

**RAJKOT MUNICIPAL CORPORATION
SOLID WASTE MANAGEMENT**

CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTA MOVA FOR RAJKOT MUNICIPAL CORPORATION.

**E- TENDER
TENDER NOTICE NO: RMC/SWM/2026-27/03**

Volume – III BOQ

SUMMARY SHEET

SR.NO.	COMPONENTS	ESTIMATED AMOUNT (Rs.)
A1. RTS & MRF with aligned Buildings		
1	Refuse Transfer Station (RTS)	4,40,29,839.95
2	Material Recovery Facility (MRF)	1,29,76,999.86
3	Aligned Buildings	
a	Weight Bridge Room with 02 No's Weigh Bridge	66,53,711.78
b	Truck Wash & Maintenance Area	13,29,572.10
c	Generator & Electrical Room	34,31,508.90
d	Toilet Block	8,25,589.43
e	Admin Office	16,80,234.98
f	Container Storage Platform	20,19,713.16
g	Under Ground Water Tank	7,83,132.06
	RTS & MRF with aligned Buildings Cost (A1)	7,37,30,302.22
A2. Mechanical Works		
1	Stationary Compactor = 03 Nos.	3,21,18,000.00
2	Container 20 CU M Capacity = 20 Nos.	2,92,90,000.00
3	Hook lift system (Vehicle + lifting mechanism) = 07 Nos.	5,82,70,940.00
4	MRF Sorting System = 01 Nos.	1,21,20,000.00
	Mechanical Cost (A2)	13,17,98,940.00
A3. Other Infrastructure & Utility Services		
1	Land Development (RCC pavement, plot soil filling)	76,02,573.00
2	Green Belt	1,59,767.03
3	Compound Wall	61,68,970.56
4	Main Gate (14 mt. length with security cabin)	8,89,508.63
5	Fire Fighting System	9,88,263.79
6	Storm Water Drain	11,85,910.42
7	Water Supply Network	2,03,269.50
8	Sewer Network	4,56,364.10
9	Bore Well	7,55,473.50
10	Street Light & High mast	22,80,202.26
11	CCTV Surveillance System	14,01,779.00
	Other Infrastructure & Utility Services (A3)	2,20,92,081.78
	Total Capital Cost (A= A1 + A2 + A3)	22,76,21,324.01
B. Operation & Maintenance Cost		
B1	Operation and Maintenance for 1st Year (461.80 Rs./ MT X 300 TPD X 365 Days)	5,05,67,100.00
	Grand Total (A+B)	27,81,88,424.01

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
Mechanical Equipments					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount in Rs.
1	Refused Transfer Station (Machines & Equipments)				
a	Supply, delivery, installation & testing and commissioning of static compactor (proven & established unit) inclusive of hopper & chute etc. complete as per specification and approved as per engineer in charge.	3	No.	1,07,06,000.00	3,21,18,000.00
b	Supply and delivery, testing & commissioning of Heavy duty transfer station containers of 20 cu m volumetric capacity etc. complete as per specification and approved as per engineer in charge.	20	No.	14,64,500.00	2,92,90,000.00
c	Supply, delivery, testing and commissioning of Hook Loader / hook lift system (vehicle + lifting mechanism) unit (proven & established unit) mounted on suitable heavy-duty chassis. etc. complete as per specification and approved as per engineer in charge.	7	No.	83,24,420.00	5,82,70,940.00
2	Material Recovery Facility (MRF)	1	No.	1,21,20,000.00	1,21,20,000.00
	For Sorting 100 mm & 75 mm	1			
	Moving Belt Feeder with VFD Panel	1			
	Primary Belt Conveyor	1			
	Trommel Screen 100 mm with VFD Panel	1			
	Under Size Belt Conveyor (-100 mm)	1			
	Sorting Belt Conveyor (+100 mm)	1			
	Sorting Platform Staircase, Railing & Support	2			
	Trommel Screen 75 mm with VFD Panel	1			
	Under Size Belt Conveyor (-75 mm)	1			
	Oversize Belt Conveyor (+75 mm)	1			
	Air Blower with Ducting System	1			
	Sorting Platform at primary Belt Conveyors	1			
	Operating Control Panel	1			
	Erection & Commissioning at Trommel Screening Plant	1			
	For Sorting 35 mm	1			
	Moving Belt Feeder with VFD Panel	1			
	Primary Belt Conveyor	1			
	Trommel Screen 100 mm with VFD Panel	1			
	Under Size Belt Conveyor (-100 mm)	1			
	Oversize Belt Conveyor (+75 mm)	1			
	Air Blower with Ducting System	1			
	C&D Belt Conveyor	1			
	Operating Control Panel	1			
	Erection & Commissioning at Trommel Screening Plant	1			
Total Amount (Rs.)					13,17,98,940.00

RAJKOT MUNICIPAL CORPORATION					
SOLID WASTE MANAGEMENT DEPARTMENT					
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RTS BUILDING & RAMP					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
(A) RCC ELEVATED PLATFORM AREA					
1	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	A. 0 to 1.50 m depth	1,379	CU M	301.99	4,16,444.21
	B. 1.5 to 3.0 mt. Depth	898	CU M	346.43	3,11,094.14
2	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	75	CU M	4,914.66	3,68,599.50
3	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	351	CU M	5,676.20	19,92,346.20
4	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A) Columns	22	CU M	6,615.50	1,45,541.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) Beams	64	CU M	6,312.50	4,04,000.00
5	Rubble Stone filling with 33% Murrum in specified thickness with watering, compaction etc. complete	202	CU M	632.26	1,27,716.52
6	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (A) For maneuvering area of work site	66	CU M	4,914.66	3,24,367.56
7	CC work M-25 for RCC Bottom Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	136	CU M	5,403.50	7,34,876.00
8	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	44,990	KG	65.65	29,53,593.50
9	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	1,766	CU M	186.85	3,29,977.10
10	Removal of Excavated Stuff within RMC limit as directed by Engineer-in-Charge	511	CU M	172.71	88,254.81
11	Filling of Plinth in layers of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete.	272	CU M	350.47	95,327.84
12	Providing & laying controlled cement concrete M250 proportions of ingredients as per mix design by weigh batching and curing complete including the cost of formwork but excluding the cost of reinforcement for reinforced concrete work in				
	Column				
	Ground floor (level -0.3 to 5.0 mt.)	48	CU M	6,615.50	3,17,544.00
	First floor	29	CU M	6,615.50	1,91,849.50
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Beam	193	CU M	6,312.50	12,18,312.50
	CC work M-25 for RCC Bottom Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Ground floor slab	167	CU M	5,403.50	9,02,384.50
	CC work M-25 for RCC Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	First Floor level	167	CU M	6,211.50	10,37,320.50
	CC work M-25 for Partition, Parsdment, railing etc. using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	RCC ELEVATION WALL	173	CU M	7,221.50	12,49,319.50
13	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	1,01,803	KG	65.65	66,83,366.95
14	Brick Masonry work in Cement:Mortar 1:6	232	CU M	5,818.61	13,49,917.52
15	Half brick masonry in common brunt clay building bricks having crushing strength not less than 35 Kg/Sq.Cm. in Cement mortar 1:4 (1- Cement : 4 - oarse sand) in foundation and plinth (B) Conventional	500	SQ M	648.58	3,24,290.00

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
16	Providing and laying Precast Lightweight concrete hollow core wall with hollow core concrete unit of approved make & size of 120 mm thick, 600 mm wide and 2400 mm / 2600 mm / 2850 mm / 3000 mm / 3300 mm in length made from controlled cement concrete M20 having cube compressive strength not less than 20 MPa jointing with high strength & tensile adhesion non-shrink cementitious joint compound / P.U. Foam. (Plaster not required)	68	SQ M	850.42	57,828.56
17	Cement Plaster 12 mm thick using Cement:Mortar in proportion 1:3 with Niru Finishing curing, etc. complete	5,485	SQ M	141.92	7,78,431.20
18	20mm thick Sand Face Cement Plaster Work in which 1 plaster in proportion of 1:3 and 2nd plaster in proportion of 1:2 using Cement:Mortar with spongy finishing etc. complete (Note: Before carrying out Plaster work on RCC, required tipping work should be carried out as instructed)	1,115	SQ M	330.72	3,68,752.80
19	Plastic Emulsion Paint (Two coats) (Asian Paint, ICI, Dulux, Nerolac, Berger etc. of approved type) (with Prime Coat) (A) For wall	5,485	SQ M	146.45	8,03,278.25
20	Water Proofing Treatment on Terrace and Wall sides with smooth finishing including material-labour etc. complete	907	SQ M	122.21	1,10,844.47
21	Providing and applying Epoxy Paint of approved make to concrete surface for RCC of structure including cleaning the surface by scrapping and air blower to the satisfaction of Engineer in charge necessary scaffolding etc. complete with all leads and lifts and giving satisfactory hydraulic test for water tightness as per IS codes. 1. For new surface - Two coat	1,115	SQ M	90.90	1,01,353.50
22	Providing and Fixing of colour coated aluminium-zinc alloy sheets (Galvalume) of ASTM – A792 Grade D, Coating AZ-150 with 0.5mm thickness, 0.90m to 1.20m width and length up to 12m with factory cut and fixing to the roof polymer coated galvanized hex head self drilling screws with integral washers and EPDM seals fasteners for support for sheet etc., complete as directed including cost of sheets For roofing, with necessary fixtures and accessories, hangers, skylights etc complete as per drawing and design.	384	SQ M	451.47	1,73,364.48
23	Steel work, welded in built up sections framed work including cutting, hoisting, fixing in position and applying a priming coat of red lead paint. (A) In beams and joists, channels angles Tees, flats, with connecting plates or angle cleats as in main and cross beams. Hip and jack rafters, purlins connected to common rafters and the like	252	Quintal	9,108.48	22,95,336.96
24	Providing and Casting Controlled cement concrete M 250 proportions of ingredients as per mix design by weigh batching for pavement wearing coat 75 mm thick including floor finishing with a floating of neat cement complete. TREMIX VD SYSTEM including providing and fixing channels as per required levels and slope, leveling poured concrete between channels with Double Beam screed vibrators removing excess water using VD Pump finishing the surface with power trowel and power floater including cutting the groove of size 5mm x 10mm at required distance and providing and filling the same with bitumen as per practices etc. complete at all levels Excluding steel reinforcement.	126	CU M	5,757.00	7,25,382.00
ELEVATED PLATFORM AREA (A)=					2,69,81,015.57
(B) RCC RAMP AREA					
WORK UPTO PLINTH LEVEL					
25	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	A. 0.0 to 1.5mt depth				
		793	CU M	301.99	2,39,478.07
	B. 1.5 to 3.0 mt. depth				
		675	CU M	346.43	2,33,840.25
26	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	58	CU M	4,914.66	2,85,050.28
27	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	233	CU M	5,676.20	13,22,554.60
28	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A) Columns	28	CU M	6,615.50	1,85,234.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) Beams	82	CU M	6,312.50	5,17,625.00
29	Rubble Stone filling with 33% Murrum in specified thickness with watering, compaction etc. complete	728	SQ M	632.26	4,60,285.28

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
30	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	15	CU M	4,914.66	73,719.90
31	CC work M-25 for RCC Bottom Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	30	CU M	5,403.50	1,62,105.00
32	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	41,710	KG	65.65	27,38,261.50
33	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	1,067	CU M	186.85	1,99,368.95
34	Removal of Excavated Stuff within RMC limit as directed by Engineer-in-Charge	401	CU M	172.71	69,256.71
35	Filling of Plinth in layers of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete.	594	CU M	350.47	2,08,179.18
WORK ABOVE PLINTH LEVEL					
36	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Column	43	CU M	6,615.50	2,84,466.50
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Beam	136	CU M	6,312.50	8,58,500.00
	CC work M-25 for RCC Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Slab	182	CU M	6,211.50	11,30,493.00
	CC work M-25 for Partition, Parsdment, railing etc. using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Pardi	20	CU M	7,221.50	1,44,430.00
37	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	75,181	KG	65.65	49,35,632.65
38	Construction of cement concrete kerb with top and bottom width 115 and 165mm respectively, 400mm high in M20 grade. kerb stone laid with kerb laying machine (I-Section)	25	CU M	505.00	12,625.00
39	Cement Plaster 12 mm thick using Cement:Mortar in proportion 1:3 with Niru Finishing curing, etc. complete	2,083	SQ M	141.92	2,95,619.36
40	Plastic Imulsion Paint (Two coats) (Asian Paint, ICI, Dulux, Nerolac, Berger etc. of approved type) (with Prime Coat) (A) For wall	246	SQ M	146.45	36,026.70
41	Providing and applying Epoxy Paint of approved make to concrete surface for RCC of structure including cleaning the surface by scrapping and air blower to the satisfaction of Engineer in charge necessary scaffolding etc. complete with all leads and lifts and giving satisfactory hydraulic test for water tightness as per IS codes. 1. For new surface - Two coat	2,083	SQ M	90.90	1,89,344.70
42	Oil bound Distemper two coat with Primer Coat	2,083	SQ M	59.59	1,24,125.97
43	Providing & fixing approved quality & designed rolling shutters with necessary top cover, fittings, single coat red lead, double coat silver or oil paint (with bearing)	90	SQ M	2,399.76	2,15,978.40
44	Plastic Imulsion Paint (Two coats) (Asian Paint, ICI, Dulux, Nerolac, Berger etc. of approved type) (with Prime Coat)	929	SQ M	146.45	1,36,052.05
45	Providing and Fixing metal expansion joints as per standard drawing. Details of expansion joint 50 x50 x 6mm size tow IS and 100 x6mm MS plate with 6 x 20x 25mm long hold fast @ 50cm/cc on both sides of expansion joints.	30	RMT	2,013.95	60,418.50
46	Providing and fixing post and pipe railing as per detailed drawing including 3 coats of painting to steel works complete.	182	RMT	1,211.75	2,20,538.50
47	Providing and fixing premoulded compressible filler board in black colour confirming to MoRT&H Specifications (Clause 1015), having minimum density 95kg/cum. non-staining with less than 1% water absorption & compression recovery of 93% minimum as per specification for 20 mm wide expansion joint including cutting to required size and shape at all levels etc. complete as directed.	8	SQ M	803.22	6,024.15

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
48	Providing and Casting Controlled cement concrete M 250 proportions of ingredients as per mix design by weigh batching for pavement wearing coat 75 mm thick including floor finishing with a floating of neat cement complete. TREMIX VD SYSTEM including providing and fixing channels as per required levels and slope, leveling poured concrete between channels with Double Beam screed vibrators removing excess water using VD Pump finishing the surface with power trowel and power floater including cutting the groove of size 5mm x 10mm at required distance and providing and filling the same with bitumen as per practices etc. complete at all levels Excluding steel reinforcement.	69	CU M	5,757.00	3,97,233.00
49	Providing PVC 100 mm diameter water spouts including necessary iron grating as per drawings	50	NO.	159.37	7,968.50
50	Providing and fixing to wall, ceiling and floor 10.0 Kg/sq.cm working pressure polythene pipes (PVC) of the following outside dia low density complete with special flange compression type fittings, wall clips etc.				
	75 mm dia	250	RMT	280.23	70,057.50
	110 mm dia.	250	RMT	339.05	84,762.50
RAMP WITH L-SHAPE(B)=					1,59,05,255.70
LEACHATE COLLECTION TANK					
51	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	A. 0 to 1.5mt depth	9	CU M	301.99	2,717.91
52	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	1	CU M	4,914.66	4,914.66
53	CC work M25 for RCC Bottom slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A)Base Slab	1	CU M	5,403.50	5,403.50
	CC work M25 for RCC Partition, Parsdment, railing etc. using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B)Wall	2	CU M	7,221.50	14,443.00
	CC work M25 for RCC slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(C)Top Slab	1	CU M	6,211.50	6,211.50
54	Cement Concrete flooring (IPS) 50 mm thick in proportion of 1:2:4 with a floating coat of neat cement, finishing, curing etc. complete	2	SQ M	341.38	682.76
55	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	400	KG	65.65	26,260.00
56	20 mm thick sand faced cement plaster with water proofing material in cement mortar with proportion recommended by the manufacturer on walls upto height 10 metres above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1-cement :3-sand) and 8mm thick finishing coat of C.M.1:1(1-cement:1-sand) etc. complete	15	SQ M	265.63	3,984.45
57	RCC precast cover with supply, fitting, fixing with complete as per specification 10ton size 700/550/60-90mm.	1	NO.	1,184.73	1,184.73
58	RCC precast frame with supply, fitting, fixing with complete as per specification 10ton size 700/550/60-90mm	1	NO.	1,132.21	1,132.21
PIPE LAYING					
59	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	0.00 to 1.50 mt depth	150	cum	301.99	45,298.50
	1.5 to 3.0 mt depth	75	cum	346.43	25,982.25
60	Providing bedding incl. ramming, watering, levelling, consolidating etc. Complete as per standard and instruction of engineer incharge as above with required quality Sand brought from outside including all lead	10	cum	332.29	3,322.90
61	HDPE (PE-100) Pipes in standard length suitable for sewage, industrial Effluent & Rising mains				
	HDPE- 6kg/cm2- Dia 160 mm	110	rmt	588.83	64,771.30
62	Lowering, laying and jointing HDPE pipes and specials of following class and diameter (By butt fusion welding method) including cost of conveyance from stores to site of works at all level including cost of labour, giving satisfactory hydraulic testing etc. comp	100	rmt	104.03	10,403.00

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
63	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm ² in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm internal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slab with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(i) Inside dimensions 500mmx 700mm and 450mm deep for pipe line with one or two inlets.	4	each	3,660.76	14,643.04
64	Extra over items 24.44 for every additional depth of 0.1 M. Of part thereof beyond 450 mm depth for Brick masonry chamber.(ii) for 500mm x 700mm size.	64	EACH	264.86	16,951.04
65	Refilling of Pipeline trenches Refilling the pipeline trenches incl. ramming, watering, consolidating disposal of surplus stuff as directed within state limit.	215	cum	22.22	4,777.30
Total Amount C (Rs.)					2,53,084.05
ELECTRIC WORK					
66	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete	30	Pt.	471.92	14,157.60
67	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. [II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete	10	Pt.	746.59	7,465.90
68	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	10	Pt.	499.50	4,995.00
69	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (a) 20 mm	200	Mtr.	24.24	4,848.00
	(b) 25 mm	350	Mtr.	33.33	11,665.50

