical package and material handling for 6 Nos. Sewage Treatment Plant for Raipur Development Authority, Raipur Chhattisgarh”.

Tender Ref no. T0AUX00078 dated:26.11.2021

[illegible]

Section 1.0 ERECTION,TESTING COMMISSIONING AND PAINTING APPLICATION FOR EQUIPMENT.																				
			STP-1:7.4 MLD			STP-2: 4.33 MLD			STP-3: 7.05 MLD			STP-4: 1.79 MLD			STP-5: 0.872 MLD			STP-6: 3.98 MLD		
Sl. No.	Description	Unit	Qty	Weight Each (kgs)	Total wt in (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)
1	Mechanical Coarse screen	No.	1	3000	3000	1	2900	2900	1	3000	3000							1	2900	2900
2	Manual Coarse screen	No.	1	500	500	1	500	500	1	500	500	2	350	700	2	350	700	1	500	500
3	Mechanical Fine screen	No.	1	800	800	1	750	750	1	800	800			0			0	1	750	750
4	Manual Fine screen	No.	1	300	300	1	300	300	1	300	300	2	300	600	2	300	600	1	300	300
5	Belt conveyor with motor (Coarse screen)	No.	1	450	450	1	450	450	1	450	450			0			0	1	450	450
6	Belt conveyor with motor (Fine screen)	No.	1	450	450	1	450	450	1	450	450			0			0	1	450	450
7	Grit Separator scrapper	No.	1	2500	2500	1	2400	2400	1	2500	2500			0			0	1	2400	2400
8	Organic pump	No.	1	300	300	1	300	300	1	300	300			0			0	1	300	300
9	Classifier	No.	1	1000	1000	1	1000	1000	1	1000	1000			0			0	1	1000	1000
10	Decanter with components such as VFD, motor with gearbox, switches	No.	2	4500	9000	2	4500	9000	2	4500	9000	2	3000	6000	2	3000	6000	2	4500	9000
11	Diffusers with Air pipe grid with supports, hardware, etc.,	lot	1	6000	6000	1	5500	5500	1	6000	6000	1	3500	3500	1	3500	3500	1	5500	5500
12	Poly electrolyte Dosing Pump and motor	No.	2	150	300	2	150	300	2	150	300	2	150	300	2	150	300	2	150	300
13	Poly electrolyte Agitator	No.	1	150	150	1	150	150	1	150	150	1	150	150	1	150	150	1	150	150
14	NaOCl Dosing tank	No.			0			0			0	1	200	200	1	200	200			0
15	NaOCl Dosing pump with motor	No.			0			0			0	1	150	150	1	150	150			0
16	Agitator in Sludge sump with motor	NO.			0			0			0	1	200	200	1	200	200			0
17	Gas Chlorination System				0			0			0			0			0			0
18	Chlorine tonner	no.	3	1000	3000	3	950	2850	3	950	2850			0			0	3	950	2850
19	Aborption tank (complete system with agitator and motor)	lot	1	500	500	1	500	500	1	500	500			0			0	1	500	500
20	Chlorinator skid	no.	1	100	100	1	100	100	1	100	100			0			0	1	100	100
21	Basket Strainer	no.	2	50	100	2	50	100	2	50	100			0			0	2	50	100
22	Booster pumps with motor	no.	2	100	200	2	100	200	2	100	200			0			0	2	100	200
23	Recirculation pumps	no.	2	100	200	2	100	200	2	100	200			0			0	2	100	200
24	Blowers with motor	no.	2	200	400	2	200	400	2	200	400			0			0	2	200	400
25	Piping including valves	lot	1	500	500	1	500	500	1	500	500			0			0	1	500	500
26	Miscellenious components	lot	1	2000	2000															

