

RAJKOT MUNICIPAL CORPORATION

e - TenderNo.RMC/PWD/WZ/20-21/



Bid Documents For

Contract for Design, Supply, Installation, Testing and Commissioning of Electric and gas based cremation furnace System with related comprehensive Electrical, Mechanical and Civil Work including all necessary equipments with 5 (five) years comprehensive O&M at Raiya in Rajkot.(Re-Tender)



Milestone Dates for e-tendering is as under	
1. Downloading of e-Tender documents	08-01-2021 To 28-01-2021 upto 1800 Hrs.
2. Pre-bid meeting in the office of the City Engineer at West Zone Office	15-01-2021 at 1700 Hours
3. Online submission of e - Tender	28-01-2021 upto 1800 Hrs.
4. Submission of EMD, Tender fee and other required documents as per Financial, Experience etc. in Person /by Regd.A.D./ Speed Post / Courier.	30-01-2021 up to 1800 Hrs.
5. Opening of online Primary Bid	30-01-2021 at 1800 Hours onwards
6. Verification of submitted documents	01-02-2021 at 1030 Hours onwards
7. Agency to remain present in person along with original documents for verification	02-02-2021 between 16.00 to 17.00 Hours
8. Opening of online PriceBid	03-02-2021 at 1100 Hours onwards (If Possible)
9. Bid Validity	180 Days

**VOLUME-III
2020-21**

**CITY ENGINEER
RAJKOT MUNICIPAL CORPORATION
CONSTRUCTION BRANCH
SHRI HARISINHJI GOHIL ZONAL OFFICE,
WEST ZONE, BEHIND BIG BAZAAR
150 FEET RING ROAD, B/H.BIG BAZAAR,
RAJKOT - 360 005 (GUJARAT)**

Note on Schedule

1. The bid is percentage rate bid.
2. The rates and prices shall be submitted in the formats given in the online Price Schedules. Rates and prices received in any other formats will be rejected and the Bids will be disqualified.
3. It will be entirely at the discretion of the Employer to accept or reject the bidder's proposal, without giving any reasons whatsoever.
4. In Price Schedule, bidder shall quote his percentage Equal/Above/Below for items listed in the schedule. Prices quoted in Schedule only will be considered for price evaluation & shall form a part of the Contract Agreement.
5. The Only Price Schedule will be considered for financial evaluation of the bid with the successful bidder.
6. The bidder shall be deemed to have allowed in his price for provision, maintenance and final removal of all temporary works of whatsoever nature required for construction including temporary bunds, diverting water, pumping, dewatering etc. for the proper execution of works. The rates shall also be deemed to include any works and setting out that may be required to be carried out for laying out of all the works involved.
7. Where there is a discrepancy between the unit rates and the amount entered, the latter shall govern.
8. The Price Schedules are to be read in conjunction with the Conditions of Contract, the Specifications and other sections of these bid documents and these documents are to be taken as mutually explanatory of one another.
9. Prices quoted by the bidder shall be firm for the entire period of Contract without any escalation.
10. The bidder shall interpret the data furnished and carry out any additional survey work, or investigative work required at his own cost.
11. The prices quoted shall also include the cost of materials utilized for testing.
12. The bidder should acquaint himself with the site conditions including the access to Worksite. The successful bidder shall have to make suitable access to worksites at his own cost. These accesses will be used by the other contractors working for RMC.
13. Agency shall have to engage Structural Engineer approved by Rajkot Municipal Corporation and shall have to submit the structural design for RCC design and steel work for this work, for which, no extra payment will

be made by Rajkot Municipal Corporation. The work is to be carried by taking necessary approval for structural design from competent authority of Rajkot Municipal Corporation.

Structural Engineer must possess Degree of M.E. and shall have 10 Years of experience. RMC may proof check the design submitted by the Structural Engineer through another Structural Engineer, the cost of which is to be borne by Agency.

14. The material shall be inspected Departmentally, the cost of which, if any, is to be borne by contractor.
15. The contractor shall have to quote their rates including GST and other taxes and the Invoice with break-up of GST is to be submitted accordingly, failing which, such amount will be deducted from the bill of the agency and deposited accordingly.

The contractor shall have to purchase the material required for this tender work, only from the supplier having registered GST Number. RMC will not be responsible to pay any amount towards GST if the material is purchased from the unregistered supplier / not having GST Number.

16. Testing of the materials like; Sand, Field Metal, Aggregate, etc. should have to be tested periodically as suggested by the Engineer-in charge at Government approved material testing Laboratory and testing charges for the same has to be borne by the contractor.
17. The Royalty of each and every material, required to be paid is to be borne by the contractor.
18. Testing of each material as and when required by Rajkot Municipal Corporation, is to be carried out by the contractor at his own cost. Schedule of testing of material will be as per R&B, State Government Manual and I S Code provision.
19. The whole work shall be executed by qualified Site Engineer. The required L-Section and Cross section is to be prepared by contractor at his own cost. The work should be done by levelling instrument. The Drawings shall be submitted accordingly in advance before starting the work. No extra payment will be made for the above work. Contractor has to submit Bill form with hard copy and soft copy of cross section and L-section of work completed. No bill will be accepted without above drawings.
20. Necessary tests for material quality, soil tests etc. shall be carried out as per the instructions of engineer-in-charge by contractor at his own cost and reports to be submitted to the engineer-in-charge.
21. The contractor shall have to get registered under ESI (Employer's State Insurance) Act and obtain ESI Registration number if the number of workers are 10 Nos. or more. Also, the agency shall have to give all the benefits to the workers as available under the ESI Act. The agency should follow all the rules and regulations of ESI Act as per prevailing norms.