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
70	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (a) 2 wire 1.5 sq. mm	350	Mtr.	62.62	21,917.00
	(b) 2 wire 2.5 sq. mm	200	Rmt.	82.82	16,564.00
71	providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) with medium class Rigid PVC pipe and accessories (a) 2 wire 4 sq. mm	150	Rmt.	112.11	16,816.50
72	Supplying and erecting Flexible PVC insulated multi strand multi core 1.1 kv grade ISI marked copper wires of following size to be erected as directed. e) 1.50 Sq.mm 3 core round PVC sheathed	300	Mtr.	46.46	13,938.00
	(i) 2.50 Sq.mm 4 core round PVC sheathed	200	Mtr.	107.06	21,412.00
73	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy> 85 lumens/watt ,LED LED driver efficiency > 85 %(fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Tube Light with integral driver (iv) 22-24 Watts, Surge - 2KV,IP-20, conventional 4 feet Cat. III	15	Ea.	373.70	5,605.50
74	Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses, with toughened glass with company mark/name engraved or embossed 160 to 270 V,Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K,Uniformity ratio >0.45, Luminaire efficacy> 100 lumens/watt . LED driver efficiency > 85 %.(fittings required LM-79 & LM-80 certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (B) Flood Light (IP-65), Surge protection -4KV integral and ,Light must have 440VAC line supply with over-voltage protection. (v) above 120 to 160 watts CAT- III	17	Ea.	8,453.70	1,43,712.90
75	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iv)12 way	3	Ea.	1,492.78	4,478.34
	(B) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) (b) sheet steel double door (v) 16 way	1	Ea.	4,666.20	4,666.20
76	Providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat. III	20	Ea.	112.11	2,242.20
77	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (B) 40 Amp. CAT-III	3	Ea.	668.62	2,005.86

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
78	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed. (ii) 40Amps. DP CAT-III	4	Ea.	2,235.13	8,940.52
79	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on 3 phase and neutral 415V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed. (ii) 40Amps. FP CAT-III	3	Ea.	2,637.11	7,911.33
80	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	10	Kg.	77.77	777.70
81	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistance mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphur content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (b)For Electrical installation up to 11 KV in normal soil. Length of Pipe : 2.00 mtrs Back filling Compound :1 no. Bag of 25 Kg.	5	Ea.	5,760.03	28,800.15
82	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (A) 4 core 16 Sq. mm (B) 4 core 25 Sq. mm	150 400	Mtr. Mtr.	153.52 190.89	23,028.00 76,356.00
83	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (G) 3 1/2 core 150 Sq. mm (70 Sq. mm 1/2 core)	200	Mtr.	731.24	1,46,248.00
84	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cable. (A) 3 core 2.5 Sq.m.m	200	Mtr.	215.13	43,026.00
85	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (A)50 mm outer dia (B)63mm outer dia	150 200	RMT RMT	62.62 73.73	9,393.00 14,746.00
86	Making trench in soft soil of suitable width of 90 cm deep for laying cable or locating the fault all over the run and back filling the same and making the surface as normal ground.	200	RMT	55.55	11,110.00
87	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables (D) 2 to 4 core 16 Sq. mm (E) 2 to 4 core 25 Sq. mm	10 10	Ea. Ea.	47.47 51.51	474.70 515.10
88	Providing and, fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (F) 3 & 1/2 core 150 Sq. mm	6	Ea.	190.89	1,145.34

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
89	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (C) 16/25 Sq.mm.	80	Ea.	15.15	1,212.00
	(H) 150 Sq.mm.	24	Ea.	61.61	1,478.64
90	Providing & erecting weather proof, dust & vermin proof, floor mounted front operated indoor type cubical panel board necessary IP-42 and above protection as per approval from engineer incharge made from 14 SWG thick CRC M.S. sheet for outer body & doors, 16 SWG thick CRC M.S. sheet for internal partitions with necessary accessories, supporting angles/ flats channel including cutting, bending, drilling, welding, riveting with internal partitions & cable alley as per requirements & instruction of engineer-in-charge with erection of supplied switch gears, BUSBARS, suitable size of inter connecting PVC copper wire / copper-aluminium strips, rubber grommets, rib, bakelite control fuses/MCB for measuring instruments, earth bus & earth bolts, foundation flange - bolts-base Plates, sufficient nos. of hinged doors, handles with locking arrangement and rubber gasket, heavy duty end terminal connection, danger notice board, necessary ventilation, earthing strip complete. The Panel shall be painted with epoxy powder coating.				
	(The rates excludes the cost of switchgears, bus bars, inter connecting mains & Copper Aluminium strips, meters, Fuses etc. The dimension shall be measured excluding base beams) The panel shall be supplied with following approved manufacturers with following size floor level to above 400mm up panel stand. (B) The standard companies switch gear shall be used and only manufacturers at CPRI approved factory (i) with 350mm depth	6	Sq Mtr	14,902.55	89,415.30
91	providng and erecting Approved make. energy meter 3 phase 4 wire unbalanced load 500 V.50A / 100A complete erected as directed with necessary earth wire. Cat III	1	Ea.	2,611.86	2,611.86
92	Supplying and erecting triple pole & neutral 440V/ 500V panel mounting Aluminium Busbars with four equal Nos. of bus having current density not more than 0.8 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each busbar,erected in existing cubical panel with necessary connections. (A) Suitable for 100 Amp. Capacity	6	RMT.	660.54	3,963.24
	(C) Suitable for 300 Amp. Capacity	10	RMT.	1,469.55	14,695.50
93	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 35 KA. at 415 V. having Normal current rating 250A. with variable Thermal & magnetic release suitable to work on A.C. supply 50 c/s. with all internal connections, spreader tinned copper & complete erected in existing 16 G.M.S. housing ICS=100% of ICU only Cat III	1	Ea.	20,946.39	20,946.39
94	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 25 KA. at 415 V, having normal current rating up to 25 A to 100A. with Fixed thermal & magnetic release suitable to work on A.C. supply 50 c/s. with all internal connections, spreader tinned copper & complete erected in existing 16 G.M.S. housing. ICS=100% of ICU only Cat III	4	Ea.	20,946.39	83,785.56
95	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat-III	5	Ea.	668.62	3,343.10
96	Providing & erecting High Voltage Danger Notice Board sticker as per language suggested by engineer incharge of standard size-as per IS 2551	2	Ea.	35.35	70.70
Total Amount D (Rs.)					8,90,484.63
Total Amount A+B+C+D (Rs.)					4,40,29,839.95

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
MATERIALS RECOVERY FACILITY					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
1	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	A. 0 to 1.5mt depth	697	CU M	301.99	2,10,487.03
	B.1.5 to 3.0 mt. Depth	519	CU M	346.43	1,79,797.17
2	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	98	CU M	4,914.66	4,81,636.68
3	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	84	CU M	5,676.20	4,76,800.80
4	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A) Columns	24	CU M	6,615.50	1,58,772.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) Beams	68	CU M	6,312.50	4,29,250.00
5	CC work M25 for RCC Bottom slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(C) Slab at PL	97	CU M	5,403.50	5,24,139.50
6	Providing and Casting Controlled cement concrete M 250 proportions of ingredients as per mix design by weigh batching for pavement wearing coat 75 mm thick including floor finishing with a floating of neat cement complete. TREMIX VD SYSTEM including providing and fixing channels as per required levels and slope, leveling poured concrete between channels with Double Beam screed vibrators removing excess water using VD Pump finishing the surface with power trowel and power floater including cutting the groove of size 5mm x 10mm at required distance and providing and filling the same with bitumen as per practices etc. complete at all levels Excluding steel reinforcement.	88	CU M	5,757.00	5,06,616.00
7	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	24,061	KG	65.65	15,79,604.65
8	Rubble Stone filling with 33% Murrum in specified thickness with watering, compaction etc. complete	179	CU M	632.26	1,13,174.54
9	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	838	CU M	186.85	1,56,580.30
10	Removal of Excavated Stuff within RMC limit as directed by Engineer-in-Charge	378	CU M	172.71	65,284.38
11	Brick Masonry work in Cement:Mortar 1:6(1) Wall	69	CU M	5,818.61	4,01,484.09
12	Cement Plaster 12 mm thick using Cement:Mortar in proportion 1:3 with Niru Finishing curing, etc. complete	396	SQ M	225.23	89,191.08
13	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster inteh proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carringout Plaster work on RCC, required tipping work should be carried out as instructed)	343	SQ M	265.63	91,111.09
14	Distempering with dry distemper of approved brand and manufacture (two coats) and of required shade on wall surfaces of given an even shade, over and including a priming coat of whiting after thoroughly brooming the surface free from mortar dropping and other foreign matter.	740	SQ M	53.89	39,878.60
15	Design, Fabrication and Painting (as per IS code) and supply of Built-Up Primary Members, all hot rolled members including brace rods, struts, flange braces, wall support members, suspenders, base plates, and cage ladders as per relevant specifications. This includes the necessary hardware such as connection bolts (8.8 grade), and miscellaneous components like cage ladders, anchor bolts, bracing, cleats, and tie beams. The scope also covers the design, fabrication, and supply of secondary members made of pre-galvanized cold-formed sections such as Z or C purlins, girts, eave struts, and flange bracing.	1,215	SQ M	5,666.10	68,84,311.50

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
	The work includes providing and fixing color-coated galvalume roofing sheets (PPGL) with a thickness of 0.50mm TCT and a strength of 550 MPA, complete with flashing, screws, sealant, and roof sheeting accessories such as filler blocks, end closures, inseal tape, and silicon sealant. Similar provisions apply for color-coated galvalume wall cladding (PPGL) with the same specifications. Additionally, accessories such as ridge profiles, flashing, eave gutters, downspout pipes, etc., are to be supplied and installed.				
	The supply and installation of 2mm thick polycarbonate sheets with high impact resistance, 24-diameter turbovents with a 2mm thick polycarbonate base, and the provision of a cage ladder for roof access.				
Total Amount A (Rs.)					1,23,88,119.41
ELECTRICAL WORK					
16	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete	30	Pt.	471.92	14,157.60
17	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. [II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete	10	Pt.	746.59	7,465.90
18	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	10	Pt.	499.50	4,995.00
19	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (a) 20 mm (b) 25 mm	200	Mtr.	24.24	4,848.00
		350	Mtr.	33.33	11,665.50
20	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (a) 2 wire 1.5 sq. mm (b) 2 wire 2.5 sq. mm	350	Mtr.	62.62	21,917.00
		200	Rmt.	82.82	16,564.00

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
21	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) with medium class Rigid PVC pipe and accessories (a) 2 wire 4 sq. mm	100	Rmt.	112.11	11,211.00
22	Supplying and erecting Flexible PVC insulated multi strand multi core 1.1 kv grade ISI marked copper wires of following size to be erected as directed. e) 1.50 Sq.mm 3 core round PVC sheathed	350	RMT.	46.46	16,261.00
23	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy > 85 lumens/watt, LED LED driver efficiency > 85 % (fitting required LM-79 & LM-80 Certificates) (NOTE: Below description have shown ranges of Wattage capacity of LED fittings. The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Tube Light with integral driver (iv) 22-24 Watts, Surge - 2KV, IP-20, conventional 4 feet Cat. III	15	Ea.	373.70	5,605.50
24	Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses, with toughened glass with company mark/name engraved or embossed 160 to 270 V, Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K, Uniformity ratio > 0.45, Luminaire efficacy > 100 lumens/watt. LED driver efficiency > 85 % (fittings required LM-79 & LM-80 certificates) (NOTE: Below description have shown ranges of Wattage capacity of LED fittings. The Engineer incharge may select any wattage capacity between the ranges shown.) (B) Flood Light (IP-65), Surge protection -4KV integral and, Light must have 440VAC line supply with over-voltage protection. (v) above 120 to 160 watts CAT- III	28	Ea.	8,453.70	2,36,703.60
25	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs. (The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iv) 12 way	3	Ea.	1,492.78	4,478.34
	(B) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) (b) sheet steel double door (v) 16 way	1	Ea.	4,666.20	4,666.20
26	Providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat. III	25	Ea.	112.11	2,802.75
27	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (B) 40 Amp. CAT-III	3	Ea.	668.62	2,005.86
28	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V, 50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed. (ii) 40Amps. DP CAT-III	6	Ea.	2,235.13	13,410.78
29	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on 3 phase and neutral 415V, 50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed. (ii) 40Amps. FP CAT-III	3	Ea.	2,637.11	7,911.33

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
30	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	50	Kg.	77.77	3,888.50
31	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill				
	Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (b)For Electrical installation up to 11 KV in normal soil. Length of Pipe : 2.00 mtrs Back filling Compound :1 no. Bag of 25 Kg.	3	Ea.	5,760.03	17,280.09
32	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (A) 4 core 16 Sq. mm (B) 4 core 25 Sq. mm	100 200	Mtr. Mtr.	153.52 190.89	15,352.00 38,178.00
33	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cable. (A) 3 core 2.5 Sq.m.m	120	Mtr.	215.13	25,815.60
34	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (A)50 mm outer dia	250	RMT	62.62	15,655.00
35	Making trench in soft soil of suitable width of 90 cm deep for laying cable or locating the fault all over the run and back filling the same and making the surface as normal ground.	200	RMT	55.55	11,110.00
36	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables (D) 2 to 4 core 16 Sq. mm (E) 2 to 4 core 25 Sq. mm	10 6	Ea. Ea.	47.47 51.51	474.70 309.06
37	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (C) 16/25 Sq.mm.	64	Ea.	15.15	969.60
38	Providing & erecting weather proof, dust & vermin proof, floor mounted front operated indoor type cubical panel board necessary IP-42 and above protection as per approval from engineer incharge made from 14 SWG thick CRC M.S. sheet for outer body & doors, 16 SWG thick CRC M.S.sheet for internal partitions with necessary accesories , supporting angles/ flats channel including cutting, bending, drilling, welding, riveting with internal partitions & cable alley as per requirements & instruction of engineer-in-charge with erection of supplied switch gears, BUSBARS, suitable size of inter connecting PVC copper wire / copper-aluminium strips, rubber grommets, rib, bakelite control fuses/MCB for measuring instruments, earth bus & earth bolts, foundation flange - bolts-base Plates, sufficient nos. of hinged doors, handles with locking arrangement and rubber gasket,heavy duty end terminal connection,danger notice board,necessary ventilation,earthing strip complete. The Panel shall be painted with epoxy powder coating.				
	(The rates excludes the cost of switchgears, bus bars, inter connecting mains & Copper Aluminium strips, meters, Fuses etc. The dimension shall be measured excluding base beams) The panel shall be supplied with following approved manufacturers with following size floor level to above 400mm up panel stand. (B) The standard companies switch gear shall be used and only manufacturers at CPRI approved factory (i) with 350mm depth	3	Sq Mtr	14,902.55	44,707.65

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
39	providng and erecting Approved make. energy meter 3 phase 4 wire unbalanced load 500 V.50A / 100A complete erected as directed with necessary earth wire. Cat III	1	Ea.	2,611.86	2,611.86
40	Supplying and erecting triple pole & neutral 440V/ 500V panel mounting Aluminium Busbars with four equal Nos. of bus having current density not more than 0.8 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each busbar,erected in existing cubical panel with necessary connections. (B) Suitable for 200 Amp. Capacity	6	RMT.	1,037.27	6,223.62
41	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 35 KA. at 415 V. having Normal current rating 200A.with variable Thermal & magnetic release suitable to work on A.C.supply 50 c/s. with all internal connections, spreader tinned copper & complete erected in existing 16 G.M.S.housing ICS=100% of ICU only Cat III	1	Ea.	16,221.61	16,221.61
42	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat-III	5	Ea.	668.62	3,343.10
43	Providing & erecting High Voltage Danger Notice Board sticker as per language suggested by engineer incharge of standard size-as per IS 2551	2	Ea.	35.35	70.70
Total Amount B (Rs.)					5,88,880.45
Total Amount A+B (Rs.)					1,29,76,999.86

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
WEIGH BRIDGE WITH OFFICE BUILDING					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
1	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	(A) Up to 1.5 Mt. Depth				
	Footing & GB	88	CU M	301.99	26,575.12
	(B) 1.5 to 3.0 Mt. Depth				
	Footing	18	CU M	346.43	6,235.74
2	Rubble Stone filling with 33% Murrum in specified thickness with watering, compaction etc. complete	25	CU M	632.26	15,806.50
3	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	16	CU M	4,914.66	78,634.56
4	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	55	CU M	5,676.20	3,12,191.00
5	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A) COLUMNS	13	CU M	6,615.50	86,001.50
	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) BEAMS :	21	CU M	6,312.50	1,32,562.50
6	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	10,607	KG	65.65	6,96,349.55
7	Brick Masonry work in Cement:Mortar 1:6	6	CU M	5,818.61	34,911.66
8	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	48	CU M	186.85	8,968.80
9	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster inteh proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carringout Plaster work on RCC, required tipping work should be carried out as instructed)	14	SQ M	265.63	3,718.82
10	Finishing wall with water proofing cement paint of on wall surfaces (Threecoats) to give an approved brand and manufacture and of required shape even shade after thoroughly brushing the surface to remove all dirt and remains of loose powered materials. (A) For wall	27	SQ M	99.23	2,679.21
11	Steel work, welded in built up sections framed work including cutting, hoisting, fixing in position and applying a priming coat of red lead paint. (A)In beams and joists, channels angles Tees, flats, with connecting plates or angle cleats as in main and cross beams. Hip and jack rafters, purlins conneted to common rafters and the like	30	q	9,108.48	2,73,254.40
12	Applying priming coat over new steel and other metel surface after and including preparing the surface by throughly cleaning, oil,grease, dirt and other foreign matter and scoured with brushes fine steel wood, scrapers and sand paper with ready mixed priming paint brushing red lead.	102	SQ M	38.15	3,891.30
13	Painting two coats (excluding priming coat) on new steel and other metal surface with enamel paint, brushing, interior to give an even shade including cleaning the surface an even shade including cleanicn the surface of all dirt, dust and other foreign matter.	102	SQ M	46.46	4,738.92
14	Supply and install/commission fully automatic on finished foundation 01 No. UNIQUE, EVERY, EAGLE, APPLE, Matrix or equivalent make pit-less type fully Electronic weighbridge platform size 9 m x 3 meters for 60 MT capacity including applying oil paint, etc complete as per specification and instruction of engineer in charge.	2	No.	5,66,610.00	11,33,220.00
Total Amount for One Weigh Bridge					28,19,739.58
A = Total Amount for Two Weigh Bridge (RS.)					56,39,479.16
OFFICE BUILDING UPTO PLINTH LEVEL					
15	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
	(A) Up to 1.5 Mt. Depth				
	Footing & GB	50	CU M	301.99	15,099.50
	(B) 1.5 to 3.0 Mt. Depth				
	Footing	48	CU M	346.43	16,628.64
16	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	6	CU M	4,914.66	29,487.96
17	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	12	CU M	5,676.20	68,114.40
18	CC work M-25 for Column using aggregate of size 10-20 mm,centring, curing, finishing etc. complete (without reinforcement)				
	(A) COLUMNS	2	CU M	6,615.50	13,231.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) BEAMS :	3	CU M	6,375.63	19,126.89
	CC work M-25 for Coping using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Coping	1	CU M	5,605.50	5,605.50
19	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	2,018	KG	65.65	1,32,481.70
20	Brick Masonry work in Cement:Mortar 1:6	10	CU M	5,818.61	58,186.10
21	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	94	CU M	137.47	12,922.18
22	Filling of Plinth in layers of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete.	10	SQ M	350.47	3,504.70
23	Finishing wall with water proofing cement paint of on wall surfaces (Threecoats) to give an approved brand and manufacture and of required shape even shade after thoroughly brushing the surface to remove all dirt and remains of loose powered materials.	10	SQ M	99.23	992.30
OFFICE BUILDING ABOVE PLINTH LEVEL					
24	CC work M-25 for Column using aggregate of size 10-20 mm,centring, curing, finishing etc. complete (without reinforcement)				
	(A) COLUMN	2	CU M	6,615.50	13,231.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) BEAMS	3	CU M	6,312.50	18,937.50
	CC work M-25 for RCC Bottom Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(C) SLAB AT PL	3	CU M	5,403.50	16,210.50
	CC work M-25 for RCC Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(D)TOP SLAB	4	CU M	6,211.50	24,846.00
	CC work M-25 for Lintel using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(E) LINTEL	1	CU M	6,060.00	6,060.00
	CC work M-25 for Chajja using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(F) CHHAJJA	2	CU M	6,009.50	12,019.00
25	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	2,290	KG	65.65	1,50,338.50
26	Brick Masonry work in Cement:Mortar 1:6	15	CU M	5,818.61	87,279.15
27	Cement Plaster 12 mm thick using Cement:Mortar in proportion 1:3 with Niru Finishing curing, etc. complete				
	(A) For wall	99	SQ M	225.23	22,297.77
	(B) For ceiling and soffits of stair & Chhija	38	SQ M	225.23	8,558.74
	(c) inside cupboard in CM 1:3 (1 cement : 3 sand)	3	SQ M	225.23	675.69
28	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster inteh proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carringout Plaster work on RCC, required tipping work should be carried out as instructed)	60	SQ M	265.63	15,937.80
29	Providing throating or plaster drip and moulding to R.C.C. Chhajja.	26	RMT	45.83	1,191.58
30	Decorative Groove Work in Cement Plaster	26	RMT	41.41	1,076.66