Section 2.0: FABRICATION, RADIOGRAPHY, ERECTION, TESTING COMMISSIONING AND PAINTING APPLICATION FOR PIPING

					STP-1: 7.40 MLD		STP-2: 4.33 MLD		STP-3: 7.05 MLD		STP-4: 1.79 MLD		STP-5: 0.872 MLD		STP-6: 3.98 MLD	
Item No.	Item Description	Matl	UOM	U Wt	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)
1	14" DUCTILE IRON PIPE FLANGED	DI	mts		54	4293			91.5	7274.25						
2	14" DUCTILE IRON PIPE SPIGOT	DI	mts		126	10017			213.5	16973.25						
3	12" DUCTILE IRON PIPE FLANGED	DI	mts				85.5	5502.78								
4	12" DUCTILE IRON PIPE SPIGOT	DI	mts				199.5	12839.82							69	4440.84
5	10" DUCTILE IRON PIPE FLANGED	DI	mts		13.5	698.895			13.5	698.895					161	10361.96
6	10" DUCTILE IRON PIPE SPIGOT	DI	mts		31.5	1630.755			31.5	1630.755						
7	8" DUCTILE IRON PIPE FLANGED	DI	mts				10.5	412.335			39	1531.53				
8	8" DUCTILE IRON PIPE SPIGOT	DI	mts				24.5	962.115			91	3573.57			10.5	412.335
9	6" DUCTILE IRON PIPE FLANGED	DI	mts		48	1404.96			48	1404.96	10.5	307.335	39	1141.53	24.5	962.115
10	6" DUCTILE IRON PIPE SPIGOT	DI	mts		112	3278.24			112	3278.24	24.5	717.115	91	2663.57		
11	4" DUCTILE IRON PIPE FLANGED	DI	mts				43.5	838.245						10.5	202.335	
12	4" DUCTILE IRON PIPE SPIGOT	DI	mts				101.5	1955.905						24.5	472.115	15
13	3" DUCTILE IRON PIPE FLANGED	DI	mts		52.5	811.125	48	741.6	52.5	811.125	58.5	903.825	51	787.95	35	674.45
14	3" DUCTILE IRON PIPE SPIGOT	DI	mts		122.5	1892.625	112	1730.4	122.5	1892.625	136.5	2108.925	119	1838.55	52.5	811.125
15	12" HDPE PIPE	HDPE	mts		20	342.6	45	770.85	40	685.2					122.5	1892.625
16	10" HDPE PIPE	HDPE	mts		15	202.8										
17	8" HDPE PIPE	HDPE	mts								25	219.25				
18	6" HDPE PIPE	HDPE	mts								30	168	30	168	45	394.65
19	4" HDPE PIPE	HDPE	mts										20	43		
20	12" MS PIPE	MS	mts		100	5545			100	5545						
21	10" MS PIPE	MS	mts				95	3964.35								
22	8" MS PIPE	MS	mts		20	665.6			20	665.6						
23	6" MS PIPE	MS	mts				20	424			70	1484			90	2995.2
24	4" MS PIPE	MS	mts		70	1008			70	1008	20	288	90	1296	20	424
25	3" MS PIPE	MS	mts				60	606								
26	2" MS PIPE	MS	mts		15	92.55	15	92.55	15	92.55	35	215.95	30	185.1	55	55.55
27	8" SS PIPE	SS	mts		30	598.2			30	598.2					15	92.55
28	6" SS PIPE	SS	mts		20	276.2	50	690.5	20	276.2	15	207.15				
29	4" SS PIPE	SS	mts										15	125.4	50	690.5
30	3" SS PIPE	SS	mts		15	96.75			15	96.75						
31	2" SS PIPE	SS	mts		50	271.5	65	352.95	50	271.5	15	81.45	15	81.45		
32	1-3/4" SS PIPE	SS	mts		280	1131.2			345	1393.8					65	352.95
33	1-1/2" SS PIPE	SS	mts				230	777.4								
34	1" SS PIPE	SS	mts		45	112.5	40	100	40	100	40	100	40	100	230	777.4
35	10" GI PIPE	GI	mts		60	2503.8			60	2503.8					40	100
36	8" GI PIPE	GI	mts		30	998.4	60	1996.8	30	998.4						
37	6" GI PIPE	GI	mts		25	530	55	1830.4	25	530	60	1996.8			60	1996.8
38	4" GI PIPE	GI	mts								30	432			55	1830.4
39	3" GI PIPE	GI	mts								25	252.5	105	1060.5		
40	2" GI PIPE	GI	mts													
41	12" CS MO BUTTERFLY VALVE	CS	nos		310	1912.7	250	1542.5	310	1912.7	195	1203.15	195	1203.15		
42	10" CS MO BUTTERFLY VALVE	CS	nos		2	297.26			2	297.26					250	1542.5
43	8" CS MO BUTTERFLY VALVE	CS	nos				2	268.18								
44	6" CS MO BUTTERFLY VALVE	CS	nos								2	226.36			2	242.72
45	4" CS MO BUTTERFLY VALVE	CS	nos		2	217.26			2	217.26			2	217.26		
46	3" CS MO BUTTERFLY VALVE	CS	nos				2	209.08								
47	5" CS MO BUTTERFLY VALVE	CS	nos								2	207.5			2	209.08
48	1-3/4" CS MO BUTTERFLY VALVE	CS	nos										2	207		
49	1-1/2" CS MO BUTTERFLY VALVE	CS	nos													

Section 2.0: FABRICATION, RADIOGRAPHY, ERECTION, TESTING COMMISSIONING AND PAINTING APPLICATION FOR PIPING

Item No.	Item Description	Matl	UOM	U Wt	STP-1: 7.40 MLD		STP-2: 4.33 MLD		STP-3: 7.05 MLD		STP-4: 1.79 MLD		STP-5: 0.872 MLD		STP-6: 3.98 MLD	
					Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)
50	1" CS MO BUTTERFLY VALVE	CS	nos													
51	12" CS HO BUTTERFLY VALVE	CS	nos		2	97.26	4	194.52	4	194.52						
52	10" CS HO BUTTERFLY VALVE	CS	nos		2	68.18										
53	8" CS HO BUTTERFLY VALVE	CS	nos		4	85.44			4	85.44	2	42.72				
54	6" CS HO BUTTERFLY VALVE	CS	nos		2	26.36	6	79.08	2	26.36	2	26.36	2	26.36	4	85.44
55	4" CS HO BUTTERFLY VALVE	CS	nos								4	34.52	4	34.52	6	79.08
56	3" CS HO BUTTERFLY VALVE	CS	nos								3	13.62	4	18.16		
57	2" CS HO BUTTERFLY VALVE	CS	nos		4	15										
58	1-3/4" CS HO BUTTERFLY VALVE	CS	nos				2	7	4	14	2	7	2	7		
59	1-1/2" CS HO BUTTERFLY VALVE	CS	nos				2	6							2	7
60	2" CS HO BALL VALVE	CS	nos		6	87.96	2	29.32			2	29.32	2	29.32	2	6
61	1-3/4" CS HO BALL VALVE	CS	nos		12	113.4	2	18.9	18	170.1	2	18.9	2	18.9	2	29.32
62	1-1/2" CS HO BALL VALVE	CS	nos				12	108							2	18.9
63	1" CS HO BALL VALVE	CS	nos				2	10.5			14	73.5	14	73.5	12	108
64	3" SS HO BALL VALVE	SS	nos		2	52.36			2	52.36					2	10.5
65	2" SS HO BALL VALVE	SS	nos				2	29.32			2	29.32	2	29.32		
66	1" SS HO BALL VALVE	SS	nos		6	31.5	6	31.5	6	31.5	6	31.5	6	31.5	2	29.32
67	1" CS MO SOLENOID	CS	nos		2	10	2	10	2	10	2	10	2	10	6	31.5
68	24"X24" CI MO SLUICE GATE	CI	nos		2	1263.6									2	10
69	20"X22" CI MO SLUICE GATE	CI	nos						2	965.25						
70	16"X20" CI MO SLUICE GATE	CI	nos				2	702								
71	14"X16" CI MO SLUICE GATE	CI	nos								2	491.4			2	702
72	14"X14" CI MO SLUICE GATE	CI	nos										2	429.975		
73	24"X24" CI HO SLUICE GATE	CI	nos		2	842.4										
74	20"X22" CI HO SLUICE GATE	CI	nos						2	643.5						
75	16"X20" CI HO SLUICE GATE	CI	nos				2	468								
76	14"X16" CI HO SLUICE GATE	CI	nos								2	327.6			2	468
77	14"X14" CI HO SLUICE GATE	CI	nos										2	286.65		
78	28"X40" CI HO SLUICE GATE	CI	nos		4	3276			4	3276						
79	28"X32" CI HO SLUICE GATE	CI	nos				4	2620.8								
80	26"X32" CI HO SLUICE GATE	CI	nos													
81	16"X28" CI HO SLUICE GATE	CI	nos								6	1965.6			4	2433.6
82	24"X26" CI HO SLUICE GATE	CI	nos										6	1368.9		
83	30"X38" CI HO SLUICE GATE	CI	nos		1	833.625			1	833.625						
84	28"X38" CI HO SLUICE GATE	CI	nos		1	778.05			1	778.05						
85	26"X34" CI HO SLUICE GATE	CI	nos				2	1292.85								
86	12" CS SWING CHECK VALVE	CS	nos	597.66			2	1195.32	2	1195.32					2	1292.85
87	10" CS SWING CHECK VALVE	CS	nos		4	1510.36			2	755.18						
88	8" CS SWING CHECK VALVE	CS	nos		2	427.9	2	427.9	2	427.9						
89	6" CS SWING CHECK VALVE	CS	nos	101.98	2	203.96	4	407.92	2	203.96	4	407.92			4	855.8
90	4" CS SWING CHECK VALVE	CS	nos								2	112.14	6	336.42	4	407.92
91	3" CS SWING CHECK VALVE	CS	nos	32.17							2	64.34	2	64.34		
92	2" CS SWING CHECK VALVE	CS	nos		2	34.66										
93	1-3/4" CS SWING CHECK VALVE	CS	nos						2	24.4						
94	1-1/2" CS SWING CHECK VALVE	CS	nos				2	17								
95	14" CI HO KNIFE GATE VALVE	CI	nos		2	796.48	2	796.48	2	796.48					2	17