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
31	Providing and laying polished Kota stone slab flooring over 20mm (Average) thick base of cement mortar 1:6 (1-cement : 6-coarse sand) or L.M. 1.1.5 (1-Lime putty :1.5 - coarse sand) laid over and jointed with grey cement slurry mixed with pigment to match the shade of slab including rubbing and polishing etc. complete. (A) 25mm thick	24	SQ M	1,019.39	24,465.36
32	Providing & Fixing Marble stone 20 mm thick 1000 mm X 450 mm size including fixing in cement mortar 1:3 (1 cement : 3 sand)	10	SQ M	2,290.56	22,905.60
33	Providing and fixing 35 mm thick shutters for Doors, windows and clearstory windows including blackenamelled M.S. butt hinges with necessary screws. (A) Indian teak wood. (i) Fully Panelled.	3	SQ M	3,773.84	11,321.52
34	Constructing a platform 60 cm width and 70 cm high resting on B.B.Masonry walls 23 cm.thick in C.M.(1:6) with (ii) Fixing black kadappa stone 30mm thick laid on precast R.C.C. (1:2:4) slab with plastering on exposed faces of wall in C.M. (1:4) etc complete. (i) cooking platform	3	RMT	1,629.13	4,887.39
35	Providing and fixing 35 mm thick shutters for Doors, windows and clearstory windows including blackenamelled M.S. butt hinges with necessary screws. (A) Indian teak wood. (i) Fully Panelled.	8	SQ M	3,773.84	30,190.72
36	aluminium section window work (with 3 track mosquito net) (jindal)(with necessary all fittings)	6	SQ M	7,131.61	42,789.66
37	Providing and fixing glazed louvered glass windows and ventilators with teak wood frame 10cm. x 7cm. size including 3 coats of oil painting to wood work etc.complete.	1	SQ M	4,202.12	4,202.12
38	Distempering with dry distemper of approved brand and manufacture (two coats) and of required shade on wall surfaces of given an even shade, over and including a priming coat of whitening after thoroughly brooming the surface free from mortar dropping and other foreign matter				
	(A) For wall	99	SQ M	53.89	5,335.11
	(B) For Ceilings and soffits of stairs	38	SQ M	53.89	2,047.82
39	Finishing wall with water proofing cement paint of on wall surfaces (Three coats) to give an approved brand and manufacture and of required shape even shade after thoroughly brushing the surface to remove all dirt and remains of loose powered materials.	60	SQ M	99.23	5,953.80
40	Water Proofing Treatment on Terrace and Wall sides with smooth finishing including material-labour etc. complete	56	SQ M	122.21	6,843.76
41	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure polythene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(F) 75mm	7	RMT	280.23	1,961.61
42	Providing and fixing to wall, ceiling and floor galvanised Mild steel tubes (Medium grade) of the following nominal bore, tube fitting and clamps including making good the wall ceiling and floor.(A) 15mm	50	RMT	252.49	12,624.50
43	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace	1,000	Liter	3.95	3,950.00
44	Grill work for doors - windows etc. as per design on site with fitting & fixing.	185	Nos.	110.09	20,366.65
45	White Poreselin Urinal with required plastic waste pipe fitting and fixing	2	Nos.	484.80	969.60
Total Amount B (Rs.)					9,54,855.98
ELECTRICAL WORK					
46	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat III	15	Pt.	471.92	7,078.80

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
47	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	4	Pt.	746.59	2,986.36
48	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	8	Pt.	499.50	3,996.00
49	Point wiring for FAN with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV Grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch and hum free EME step type electronic fan regulator mounted and accessories with earth continuity of following type erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat-III NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	3	Pt.	670.24	2,010.72
50	providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat III	5	Ea	112.11	560.55
51	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (a) 20 mm (b) 25 mm	40 25	Mtr. Mtr.	24.24 33.33	969.60 833.25
52	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (a) 2 wire 1.5 sq. mm (b) 2 wire 2.5 sq. mm	60 35	Mtr. Rmt.	62.62 82.82	3,757.20 2,898.70
53	providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) with medium class Rigid PVC pipe and accessories (a) 2 wire 4 sq. mm	30	Rmt.	112.11	3,363.30

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
54	Providing & erecting Approved make Ceiling Fan with double ball bearing ISI mark with Condenser 230 volt A.C.50 Hz 1200 mm sweep complete having 3 blades aluminium body and blade sets having ornamental design shanks , canopy erected with earthing. [Make shall be approved by Engineer in Charge]	3	Ea.	2,311.89	6,935.67
55	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy> 85 lumens/watt ,LED LED driver efficiency > 85 %(fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Tube Light with integral driver (iv) 22-24 Watts, Surge - 2KV,IP-20, conventional 4 feet Cat. III	8	Ea.	373.70	2,989.60
56	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on 3 phase and neutral 415V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed. (ii) 40Amps. FP CAT-III	1	Ea.	2,637.11	2,637.11
57	Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity (ii) 6 to 32Amps. Cat III	6	Ea.	299.97	1,799.82
58	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat III	2	Ea.	638.32	1,276.64
59	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iv)12 way	2	Ea.	1,492.78	2,985.56
60	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	5	Kg.	77.77	388.85
61	Providing and erecting required size HOT deep Galvanised iron strip for earthing of H.T. , OCB/ ACB/ Transformer LT panel board, Motors etc. using proper clamp.	5	Kg.	77.77	388.85
62	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistance mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphur content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (b)For Electrical installation up to 11 KV in normal soil. Length of Pipe : 2.00 mtrs Back filling Compound :1 no. Bag of 25 Kg.	2	Ea.	5,760.03	11,520.06
Total Amount B (Rs.)					59,376.64
Total Amount A + B + C (Rs.)					66,53,711.78

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
TRUCK WASH & MAINTENANCE AREA					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
WORK UP TO PLINTH LEVEL					
1	Excavation of Foundation in Hard Murrum from 0.0 mtr. to 1.50 mtr depth including dewatering with lifting and laying in RMC limit as instructed				
	A. 0 to 1.5mt depth				
	Footing & GB	58	CU M	301.99	17,515.42
	B.1.5 to 3.0 mt. Depth				
	Footing	53	CU M	346.43	18,360.79
2	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	8	CU M	4,914.66	39,317.28
3	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	11	CU M	5,676.20	62,438.20
4	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A) Columns	3	CU M	6,615.50	19,846.50
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) Beams	5	CU M	6,312.50	31,562.50
	CC work M25 for RCC Bottom slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(C) Slab at PL	7	CU M	5,403.50	37,824.50
5	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	2,907	KG	65.65	1,90,844.55
6	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	91	CU M	186.85	17,003.35
7	Removal of Excavated Stuff within RMC limit as directed by Engineer-in-Charge	20	CU M	172.71	3,454.20
8	Filling of Plinth in layers of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	13	CU M	350.47	4,556.11
WORK ABOVE PLINTH LEVEL					
9	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Column	6	CU M	6,615.50	39,693.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Beam/ Lintel /Chajja etc	8	CU M	6,312.50	50,500.00
	CC work M-25 for Stair Case using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Slab/ Staircase/lending etc	8	CU M	6,363.00	50,904.00
10	Brick Masonry work in Cement:Mortar 1:6	16	CU M	5,818.61	93,097.76
11	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	2,980	KG	65.65	1,95,637.00
12	Cement Plaster 12 mm thick using Cement:Mortar in proportion 1:3 with Niru Finishing curing, etc. complete				
	(A) For wall	69	SQ M	225.23	15,540.87
	(B) For ceiling and soffits of stair	44	SQ M	225.23	9,910.12
13	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster inteh proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carringout Plaster work on RCC, required tipping work should be carried out as instructed)	69	SQ M	265.63	18,328.47
14	Providing and laying Precast Lightweight concrete hollow core wall with hollow core concrete unit of approved make & size of 92 mm thick, 600 mm wide and 2400 mm / 2600 mm / 2850 mm / 3000 mm / 3300 mm in legth made from of controlled cement concrete M20 having cube compressive strength not less than 20 MPa jointing with high strength & tensile adhesion non-shrink cementitious joint compound / P.U. Foam. (Plaster not required)	67	SQ M	754.47	50,549.49

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
15	Distemping with dry distemper of approved brand and manufacture (two coats) and of required shade on wall surfaces of given an even shade, over and including a priming coat of whitening after thoroughly brooming the surface free from mortar dropping and other foreign matter.				
	(A) For wall	138	SQ M	30.10	4,153.80
	(B) For Ceilings and soffits of stairs	44	SQ M	30.10	1,324.40
16	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure poluthene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(G)110 mm	7	RMT	343.40	2,403.80
17	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm2 in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm intenal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slabe with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(i) Inside dimensions 455mmx 610mm and 450mm deep for single pipe line.	1	NO.	2,548.23	2,548.23
18	Providing laying (to level or slopes) and jointing reinforced concrete Light duty non-pressure pipes I.S. class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete.(B) 150mm	20	RMT	151.50	3,030.00
19	Cast iron manhole with fixing	40	KG	82.82	3,312.80
Total Amount A (Rs.)					9,83,657.14
OIL & GREASE COLLECTION TANK					
20	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	A. 0 to 1.5mt depth	9	CU M	301.99	2,717.91
21	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	1	CU M	4,914.66	4,914.66
22	CC work M25 for RCC Bottom slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A)Base Slab	1	CU M	5,403.50	5,403.50
	CC work M25 for RCC Partition, Parsdment, railling etc. using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B)Wall	2	CU M	7,221.50	14,443.00
	CC work M25 for RCC slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(C)Top Slab	1	CU M	6,211.50	6,211.50
23	Cement Concrete flooring (IPS) 50 mm thick in proportion of 1:2:4 with a floating coat of neat cement, finishing, curing etc. complete	2	SQ M	341.38	682.76
24	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	400	KG	65.65	26,260.00
25	20 mm thick sand faced cement plaster with water proofing material in cement mortar with proportion recommended by the manugacturer on walls upto height 10 metres above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1-cement :3-sand) and 8mm thick finishing coat of C.M.1:1(1-cement:1-sand) etc. complete	15	SQ M	265.63	3,984.45
26	RCC precast cover with supply, fitting, fixing with complete as per specification 10ton size 700/550/60-90mm.	1	NO.	1,184.73	1,184.73
27	RCC precast frame with supply, fitting, fixing with complete as per specification 10ton size 700/550/60-90mm	1	NO.	1,132.21	1,132.21
PIPE LAYING					
28	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	0.00 to 1.50 mt depth	150	cum	301.99	45,298.50
	1.5 to 3.0 mt depth	75	cum	346.43	25,982.25
29	Providing bedding incl. ramming, watering, levelling, consolidating etc. Complete as per standard and instruction of engineer incharge as above with required quality Sand brought from outside including all lead	10	cum	332.29	3,322.90
30	HDPE (PE-100) Pipes in standard length suitable for sewage, industrial Effluent & Rising mains				
	HDPE- 6kg/cm2- Dia 160 mm	110	rmt	588.83	64,771.30

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
31	Lowering, laying and jointing HDPE pipes and specials of following class and diameter (By butt fusion welding method) including cost of conveyance from stores to site of works at all level including cost of labour, giving satisfactory hydraulic testing etc. comp	100	rmt	104.03	10,403.00
32	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm ² in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm intenal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slabe with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(i) Inside dimensions 500mmx 700mm and 450mm deep for pipe line wih one or two intles.	4	each	3,660.76	14,643.04
33	Extra over items 24.44 for every additional depth of 0.1 M. Of part thereof beyond 450 mm depth for Brick masonry chamber.(ii) for 500mm x 700mm size.	64	EACH	264.86	16,951.04
34	Refilling of Pipeline trenches Refilling the pipeline trenches incl. ramming, watering, consolidating desposal of surplus stuff as directed within state limit.	215	cum	22.22	4,777.30
Total Amount B (Rs.)					2,53,084.05
ELECTRIC WORK					
35	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat III	12	Pt.	471.92	5,663.04
36	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	2	Pt.	746.59	1,493.18
37	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	4	Pt.	499.50	1,998.00

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
38	Point wiring for FAN with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch and hum free EME step type electronic fan regulator mounted and accessories with earth continuity of following type erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat-III NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	2	Pt.	670.24	1,340.48
39	providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat III	4	Ea	112.11	448.44
40	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (a) 20 mm	35	Mtr.	24.24	848.40
	(b) 25 mm	25	Mtr.	33.33	833.25
41	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (a) 2 wire 1.5 sq. mm	70	Mtr.	62.62	4,383.40
	(b) 2 wire 2.5 sq. mm	35	Rmt.	82.82	2,898.70
42	providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) with medium class Rigid PVC pipe and accessories (a) 2 wire 4 sq. mm	30	Rmt.	112.11	3,363.30
43	Supplying and erecting Flexible PVC insulated multi strand multi core 1.1 kv grade ISI marked copper wires of following size to be erected as directed. (e) 1.50 Sq.mm 3 core round PVC sheathed	40	Rmt.	46.46	1,858.40
44	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (A) 4 core 16 Sq. mm	50	Ea	153.52	7,676.00
45	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables (D) 2 to 4 core 16 Sq. mm	4	Ea	47.47	189.88
46	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (C) 16/25 Sq.mm.	16	Ea	15.15	242.40
47	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (A)50 mm outer dia	45	Mtr.	62.62	2,817.90
48	Providing & erecting Approved make Ceiling Fan with double ball bearing ISI mark with Condenser 230 volt A.C.50 Hz 1200 mm sweep complete having 3 blades aluminium body and blade sets having ornamental design shanks , canopy erected with earthing. [Make shall be approved by Engineer in Charge]	2	Ea.	2,311.89	4,623.78

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
49	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy> 85 lumens/watt ,LED LED driver efficiency > 85 %(fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Tube Light with integral driver (iv) 22-24 Watts, Surge - 2KV,IP-20, conventional 4 feet Cat. III	4	Ea.	373.70	1,494.80
50	Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses, with toughened glass with company mark/name engraved or embossed 160 to 270 V,Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K,Uniformity ratio >0.45, Luminaire efficacy> 100 lumens/watt . LED driver efficiency > 85 %.(fittings required LM-79 & LM-80 certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (B) Flood Light (IP-65), Surge protection -4KV integral and ,Light must have 440VAC line supply with over-voltage protection. (iv) above 90 to 120 watts CAT- III	4	Ea.	7,266.95	29,067.80
51	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on 3 phase and neutral 415V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed. (ii) 40Amps. FP CAT-III	1	Ea.	2,637.11	2,637.11
52	Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity (ii) 6 to 32Amps. Cat III	3	Ea.	299.97	899.91
53	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat III	2	Ea.	638.32	1,276.64
54	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iv)12 way	3	Ea.	1,492.78	4,478.34
55	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	5	Kg.	77.77	388.85
56	Providing and erecting required size HOT deep Galvanised iron strip for earthing of H.T. , OCB/ ACB/ Transformer LT panel board, Motors etc. using proper clamp.	5	Kg.	77.77	388.85
57	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistance mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill				

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
	Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (b)For Electrical installation up to 11 KV in normal soil. Length of Pipe : 2.00 mtrs Back filling Compound :1 no. Bag of 25 Kg.	2	Ea.	5,760.03	11,520.06
Total Amount C (Rs.)					92,830.91
Total Amount A+B+C (Rs.)					13,29,572.10

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
GENERATOR AND ELECTRICAL ROOM					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
WORK UP TO PLINTH LEVEL					
1	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	A. 0 to 1.5mt depth				
	Footing & GB	58	CU M	301.99	17,515.42
	B.1.5 to 3.0 mt. Depth				
	Footing	53	CU M	346.43	18,360.79
2	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	8	CU M	4,914.66	39,317.28
3	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	15	CU M	5,676.20	85,143.00
4	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A) Columns	2	CU M	6,615.50	13,231.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) Beams	4	CU M	6,312.50	25,250.00
	CC work M25 for RCC Bottom slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(C) Slab at PL	7	CU M	5,403.50	37,824.50
5	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	1,840	KG	65.65	1,20,796.00
6	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	88	CU M	186.85	16,442.80
7	Removal of Excavated Stuff within RMC limit as directed by Engineer-in-Charge	23	CU M	172.71	3,972.33
8	Filling of Plinth in layers of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	13	CU M	350.47	4,556.11
WORK ABOVE PLINTH LEVEL					
9	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Column	4	CU M	6,615.50	26,462.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Beam/ Lintel /Chajja etc	9	CU M	6,312.50	56,812.50
	CC work M-25 for Stair Case using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Slab/ Staircase/lending etc	8	CU M	6,363.00	50,904.00
10	Brick Masonry work in Cement:Mortar 1:6	22	CU M	5,818.61	1,28,009.42
11	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	2,797	KG	65.65	1,83,623.05
12	Cement Plaster 12 mm thick using Cement:Mortar in proportion 1:3 with Niru Finishing curing, etc. complete				
	(A) For wall	117	SQ M	225.23	26,351.91
	(B) For ceiling and soffits of stair	60	SQ M	225.23	13,513.80
13	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster in proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carrying out Plaster work on RCC, required tipping work should be carried out as instructed)	117	SQ M	265.63	31,078.71
14	Providing throating or plaster drip and moulding to R.C.C. Chhajja.	30	RM	45.83	1,374.90
15	Decorative Groove Work in Cement Plaster	30	RM	41.41	1,242.30
16	Supply, Fixing & Polishing of Kota Stone work thickness 20-25 mm to be fixed in Lime:Mortar 1:2 and liquid Cement and as instructed	49	SQ M	922.13	45,184.37

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
17	Providing and fixing 35 mm thick shutters for Doors, windows and clear story windows including anodised aluminium butt hinges with necessary screws.(A) Indian Teak Wood (1) Fully Panelled				
	(1) Fully paneled	4	Cu.Dm	4,101.06	16,404.24
18	Aluminium section window work (with 3 track mosquito net) (jindal)(with necessary all fittings)	6	SQM	7,131.61	42,789.66
19	Providing & fixing approved quality & designed rolling shutters with necessary top cover, fittings, single coat red lead, double coat silver or oil paint (with bearing)	7	SQ M	2,399.76	16,798.32
20	Distempering with dry distemper of approved brand and manufacture (two coats) and of required shade on wall surfaces of given an even shade, over and including a priming coat of whitening after thoroughly brooming the surface free from mortar dropping and other foreign matter.				
	(A) For wall	117	SQ M	53.89	6,305.13
	(B) For Ceilings and soffits of stairs	60	SQ M	53.89	3,233.40
21	Finishing wall with water proofing cement paint of on wall surfaces (Threecoats) to give an approved brand and manufacture and of required shape even shade after thoroughly brushing the surface to remove all dirt and remains of loose powered materials.				
	(A) For wall	117	SQ M	99.23	11,609.91
22	Water Proofing Treatment on Terrace and Wall sides with smooth finishing including material-labour etc. complete	44	SQ M	122.21	5,377.24
	0				
23	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure poluthene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(G)110 mm	7	RMT	339.05	2,373.35
24	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm2 in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm intenal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slabe with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(i) Inside dimensions 455mmx 610mm and 450mm deep for single pipe line.	1	NO.	2,932.93	2,932.93
25	Providing laying (to level or slopes) and jointing reinforced concrete Light duty non-pressure pipes I.S. class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete.(B) 150mm	20	RMT	257.19	5,143.80
26	Cast iron manhole with fixing	1	KG	82.82	82.82
27	Grill work for doors - windows etc. as per design on site with fitting & fixing.	150	KG	110.09	16,513.50
Total Amount A (Rs.)					10,76,530.49
ELECTRIC WORK					
28	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat III	12	Pt.	471.92	5,663.04

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
29	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	2	Pt.	746.59	1,493.18
30	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	4	Pt.	499.50	1,998.00
30	Point wiring for FAN with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch and hum free EME step type electronic fan regulator mounted and accessories with earth continuity of following type erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat-III NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	2	Pt.	670.24	1,340.48
31	providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat III	5	Ea	112.11	560.55
32	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (a) 20 mm (b) 25 mm	30 20	Mtr. Mtr.	24.24 33.33	727.20 666.60
33	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (a) 2 wire 1.5 sq. mm (b) 2 wire 2.5 sq. mm	70 50	Mtr. Rmt.	62.62 82.82	4,383.40 4,141.00
34	providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) with medium class Rigid PVC pipe and accessories (a) 2 wire 4 sq. mm	35	Rmt.	112.11	3,923.85
35	Providing & erecting Approved make Ceiling Fan with double ball bearing ISI mark with Condenser 230 volt A.C.50 Hz 1200 mm sweep complete having 3 blades aluminium body and blade sets having ornamental design shanks , canopy erected with earthing. [Make shall be approved by Engineer in Charge]	2	Ea.	2,311.89	4,623.78

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
36	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy > 85 lumens/watt, LED driver efficiency > 85 % (fitting required LM-79 & LM-80 Certificates) (NOTE: Below description have shown ranges of Wattage capacity of LED fittings. The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Tube Light with integral driver (iv) 22-24 Watts, Surge - 2KV, IP-20, conventional 4 feet Cat. III	8	Ea.	373.70	2,989.60
37	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on 3 phase and neutral 415V, 50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed. (ii) 40Amps. FP CAT-III	1	Ea.	2,637.11	2,637.11
38	Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity (ii) 6 to 32Amps. Cat III	4	Ea.	299.97	1,199.88
39	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS : 8828 in existing box having following capacity (b) 40 Amp. Cat III	2	Ea.	638.32	1,276.64
40	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs. (The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iv) 12 way	2	Ea.	1,492.78	2,985.56
41	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	5	Kg.	77.77	388.85
42	Providing and erecting required size HOT deep Galvanised iron strip for earthing of H.T., OCB/ ACB/ Transformer LT panel board, Motors etc. using proper clamp.	10	Kg.	77.77	777.70
43	Supplying & erecting earth pit of minimum bore dia. 150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I. Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A) (approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistance mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphur content:- < 2% (C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (b) For Electrical installation up to 11 KV in normal soil. Length of Pipe : 2.00 mtrs Back filling Compound : 1 no. Bag of 25 Kg.	6	Ea.	5,760.03	34,560.18
44	Providing and erecting XLPE (IS:7098) (I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (I) 3 1/2 core 240 Sq. mm (120 Sq. mm 1/2 core)	180	Mtr.	1,168.57	2,10,342.60
45	Supplying & erecting XLPE (IS:7098) (I)-88 ISI unarmoured copper cable 1.1 KV grade to be erected as directed of following size. (J) 4 core 2.5 Sq. mm	100	RMT	168.67	16,867.00

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
46	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (C)90 mm outer dia	180	RMT	112.11	20,179.80
47	Making trench in soft soil of suitable width of 90 cm deep for laying cable or locating the fault all over the run and back filling the same and making the surface as normal ground.	180	RMT	54.54	9,817.20
48	Providing and, fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (H) 3 & 1/2 core 240 Sq. mm	8	Ea.	247.45	1,979.60
49	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (I) 240 Sq.mm.	32	Ea.	85.85	2,747.20
50	Providing & erecting weather proof, dust & vermin proof, floor mounted front operated indoor type cubical panel board necessary IP-42 and above protection as per approval from engineer incharge made from 14 SWG thick CRC M.S. sheet for outer body & doors, 16 SWG thick CRC M.S.sheet for internal partitions with necessary accessories , supporting angles/ flats channel including cutting, bending, drilling, welding, riveting with internal partitions & cable alley as per requirements & instruction of engineer-in-charge with erection of supplied switch gears, BUSBARS, suitable size of inter connecting PVC copper wire / copper-aluminium strips, rubber grommets, rib, bakelite control fuses/MCB for measuring instruments, earth bus & earth bolts, foundation flange - bolts-base Plates, sufficient nos. of hinged doors, handles with locking arrangement and rubber gasket,heavy duty end terminal connection,danger notice board,necessary ventilation,earthing strip complete. The Panel shall be painted with epoxy powder coating.				
	(The rates excludes the cost of switchgears, bus bars, inter connecting mains & Copper Aluminium strips, meters, Fuses etc. The dimension shall be measured excluding base beams) The panel shall be supplied with following approved manufacturers with following size. (B) The standard companies switch gear shall be used and only manufacturers at CPRI approved factory (iii)with 750 mm. Depth	8	Sq Mtr	33,562.30	2,68,498.40
51	providng and erecting Approved make. energy meter 3 phase 4 wire unbalanced load 500 V. 500A/5 CT complete erected as directed with necessary earth wire. Cat III	1	Ea.	2,611.86	2,611.86
52	Supplying and erecting triple pole & neutral 440V/ 500V panel mounting Aluminium Busbars with four equal Nos. of bus having current density not more than 0.8 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each busbar,erected in existing cubical panel with necessary connections. (A) Suitable for 100 Amp. Capacity	7	RMT.	660.54	4,623.78
	(D) Suitable for 400 Amp. Capacity	7	RMT.	2,204.83	15,433.81
53	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 50 KA and above at 415 V having Normal current rating 400A. with variable Thermal & magnetic release suitable to work on A.C.supply 50 c/s. With all internal connections, spreader tinned copper & complete erected in existing 16 G.M.S. housing. ICS=100% of ICU only Cat III	2	Ea.	25,228.79	50,457.58
54	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 35 KA. at 415 V. having normal current rating 200A. with Fixed thermal & magnetic release suitable to work on A.C.supply 50 c/s. with all internal connections, spreader tinned copper & complete erected in existing 16 G.M.S. housing. ICS=100% of ICU only Cat III	3	Ea.	16,221.61	48,664.83

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
55	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat-III	5	Ea.	668.62	3,343.10
	(c)63 Amp. Cat-III	5	Ea.	737.30	3,686.50
56	Providing & erecting High Voltage Danger Notice Board sticker as per language suggested by engineer incharge of standard size-as per IS 2551	2	Ea.	35.35	70.70
56	<p>Supplying and erecting, commissioning and testing of Diesel Generating set confirming to IS: 4722:1968 & BS:5514 having continuous rating, 3 phase, 415 volts, 50 cycles A.C. supply comprising of a totally enclosed air/water cooled diesel engine with multi-cylinders developing suitable BHP not less than following capacity at 1500 RPM with 10% overload for one hour in 24 hours with standard accessories like fly wheel, lubricating oil cooler, "A" class governor, heavy duty fuel wheel and lubricating oil filter, oil bath air filler, lubricating oil pressure gauge, end exhaust manifold, standard set of tools with adjustable spanners, screw drivers, cylinder head to cover, joint cylinder head to exhaust, element lube oil filter, 12 / 24 volts electric starting equipment complete with standard heavy duty battery, dynamo, cut-outs, ammeter, necessary wiring, pressure gauge, starter etc and heavy duty Residential type exhaust silencer (With DEF System) and vertical hot air duct both</p> <p>logged with asbestos rope, save oil trays, exhaust piping of required length, standard wall/floor mounted fuel with level indicator and piping and drip proof alternator, self excited, self regulated, screen protected, with excitation system, capable of delivering the rated system output at 415 volts, 3 phase, 0.8 PF, 50 Hz, 4 wire, running at 1500 RPM, conforming to IS-4722- 1968 with voltage regulation +/- 5% of rated voltage from no load to full load. Both the engine and alternator fitted on a common fabricated steel base plate with antivibration mounting engine and alternator both connected to each other by flexible flange coupling and with floor/wall mounted control panel box comprising of voltmeter ammeter, selector switches, ACB / MCCB / MCB of adequate capacity,</p> <p>indicator lamps duly wired with HRC fuses. The alternator & control panel shall be connected with provided suitable capacity armoured cable and complete with Acoustic enclosure (canopy) made out of 16 SWG CRCA Sheet, sound absorbing material Rockwool of 64 density & 100 mm thick conforming to IS:8183 / PU Foam of 40 Density - at least 40 mm. The resin bonded rockwool covered from inside the canopy by perforated sheet with 3/4 mm holes, sound level not more than 75 dB at a distance of 1 mtr, as per PVCT norms.DG set should have in built fuel tank capacity of minimum 8 hrs of continous running capacity on full load . Erection, commissioning and satisfactory testing as per requirement with first filling of fuel (minimum up to the 80% of fuel tank capacity), oil, etc. with guarantee / Warrantee of complete system for Two years. & with obtaining all necessary certificate from Electrical Inspector. The Capacity and Ratings of DG sets are as below.</p> <p>(As per new CPCB4+ Emission norms Engine With - Turbo Charger, EGR (Exhaust Gas Recirculation), CRS (Common Rail Fuel System), DOC (Diesel Oxidation Catalyst), SCR (Selective Catalytic Reduction), Integrated wiring harness connected to ECU .) (O) Continuous rating of 160 KVA ,BHP not less than 197 BHP</p>	1	Ea.	13,96,603.76	13,96,603.76
57	<p>Providing & erecting approved make AMF control panel suitable for following size of 3 phase, 415 V., 50 cycles, A.C. diesel generating set complete of scope as detailed below:</p> <p>1) Power module: A pair of electromechanically interlocked contactors (for mains & generator) Overload relay for generator contactor Neutral contactor for mains and generator Power socket for connections.</p> <p>2) Control and metering module: Line voltage monitor. Generator voltage monitor Ammeter 3 items attempt start facility. Air circuit breakers/MCB/MCCB of suitable rating for auto/manual operation. Auto/manual switch. Emergency stop push buttons. Manual start push button. frequency meter. Engine hour meter. Two earthing studs.</p>				

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
	3) Protection module: The engine shutdown in the unlikely event of Low lube oil pressure High cylinder head temperature. V belt failure. 4) Indicators with alarm Load on generator. 5) Indicators Load on mains Engine fails to start . Emergency stop battery charger. The AMF Panel of following capacity (D) AMF Control Panel for 200 KVA/250 KVA 3 phase DG Set	1	Ea.	2,22,714.09	2,22,714.09
Total Amount B (Rs.)					23,54,978.41
Total Amount A + B (Rs.)					34,31,508.90

CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
TOILET BLOCK					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
WORK UP TO PLINTH LEVEL					
1	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	(A) Up to 1.5 Mt. Depth				
	Footing & GB	34	CUM	301.99	10,267.66
	(B) 1.5 to 3.0 Mt. Depth				
	Footing	32	CUM	346.43	11,085.76
2	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	5	CUM	4,914.66	24,573.30
3	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	8	CUM	5,676.20	45,409.60
4	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A) COLUMNS	2	CUM	6,615.50	13,231.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) BEAMS :	3	CUM	6,312.50	18,937.50
	CC work M-25 for Coping using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Coping	1	CUM	5,605.50	5,605.50
5	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	1,350	Kg	65.65	88,627.50
6	Brick Masonry work in Cement:Mortar 1:6	3	CUM	5,818.61	17,455.83
7	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	51	CUM	186.85	9,529.35
8	Filling of Plinth in layers of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	9	CUM	350.47	3,154.23
9	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster inteh proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carrington Plaster work on RCC, required tipping work should be carried out as instructed)	16	SQM	265.63	4,303.21
10	Finishing wall with water proofing cement paint of on wall surfaces (Threecoats) to give an approved brand and manufacture and of required shape even shade after thoroughly brushing the surface to remove all dirt and remains of loose powered materials.	11	SQM	99.23	1,071.68
WORK ABOVE PLINTH LEVEL					
11	CC work M-25 for Column using aggregate of size 10-20 mm,centring, curing, finishing etc. complete (without reinforcement)				
	(A) COLUMN	2	CUM	6,615.50	13,231.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) BEAMS	2	CUM	6,312.50	12,625.00
	CC work M-25 for RCC Bottom Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(C) SLAB	3	CUM	5,403.50	16,210.50
	CC work M-25 for RCC Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(D) TERRACE SLAB	3	CUM	6,211.50	18,634.50
	CC work M-25 for Lintel using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(E) LINTEL	1	CUM	6,060.00	6,060.00
	CC work M-25 for Chajja using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(F) CHHAJJA	2	CUM	6,009.50	12,019.00

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
12	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	1,990	Kg	65.65	1,30,643.50
13	Brick Masonry work in Cement:Mortar 1:6	12	CU M	5,818.61	69,823.32
14	Cement Plaster 12 mm thick using Cement:Mortar in proportion 1:3 with Niru Finishing curing, etc. complete	88	SQ M	225.23	19,820.24
15	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster inteh proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carrington Plaster work on RCC, required tipping work should be carried out as instructed)	48	SQ M	245.43	11,780.64
16	Supply, Fixing & Polishing of Kota Stone work thickness 20-25 mm to be fixed in Lime:Mortar 1:2 and liquid Cement and as instructed	9	SQ M	922.13	8,299.17
17	Supply & Fixing of Glazed tiles (1st Quality) of required size in Cement Roga and joints to be filled with white cement after 12mm rough plaster in proportion of 1:3 flooring, treads of steps & landings	6	SQ M	497.93	2,987.58
18	Supply & Fixing of Glazed tiles (1st Quality) of required size in Cement Roga and joints to be filled with white cement after 12mm rough plaster in proportion of 1:3	83	SQ M	525.20	43,591.60
19	Providing and fixing 35 mm thick shutters for Doors, windows and clear story windows including anodised alluminium butt hinges with necessary screws. (A) Indian Teak Wood(iii) Partly panelled and partly glazed.	7	SQ M	3,752.41	25,141.15
	Fully paneled				
20	Providing and fixing glazed louvered glass windows and ventilators with teak wood frame 10cm. x 7cm. size including 3 coats of oil painting to wood work etc.complete.	2	SQ M	4,202.12	9,664.88
21	Plastic Imulsion Paint (Two coats) (Asian Paint, ICI, Dulux, Nerolac, Berger etc. of approved type) (with Prime Coat)	88	SQ M	146.45	12,887.60
22	Finishing wall with water proofing cement paint of on wall surfaces (Threecoats) to give an approved brand and manufacture and of required shape even shade after thoroughly brushing the surface to remove all dirt and remains of loose powered materials.	48	SQ M	99.23	4,763.04
WATER SUPPLY AND SANITARY ITEMS					
23	Providing and fixing wash down water closet (European type,W.C. Pan) with integral P or S trap including jointing the trap with soil pipe in Cement Mortar 1:1 (1-Cement : 1-fine sand) (Seal and cover to be measured and paid for separately)(A) vitreous China Pattern :(i) in white colour	3	NO.	1,356.81	4,070.43
24	Providing and fixing plastic seat and cover for wash down water closer with C.P. brass hinges and rubber buffers. (B) Black plastic seal and cover.	3	NO.	291.33	873.99
25	Providing and fixing washbasin with single hole for pillar tap with C.I. or M.S. brackets painted white including sutting holes and making good the same but excluding fittings.(A) Vitreous China:(ii) Flat Back washbasin 550 mm x v 400mm size. (i) In white colour.	2	NO.	1,660.59	3,321.18
26	Providing and fixing C.P. brass waste for washbasin or sink. (A) 32mmdia.	2	NO.	67.91	135.82
27	Providing and fixing pillar tap, capstan head, screw down high pressure with screws, shanks and back nuts. (i) 15mm dia.	2	NO.	308.73	617.46
28	Providing and fixing brass screw down stop tap.(A) 15mm dia.	3	NO.	205.83	617.49
29	Providing and fixing chromium plated, bottle trap with necessary couplings of approved quality for wash basin.	2	NO.	295.80	591.60
30	Providing and fixing Urinal or approved quality including connecting the Urinal with waste pipe , tap etc. complete.(A) White earthenware flat back or corner type size 430mm x 260mm x 350mm.	3	NO.	1,074.86	3,224.58
31	Providing and fixing 600mm x 450mm bevelled edge mirror of superior glass mounted on 6mm thick A.C. sheet or plywood sheet and fixing to wooden plug with C.P. brass screws and washers.	2	NO.	859.41	1,718.82
32	Providing and fixing PVC SWR Nahni trap IS 14735 for drain - 100 mm diameter with jali of the following nominal diameter of self cleansing design with C.I spread down or hinged grating including the cost of cutting and making good the walls.	3	NO.	628.19	1,884.57
33	Providing and fixing to wall ceiling and floor 10.0 Kg.F/Cm2 working pressure polythene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(F) 75mm				