Section 2.0: FABRICATION, RADIOGRAPHY, ERECTION, TESTING COMMISSIONING AND PAINTING APPLICATION FOR PIPING

					STP-1: 7.40 MLD		STP-2: 4.33 MLD		STP-3: 7.05 MLD		STP-4: 1.79 MLD		STP-5: 0.872 MLD		STP-6: 3.98 MLD	
Item No.	Item Description	Matl	UOM	U Wt	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)	Length(m)	Weight(Kg)
96	12" CI HO KNIFE GATE VALVE	CI	nos													
97	10" CI HO KNIFE GATE VALVE	CI	nos		2	400.7			2	400.7					2	608.52
98	8" CI HO KNIFE GATE VALVE	CI	nos				2	252.34			2	252.34				
99	6" CI HO KNIFE GATE VALVE	CI	nos		1	76.48			1	76.48	2	152.96	2	152.96	2	252.34
100	4" CI HO KNIFE GATE VALVE	CI	nos				1	43.88								
101	3" CI HO KNIFE GATE VALVE	CI	nos		4	108.36	4	108.36	4	108.36	5	135.45	5	135.45		
102	6" CS DUAL PLATE CHECK	CS	nos		2	203.96			2	203.96					5	135.45
103	4" CS DUAL PLATE CHECK	CS	nos				2	112.14								
104	3" CS DUAL PLATE CHECK	CS	nos								2	64.34	2	64.34		
105	CPVC FITTINGS	CPVC	Lot			375.785		375.785		375.785		375.785		375.785	2	64.34
106	Structural steel	MS	kgs			8500		8500		8500		8500		8500		375.785
107	Fabrication, welding and mounting of Hook -up items for Instruments	MS	kgs			3000		3000		3000		3000		3000		8500
Total weight(In Metric Ton)					64.05		59.45		74.31		32.39		26.79		48.08	
Total weight (In MT) for all six nos of STPs =						305.06										
Rate (in Rs./ MT) =																
Amount (Rs.) =																

Section 3: Electrical & C&I Works													
Item No.	Description	Qty	UNIT	Rate in Rs.	Amount in Rs.	Weight Each (kgs)	Weightage %	STP-1: 7.4 MLD	STP-2: 4.33 MLD	STP-3: 7.05 MLD	STP-4: 1.79 MLD	STP-5: 0.872 MLD	STP-6: 3.98 MLD
1	Installation of 600mm width, L=2500mm ladder type straight run cable tray along with accessories including coupler plate:	400	Nos.			27	0.3920976%	75	75	75	50	50	75
2	Installation of 600mm width cover for ladder type cable tray	300	Nos.			20	0.2940958%	50	50	50	50	50	50
3	Installation of 300mm width, L=2500mm ladder type straight run cable tray along with accessories including coupler plate:	300	Nos.			15	0.3321821%	50	50	50	50	50	50
4	Installation of 300mm width cover for ladder type cable tray	150	Nos.			10	0.1660911%	25	25	25	25	25	25
5	Installation of 300mm width perforated type straight run cable tray along with accessories including coupler plates	800	Nos.			25	0.8858190%	150	150	150	100	100	150
6	Installation of 3000mm width cover for ladder type cable tray	300	Nos.			20	0.3321821%	50	50	50	50	50	50
7	Installation of 150mm width perforated type straight run cable tray along with accessories including coupler plates	300	Nos.			18	0.2242257%	50	50	50	50	50	50
8	Installation of 150mm width cover for ladder type cable tray	700	Nos.			18	0.5231934%	150	100	150	100	100	100
9	Installation of 50mm width perforated type straight run cable tray along with accessories including coupler plates	120	Nos.			12	0.0597996%	20	20	20	20	20	20
10	Installation of 50mm width cover for ladder type cable tray	360	Nos.			12	0.1793987%	60	60	60	60	60	60
11	Installation of weather proof LCS with start/stop PB	18	Nos.			6000	0.0797224%	3	3	3	3	3	3
12	Laying of Electrical control cable (5C X1.5)sqmm Cu	1000	mts				0.1238671%	200	150	200	150	150	150
13	Laying of Electrical control cable (10C X1.5)sqmm Cu	3500	mts				0.7223822%	600	600	600	550	550	600
14	Laying of Electrical control cable (16C X1.5)sqmm Cu	17000	mts				2.6318552%	3500	2500	3500	2500	2500	2500
15	Installation of STP MCC FIXED DB (Centrifuge area, Auto screen area, DAF system, raw sewage, sludge sump)	18	set				0.0797224%	3	3	3	3	3	3
16	Installation of wall mounted DBs	12	set			10	0.0884433%	2	2	2	2	2	2
17	Installation of UPS system	6	set			700	0.1993020%	1	1	1	1	1	1
18	Installation of UPS Battery isolation Box	6	set			40	0.0000000%	1	1	1	1	1	1
19	Installation of UPS Battery	6	set			1500	0.0000000%	1	1	1	1	1	1
20	Installation of wall mounted UPSDB	6	set			100	0.0000000%	1	1	1	1	1	1
21	Installation of DC system battery charger	6	set			350	0.1993020%	1	1	1	1	1	1
22	Installation of DC Battery isolation Box	6	set			40	0.0000000%	1	1	1	1	1	1
23	Installation of DC Battery	6	set			900	0.0000000%	1	1	1	1	1	1
24	Installation of HT Energy metering cubicle	6	set				1.7334796%	1	1	1	1	1	1
25	Installation of 125kva DG set with AMF Panel	2	set			3000	0.2338722%	1	0	1	0		0
26	Installation of 82.5kva DG set with AMF Panel	2	set				0.1543566%		1		0	0	1
27	Installation of 50kva DG set with AMF Panel	2	set				0.0935494%				1	1	
28	Installation of 315kva oil type transformer (11kv/415v)	8	Nos.			2500	2.0261460%	2	2	2			2
29	Installation of 200kva oil type transformer (11kv/415v)	2	Nos.				0.5065371%				2		
30	Installation of 100kva oil type transformer (11kv/415v)	2	Nos.				0.5065371%					2	
31	Installation of HT switch boards	6	Nos.			5000	1.7334796%	1	1	1	1	1	1
32	Installation of EPABX central exchange system (intercom)	6	Nos.				0.4643249%	1	1	1	1	1	1
33	Installation of telephones	36	Nos.				0.2807706%	6	6	6	6	6	6
34	Installation of telephone cables	6000	mts				0.6813065%	1000	1000	1000	1000	1000	1000
35	Installation of Erection hardware for EPABX system	1	lot				1.0836275%	1	1	1	1	1	1
36	Installation of Insulating mats-Upto 3.3kv (2.0mm) thick	18	Nos.			30	0.7800671%	3	3	3	3	3	3
37	Installation of Insulating mats-above 3.3kv & upto 11kv (2.5mm) thick	6	Nos.			40	0.2600214%	1	1	1	1	1	1