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
	(A) 75 mm Dia	60	RMT	280.23	16,813.80
	Providing and fixing to wall ceiling and floor 10.0 Kg.F/Cm2 working pressure polythene pipes of the following outside Dia. Low density, complete with special flange compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(F) 110mm				
	(B) 110 mm Dia	30	RMT	339.05	10,171.50
34	Providing and fixing S.W. gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300mm size (inside) with standard weight.(i) Square mouth traps.(B) 150mm x 100mm size P or R type	2	NO.	1,246.92	2,493.84
35	Constructing brick masonry chamber for underground C.I.Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm2 in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm internal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slab with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(i) Inside dimensions 455mmx610mm and 450mm deep for single pipe line.	2	NO.	2,932.93	5,865.86
36	Providing laying (to level or slopes) and jointing reinforced concrete Light duty non-pressure pipes I.S. class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete.(B) 150mm	100	RMT	257.19	25,719.00
37	Providing and laying in trenches galvanised mild steel tubes (Medium grade) of the following nominal bore, and tube fitting (Earthwork in trenches to be measured and paid for separately) (C) 25mm	30	RMT	282.98	8,489.40
38	Providing laying and jointing in true line and level 15mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.				
	(A) 15 mm.dia.	40	RMT	72.65	2,906.00
	Providing laying and jointing in true line and level 25mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.				
	(B) 25 mm.dia.	30	RMT	91.84	2,755.20
39	Providing and fixing screw down bib taps of following size.(A) Brass screw down bib tap polished bright. (i) 15mm dia.	1	NO.	186.83	186.83
40	Providing and fixing M.I. fisher union for washbasin or sink. (A) 32mm dia.	3	NO.	78.75	236.25
41	Providing and fixing Gun metal check or non-return fullway wheel valve.(A) 15mm dia.				
	(A) 15 mm Dia.	1	NO.	186.83	186.83
	Providing and fixing Gun metal check or non-return fullway wheel valve.(A) 25mm dia.				
	(B) 25 mm Dia.	1	NO.	420.63	420.63
42	Providing and fixing chromium plated brass half turn flush cock of approved quality including fixing in pipe line etc.complete. (ii) 25mm dia.	3	NO.	263.77	791.31
43	Providing and fixing ball cock of approved. quality as directed.(B) Abonite (i) 25mm dia.	2	NO.	102.91	205.82
44	Providing and fixing C.I. Manhole cover 0.60 M. x 0.45M. size having weight not less than 35Kg.	2	No	958.17	1,916.34
45	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace	1,000	LIT.	3.95	3,950.00
Total Amount A (Rs.)					7,71,599.38
ELECTRICAL WORKS					
46	Supplying & erecting approved make self-priming domestic monoblock water pump with 1 H.P motor, suitable for operation on 230 volts, 50c/s. AC supply with metallic flange, and M.S. impeller delivery and following discharge (a) 40 LPM at 24 mtrs. head suitable for 25mm dia. Delivery Cat III	1	Ea.	7,679.03	7,679.03

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
47	Providing and erecting ISI marked PVC insulated PVC Sheathed Flat flexible Submersible copper cable approved make of following Size. (A) 3 Core x 1.5 Sq. mm.	30	Mtr	102.91	3,087.30
48	Supplying and erecting Direct - On - Line Starter with 18 A. rating contactor and with 3.5 Amp. 18A range directly operated in totally insulated elegant enclosure for single phase operation up to 3 HP as per IS 13947 complete erected on P.W. Block with necessary connection. Cat III	1	Ea.	2,100.80	2,100.80
49	Supplying of following size of STANDARD UPVC column pipe with coupler and wire lock [A] 25 mm dia	20	Ea.	144.43	2,888.60
47	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat III	12	Pt.	471.92	5,663.04
48	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	4	Pt.	746.59	2,986.36
49	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (a) 20 mm (b) 25 mm	50	Mtr.	24.24	1,212.00
		45	Mtr.	33.33	1,499.85
50	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (b) 2 wire 2.5 sq. mm	80	Mtr.	82.82	6,625.60
51	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand / Solid Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (A) 4 core 4 Sq. mm	50	Ea	117.16	5,858.00
52	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (A) 2 to 4 core 2.5 / 4 Sq. mm	4	Ea	33.33	133.32
53	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (A) 1.5/ 2.5/4/6 Sq.mm	16	Ea	6.06	96.96
54	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (A)50 mm outer dia	45	Mtr.	62.62	2,817.90

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
55	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy> 85 lumens/watt ,LED LED driver efficiency > 85 %(fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Tube Light with integral driver (iv) 22-24 Watts, Surge - 2KV,IP-20, conventional 4 feet Cat. III	6	Ea.	373.70	2,242.20
56	Supplying and erecting led lamps with following wattage capacity of 220 to 240 voltage, minimum 15000 burning hours life, 500 V in built-surge protection,Polycarbonate diffuser, mounting suitable for E14 / E27 / B22 lamp holders, pf >= 0.5 (A) LED Lamps integral type, with PC diffuser suitable LAMP holder (iii) 10 to 15 watts Cat-III	4	Ea.	188.87	755.48
57	Providing & erecting 415V MCB Four Pole Switch for Lighting Load (B curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (a) 6 to 32 Amp. Cat III	1	Ea.	578.73	578.73
58	Providing & erecting 240 V MCB double pole switch for lighting Load (B Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity (a) 6 to 32 Amp. Cat III	1	Ea.	278.76	278.76
59	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iv)12 way	1	Ea.	1,492.78	1,492.78
60	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	3	Kg.	77.77	233.31
61	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (b)For Electrical installation up to 11 KV in normal soil. Length of Pipe : 2.00 mtrs Back filling Compound :1 no. Bag of 25 Kg.	1	Ea.	5,760.03	5,760.03
Total Amount B (Rs.)					53,990.05
Total Amount A + B (Rs.)					8,25,589.43

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
ADMIN OFFICE BUILDING					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
UPTO PLINTH LEVEL					
1	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	(A) Up to 1.5 Mt. Depth				
	Footing & GB	82	CU M	301.99	24,763.18
	(B) 1.5 to 3.0 Mt. Depth				
	Footing	80	CU M	346.43	27,714.40
2	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	10	CU M	4,914.66	49,146.60
3	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	20	CU M	5,676.20	1,13,524.00
4	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A) COLUMNS	3	CU M	6,615.50	19,846.50
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) BEAMS :	4	CU M	6,312.50	25,250.00
5	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	3168	KG	65.65	2,07,979.20
6	Brick Masonry work in Cement:Mortar 1:6	12	CU M	5,818.61	69,823.32
7	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	158	CU M	186.85	29,522.30
8	Filling of Plinth in layers of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete.	13	SQ M	350.47	4,556.11
9	Water Proof Cement Paint Work two coat (Snowcem, Deorocem or other similar brands approved) after primer Coat	13	SQ M	71.71	932.23
ABOVE PLINTH LEVEL					
10	CC work M-25 for Column using aggregate of size 10-20 mm,centring, curing, finishing etc. complete (without reinforcement)				
	(A) COLUMN	4	CU M	6,615.50	26,462.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) BEAMS	5	CU M	6,312.50	31,562.50
	CC work M-25 for RCC Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(C) SLAB AT PL	8	CU M	6,211.50	49,692.00
	CC work M-25 for Lintel using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(E) LINTEL	1	CU M	6,060.00	6,060.00
	CC work M-25 for Chajja using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(F) CHHAJJA	2	CU M	6,009.50	12,019.00
11	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	3,080	KG	65.65	2,02,202.00

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
12	Brick Masonry work in Cement:Mortar 1:6	28	CU M	5,818.61	1,62,921.08
13	Half brick masonry in common brunt clay building bricks having crushing strength not less than 35 Kg/Sq.Cm. in Cement mortar 1:4 (1- Cement : 4 - oarse sand) in foundation and plinth (B) Conventional	16	SQ M	648.58	10,377.28
14	Cement Plaster 12 mm thick using Cement:Mortar in proportion 1:3 with Niru Finishing curing, etc. complete				
	(A) For wall	215	SQ M	225.23	48,424.45
	(B) For ceiling and soffits of stair & Chhija	57	SQ M	225.23	12,838.11
15	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster inteh proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carringout Plaster work on RCC, required tipping work should be carried out as instructed)	121	SQ M	265.63	32,141.23
16	Providing throating or plaster drip and moulding to R.C.C. Chhajja.	32	RMT	45.83	1,466.56
17	Decorative Groove Work in Cement Plaster	32	RMT	41.41	1,325.12
18	Providing and laying polished Kota stone slab flooring over 20mm (Average) thick base of cement mortar 1:6 (1-cement : 6-coarse sand) or L.M. 1:1.5 (1-Lime putty :1.5 - coarse sand) laid over and jointed with grey cement slurry mixed with pigment to match the shade of slab including rubbing and polishing etc. complete. (A) 25mm thick	40	SQ M	1,019.39	40,775.60
19	Constructing a platform 60 cm width and 70 cm high resting on B.B.Masonry walls 23 cm.thick in C.M.(1:6) with (ii) Fixing black kadappa stone 30mm thick laid on precast R.C.C. (1:2:4) slab with plastering on exposed faces of wall in C.M. (1:4) etc complete. (i) cooking platform	3	RMT	2,656.06	7,968.18
20	Supply & Fixing of Glazed tiles (1st Quality) of required size in Cement Roga and joints to be filled with white cement after 12mm rough plaster in proportion of 1:3	20	SQ M	497.93	9,958.60
21	Providing and fixing 35 mm thick shutters for Doors, windows and clearstory windows including blackenamelled M.S. butt hinges with necessary screws. (A) Indian teak wood. (i) Fully Panelled.	10	SQ M	3,773.84	37,738.40
22	aluminium section window work (with 3 track mosquito net) (jindal)(with necessary all fittings)	11	SQ M	7,131.61	78,447.71
23	Providing and fixing glazed louvered glass windows and ventilators with teak wood frame 10cm. x 7cm. size including 3 coats of oil painting to wood work etc.complete.	1	SQ M	4,202.12	4,202.12
24	Distempering with dry distemper of approved brand and manufacture (two coats) and of required shade on wall surfaces of given an even shade, over and including a priming coat of whitening after thoroughly brooming the surface free from mortar dropping and other foreign matter				
	(A) For wall	215	SQ M	53.89	11,586.35
	(B) For Ceilings and soffits of stairs	57	SQ M	53.89	3,071.73
25	Finishing wall with water proofing cement paint of on wall surfaces (Threecoats) to give an approved brand and manufacture and of required shape even shade after thoroughly brushing the surface to remove all dirt and remains of loose powered materials.				
	(A) For wall	121	SQ M	99.23	12,006.83
26	Water Proofing Treatment on Terrace and Wall sides with smooth finishing including material-labour etc. complete	34	SQ M	122.21	4,155.14
27	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure polythene pipes of the following outside Dia. Low densidy, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(F) 75mm	7	RMT	280.23	1,961.61
28	Providing and fixing to wall, ceiling and floor galvanised Mild steel tubes (Medium grade) of the following nominal bore, tube fitting and clamps including making good the wall ceiling and floor.(A) 15mm	25	RMT	252.49	6,312.25
29	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace	1,000	LIT.	3.95	3,950.00

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
30	Grill work for doors - windows etc. as per design on site with fitting & fixing.	185	KG	110.09	20,366.65
WATER SUPPLY AND SANITARY ITEMS					
31	Providing and fixing wsh down water closet (European type, W.C. Pan) with integral P or S trap including jointing the trap with soil pipe in Cement Mortar 1:1 (1-Cement : 1-fine sand) (Seal and cover to be measured and paid for separately)(A) vitreous China Pattern :(i) in white colour	2	NO.	1,356.81	2,713.62
32	Providing and fixing plastic seat and cover for wash down water closer with C.P. brass hinges and rubber buffers. (B) Black plastic seal and cover.	2	NO.	291.33	582.66
33	Providing and fixing washbasin with single hole for pillar tap with C.I. or M.S. brackets painted white including sutting holes and making good the same but excluding fittings.(A) Vitreous China:(ii) Flat Back washbasin 550 mm x v 400mm size. (i) In white colour.	1	NO.	1,660.59	1,660.59
34	Providing and fixing C.P. brass waste for washbasin or sink. (A) 32mmdia.	1	NO.	67.91	67.91
35	Providing and fixing pillar tap, capstan head, screw down high pressure with screws, shanks and back nuts. (i) 15mm dia.	1	NO.	308.73	308.73
36	Providing and fixing brass screw down stop tap.(A) 15mm dia.	2	NO.	205.83	411.66
37	Providing and fixing chromium plated, bottle trap with necessary couplings of approved quality for wash basin	1	NO.	295.80	295.80
38	Providing and fixing 600mm x 450mm bevelled edge mirror of superior glass mounted on 6mm thick A.C. sheet or plywood sheet and fixing to wooden pluge with C.P. brass screws and washers.	1	NO.	859.41	859.41
39	Providing and fixing PVC SWR Nahni trap IS 14735 for drain - 100 mm diameter with jali of the following nominal diameter of self cleansing design with C.I sread down or hinged grating including the cost of cutting and making good the walls.	1	NO.	628.19	628.19
40	Providing and fixing to wall ceiling and floor 10.0 Kg.F/Cm2 working pressure polythene pipes of the following outside Dia. Low densidy, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.				
	(A) 75 mm Dia	25	RMT	280.23	7,005.75
	(B) 110 mm Dia	30	RMT	339.05	10,171.50
41	Providing and fixing S.W. gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300mm size (inside) with standard weight.(i) Square mouth traps. (A) 100mm x 100mm size P type.	1	NO.	1,292.19	1,292.19
42	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm2 in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm intenal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slabe with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(ii) Inside dimensions 500mm x 700 mm and 450mm deep for pipe line with one or two inlets.	1	NO.	3,660.76	3,660.76
43	Providing laying (to level or slopes) and jointing reinforced concrete Light duty non-pressure pipes I.S. class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete.(B) 150mm	30	RMT	257.19	7,715.70
44	Providing and laying in trenches galvanised mild steel tubes (Medium grade) of the following nominal bore, and tube fitting (Earthwork in trenches to be measured and paid for separately) (C) 25mm	30	RMT	282.98	8,489.40
45	Providing laying and jointing in true line and level 15mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	40	RMT	72.65	2,906.00
	Providing laying and jointing in true line and level 25mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	30	RMT	91.84	2,755.20

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
46	Providing and fixing screw down bib taps of following size.(A) Brass screw down bib tap polished bright. (i) 15mm dia.	3	NO.	186.83	560.49
47	Providing and fixing M.I. fisher union for washbasin or sink. (A) 32mm dia.	1	NO.	78.75	78.75
48	Providing and fixing Gun metal check or non-return fullway wheel valve.(A) 15mm dia.	1	NO.	186.83	186.83
	Providing and fixing Gun metal check or non-return fullway wheel valve.(C) 25mm dia.	1	NO.	420.63	420.63
49	Providing and fixing chromium plated brass half trun flush cock of approved quality including fixing in pipe line etc. complete.(ii) 25mm dia	2	NO.	263.77	527.54
50	Providing and fixing ball cock of approved. quality as directed.(B) Abonite (i) 25mm dia.	1	NO.	102.91	102.91
51	Providing and fixing C.I. Manhole cover 0.60 M. x 0.45M. size having weight not less than 35Kg.	2	NO.	958.17	1,916.34
52	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace	1,000	LIT.	3.95	3,950.00
53	Supplying & erecting approved make self-priming domestic monoblock water pump with 1 H.P motor, suitable for operation on 230 volts, 50c/s. AC supply with metallic flange, and M.S. impeller delivery and following discharge (a) 40 LPM at 24 mtrs. head suitable for 25mm dia. Delivery Cat III	1	Ea.	7,590.15	7,590.15
UNDER GROUND WATER TANK					
54	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	(A) Up to 1.5 Mt. Depth				
	Soft Rock not required blasting	11	CU M	301.99	3,321.89
	(B) 1.5 to 3.0 Mt. Depth				
	Soft Rock not required blasting	10	CU M	346.43	3,464.30
55	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	1	CU M	4,914.66	4,914.66
56	CC work M20 for RCC Bottom slabusing aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A)Base Slab	2	CU M	5,050.00	10,100.00
	CC work M-20 for Partition, Parsdment, railing etc.using aggregate of size 10-20 mm, centring, curing, finishing etc. Complete (without reinforcement)				
	(B)Wall	4	CU M	7,070.00	28,280.00
	CC work M-20 for RCC slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(C)Top Slab	1	CU M	6,060.00	6,060.00
57	Providing and laying cement concrete flooring 1:2:4 (1- cement : 2-coarse sand : 4-graded stone aggregate 20mm nominal size) laid in one layer and finished with a floating coat of neat cement. (B) 50mm thick.	5	SQ M	355.22	1,776.10
58	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	880	KG	65.65	57,772.00
59	Water Proof Cement Plaster 20 mm thick using Water Proofing Compound and in the ratio of 1:3 with necessary finishing	48	SQ M	236.34	11,344.32
60	RCC precast cover with supply, fitting, fixing with complete as per specification 10ton size 700/550/60-90mm.	1	NO.	1,255.43	1,255.43
61	RCC precast frame with supply, fitting, fixing with complete as per specification 10ton size 700/550/60-90mm	1	NO.	570.65	570.65
Total Amount A (Rs.)					16,08,768.40

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
ELECTRICAL WORK					
62	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete	18	Pt.	471.92	8,494.56
63	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. [II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete	4	Pt.	746.59	2,986.36
64	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	6	Pt.	499.50	2,997.00
64	Point wiring for FAN with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch and hum free EME step type electronic fan regulator mounted and accessories with earth continuity of following type erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	4	Pt.	670.24	2,680.96
65	Providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat. III	5	Ea	112.11	560.55
66	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (a) 20 mm	50	Mtr.	24.24	1,212.00
	(b) 25 mm	35	Mtr.	33.33	1,166.55

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
67	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (a) 2 wire 1.5 sq. mm	90	Mtr.	62.62	5,635.80
	(b) 2 wire 2.5 sq. mm	60	Mtr.	82.82	4,969.20
68	providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) with medium class Rigid PVC pipe and accessories (a) 2 wire 4 sq. mm	40	Rmt.	112.11	4,484.40
69	Providing & erecting Approved make Ceiling Fan with double ball bearing ISI mark with Condenser 230 volt A.C.50 Hz 1200 mm sweep complete having 3 blades aluminium body and blade sets having ornamental design shanks , canopy erected with earthing. [Make shall be approved by Engineer in Charge]	4	Ea.	2,311.89	9,247.56
70	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy> 85 lumens/watt ,LED LED driver efficiency > 85 %(fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Tube Light with integral driver (iv) 22-24 Watts, Surge - 2KV,IP-20, conventional 4 feet Cat. III	10	Ea.	373.70	3,737.00
71	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on 3 phase and neutral 415V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed. (ii) 40Amps. FP CAT-III	1	Ea.	2,637.11	2,637.11
72	Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity (ii) 6 to 32Amps. Cat III	5	Ea.	299.97	1,499.85
73	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat III	3	Ea.	638.32	1,914.96
74	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iv)12 way	3	Ea.	1,492.78	4,478.34
75	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	6	Kg.	77.77	466.62
76	Providing and erecting required size HOT deep Galvanised iron strip for earthing of H.T. , OCB/ ACB/ Transformer LT panel board, Motors etc. using proper clamp.	10	Kg.	77.77	777.70

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
77	<p>Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistance mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphur content:- <2%(C) Back fill</p> <p>Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (b)For Electrical installation up to 11 KV in normal soil. Length of Pipe : 2.00 mtrs Back filling Compound :1 no. Bag of 25 Kg.</p>	2	Ea.	5,760.03	11,520.06
				Total Amount B (Rs.)	71,466.58
				Total Amount A + B (Rs.)	16,80,234.98

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
CONTAINER STORAGE PLATFORM					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
UPTO PLINTH LEVEL					
1	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	(A) Up to 1.5 Mt. Depth Platform	131	CU M	301.99	39,560.69
2	Rubble Stone filling with 33% Murrum in specified thickness with watering, compaction etc. complete	66	CU M	632.26	41,729.16
3	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	27	CU M	4,914.66	1,32,695.82
4	CC work M-25 for RCC Bottom Slab using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(C) SLAB AT PL	118	CU M	5,403.50	6,37,613.00
5	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	17,700	KG	65.65	11,62,005.00
6	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster inteh proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carringout Plaster work on RCC, required tipping work should be carried out as instructed)	23	SQ M	265.63	6,109.49
Total Amount A (Rs.)					20,19,713.16

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
UNDER GROUND WATER TANK					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
1	Item No. 2				
	Preparing structural design of RCC Under Ground / Partially under ground / above high ground level Reservoir of required capacity as per relevant I.S. Standards and constructing the same, including excavation in all types of soil strata (including rock) including shoring strutting if required, for loose soil / to protect from collapse, casting 100 mm thick P.C.C. leveling course in M-15, Refilling the pit with proper soil and disposing of the surplus stuff at all lead including cement plaster in CM 1:2 with approved water proofing compound to all over inside container (i.e walls, base, top slab/dome bottom etc. all). Including all types of labour and material charges of lowering, laying, erecting / hosting and jointing of pipe assembly to inlet, outlet, overflow, washout and bye pass arrangement as per hydraulic design.				
	Providing and fixing accessories, CI Manhole frame and cover, water level indicator, adequate cowl type ventilators or lantern type ventilator with stainless steel jail.				
	RCC chambers for valves. Providing and applying three coats of cement paint / snowcem to the out side face of structure. It also includes satisfactory water tightness test as per relevant I.S. code and painting name of scheme and capacity on the tank as per direction of engineer in charge.				
	List of Indian Standards for Design of GSR / SUMP:-				
	The structural design of GSR shall be in accordance with provisions relevant I.S Standards.				
	(1) I.S. 3370 part I & II 2009 or latest revision				
	(1.1) I.S 3370 Part III & IV 1965 or its latest revision				
	(2) IS 456-2000 or its latest revision				
	(3) IS 1893-2002 part I to V or its latest revision				
	(4) IS 875 part I to III, 1987 or its latest revision				
	General Specifications:-				
	(1) Water depth in container shall be adopted as per data of tender. Capacity shall be calculated excluding free board of the reservoir. If water depth is not specified the suitable water depth / acceptable to field engineer in accordance with hydraulic requirement shall be adopted for capacity.				
	(2) Shape of container (in plan) specified by in data shall be adopted in absence circular shape shall be adopted.				
	(3) Size shall be fixed as per availability of space (land area) at site / acceptable engineer in charge.				
	(4) Effect of overlapping of pressure bulbs on soil due near by structure and proposed sump should be considered.				
	(5) Care shall be taken that no damage should occur to nearby existing structure. Compensation shall be paid for the same by agency.				
	(6) The minimum concrete grade for RCC shall be M-30				
	(7) HYSD Fe 415 / 500 grade reinforcing bars confirming to I.S. 1786 / 1139 shall be considered in design. CRS / TMT bars shall be provided. In saline atmosphere corrosion resistance stainless steel / HCR rebar shall be provided. Any other steel can be used with approval of C.E./ in situation of non availability in market without extra cost.				
	(8) Minimum size (or thickness) of various components shall be provided as per tender criteria / specifications in absence as per I.S./ Std. practice of G.W.S.S.B. Minimum dimensions specified for various components in tender data / specifications shall be provided without fail.				
	(9) The safe bearing capacity (SBC) shall be referred from SBC test report. In absence of report it shall be referred from data sheet. If poor soil is found / water table is met with during excavation SBC shall be scientifically ascertained and design shall be revise. No extra shall be paid for increase in quantity.				
	(10) DI pipes and special shall only be used if type is not specified in tender.				
	(11) The rate shall include cost of dewatering during excavation making all arrangement when water table meets within depth.				

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
	(12) The structure shall be designed properly to resist uplift due to ground water table specified in data or actual ground water table meets with during excavation. If GWT / Uplift is mentioned in tender and during excavation it dose not meet 7.5% rate shall be reduced.				
	(13) SS pipes railing shall be provided when sump is more than or equal to 1.5 meter above ground level.				
	(14a) RCC staircase / RCC steps should be provided from GL to sump top slab based on the height of GSR above or below the ground .				
	(14b) RCC staircase with SS railing to be provided inside reservoir container BB masonry stair cabin with MS safety door having locking arrangements to be provided for GSR, sump, and HGLR of capacity more than 7.5 lac lit. with top slab. If dome is considered as top slab then provide minimum opening of 900 mm X 2000 mm with curbing and SS railing around.				
	(15) Appearance of structure should be aesthetically good looking acceptable to authority.				
	(16) Any change in size, shape, depth below GL, height above GL, water depth, F.B., size of member etc can be permitted in exceptional case due to site condition or hydraulic design requirement by C.E. No extra shall be paid for change.				
	(17) Any change in data, dimensions, shape, water depth, reduction in size if permitted by competent authority and if it reduces quantity then payment shall be reduced prorate.				
	(18) When capacity of GSR / Sump is > 20 lakh liters two or suitable compartments acceptable to executive engineer shall be designed and provided.				
	(19) Agency shall engage qualified (at least graduate) consulting engineer for designing the structure and he / she shall visit the site for guidance of work.				
	(20) 75% part rate shall be payable for concrete, reinforcement and plastering items of container until satisfactory hydraulic testing for water tightness is performed as per tender condition. Till the work shall be treated as incomplete.				
	Above conditions / general specifications Sr. No. 1 to 20 are part and parcel of tender (contact) and prevail over other provisions in tender.				
	As above rectangular sump with water table (Sub Soil water above foundation level)				
	(3)Cost of 100000 Liter	1	Nos	5,40,054.79	5,40,054.79
	(3a) Add for Capicity above 100000 up to 200000 litre		liter	3.75	1,87,500.00
Total Amount A (Rs.)					7,27,554.79
Note: Final Rate for UG Tank Rate is considered with 15% increase in basic rate for R-Urban as mentioned in SOR					
ELECTRICAL WORKS					
2	Providing & erecting open well horizontal mono block pump set with cast iron body, complete for three phase submersible motor having [B] For 2 HP 3 phase open well horizontal mono block pump set suitable for 200 LPM @ 25 mtr head suitable for 50 mm dia delivery pipe cat III	1	Ea.	10,734.28	10,734.28
3	Providing & erecting open well horizontal mono block pump set with cast iron body, complete for three phase submersible motor having [C] For 3 HP 3 phase open well horizontal mono block pump set suitable for 85 LPM to 270 LPM @ 11 mtr to 33 mtr head suitable for 50/65 mm dia delivery pipe cat III	1	Ea.	15,707.52	15,707.52
4	Supplying & erecting approved make motor control cubical panel (Direct - on - line) made from 16 G. CRCA sheet duly epoxy powder painted inside and outside with hinged doors and locking, arrangement consisting of suitable size of ON- OFF isolator (AC - 3/23duty) main fuses, single phasing preventer, indicating lamps for R- Y - B phases, overload relay, Automatic water level controller, Ammeter, Voltmeter each with two way selector switch incoming, wires duly socket crimped, main contactor & overload relay, start - stop push buttons, to be erected on angle iron frame grouted on wall as directed. The isolator, overload relay & contactors will be of L & T, Siemens or BCH make only. (A) DOL up to 5.0 H.P.	2	Ea.	7,722.46	15,444.92

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
5	Providing and erecting ISI marked PVC insulated PVC Sheathed Flat flexible Submersible copper cable approved make of following Size. (B) 3 Core x 2.5 Sq. mm.	60	Mtr.	104.03	6,241.80
6	Supplying of following size of STANDARD UPVC column pipe with coupler and wire lock [D] 50 mm dia	25	Mtr.	297.95	7,448.75
Total Amount B (Rs.)					55,577.27
Total Amount A + B (Rs.)					7,83,132.06

RAJKOT MUNICIPAL CORPORATION					
SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
Land Development					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
1	Filling of Plinth in layers of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete				
	A. 0 to 0.2 mt depth	1,410	CU M	142.41	2,00,798.10
2	Rubble Stone filling with 33% Murrum in specified thickness with watering, compaction etc. complete	1,410	CU M	632.26	8,91,486.60
3	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	705	CU M	4,914.66	34,64,835.30
4	Providing and Casting Controlled cement concrete M 250 proportions of ingredients as per mix design by weigh batching for pavement wearing coat 75 mm thick including floor finishing with a floating of neat cement complete. TREMIX VD SYSTEM including providing and fixing channels as per required levels and slope, leveling poured concrete between channels with Double Beam screed vibrators removing excess water using VD Pump finishing the surface with power trowel and power floater including cutting the groove of size 5mm x 10mm at required distance and providing and filling the same with bitumen as per practices etc. complete at all levels Excluding steel reinforcement.	529	CU M	5,757.00	30,45,453.00
Total Amount (Rs.)					76,02,573.00

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
COMPOUND DEVELOPMENT - GREEN BELT					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
1	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	(A) up to 1.50 m depth				
	Green Space	168	CUM	301.99	50,734.32
2	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 In rows 5 cm apart in both directions.	1,120	SQ M	29.59	33,140.80
3	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. Complete				
	Green Space	151	CU M	186.85	28,270.41
4	Supply and stacking of Peltophorum species plant of height 150-165 cm. in big poly bags of size 25 cm				
	In Green Belt	230	Each	137.36	31,592.80
5	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%): Holes 60 cm dia, and 60 cm deep, Plantation of Trees, Shrubs, and Hedge at site i/c watering and removal of unserviceable material's as per direction of officer in charge (excluding cast of plant & water)				
	In Green Belt	230	Each	69.69	16,028.70
Total Amount (Rs.)					1,59,767.03

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
COMPOUND WALL					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
1	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	(A) up to 1.50 m depth				
	Footing & GB	641	CUM	301.99	1,93,575.59
	(B) 1.50 m to 3.0 m depth				
	Footing	358	CUM	346.43	1,24,021.94
2	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	43	CUM	4,914.66	2,11,330.38
3	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	65	CUM	5,676.20	3,68,953.00
4	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(A) COLUMNS	51	CUM	6,615.50	3,37,390.50
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(B) BEAMS	33	CUM	6,312.50	2,08,312.50
	CC work M-25 for Coping using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	(3) Coping	17	CUM	5,605.50	95,293.50
5	Brick Masonry work in Cement:Mortar 1:6	308	CUM	5,818.61	17,92,131.88
6	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	21,650	KG	65.65	14,21,322.50
	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	867	CUM	186.85	1,61,998.95
7	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster inteh proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carringout Plaster work on RCC, required tipping work should be carried out as instructed)	3,230	SQM	265.63	8,57,984.90
8	Finishing wall with water proofing cement paint of on wall surfaces (Threecoats) to give an approved brand and manufacture and of required shape even shade after thoroughly brushing the surface to remove all dirt and remains of loose powered materials.	3,230	SQM	46.46	1,50,065.80
9	Supply and fixing 610mm dia. concertina coil fencing etc. complete.	400	KG	183.82	73,528.00
10	Steel work, welded in built up sections framed work including cutting, hoisting, fixing in position and applying a priming coat of red lead paint. (A)In beams and joists, channels angles Tees, flats, with connecting plates or angle cleats as in main and cross beams. Hip and jack rafters, purlins conneted to common rafters and the like	19	q	9,108.48	1,73,061.12
Total Amount (Rs.)					61,68,970.56

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
Main Gate					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
1	Excavation of foundation in soft rock up to required depth including dewatering with lifting and laying in RMC limit as instructed.				
	(A) up to 1.50 m depth				
	Footing	60	CUM	301.99	18,119.40
	(B) 1.50 m to 3.0 m depth				
	Footing	60	CUM	346.43	20,785.80
2	CC work 1:3:6 using aggregate of size 10-20 mm, curing, finishing etc. complete (without reinforcement)	4	CUM	4,914.66	19,658.64
3	CC work M-25 for RCC footing using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Footing	20	CUM	5,676.20	1,11,253.52
	CC work M-25 for Column using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Column	8	CUM	6,615.50	52,924.00
	CC work M-25 for Beam using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	Ground Beam and Tie Beam	3	CUM	6,312.50	20,831.25
	CC work M-25 for Stair Case using aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)				
	SLAB FOR CABIN	1	CUM	6,363.00	3,181.50
4	Supplying, Cutting, Bending, Binding and Hooking and binding with wire for RCC work Tor steel TMT round bar including all cost	3,718	KG	65.65	2,44,086.70
5	Filling of Plinth with using excavated usefull material partly and remaining murrum to be brought from out side in layer of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	85	CUM	186.85	15,900.94
6	Providing and fixing 35 mm thick shutters for Doors, windows and clear story windows including anodised alluminium butt hinges with necessary screws.(A) Indian Teak Wood (1) Fully Panelled				
	Fully Paneled D	2	SQM	4,101.06	7,381.91
	Providing and fixing 35 mm thick shutters for Doors, windows and clear story windows including anodised alluminium butt hinges with necessary screws. (A) Indian Teak Wood (ii) Fully Glazed.				
	Fully Glazed W	2	SQM	3,403.77	6,126.79
7	Brick Masonry work in Cement:Mortar 1:6	7	CUM	5,818.61	40,730.27
8	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster inteh proportion of 1:2 using Cement:Mortar with spong finishing etc. complete (Note: Before carringout Plaster work on RCC, required tipping work should be carried out as instructed)	41	SQM	265.63	10,890.83
9	Cement Plaster 12 mm thick using Cement:Mortar in proportion 1:3 with Niru Finishing curing, etc. complete	16	SQM	225.23	3,603.68
10	Providing, fixing and Lettering Stainless steel Font " RAJKOT MUNICIPAL CORPORATION - REFUSED TRANSFER STATION, MOTA MUVA" (height 12") on FRONT TOP beam as per drawing. at elevation portion as directed by Engineer in charge.	57	NO.	265.63	15,140.91
11	Providing & fixing steel work welded in built up structural M.S. Sections, Plates etc. for Platform, MS ladder, inserts including fabrication as shown in the drg. all steel work to have primer coat of red oxide zink chromate paint to relavant IS followed by final coat as per specification / 2 coats of approved enamel paint as directed by engineer in charge etc with all material & labour, complete.	28	q	9,108.48	2,55,037.44
12	Alucomat Ti - Zink aluminium composite Panel 4 mm thick cladding as per drawing, approved color, specification and as directed by engineer in charge	47	SQM	202.00	9,494.00
13	Finishing wall with water proofing cement paint of on wall surfaces (Threecoats) to give an approved brand and manufacture and of required shape even shade after thoroughly brushing the surface to remove all dirt and remains of loose powered materials.	57	SQM	99.23	5,656.11

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
14	Providing and erecting approved make LED compound wall light 200 mm dia, 300 mm high, aluminium base, white color, LED E27 8 W bulb, luminous flux 750 lm, luminous efficiency >= 90 lm/w with fixtures and lamp etc. complete and as directed by engineer in charge	5	NO.	2,020.00	10,100.00
Total Amount A (Rs.)					8,70,903.68
ELECTRICAL WORK					
15	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete	3	Pt.	471.92	1,415.76
16	Point wiring for FAN with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch and hum free EME step type electronic fan regulator mounted and accessories with earth continuity of following type erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete cat III NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-5 & 1-5-1 & 1-5-2.	1	Pt.	670.24	670.24
17	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. NOTE:1. For use of ZHFR/HRFR Copper wires in place of FRLS PVC wires add 5% in Item of Point wiring Item No 1-1-1 to 1-2-6 & 1-5-1 & 1-5-2. [II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete	2	Pt.	746.59	1,493.18
18	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (a) 20 mm	10	Mtr.	24.24	242.40
	(b) 25 mm	10	Mtr.	33.33	333.30
19	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (b) 2 wire 2.5 sq. mm	30	Mtr.	82.82	2,484.60
20	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand / Solid Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (A) 4 core 4 Sq. mm	50	Ea	117.16	5,858.00
21	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (A) 2 to 4 core 2.5 / 4 Sq. mm	4	Ea	33.33	133.32
22	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (A) 1.5/ 2.5/4/6 Sq.mm	16	Ea	6.06	96.96

Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
23	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable A)50mm Outer dia	45	Mtr.	62.62	2,817.90
24	Providing & erecting Approved make Ceiling Fan with double ball bearing ISI mark with Condenser 230 volt A.C.50 Hz 1200 mm sweep complete having 3 blades aluminium body and blade sets having ornamental design shanks , canopy erected with earthing. [Make shall be approved by Engineer in Charge]	1	Ea.	2,311.89	2,311.89
25	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy> 85 lumens/watt ,LED LED driver efficiency > 85 % (fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Tube Light with integral driver (iv) 22-24 Watts, Surge - 2KV,IP-20, conventional 4 feet Cat -III	2	Ea.	373.70	747.40
Total Amount B (Rs.)					18,604.95
Total Amount A + B for One Gate (Rs.)					8,89,508.63

RAJKOT MUNICIPAL CORPORATION					
SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
FIRE FIGHTING, DETENTION & PA SYSTEM WORKS					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
A.	FIRE FIGHTING SYSTEM :				
1	Supply, Installation, Testing & Commissioning of MS Pipes (above ground level)(Hydrant System) confirming to IS 1239 medium duty malleable specials such as Reducers, Tees, elbows, flanges. Including cutting, Welding with all associated works & accessories				
	(a) 100 mm	300	Mtr	1,336.23	4,00,869.00
	(b) 80 mm	20	Mtr	1,138.27	22,765.40
2	Supply, Installation, Testing & Commissioning of Hydrant valve oblique pattern single head SS 80mm inflow dia and 63 mm outflow dia with black cap, chain nut-bolt rubber gasket complete (ISI Marked)	1	Nos	5,811.54	5,811.54
3	Supply, Installation, Testing & Commissioning of First Aid Swinging Hose Reel Drum along with Isolation Valve & necessary pipe fittings complete. (30 metre Length)	6	Nos	5,575.20	33,451.20
4	Supply, Installation, Testing & Commissioning of Hose Box cabinet made of MS sheet to accommodate 2 nos fire hose and 1 branch pipe	1	Nos	3,272.40	3,272.40
5	Supply, Installation, Testing & Commissioning of 63mm RRL Hose of 15 mtr length & Male Female Instantaneous coupling (SS)	2	Nos	5,171.20	10,342.40
6	Supply, Installation, Testing & Commissioning of Branch Pipe 16 mm dia outlet with 63 mm (SS)	1	Nos	1,696.80	1,696.80
7	Supply, Installation, Testing & Commissioning of Two Way Fire Brigade Inlet with 63mm instantaneous coupling.	1	Nos	5,226.75	5,226.75
8	Supply, Installation, Testing & Commissioning of Cast Iron Sluice Valve of 100mm.	1	Nos	12,322.00	12,322.00
9	Supply, Installation, Testing & Commissioning of Isolation Valve of 100mm S S Plate of PN 1.6 including nuts, bolts, gasket.	1	Nos	2,848.20	2,848.20
10	Supply, Installation, Testing & Commissioning of Single Plate Non Return valve 100 mm including nuts, bolts.	2	Nos	2,272.50	4,545.00
11	Supply, Installation, Testing & Commissioning of Ball Valve -25 mm dia	3	Nos	808.00	2,424.00
12	ISI Marked Fire Extinguisher, ABC (Powder) Type, Capacity – 04.0 Kgs	20	Nos	2,893.65	57,873.00
13	ISI Marked Fire Extinguisher, BC (Co2) Type, Capacity – 04.5 Kgs	12.00	Nos	5,403.50	64,842.00
14	ISI Marked Fire Extinguisher, ABC (Powder) Type, Capacity – 01.0 Kgs	20	Nos	1,232.20	24,644.00
15	Supply of 10.8 Cum./hr. electrically driven horizontal centrifugal, end suction type Common Jockey pump set for wet riser Sprinkler system at 7.0 Bar & 2,900 rpm with all necessary accessories like bronze impeller, stainless steel shaft and mechanical seal along with anti-vibration mounting pad and flexible connections at discharge end of the pipes etc., and shall be automatic in operation. Pump shall have electrical motor of adequate KW/HP suitable for electric supply, material, piping, fittings, installation, minor civil works, etc. complete.	1	Nos	1,11,100.00	1,11,100.00
16	Auto / Manual Panel for the Pump	1	Nos	30,300.00	30,300.00
17	Pressure Gauge	2	Nos	1,464.50	2,929.00
18	Pressure Switch	1	Nos	2,636.10	2,636.10
19	Installation & Fittings Charges	1	Nos	1,74,225.00	1,74,225.00
20	Various Symbols as per BOQ	1	Set	14,140.00	14,140.00
Total Amount (Rs.)					9,88,263.79