Section 3: Electrical & C&I Works													
Item No.	Description	Qty	UNIT	Rate in Rs.	Amount in Rs.	Weight Each (kgs)	Weightage %	STP-1: 7.4 MLD	STP-2: 4.33 MLD	STP-3: 7.05 MLD	STP-4: 1.79 MLD	STP-5: 0.872 MLD	STP-6: 3.98 MLD
38	Laying of HT power cables -11kv 3Cx240 AL sqmm cable	1200	mts				0.5387201%	200	200	200	200	200	200
39	Installation of HT cable termination kits for 3C x240sqmm	36	Nos.				0.4364663%	6	6	6	6	6	6
40	Laying of LT Power cables 1Cx10sqmm Cu unarmoured	1200	mts				0.1857780%	200	200	200	200	200	200
41	Laying of LT Power cables 1Cx70sqmm Cu unarmoured	1200	mts				0.2785767%	200	200	200	200	200	200
42	Laying of LT Power cables 3CX4 AL, armoured, XLPE	16000	mts				1.9818731%	3000	3000	3000	2000	2000	3000
43	Laying of LT Power cables 3CX10 AL, armoured, XLPE	750	mts				0.1161113%	150	150	150	75	75	150
44	Laying of LT Power cables 3CX16 AL, armoured, XLPE	500	mts				0.0774075%		100		150	150	100
45	Laying of LT Power cables 3CX25 AL, armoured, XLPE	1300	mts				0.2137893%	150	500	150	0	0	500
46	Laying of LT Power cables 3CX35 AL, armoured, XLPE	700	mts				0.1354631%	100	100	100	150	150	100
47	Laying of LT Power cables 3CX70 AL, armoured, XLPE	1100	mts				0.2553619%	200	200	200	150	150	200
48	Laying of LT Power cables 3CX120 AL, armoured, XLPE	500	mts				0.1160736%	250	0	250	0	0	0
49	Laying of LT Power cables 3.5CX300 AL, armoured, XLPE	4400	mts				1.0214477%	750	750	750	700	700	750
50	Laying of LT Power cables 4CX25 AL, armoured, XLPE	250	mts				0.0411133%	150	0	100	0	0	0
51	Laying of LT Power cables 4CX10 AL, armoured, XLPE	500	mts				0.0774075%	75	75	75	100	100	75
52	Laying of LT Power cables 3CX6 AL, armoured, XLPE	500	mts				0.0619335%	0	100	0	150	150	100
53	Installation of Double compression nickle plated brass cable glands for safe area suitable for 10-12.5mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
54	Installation of Double compression nickle plated brass cable glands for safe area suitable for 13-18mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
55	Installation of Double compression nickle plated brass cable glands for safe area suitable for 18.5 - 20mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
56	Installation of Double compression nickle plated brass cable glands for safe area suitable for 20.5 - 23mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
57	Installation of Double compression nickle plated brass cable glands for safe area suitable for 23.5 - 26mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
58	Installation of Double compression nickle plated brass cable glands for safe area suitable for 26.5 - 30mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
59	Installation of Double compression nickle plated brass cable glands for safe area suitable for 30.5 - 33mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
60	Installation of Double compression nickle plated brass cable glands for safe area suitable for 33.5 - 37mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
61	Installation of Double compression nickle plated brass cable glands for safe area suitable for 37.5 - 41mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
62	Installation of Double compression nickle plated brass cable glands for safe area suitable for 41.5 - 46mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
63	Installation of Double compression nickle plated brass cable glands for safe area suitable for 46.5 - 52mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
64	Installation of Double compression nickle plated brass cable glands for safe area suitable for 52.5 - 61mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
65	Installation of Double compression nickle plated brass cable glands for safe area suitable for 67.5 - 77mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
66	Installation of Double compression nickle plated brass cable glands for safe area suitable for 77.5 - 83mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100
67	Installation of Double compression nickle plated brass cable glands for safe area suitable for 83.5 - 89mm OD cable	600	Nos				0.1793625%	100	100	100	100	100	100