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
STORM NETWORK					
ABSTRACT SHEET					
Sr. No.	Description	Unit	Quantity	Final Rate	Amount (Rs.)
1	Excavation of trench for Pipes in Soft Murrum / Clay / Sand with all safety Provisions (with re-filling of trench) for depth from 0.0 to 1.5 mtr	Cu.m.	783.0	151.00	1,18,233.00
2	Excavation of trench for Pipes in Hard Murrum with all safety Provisions (with re-filling of trench) for depth from 0.0 to 1.5 mtr	Cu.m.	112.0	160.00	17,920.00
3	Excavation of trench for Pipes in Soft Rock with all safety Provisions (with re-filling of trench) for depth from 0.0 to 1.5 mtr	Cu.m.	112.0	345.00	38,640.00
4	Excavation of trench for Pipes in Hard Rock using Breaker / blasting / Chiezale / Hammer with all safety Provisions (with re-filling of trench) for depth from 0.0 to 1.5 mtr	Cu.m.	112.0	808.00	90,496.00
5	Excavation of trench for Pipes in Soft Murrum / Clay / Sand with all safety Provisions (with re-filling of trench) for depth from 1.51 to 3.0 mtr	Cu.m.	168.0	160.00	26,880.00
6	Excavation of trench for Pipes in Hard Murrum with all safety Provisions (with re-filling of trench) for depth from 1.51 to 3.0 mtr	Cu.m.	42.0	183.00	7,686.00
7	Excavation of trench for Pipes in Soft Rock with all safety Provisions (with re-filling of trench) for depth from 1.51 to 3.0 mtr	Cu.m.	42.0	399.00	16,758.00
8	Excavation of trench for Pipes in Hard Rock using Breaker / blasting / Chiezale / Hammer with all safety Provisions (with re-filling of trench) for depth from 1.51 to 3.0 mtr	Cu.m.	28.0	830.00	23,240.00
9	Providing bhogavo sand bedding including raming , watering, consolidating etc. complete	Cu.m.	41.0	941.00	38,581.00
10	R.C.C. Spun pipe IS. N.P.-3 class pipe, should of the standard design and also have corresponding standard diameter as per length including spigot and socket with rubberized, all taxes, insurance, transportation, loading along with unloading and reaching the store or site and carrying out necessary inspections along with providing supply work and required hemp, wata (from CM. 1:1) and also line level And complete including laying, jointing, curing with required hemp in grades. for pipe of NP - 3 class of 350 m.m. dia. only supply work.	Rmt.	247.0	1,594.00	3,93,718.00
11	R.C.C. Spun pipe IS. N.P.-3 class pipe, should of the standard design and also have corresponding standard diameter as per length including spigot and socket with rubberized, all taxes, insurance, transportation, loading along with unloading and reaching the store or site and carrying out necessary inspections along with providing supply work and required hemp, wata (from CM. 1:1) and also line level And complete including laying, jointing, curing with required hemp in grades. for pipe of NP - 3 class of 350 m.m. dia. only fixing work	Rmt.	247.0	158.00	39,026.00
12	Drainage manhole should be done according to design given with ratio are at the bottom it should be C C 1:3:6 with brick masonry 1:4 cum plaster 1:3 cm coping 1:1:2 and also benching around it with 1:2:4 should be done with finishing, curing, manhole frame cover and also with PVC step. (excluding excavation or suply of frame cover) Type ---A--- : Round : Up to 1.50 m depth * inside dia. 1200 mm (for drainage lines from 150 mm to 500 mm dia.) (Menhole type - A up to 1.00 meter depth)	No.	3.0	8,084.00	24,252.00
13	Drainage manhole should be done according to design given with ratio are at the bottom it should be C C 1:3:6 with brick masonry 1:4 cum plaster 1:3 cm coping 1:1:2 and also benching around it with 1:2:4 should be done with finishing, curing, manhole frame cover and also with PVC step. (excluding excavation or suply of frame cover) Type ---A--- : Round : Up to 1.50 m depth * inside dia. 1200 mm (for drainage lines from 150 mm to 500 mm dia.) (Additional depth up to 1.01 to 1.50 meter)	Rmt.	1.0	7,461.00	7,461.00
14	Drainage manhole should be done according to design given with ratio are at the bottom it should be C C 1:3:6 with brick masonry 1:4 cum plaster 1:3 cm coping 1:1:2 and also benching around it with 1:2:4 should be done with finishing, curing, manhole frame cover and also with PVC step. (excluding excavation or suply of frame cover) Type --- B --- : Round : for 1.50 to 4.00 m. depth and inside dia. 1500 mm (for drainage lines from 150 mm to 600 mm dia.) (up to 1.50 meter depth)	No.	9.0	16,003.00	1,44,027.00

Sr. No.	Description	Unit	Quantity	Final Rate	Amount (Rs.)
15	Drainage manhole should be done according to design given with ratio are at the bottom it should be C C 1:3:6 with brick masonry 1:4 cum plaster 1:3 cm coping 1:1:2 and also benching around it with 1:2:4 should be done with finishing, curing, manhole frame cover and also with PVC step. (excluding excavation or supply of frame cover) Type --- B --- : Round : for 1.50 to 4.00 m. depth and inside dia. 1500 mm (for drainage lines from 150 mm to 600 mm dia.) (Additional depth up to 1.51 to 4.00 meter)	Rmt.	5.0	12,227.00	61,135.00
16	Precast R.C.C circular manhole frame supply complete with fixing 600 mm diameter with 20 tone of capacity	No.	12.0	776.00	9,312.00
17	Precast R.C.C circular manhole cover supply complete with fixing 600 mm diameter with 20 tone of capacity	No.	12.0	1,909.00	22,908.00
18	Rigid P.V.C. Pipe ISI Marked of 6 kg/sq.cm. Pressure, required with coupler, only supplies work for pipe of 160 m.m. outer dia.	Rmt..	72.0	523.00	37,656.00
19	Rigid PVC Pipe 4 to 6 kg/sq.cm pressure. With the necessary fittings of it. The required solvent to be joined with cement. (Only labour work). for pipe of 160 m.m. outer dia.	Cu.m.	72.0	18.00	1,296.00
20	Constructing Brick masonry road gully chamber 500mm x 450mm x 600mm including 500mm x 450mm C.I. horizontal grating with frame complete.	Each.	24.0	2,017.19	48,412.56
21	Demolition including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (i) RCC work	Cu.m.	7.5	1,163.64	8,727.30
22	Demolition brick work and stone masonry including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (i) in Cement mortar	Cu.m.	7.5	602.55	4,519.13
23	Demolition including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (i) Cement Concrete work	Cu.m.	7.5	670.19	5,026.43
Total Amount (Rs.)					11,85,910.42

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
WATER SUPPLY NETWORK					
ABSTRACT SHEET					
Sr. No.	Description	Unit	Quantity	Final Rate	Amount
1	Providing, supplying, Lowering, laying, fixing and jointing PVC/uPVC/cPVC pipes and specials of following class and diameter including cost of conveyance from stores to site of works including cost of labour, material, cement solvent, giving satisfactory hydraulic testing as per ISI code.				
	15 mm Dia	Rmt.	30	41.00	1,230.00
	25 mm Dia	Rmt.	140	84.00	11,760.00
	40 mm Dia	Rmt.	320	128.00	40,960.00
	15 mm Dia Tee	Each	5	8.00	40.00
	25 mm Dia Tee	Each	5	17.00	85.00
	40 mm Dia Tee	Each	5	42.00	210.00
	15 mm Dia Elbow	Each	5	5.00	25.00
	25 mm Dia Elbow	Each	5	13.50	67.50
	40 mm Dia Elbow	Each	5	29.00	145.00
	15 mm Dia Coupling	Each	10	4.50	45.00
	25 mm Dia Coupling	Each	10	9.10	91.00
	40 mm Dia Coupling	Each	10	16.00	160.00
	25 mm to 15 mm Dia Reducer	Each	5	8.00	40.00
	40 mm to 25 mm Dia Reducer	Each	5	18.00	90.00
2	Laying of PVC / UPVC Pipe line - 15 to 75 mm dia without special as per site condition with required jointing solution including hydraulic testing as directed by engineer-in-charge	Rmt.	490	6.00	2,940.00
3	Excavation of trench for Pipes in Soft Murrum / Clay / Sand with all safety Provisions (with re-filling of trench) for depth from 0.0 to 1.5 mtr	Cu.mt.	259	151.00	39,109.00
4	Excavation of trench for Pipes in Hard Murrum with all safety Provisions (with re-filling of trench) for depth from 0.0 to 1.5 mtr	Cu.mt.	37	160.00	5,920.00
5	Excavation of trench for Pipes in Hard Rock using Breaker / blasting / Chiezale / Hammer with all safety Provisions (with re-filling of trench) for depth from 1.0 to 1.5 mtr	Cu.mt.	37	345.00	12,765.00
6	Excavation of trench for Pipes in Hard Rock using Breaker / blasting / Chiezale / Hammer with all safety Provisions (with re-filling of trench) for depth from 1.0 to 1.5 mtr	Cu.mt.	37	808.00	29,896.00
7	Providing and supplying ISI standard R.C.C pipes (of sulphate resisting cement) in standard length of following class and diameter suitable for either collar joints or rubber ring joints including all taxes. Insurance, transportation, freight charges, octroi, inspection charges, loading, unloading, conveyance to department stores, stacking etc. Note: One collar should be supplied with each full length plain ended RCC pipe, cost included in rates below. one rubber ring should be supplied with each full length socketed pipe, cost included in rate below.				
	A RCC pipe is set to be placed across the road to allow for utility transmission in future development plans.				
	Class NP3 Test Pressure 0.7 kg/sq.cm				
	150 mm dia for Encasing under road	Rmt.	100	331.00	33,100.00
8	Lowering, laying and jointing R.C.C pipes in C.M. 1:1 1/2 of following diameter in proper position, grade and alignment at all level as directed by Engineer in charge including conveyance from stores to site of work, labour, giving hydraulic testing as per ISI code.				
	Class NP3				
	150 mm dia for Encasing under road	Rmt.	100	72.45	7,245.00
9	Water Storage Tank of HDPE material cylindrical Vertical Black with closed Top 'SINTEX' Brand. (500 Liter Capacity).	No.	2	6,698.00	13,396.00
10	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace	Liter	1,000	3.95	3,950.00
Total Amount (Rs.)					2,03,269.50

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
SEWER NETWORK					
ABSTRACT SHEET					
Sr. No.	Description	Unit	Quantity	Final Rate	Amount (Rs.)
1	Excavation of trench for Pipes in Soft Murrum / Clay / Sand with all safety Provisions (with re-filling of trench) for depth from 0.0 to 1.5 mtr	Cu.m.	354.00	151.00	53,454.00
2	Excavation of trench for Pipes in Hard Murrum with all safety Provisions (with re-filling of trench) for depth from 0.0 to 1.5 mtr	Cu.m.	51.00	160.00	8,160.00
3	Excavation of trench for Pipes in Soft Rock with all safety Provisions (with re-filling of trench) for depth from 0.0 to 1.5 mtr	Cu.m.	51.00	345.00	17,595.00
4	Excavation of trench for Pipes in Hard Rock using Breaker / blasting / Chiezale / Hammer with all safety Provisions (with re-filling of trench) for depth from 0.0 to 1.5 mtr	Cu.m.	51.00	808.00	41,208.00
5	Excavation of trench for Pipes in Soft Murrum / Clay / Sand with all safety Provisions (with re-filling of trench) for depth from 1.51 to 3.0 mtr	Cu.m.	15.00	160.00	2,400.00
6	Excavation of trench for Pipes in Hard Murrum with all safety Provisions (with re-filling of trench) for depth from 1.51 to 3.0 mtr	Cu.m.	4.00	183.00	732.00
7	Excavation of trench for Pipes in Soft Rock with all safety Provisions (with re-filling of trench) for depth from 1.51 to 3.0 mtr	Cu.m.	4.00	399.00	1,596.00
8	Excavation of trench for Pipes in Hard Rock using Breaker / blasting / Chiezale / Hammer with all safety Provisions (with re-filling of trench) for depth from 1.51 to 3.0 mtr	Cu.m.	3.00	830.00	2,490.00
9	providing bhogavo sand bedding including raming , watering, consolidating etc. complete	Cu.m.	26.00	941.00	24,466.00
10	Providing and supplying ISI Standard R.C.C. pipes(of Sulphate Resisting Cement) in standard lengths of following class and diameter suitable for either collar joints or rubber ring joints including all taxes, insurance, transportation, freight charges, octroi, inspection charges, loading, unloading, conveyance to departmental stores, stacking etc. complete. Note : One collar should be supplied with each full length plain ended RCC pipe, cost included in rates below. One rubber ring should be supplied with each full length socketed pipe, cost included in rates below. Class NP3 Test Pressure 0.7 Kg./sq.cm				
	200 mm dia pipe ID	Rmt.	201.00	417.00	83,817.00
11	Lowering, laying and jointing R. C. C. pipes in C. M. 1:1 1/2 of following diameters in proper position, grade and alignment at all level as directed by Engineer-in-charge including conveyance from stores to site of work, labour, giving hydraulic testing as per ISI code.				
	200 mm dia pipe ID	Rmt.	201.00	101.20	20,341.20
12	Drainage manhole should be done according to design given with ratio are at the bottom it should be C C 1:3:6 with brick mansonry 1:4 cum plaster 1:3 cm coping 1:1:2 and also benching around it with 1:2:4 should be done with finishing, curing, manhole frame cover and also with PVC step. (excluding excavation or suply of frame cover) Type ---A--- : Round : Up to 1.50 m depth * inside dia. 1200 mm (for drainage lines from 150 mm to 500 mm dia.) (Menhole type - A up to 1.00 meter depth)	No.	7.00	8,084.00	56,588.00
13	Drainage manhole should be done according to design given with ratio are at the bottom it should be C C 1:3:6 with brick mansonry 1:4 cum plaster 1:3 cm coping 1:1:2 and also benching around it with 1:2:4 should be done with finishing, curing, manhole frame cover and also with PVC step. (excluding excavation or suply of frame cover) Type ---A--- : Round : Up to 1.50 m depth * inside dia. 1200 mm (for drainage lines from 150 mm to 500 mm dia.) (Additional depth up to 1.01 to 1.50 meter)	Rmt.	3.00	7,461.00	22,383.00
14	Drainage manhole should be done according to design given with ratio are at the bottom it should be C C 1:3:6 with brick mansonry 1:4 cum plaster 1:3 cm coping 1:1:2 and also benching around it with 1:2:4 should be done with finishing, curing, manhole frame cover and also with PVC step. (excluding excavation or suply of frame cover) Type --- B --- : Round : for 1.50 to 4.00 m. depth and inside dia. 1500 mm (for drainage lines from 150 mm to 600 mm dia.) (up to 1.50 meter depth)	No.	2.00	16,003.00	32,006.00

Sr. No.	Description	Unit	Quantity	Final Rate	Amount (Rs.)
15	Drainage manhole should be done according to design given with ratio are at the bottom it should be C C 1:3:6 with brick masonry 1:4 cum plaster 1:3 cm coping 1:1:2 and also benching around it with 1:2:4 should be done with finishing, curing, manhole frame cover and also with PVC step. (excluding excavation or supply of frame cover) Type --- B --- : Round : for 1.50 to 4.00 m. depth and inside dia. 1500 mm (for drainage lines from 150 mm to 600 mm dia.) (Additional depth up to 1.51 to 4.00 meter)	Rmt.	1.00	12,227.00	12,227.00
16	Precast R.C.C circular manhole cover supply complete with fixing 600 mm diameter with 10 tone of capacity	No.	9.00	1,177.00	10,593.00
17	Precast R.C.C circular manhole frame supply complete with fixing 600 mm diameter with 10 tone of capacity	No.	9.00	610.00	5,490.00
18	RCC precast MH frame & cover manufacture, supply & delivery at store or at site of work precast RCC M200 frame & cover suitable to drainage MH and as per type design & drawing including cost of reinforcement MS angle or flat, curing mold work etc. House connection chamber light duty				
	Frame	No.	6.00	813.00	4,878.00
	Cover	No.	6.00	920.00	5,520.00
19	Rigid P.V.C. Pipe ISI Marked of 6 kg/sq.cm. Pressure, required with coupler, only supplies work for pipe of 160 m.m. outer dia.	Rmt..	20.00	523.00	10,460.00
20	PVC Fittings 6 kg/sq.cm pressure pipes. Only supply work. 160 m.m. outer dia. Of albo of the PVC pipe	No.	15.00	168.00	2,520.00
21	PVC Fittings 6 kg/sq.cm pressure pipes. Only supply work. 160 m.m. outer dia. Of tee of the PVC pipe	No.	15.00	266.00	3,990.00
22	Rigid PVC Pipe 4 to 6 kg/sq.cm pressure. With the necessary fittings of it. The required solvent to be joined with cement. (Only labour work) for pipe of 160 m.m. outer dia.	Cu.m.	20.00	18.00	360.00
23	Demolition including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (i) RCC work	Cu.m.	6.00	1,163.64	6,981.84
24	Demolition brick work and stone masonry including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (i) in Cement mortar	Cu.m.	6.00	602.55	3,615.30
25	Demolition including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (i) Cement Concrete work	Cu.m.	6.00	670.19	4,021.14
26	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm ² in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm intenal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slabe with 1:2:4 mix (1-cement: 2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(i) Inside dimensions 455mmx 610mm and 450mm deep for single pipe line.	Each.	6.00	2,932.93	17,597.58
27	Extra over items 24.44 for every additional depth of 0.1M. of part thereof beyond 450mm depth for Brick masonry chamber.(i) for 455mm x 610mm size.	Each.	3.30	264.86	874.04
Total Amount (Rs.)					4,56,364.10