Section 3: Electrical & C&I Works													
Item No.	Description	Qty	UNIT	Rate in Rs.	Amount in Rs.	Weight Each (kgs)	Weightage %	STP-1: 7.4 MLD	STP-2: 4.33 MLD	STP-3: 7.05 MLD	STP-4: 1.79 MLD	STP-5: 0.872 MLD	STP-6: 3.98 MLD
68	Installation of Double compression nickle plated brass cable glands for safe area suitable for 13-18NPT	600	Nos				0.2723871%	100	100	100	100	100	100
69	Installation of Double compression nickle plated brass cable glands for safe area suitable for 18.5-20NPT	600	Nos				0.2524629%	100	100	100	100	100	100
70	Installation of Double compression nickle plated brass cable glands for safe area suitable for 20.5-23NPT	600	Nos				0.4882998%	100	100	100	100	100	100
71	Installation of Double compression nickle plated brass cable glands for safe area suitable for 23.5-26NPT	600	Nos				0.4882998%	100	100	100	100	100	100
72	Installation of Double compression nickle plated brass cable glands for safe area suitable for 26.5-30NPT	600	Nos				0.4882998%	100	100	100	100	100	100
73	Installation of Double compression nickle plated brass cable glands for safe area suitable for 30.5-33NPT	600	Nos				0.4882998%	100	100	100	100	100	100
74	Installation of cable lugs of 2.5sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
75	Installation of cable lugs of 4 sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
76	Installation of cable lugs of 6 sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
77	Installation of cable lugs of 10 sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
78	Installation of cable lugs of 16 sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
79	Installation of cable lugs of 25 sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
80	Installation of cable lugs of 35 sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
81	Installation of cable lugs of 50 sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
82	Installation of cable lugs of 70 sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
83	Installation of cable lugs of 95 sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
84	Installation of cable lugs of 120 sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
85	Installation of cable lugs of 150sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
86	Installation of cable lugs of 185sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
87	Installation of cable lugs of 240sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
88	Installation of cable lugs of 300sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
89	Installation of cable lugs of 630sq mm Tinned cu	1000	Nos				0.0719860%	200	200	200	100	100	200
90	Installation of cable lugs of 1.5sq mm Tinned cu -Pin type	1000	Nos				0.0719860%	200	200	200	100	100	200
91	Installation of cable lugs of 1.5sq mm Tinned cu -Fork type	1000	Nos				0.0719860%	200	200	200	100	100	200
92	Installation of 40 mm dia MS rod for Plant earthing & lightning protection	6000	mts				2.5002323%	1000	1000	1000	1000	1000	1000
93	Installation of 50X6 GI STRIP for Plant earthing & lightning protection	9000	mts				4.0634422%	1500	1500	1500	1500	1500	1500
94	Installation of 35X6 GI strip for Plant earthing & lightning protection	3000	mts				1.2501161%	500	500	500	500	500	500
95	Installation of 25X3 GI strip for Plant earthing & lightning protection	3000	mts				1.5756343%	500	500	500	500	500	500
96	Installation of 8 swg GI solid wire for Plant earthing & lightning protection	3000	mts				0.5572889%	500	500	500	500	500	500
97	Installation of Vertical airtermination rods for Plant earthing & lightning protection	24	Nos				0.4333706%	4	4	4	4	4	4
98	Installation of Industrial weather proof type Wellglass Fixture suitable for 60W GLS and 110V DC Supply. Fixture shall be supplied with DC Brass cable Glands, Cu. Lugs and mounting hardware (I.e. Bracket, Pole reducer etc.	30	Nos				0.1158176%	5	5	5	5	5	5

Section 3: Electrical & C&I Works													
Item No.	Description	Qty	UNIT	Rate in Rs.	Amount in Rs.	Weight Each (kgs)	Weightage %	STP-1: 7.4 MLD	STP-2: 4.33 MLD	STP-3: 7.05 MLD	STP-4: 1.79 MLD	STP-5: 0.872 MLD	STP-6: 3.98 MLD
99	Installation of Industrial type general purpose FTL luminaire suitable for 2X36W Flourescent tube lamp with high efficiency electronic ballast, MS sheet steel housing(CRCA) and vitreous enamelled external reflector.Fixture shall be supplied with suitable terminal block for loop in/out of circuit cable and earthing terminal. -Surface /suspension mounted through 20mm down conduit with Spring Loaded Ball socket as applicable.	290	Nos				0.9160079%	55	50	55	40	40	50
100	Installation of Industrial corrosion resistant FTL luminaire suitable for 2X36W Flourescent tube lamp with high efficiency electronic ballast, Polycarbonate /GRP/FRP body, cover and SS toggles etc. Fixture shall be supplied with suitable terminal block for loop in/out of circuit cable and earthing terminal. -Surface /suspension mounted through down conduit.	155	Nos				0.4895904%	30	30	30	20	20	25
101	Installation of Surface mounted decorative fixtures suitable for 2x36W FTL lamp comprises of epoxy powder coated CRCA MS Sheet housing with anodised aluminium mirror reflector and aluminium cross louver assymby for low glare output Fixture shall be provided with 2 nos. conduit knockout for mounting through 20mm down conduit. and shall be supplied with suitable terminal block for loop in/out of circuit cable and earthing terminal. (Equivalent to CGL Model CRFG24EB	72	Nos				0.2274226%	12	12	12	12	12	12
102	Street Light luminaire with single piece die cast aluminium body , electrochemically brightened and anodised/Glaskote finish aluminium reflector, heat resistant clear toughened front glass cover & Gasket etc. Fitting shall be fully wired complete with copper wound ballast, power factor improvement capacitor, ignitor etc. and shall be suitable for 150W HPSV tubular lamp. Fixture shall be supplied with suitable terminal block and earthing terminal.	163	Nos				0.6292756%	34	25	30	23	25	26
103	Installation of Industrial weather proof heavy duty type narrow beam Non-integral Flood Light luminaire made of cast aluminium housing having brightened anodised aluminium reflector with heat resistant toughened front glass cover, neoprene gasket etc. suitable for 2x400W HPSV Tubular lamp. Fitting shall have provision for rotating in both horizontal & vertical plane and supplied with necessary control gear box etc. . Fixture shall be supplied with suitable terminal block and earthing terminal.	48	Nos				0.1853081%	8	8	8	8	8	8
104	Installation of Post top lattern lighting arrangement with 150W HPSV Lamp and 4.5M pole & Marshalling Box.	12	Nos				0.0463279%	2	2	2	2	2	2
105	Installation of Emergency Light of 20W CFL/Tube lamp with necessary charging facility, auto changeover and battery back up for 2Hrs(Min). Lighting unit shall be suitable for wall mounting and supplied with necessary mounting hardware and 5 feet wire with 3pin plug.	72	Nos				0.2274226%	12	12	12	12	12	12
106	Installation of 7.5 meter tubular street lighting pole as per drg	101	Nos				3.8992074%	22	14	20	14	15	16
107	Installation of 11 meter tubular Flood Lighting pole as per drg.	24	Nos				0.9265443%	4	4	4	4	4	4

Section 3: Electrical & C&I Works													
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108	Installation of 1200mm long 150 deg bend 50NB pipe with 2 nos suitable clamp with base, reducer/nipple etc.	70	Nos				0.3193767%	12	12	12	10	12	12
109	Installation of 3000mm long 25mm GI conduit (Heavy duty)including accessories such as couplers/bends/inspection bends wherever necessary using the saddles/clamps as required.	7800	Mtrs				1.3684864%	1320	1320	1320	1260	1260	1320
110	Installation of 4 way conduit branching JB for 25mm GI conduit with flat cover	2720	Nos				5.2624815%	460	460	460	440	440	460
111	Installation of GS stripped Flexible PVC conduit (20mm dia)	540	Mtrs				0.0947414%	90	90	90	90	90	90
112	Installation of GS stripped Flexible PVC conduit (25mm dia)	1020	Mtrs				0.1789559%	170	170	170	170	170	170
113	Installation of 3000mm long 50mm GI conduit	36	Mtrs				0.0063188%	6	6	6	6	6	6
114	Installation of 3000mm long 50mm PVC conduit	36	Mtrs				0.0063188%	6	6	6	6	6	6
115	Installation of GI conduit Branching Round JB with 3nos.terminal block suitable for 4sqmm.	550	Nos				1.9302894%	100	100	100	75	75	100
116	Installation of 4 way 250x200x120mm rectangular sheet steel weather proof JB (IP65) with two nos. Cable entry suitable for 4Cx25sqmm Al. armoured Cable and two nos suitable for 3Cx2.5 sqmm. Cu. armoured cable along with DC Cable glands, PVC gland hood. JB shall have Terminal block 4 nos. suitable for 35sq.mm Al cable & 4 nos. 6 sq.mm Cu cable and shall be supplied with mounting hardware, suitable cu. lugs blanking plug/rubber grommet.	72	Nos				0.4043111%	12	12	12	12	12	12
117	Installation of 4 way 200x150x100mm rectangular sheet steel weather proof JB (IP65) with four nos. Cable entry suitable for 3Cx2.5 sqmm. Cu. armoured cable along with DC Cable glands, PVC gland hood. JB shall have Terminal block 4 nos. suitable for 6 sq.mm cu cable and shall be supplied with mounting hardware, suitable cu. lugs blanking plug/rubber grommet.	60	Nos				0.3369260%	10	10	10	10	10	10
118	Installation of SSB-2 Surface mounted switchboard with 3nos 5A piano type switches a (modular type). Switch board shall have necessary conduit entries suitable for 25 sqmm GI Conduit.	106	Nos				0.2976219%	18	18	18	17	17	18
119	Installation of SSB-3 Surface mounted switchboard with 3nos 5A piano type switches a (modular type). Switch board shall have necessary conduit entries suitable for 25 sqmm GI Conduit.	12	Nos				0.0336921%	2	2	2	2	2	2
120	Installation of SSB-3 + R Surface mounted switchboard with 3 nos 6A piano type switches, 1Nos. Electronic Fan regulator and 1no. 5/15A socket with 16A piano type switch (modular type). Switch board shall have necessary conduit entries suitable for 25 sqmm GI Conduit	12	Nos				0.0336921%	2	2	2	2	2	2
121	Installation of SSB-5+2R Surface mounted switchboard with 5 nos 6A piano type switches, 2Nos. Electronic Fan regulator and 1no. 5/15A socket with 16A piano type switch (modular type). Switch board shall have necessary conduit entries suitable for 25 sqmm GI Conduit	12	Nos				0.0336921%	2	2	2	2	2	2
122	Installation of 5/15A, 230V, Surface mounted decorative type switch socket outlet. Socket outlet shall have necessary conduit entries suitable for 25 sqmm GI Conduit.	176	Nos				0.4941514%	30	30	30	28	28	30
123	Installation of 20A, 230V, 1 ph, Surface/Column mounted indoor type socket outlet with 20A MCB. Socket outlet shall have necessary conduit/cable knock out entries suitable for 3Cx2.5 sqmm Cu. cable.	90	Nos				0.2526911%	15	15	15	15	15	15

Section 3: Electrical & C&I Works													
Item No.	Description	Qty	UNIT	Rate in Rs.	Amount in Rs.	Weight Each (kgs)	Weightage %	STP-1: 7.4 MLD	STP-2: 4.33 MLD	STP-3: 7.05 MLD	STP-4: 1.79 MLD	STP-5: 0.872 MLD	STP-6: 3.98 MLD
124	Installation of 63A TPN welding receptacles with interlocked switch & Plug for safe area with IP55 protection. Receptacle shall have necessary cable entries suitable for 4CX35 sqmm Al.. Cable for loop in/out facilities..	48	Nos				0.2021547%	8	8	8	8	8	8
125	Installation of 6 way AC Indoor type Lighting Panel (Safe area) with incommer 63A TPN RCBO & Outgoing 6 nos. 20A SPN MCB. Panel shall have cable entries suitable for 4CX35 sqmm Al. cable for incommerand 3Cx2.5sqmm Cu. Cable for Outgoing.	6	Nos				0.0358445%	1	1	1	1	1	1
126	Installation of 12 way AC Indoor type Lighting Panel (Safe area) with incommer 63A TPN RCBO & Outgoing 12nos. 20A SPN MCB. Panel shall have cable entries suitable for 4CX35 sqmm Al. cable for incommer and 3Cx2.5sqmm Cu. Cable for Outgoing.	6	Nos				0.0442208%	1	1	1	1	1	1
127	Installation of 18way AC Indoor type Lighting Panel (Safe area) with incommer 63A TPN RCBO & Outgoing 18 nos. 20A SPN MCB. Panel shall have cable entries suitable for 4CX35 sqmm Al. cable for incommer and 3Cx2.5sqmm Cu Cable for Outgoing.	6	Nos				0.0442208%	1	1	1	1	1	1
128	Installation of 6 way DC Indoor type Lighting Panel (Safe area) with incommer 63A DP MCB & Outgoing 6 nos. 10A DP MCB. Panel shall have cable entries suitable for 4CX16sqmm cu. cable for incommer and 3Cx2.5sqmm Cu. Cable for Outgoing.	6	Nos				0.0358445%	1	1	1	1	1	1
129	Installation of Distribution board (MCB Box)	24	Nos				0.1684634%	4	4	4	4	4	4
130	Installation of 1Cx2.5sq.mm. Red colour 1.1kV PVC insulated Cu flexible wire	6840	mts				1.2268397%	1170	1170	1170	1080	1080	1170
131	Installation of 1Cx2.5sq.mm. Yellow colour 1.1kV PVC insulated Cu flexible wire	3780	mts				0.6631896%	630	630	630	630	630	630
132	Installation of 1Cx2.5sq.mm. Blue colour 1.1kV PVC insulated Cu flexible wire	4320	mts				0.7579309%	720	720	720	720	720	720
133	Installation of 1Cx2.5sq.mm. Black colour 1.1kV PVC insulated Cu flexible wire	14940	mts				2.6211777%	2520	2520	2520	2430	2430	2520
134	Installation of 1Cx2.5sq.mm. Green colour 1.1kV PVC insulated Cu flexible wire	14940	mts				2.6211777%	2520	2520	2520	2430	2430	2520
135	Installation of 1Cx4.0 sq.mm. Red colour 1.1kV PVC insulated Cu flexible wire	4140	mts				0.7425609%	720	720	720	630	630	720
136	Installation of 1Cx4.0 sq.mm. Yellow colour 1.1kV PVC insulated Cu flexible wire	3240	mts				0.5684482%	540	540	540	540	540	540
137	Installation of 1Cx4.0 sq.mm. Blue colour 1.1kV PVC insulated Cu flexible wire	2160	mts				0.3789655%	360	360	360	360	360	360
138	Installation of 1Cx4.0 sq.mm. Black colour 1.1kV PVC insulated Cu flexible wire	9540	mts				1.6737641%	1620	1620	1620	1530	1530	1620
139	Installation of 1Cx4.0 sq.mm. Green colour 1.1kV PVC insulated Cu flexible wire	9540	mts				1.6737641%	1620	1620	1620	1530	1530	1620
140	Installation of Ceiling Fan 1200mm along with ceiling rose as required.	42	nos				0.1326632%	7	7	7	7	7	7
141	Installation & erection of structural steel for cable supports-ISA-50X50X6	6000	kg				1.4742064%	1000	1000	1000	1000	1000	1000
142	Installation & erection of structural steel for cable supports-ISM-100	12000	kg				2.9484127%	2000	2000	2000	2000	2000	2000