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
TUBE WELL					
ABSTRACT SHEET					
Sr. No.	Description	Qty.	Unit	Rate	Amount (Rs.)
1	Drilling of tube well by direct / reverse rotary rig in alluvial starta Drilling of pilot bore hole in alluvial strata by directrotary rig / reverse rotary rig. 300mm	100	RMT	963.00	96,300.00
2	Reaming of 250/300 mm dia. pilot bore hole including assembling, lowering housing casing ,strainer pipes, gravel packing, clay packing etc.400mm	100	RMT	963.00	96,300.00
3	Supply of clay ball of size ranging from 25 mm to 50 mm made from sticky clay at site of work as certified by Hydrologist.	1	CU M	963.00	963.00
4	Supply of best quality well sorted Sevaliya gravel of size ranging from 4 mm to 6mm.	8	CU M	963.00	7,704.00
5	Supply of ordinary portland cement of grade 53	1	M.T.	963.00	481.50
6	Cement grouting / sealing without cost of cement by means of mud pump. (a) Cement Sealing	1	LS	963.00	963.00
	(b) Bottom Cement Sealing (Grouting)	1	LS	963.00	963.00
7	Charges for attending existing bore well and taking necessary measurement & giving opinion for depth and filling materials and cleaning of bore well with necessary tools and tacksels. (without lifting & lowering of pump).	100	RMT	963.00	96,300.00
8	Compressor test of tube well by air compressor of 600 CFM / 150 PSI capacity in all districts.	18	Hour	963.00	17,334.00
9	Manufacture, supply & delivery of ISI marked UPVC Casing pipe (IS 12818 with latest amendment. (Rates are exclusive of GST) (B)200.00 mm nominal dia. " CM " Type	100	RMT	963.00	96,300.00
10	Manufacture, supply and delivery of following ISI marked HDPE pipes (IS:4984/1985 with latest amendment) having material Grade PE-80 in approximate 100 meter coil length or as per GWSSB requirement with SS 316 nipple at both ends having 11 TPI threads as per specifications, press fitted and bolted having nominal diameter as under as per detailed technical specifications. (Rates are exclusive of GST) iv) DN 63 PN-10	150	RMT	963.00	1,44,450.00
9	Bail plug of length 0.45 meter made from MS medium class pipe as per IS suitable for b) 200 mm dia. pipe.	1	NO.	963.00	963.00
10	Clamps made from MS plate with 3 holes on either side with nuts & bolts of standard make and suitable size. (g)750 mm X 75 mm X 16 mm flat to 200 mm dia. pipe.	1	Per pair	963.00	963.00
11	3 Phase Borewell Submersible Pump Sets Electric motor driven borewell submersible pump set confirming to IS 8034 and motor confirming to IS 9283 working at 3 phase 400 / 440 volt 50 Hz AC supply & 2900 RPM. 7.5 HP Head = 150 LPM 90	1	NO.	963.00	963.00
12	DOL / Star Delta starter suitable for local & remote pump control application consisting of MPCB, overload relay and contactors as per Type II coordination including digital voltmeter, analogue ammeter with selector switch, run hour meter, required protective relays & control accessories. (c)D. O. L. up to 7.5 HP	1	NO.	963.00	963.00
13	PVC insulated flat submersible cable as per detailed technical specifications of R/C of GWSSB Ele -mech conforming to IS 694, IEC 60227 / 60228. (b)1 R x 3 C x 2.5 mm2	200	RMT	963.00	1,92,600.00
14	Material required for piping and connection to pump like clamp nipple union, valve bend, elbow etc. comp as per bill.	1	JOB L.S	963.00	963.00
Total Amount (Rs.)					7,55,473.50
(Note - in the GWSSB SOR LABOUR CSEE OF 1% does not need to be calculated)					

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
STREET LIGHT & HIGH MAST					
ABSTRACT SHEET					
Sr. No.	Item of Work	Unit	Quantity	Rate with 1% L.C.	Amount (Rs.)
1	Supplying and erecting approved make Octagonal pole made from HR sheet steel. The pole should be made as per IS. and shall be coated with hot dip galvanizing as per IS 2629/2633/4759, suitable suspend local wind speed with integral Junction box consist of terminal plate of min 6mm Hylam sheet, standard profile 35mmX7.5mm Din-Rail for MCB Mounting, stud type terminal and arrangement for cable termination to be erected on foundation as per details given by manufacturer considering site requirement.				
	(E) 7 Mtr. Long 70 mm Top X 135 mm bottom dia, 3 mm thickness with 225mmX225mmX16mm base plate, 4-M20 Bolts and 600mm long with necessary G.I. J Bolts .Approx Pole weight 67 kg	Ea	25.00	11,411.99	2,85,299.75
2	Providing and erecting street light pole bracket comprising main B Class GI pipe of 4.2 cm/require outside dia. complete with suitable B Class G.I sleeve tubing of approx. 45cms.length and suitable for 76.5 mm / 80mm. / require size pole top having sufficient fasteners for fixing the brackets and having spread of 1 mtr. length with suitable rise as per site condition & suitable welded stiffener reducer and nipple with check nut complete painted with one coat of Red oxide / PU base primer and two coats of Aluminium / PU paint. paint with following nos of arms.			-	
	[A] Single Arm bracket 1.5 Mtr	Ea	22.00	683.77	15,042.94
	[B] Double Arm Bracket 1.5 Mtr	Ea	3.00	1,002.93	3,008.79
3	Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses, with toughened glass with company mark/name engraved or embossed 160 to 270 V,Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K,Uniformity ratio >0.45, Luminaire efficacy> 100 lumens/watt . LED driver efficiency > 85 %.(fittings required LM-79 & LM-80 certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.)			-	
	(A) Street Light (IP-65), Surge protection -4KV integral and ,Light must have 440VAC line supply with over-voltage protection. (iv) above 90 to 120 watts Cat-III	Ea	28.00	6,566.01	1,83,848.28
4	Making trench in soft soil of suitable width of 90 cm deep for laying cable or locating the fault all over the run and back filling the same and making the surface as normal ground.	Mtr.	685.00	55.55	38,051.75
5	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (A)50 mm inner dia	Ea	795.00	62.62	49,782.90
6	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand / Solid Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (B) 4 core 6 Sq. mm	Mtr.	400.00	126.25	50,500.00
7	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (A) 4 core 16 Sq. mm	Mtr.	400.00	153.52	61,408.00
8	Supplying and erecting Flexible PVC insulated multi strand multi core 1.1 kv grade ISI marked copper wires of following size to be erected as directed. e) 1.50 Sq.mm 3 core round PVC sheathed	Mtr.	240.00	46.46	11,150.40

9	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (B) 2 to 4 core 6 Sq. mm (D) 2 to 4 core 16 Sq. mm	Ea	30.00	38.38	1,151.40
		Ea	30.00	47.47	1,424.10
10	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (A) 1.5/ 2.5/4/6 Sq.mm (C) 16/25 Sq.mm.	Ea	120.00	6.06	727.20
		Ea	120.00	15.15	1,818.00
11	providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat.III	Ea	32.00	112.11	3,587.52
12	Providing and erecting Pipe type earthing with 40 mm dia 2.5 mtr long 'B' grade G.I. pipe with necessary coupling buch buried in specially prepared earth pit & G.I. earth wire of 8 SWG erected & connected as directed (For panel)	Ea	27.00	823.15	22,225.05
13	For using salt and charcoal / coke as required for pipe type earthing.	Ea	27.00	171.70	4,635.90
14	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on 3 phase and neutral 415V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed. (ii) 40 Amps.FP Cat. III	Ea	2.00	2,637.11	5,274.22
15	Providing & erecting 415V MCB Four Pole Switch for Lighting Load (B curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (a) 6 to 32 Amp.	Ea	2.00	578.73	1,157.46
16	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iv)12 way	Ea	2.00	1,492.78	2,985.56
17	Providing and erecting Pipe type earthing with 40 mm dia 2.5 mtr long 'B' grade G.I. pipe with necessary coupling buch buried in specially prepared earth pit & G.I. earth wire of 8 SWG erected & connected as directed (For panel)	Ea	2.00	823.15	1,646.30
18	Supplying & erecting approved make IP 55 grade Company fabricated Timer Panel of following capacity for switch On-Off street lights on time scheduling basis made from 16G CRCA sheet duly epoxy power painted inside and outside with hinged doors and locking arrangement consisting of suitable size of 4 Pole MCB and 4 pole contactor (cat-III)with analog time switch, auto manual switch of same make and suitable input and output Bakelite terminals and with door earthing approved by Engineer in charge. (B) 40 Amp	Ea	1.00	13,350.18	13,350.18
19	Supplying, erecting, testing, commissioning approved make M.S. Polygonal High Mast Pole having following general Specification. (a) Polygonal Section fabricated from M.S. Plate confirms BSEN 10025 & Hot deep galvanized minimum 65/86 micron (as per IS 2629 /1985) Lantern carriage with ring and rubber lines for erection of luminaries of suitable site. (b) Maximum telescopic section not more than four (c) Double drum gear pipe motorized winch with 6mm dia S.S. Rod (For 16 mtr and above size) (d) Approved make L.E.D. aviation light = 1 No. Lightning arrestor = 1 No. with necessary wiring of 2.5 sq.mm 5 core ISI copper cable Unarmoured. (e) Bottom most section suitable for mounting reversible motor and switchgears having door not more than 1400mm x 300mm with waterproof gasket & hinges & locking arrangement. (f) Pole structure comprises suitable size of reversible motor, cable and necessary switchgears with control panel.	Ea.	4	2,07,368.15	8,29,472.60

	(g) bottom section shall have suitable size of thickness supports ribs foundation bolts nuts etc. (h) Item not comprises the cost of lanterns. (i) Necessary Cement Concrete foundation as per IS including testing & commissioning of the entire structure for following size of High Mast poles [7] High Mast 20 Mtr. TOP A/F 150 Mm, BOTTOM A/F 400 Mm, No. of Sec. No. - 2, Bottom Thickness - 4 mm, Top Sec. - 3 mm, Size Base Plate -dia.580 mm x 20 mm thick, Foundation Bolt Size M27 x 850mm , Qty - 10 Nos., Suitable for mounting Fitting of Light - 12 Nos.				
20	Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses, with toughened glass with company mark/name engraved or embossed 160 to 270 V,Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K,Uniformity ratio >0.45, Luminaire efficacy> 100 lumens/watt . LED driver efficiency > 85 %.(fittings required LM-79 & LM-80 certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (B) Flood Light (IP-65), Surge protection -4KV integral and ,Light must have 440VAC line supply with over-voltage protection.				
	(vii)Above 200 to 250 watts Cat III	Ea.	48	10,818.11	5,19,269.28
21	Supplying and erecting Flexible PVC insulated multi strand multi core 1.1 kv grade ISI marked copper wires of following size to be erected as directed. (k) 4.00Sq.mm 4 core round PVC sheathed	Mtr.	160	176.75	28,280.00
22	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables. 4 Core x 10 Sq.m.m	Mtr.	450	140.39	63,175.50
23	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables 3 1/2 core 25 Sq. mm (16 Sq. mm 1/2 core)	Mtr.	50	183.82	9,191.00
23	Providing & fitting heavy duty brass cable glands (nickel-plated) with washers & rubber ring conforming to IS, suitable for 3, 3½ & 4 core cables of following type & sizes: Double Compression Brass Cable Glands 2 to 4 core10 Sq.m.m 2 to 4 core25 Sq.m.m	Ea.	12	38.38	460.56
		Ea.	6	51.51	309.06
24	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. 10 Sq.m.m	Ea.	48	13.13	630.24
	16/25 Sq.mm.	Ea.	24	15.15	363.60
25	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth for laying of cable. below ground / road surface for enclosing cable (A)50 mm inner dia	Mtr	400	62.62	25,048.00
26	Providing and erecting Pipe type earthing having 150 cms.long and 2.5 cms. dia. galvanised iron pipe with coupling and buch buried in specially prepared earth pit complete with necessary 8 SWG earth wire.	Ea.	6	368.65	2,211.90
27	For using salt and charcoal / coke as required for pipe type earthing.	Mtr	6	17.17	103.02
28	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (b) sheet steel double door (IP-43) (H) Single phase 12 way SS Double door	Ea.	4	1,492.78	5,971.12
29	providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat.III	Ea.	53	112.11	5,941.83

30	Providing & erecting 415V MCB Four Pole Switch for Lighting Load (B curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (a) 6 to 32 Amp. Cat.III	Ea.	4	578.73	2,314.92
31	Providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on 3 phase and neutral 415V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed. (ii) 40Amps. FP Cat.III	Ea.	4	2,637.11	10,548.44
32	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	Kg.	20.00	77.77	1,555.40
33	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistance mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphur content:- <2%(C) Back fill				
	Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (b)For Electrical installation up to 11 KV in normal soil. Length of Pipe : 2.00 mtrs Back filling Compound :1 no. Bag of 25 Kg.	Ea.	3.00	5,760.03	17,280.09
Total Amount (Rs.)					22,80,202.26

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
CCTV Surveillance Sysytem					
ABSTRACT SHEET					
Sr. No.	Description	Quantity	Unit	Rate with 1% L.C.	Amount (Rs.)
1	Supply, Providing, Installtion and erecting of CCTV Surveillance system including item such as mentioned below				
	NVR 32 Ch/04 Hdd Slots = 1 Nos. IP Bullet/4MP/IR = 18 Nos. IP 5" PTZ Camera = 2 Nos. Connectors and DC Pins = 100 Nos. Network Cable /Meters = 3000 Rmt. Ropway Wire for Wire laying = 3000 Rmt. Camera Installation/pc = 36 Nos. Camera Installation/PTZ = 4 Nos. Cable Laying charges = 3000 Rmt. HDD - 06TB = 2 Nos. POE switch 08 Port 10/100mbps = 8 Nos. UPS For power protection-DVR- 1KVA = 1 Nos. Extra Accessories/shedal/tie/gbox/Other = 1 Nos. Junction Box = 16 Nos. Wire Electric = 1200 Rmt. 6U Rack = 1 Nos.	1	Nos	14,01,779.00	14,01,779.00
Total Amount (Rs.)					14,01,779.00

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
RATE ANALYSIS					
Sr.No.	Description	Unit	Quantity	Rate	Amount
RA - 04					
1	Providing and Casting Controlled cement concrete M 250 proportions of ingredients as per mix design by weigh batching for				
	CC work M25 for RCC Bottom slabusing aggregate of size 10-20 mm, centring, curing, finishing etc. complete (without reinforcement)	Cu.m.		5,350.00	
	Current Rate for tremix VD system (MR)	Cu.m.		350.00	
	Total Amount for 1 cum wearing coat by trimix VD system in Rs.			5,700.00	
RA - 05					
2	Providing and Fixing of Colour Coated Aluminium-Zinc Alloy Sheet (Galvalume) of 0.50mm to 1.00mm thickness and 0.90 to 1.20 mtr width and length up to 12 mts with factory cut and fixing to the roof shall be crest fixed to roof purlins with number 12-14 x 55 mm long polymer coated galvanized hex head self drilling screws with integral washers and EPDM seals (4 fastners for support) for sheet etc., complete as directed including cost of galvalume sheets For roofing, with necessary fixtures.				
	ASTM – A792, Grade D, Coating – AZ150				
	PPGL 150 GSM				
	Thickness BMT- 0.50 mm				
	Rate As per Quotation = Rs. 73.50 per Kgweight per sqm = 1.0 x 1.0 x 0.0005 x 7850 x 73.50 = Rs. 288.49	Sqm			288.49
	add, 18% GST	Sqm			51.93
	Transportation @ 10000 Rs for trip	Sqm			3.92
	Fixing Charges at site	Sqm			102.13
	Total per Sqm				446.46
				Say	447.00

RAJKOT MUNICIPAL CORPORATION SOLID WASTE MANAGEMENT DEPARTMENT					
CONSTRUCTION OF MSW REFUSE TRANSFER STATION WITH SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF MACHINERIES / EQUIPMENTS, TRANSPORTATION OF COMPACTED MSW FROM TRANSFER STATION TO TREATMENT / LANDFILL SITE AND SETTING UP OF MATERIAL RECOVERY FACILITY INCLUDING OPERATION & MAINTENANCE OF WHOLE SYSTEM FOR THE PERIOD OF 05 YEARS AT MOTAMAVA FOR RAKOT MUNICIPAL CORPORATION.					
Rate Analysis Landscaping-1 For Grassing					
SR. NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	COST (Rs)
1	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 In rows 5 cm apart in both directions.	Sqm.	1	Quotation	17.30
Transpotation Charges(Rs.)					12.00
Final Rate (Rs.)					29.30
Rate Analysis Landscaping-2 For Plantation of Peltophorum species plant					
SR. NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	COST (Rs)
1	Supply and stacking of Peltophorum species plant of height 150-165 cm. in big poly bags of size 25 cm	Each	1	Quotation	121.00
Transpotation Charges(Rs.)					15.00
Final Rate (Rs.)					136.00
Rate Analysis Landscaping-3 For Plantation of Peltophorum species plant					
SR. NO.	DESCRIPTION	UNIT	QTY	RATE (Rs)	COST (Rs)
1	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%): Holes 60 cm dia, and 60 cm deep, Plantation of Trees, Shrubs, and Hedge at site i/c watering and removal of unserviceable material's as per direction of officer in charge (excluding cast of plant & water)	Each	1	Quotation	69.00
Final Rate (Rs.)					69.00

MARKET RATE -01 WITH COMPARATIVE STATEMENT						
Sr. No.	Description	Unit	Quantity	MAKE NAME		
				Jay Laxmi Hardware and Electrical	Unique Hardware	Uma Hardware & Paints
1	2	3	4	5	6	7
1	Providing, supplying, Lowering, laying, fixing and jointing PVC/uPVC/cPVC pipes and specials of following class and diameter including cost of conveyance from stores to site of works including cost of labour, material, cement solvent, giving satisfactory hydraulic testing as per ISI code.					
	15 mm Dia	Rmt.	1	35.00	34.00	36.00
	25 mm Dia	Rmt.	1	68.00	70.00	69.00
	40 mm Dia	Rmt.	1	108.00	106.00	110.00
	15 mm Dia Tee	Each	1	8.00	9.00	10.00
	25 mm Dia Tee	Each	1	19.00	20.00	17.00
	40 mm Dia Tee	Each	1	42.00	43.00	45.00
	15 mm Dia Elbow	Each	1	6.00	5.00	6.00
	25 mm Dia Elbow	Each	1	14.00	15.00	13.50
	40 mm Dia Elbow	Each	1	30.00	30.00	29.00
	15 mm Dia Coupling	Each	1	4.50	6.00	5.00
	25 mm Dia Coupling	Each	1	9.10	12.00	13.50
	40 mm Dia Coupling	Each	1	17.40	18.00	16.00
	25 mm to 15 mm Dia Reducer	Each	1	9.00	10.00	8.00
	40 mm to 25 mm Dia Reducer	Each	1	18.00	20.00	18.00
Note : The Highlighted rates have been found to be the lowest & reasonable as market rate and hence recommended for approval please.						