Section 3: Electrical & C&I Works													
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143	Commissioning of Electrical Systems including supply of fuel for DG set	1	SET				0.6882044%	1	1	1	1	1	1
144	Supply & Erection of Miscellaneous items						0.0000000%						
145	Supply & Installation of MS checkered plates for closing open trenches	7200	kg				3.4291223%	1200	1200	1200	1200	1200	1200
146	Supply & Installation of Aluminium cable tags (Dimension 75mmx 20mmx1.6mm tk.)	2400	Nos				0.1122258%	400	400	400	400	400	400
147	Supply of cable ties (1 PAC=100Pcs)	300	PAC				0.5692614%	50	50	50	50	50	50
148	Supply & Installation of fire proof sealing mortar seal	24	SQ. Mtr				0.4404638%	4	4	4	4	4	4
149	Board for Electric shock	12	Nos				0.1857301%	2	2	2	2	2	2
150	Board for artificial respiration	6	Nos				0.0928651%	1	1	1	1	1	1
151	Board displaying dos and don'ts.	6	Nos				0.0928651%	1	1	1	1	1	1
152	Board displaying fire extinguishers data	6	Nos				0.0928651%	1	1	1	1	1	1
153	Board displaying "No Smoking"	6	Nos				0.0290192%	1	1	1	1	1	1
154	Board showing list of O&M staff with names	6	Nos				0.2321624%	1	1	1	1	1	1
155	Board showing list of contact details	6	Nos				0.1160823%	1	1	1	1	1	1
156	Board showing Danger sign with Voltage level, 11kV: 60nos & 415V : 60nos and Stickers with 415V :120nos & 11kV levels: 60 nos	300	Nos				1.4510293%	50	50	50	50	50	50
157	Supply & Installation of Signal cable marking/Ferruling	6000	Nos				0.4319158%	1000	1000	1000	1000	1000	1000
158	Supply & Installation of Signal cable dressing material	6000	Nos				0.4319158%	1000	1000	1000	1000	1000	1000
159	Installation of DO analysers	12	Nos				0.0996497%	2	2	2	2	2	2
160	Installation of Ultrasonic flow meter	24	Nos				0.0664337%	4	4	4	4	4	4
161	Installation of Level transmitter-Ultra Sonic type	24	Nos				0.1992993%	4	4	4	4	4	4
162	Installation of Ultrasonic Differential level Tx	36	Nos				0.2989517%	6	6	6	6	6	6
163	Installation of Level switch - Capacitance type	72	Nos				0.3188840%	12	12	12	12	12	12
164	Installation of Pressure gauge	108	Nos				0.4783260%	18	18	18	18	18	18
165	Installation of Pressure switch	36	Nos				0.1594420%	6	6	6	6	6	6
166	Installation of Junction box	48	Nos				0.2125893%	8	8	8	8	8	8
167	Laying and termination of control cables-1P x 0.8 mm ²	2500	mts				0.2322978%	450	400	450	400	400	400
168	Laying and termination of control cables-2P x 0.8 mm ²	1500	mts				0.1393787%	300	300	300	200	200	200
169	Laying and termination of control cables-6P x 0.8 mm ²	7000	mts				0.6773157%	1500	1000	1500	1000	1000	1000
170	Laying and termination of control cables-6P x 0.5 mm ² - Unarmoured	6000	mts				0.5805563%	1000	1000	1000	1000	1000	1000
171	Fabrication, assembly & erection of instrument supporting structures & instrument impulse line connections- str steel ms angle (50x50x6mm), str steel ms angle (75x75x6mm), str steel 6mm plates & ISMC ms channels(100x50), tubes, connectors, valves, manifolds, unions caps, reducers, nipples, tees, elbows, plugs, couplings, pipes, flanges, gaskets etc	2200	kg				0.5405423%	400	350	400	350	350	350
172	Erection, installation & commissioning of PLC system for STPs in rack room & operator room along with HMI	12	Nos				3.2626983%	2	200.00%	2	2	2	2
173	Erection, installation & commissioning of VSAT communication system with central system including dish, modem, network cable, PC, furniture, LAN cable, LAN connectors on either side	8	Nos				2.1751316%	2	1	2	1	1	1

Section 3: Electrical & C&I Works													
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174	Supply & installation of Computer Furniture (one Chair + one Table) set	12	Nos				2.2657635%	2	2	2	2	2	2
175	Supply & installation of 3no PC + 3 nos A4 Printer cum scanner Specification: Processor dual core intel i3 2400 CPU @ 3.1GHz, 8GB Ram, 1TB HD, 15" LCD Monitor with Windows 7, MS Office, Autocad software installed and internet 4G wifi dongle	3	Nos				1.0200033%	1	1	1			
177	Supply of Kent RO Purifier of 9L cap.	1	No				0.1184695%	1					
178	Laying and termination of field cable inside PLC, PC, Printer as per Site Engineer	360	nos				1.5944199%	60	60	60	60	60	60
	Total Weightage (for all six nos of STP's)						100.00%						

Section 4.0 ERECTION,TESTING COMMISSIONING of HVAC System			STP-1:7.4 MLD				STP-2:4.33 MLD			STP-3:7.05 MLD			STP-4:1.79 MLD			STP-5:0.872			STP-6:3.98 MLD		
Sl. No.	Description	Unit	Weight Each (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)	Qty	Weight Each (kgs)	Total wt in (kgs)
AC SYSTEM																					
4.1.1	2 TR Split Acs - Outdoor Unit	Nos	50	2	50	100	2	50	100	2	50	100	2	50	100	2	50	100	2	50	100
4.1.2	2 TR Split Acs - Indoor Unit	Nos	20	2	20	40	2	20	40	2	20	40	2	20	40	2	20	40	2	20	40
4.1.3	MCB & Power Socket	Nos		2		0	2		0	2		0	2		0	2		0	2		0
Ventilation System																					
4.2.1	1000 CMH Propeller Type Exhaust Fan	Nos	10	1	10	10	1	10	10	1	10	10	1	10	10	1	10	10	1	10	10
4.2.2	500 CMH Propeller Type Exhaust Fan	Nos	10	2	10	20	2	10	20	2	10	20	2	10	20	2	10	20	2	10	20
4.2.3	1500 CMH Propeller Type Exhaust Fan	Nos	150	2	150	300	2	150	300	2	150	300	2	150	300	2	150	300	2	150	300
4.2.4	5000 CMH Supply Fan with air intake louver, panel type filter, Tube axial air supply fan, Bird screen etc.	Nos	40	1	40	40	1	40	40	1	40	40	1	40	40	1	40	40	1	40	40
4.2.5	1500 CMH Propeller Type Exhaust Fan with Gravity louver	Nos	150	2	150	300	2	150	300	2	150	300	2	150	300	2	150	300	2	150	300
4.2.6	1500 CMH Propeller Type Exhaust Fan	Nos	150	3	150	450	3	150	450	3	150	450	3	150	450	3	150	450	3	150	450
4.2.7	1500 CMH Propeller Type Exhaust Fan	Nos	150	3	150	450	3	150	450	3	150	450	3	150	450	3	150	450	3	150	450
4.2.8	1500 CMH Propeller Type Exhaust Fan	Nos	150	3	150	450	3	150	450	3	150	450	3	150	450	3	150	450	3	150	450
4.2.9	1500 CMH Propeller Type Exhaust Fan	Nos	150	5	150	750	5	150	750	5	150	750	5	150	750	5	150	750	5	150	750
						2910			2910			2910			2910			2910			2910
	Total Metric (all Six nos of STP's)	17.46																			
Rate (in Rs./ MT) =																					
Amount =																					

Section 5.0:: Fire Protection System : FABRICATION, RADIOGRAPHY, ERECTION, TESTING COMMISSIONING AND PAINTING APPLICATION.

						STP-1 7.4 MLD	STP-2 4.33 MLD	STP-3 7.05 MLD	STP-4 1.79 MLD	STP-5 0.872 MLD	STP-6 3.98 MLD
Sl. No.	Description	Unit	Rate in Rs.	Amount In Rs.	Weightage %	Qty	Qty	Qty	Qty	Qty	Qty
5.1	Fire Extinguisher (Installation & Fixing)										
5.1.1	9 Lit. Water type Fire Extinguisher	Nos.			24.2540905%	7	7	7	7	7	7
5.1.2	4.5 kg CO2 type Fire Extinguisher	Nos.			24.2540905%	7	7	7	7	7	7
5.1.3	6 kg DCP type Fire Extinguisher	Nos.			34.6487007%	8	8	8	8	8	8
5.1.4	50 Lit. Foam type Fire Extinguisher	Nos.			4.3310876%	1	1	1	1	1	1
5.1.5	25 kg DCP type Fire Extinguisher	Nos.			8.6621752%	2	2	2	2	2	2
5.1.6	Sand Buckets	Nos.			3.8498556%	4	4	4	4	4	4
	Total weightage all six nos STP"s				100.00%						

Section 6.0 Material Handling									
				STP-1: 7.4 MLD	STP-2: 4.33 MLD	STP-3: 7.05 MLD	STP-4: 1.79 MLD	STP-5: 0.872 MLD	STP-6: 3.98 MLD
Item No.	Description	Weight(in MT)	Remarks	Wt(in MT)	Wt(in MT)	Wt(in MT)	Wt(in MT)	Wt(in MT)	Wt(in MT)
6.1	Equipments	224.33	As per wt. in section 1.0	48.23	43.63	48.08	20.38	20.38	43.63
6.2	Piping	305.06	As per wt. in section 2.0	64.05	59.45	74.31	32.39	26.79	48.08
6.3	Electrical items	256.24	As per wt. in section 3.0	46.31	42.36	44.34	40.36	40.34	42.53
6.4	Misc Equipments	78.56	10% of (6.1+6.2+6.3)	15.86	14.54	16.67	9.31	8.75	13.42
	Total sum	864.20		174.45	159.99	183.40	102.44	96.26	147.66
Total equipment weight (MT) All six nos of STP"s=		864.20							
Rate (in Rs./ MT) =									
Amount (Rs.) =									

Section 7.0 Manpower

Sl No	Manpower	Unit	Quantities	Category	Rate in Rs	Amount in Rs.	Total Cost in Rs.	Weightage in %age	Remarks
1	Office boy cum messenger	Manmonth	12	Unskilled			194,040	14.29%	Scope: Two office boys for BHEL office Establishment. OR as per the instruction of the site engineer.
2	Watchman	Manmonth	72	Unskilled			1,164,240	85.71%	Scope : Two person per shift (eight (8)- hourly) total three shift in a day to be deployed for a period of six (6) month at 2 locations. OR as per the instruction of the site engineer.
							1,358,280	100.00%	