22. The testing of metal and the design as per IRC shall have to carried out by the contractor at his own cost.
23. It will be the responsibility of contractor to carry out Architecture, Structural design, drawings, concrete mix design, all required testing as per requirement of engineer in charge and shall have to be got approved from the competent authority of RMC, for which, RMC will not pay any extra charges.
28. The successful agency shall have to engage TPI agency for whole work as well as pipe material inspection and testing at site / factory. The PMC agency shall be from approved list of RMC or as decided by engineer in charge. All necessary charges of 0.90% of contract value of PMC agency, which is to be borne by the contractor.
29. As per tender, only civil work is in the scope of bidder. It is also clarified that the agency will be relieved after full functioning of crematorium, however, if any fault is observed during the validity period, the bidder shall have to settle the same.
30. Time limit of the work will start from the date of issue of work order.
31. Bidder has to access all the site conditions before quoting the rates.
32. Bidder has to arrange water and power facilities for construction at his own cost and responsibilities.
33. Evaluation of tender will be as per qualification criteria.
34. Execution of any item which is not included in estimate, then it will be treated as extra item and the payment of such item shall be made as per prevailing norms.

Addl.Asst.Engineer Dy.Ex.Engineer City Engineer
Rajkot Muni. Corporation Rajkot Muni. Corporation Rajkot Muni. Corporation

Signature of Contractor.

Rajkot Municipal Corporation

Name of work:-Contract for Design, Supply, Installation, Testing and Commissioning of Electric and gas based cremation furnace System with related comprehensive Electrical, Mechanical and Civil Work including all necessary equipments with 5 (five) years comprehensive O&M at Raiya in Rajkot.

:: SCHEDULE- B (Civil Works)::

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
1	670.00	Excavation of foundation in soft morrum, soil of sand from 0.0 mtr. To 1.50 mtr. Depth including lifting and laying in 90 mtr. Lead area as instructed.	96.60	cu.mt.	64,722.00
2	170.00	Excavation of foundation in hard moram from 0.0 mtr. To 1.50 mtr. Depth including lifting and laying in 90 mtr. Lead area as instructed.(avg.)	103.50	cu.mt.	17,595.00
3	180.00	Excavation of foundation in soft Rock from 0.0 mtr. To 1.50 mtr. Depth including lifting and laying in 90 mtr. Lead area as instructed.(avg.)	220.80	cu mt	39,744.00
4	125.00	Excavation of foundation in hard moram from 1.51 mtr. To 3.00 mtr. Depth including lifting and laying in 90 mtr. Lead area as instructed.(avg.)	117.30	cu.mt.	14,662.50
5	550.00	Excavation of foundation in soft rock from 1.51 mtr. To 3.00 mtr. Depth including lifting and laying in 90 mtr. Lead area as instructed.(avg.)	255.30	cu.mt.	140,415.00
6	350.00	Excavation of foundation in Hard Rock rock from 1.51 mtr. To 3.00 mtr. Depth including lifting and laying in 90 mtr. Lead area as instructed.(avg.)	531.30	#REF!	185,955.00
7	165.00	Excavation of foundation in Hard Rock rock from 3.0 mtr. To 4.50 mtr. Depth including lifting and laying in 90 mtr. Lead area as instructed.(avg.)	552.00	cu mt	91,080.00
8	300.00	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.	147.00	cu.mt.	44,100.00
9	150.00	Filling of Plinth in layers of 0.23 m thick including murrum and sprinkling of water, compaction etc. complete	279.00	cu.mt.	41,850.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
10	350.00	Rolling work with Roller 8-10 Ton Capacity over metalling murrum for solling or single layer arriving proper compaction (with watering)	7.50	sqmt	2,625.00
11	1600.00	Removal of Excavated Stuff and laying within RMC limit as directed by Engineer-in-Charge	122.00	cu.mt.	195,200.00
12	80.00	Foundation filling with CC work in proportion of 1:2:4 using 1.5 cm to 2.0 cm aggregate including Raming, Curing etc.	3,913.20	cu mt	313,056.00
13	3.50	Foundation filling with CC work in proportion of 1:3:6 using 1.5 cm to 2.0 cm aggregate including Raming, Curing etc.	3,360.00	cu.mt.	11,760.00
14	250.00	providing and laying Ready Mix cement concrete M-250 and curing complete including cost form work and excluding the cost of reinforcement for reinforced concrete work in FOUNDATION FOOTING base of columns and Mass concrete including pro & mixing plasticiser and Water Proofing Chemical in cement concrete inclu. rate of labour material etc.	5,569.00	cu mt	1,392,250.00
15	400.00	providing and laying Ready Mix cement concrete M-300 and curing complete including cost form work and excluding the cost of reinforcement for reinforced concrete work in FOUNDATION FOOTING base of columns and Mass concrete including pro & mixing plasticiser and Water Proofing Chemical in cement concrete inclu. rate of labour material etc.	6,127.00	cu mt	2,450,800.00
16	65.00	providing and laying Ready Mix cement concrete M-250 and curing complete including cost form work and excluding the cost of reinforcement for reinforced concrete work in WALL base of columns and Mass concrete including pro & mixing plasticiser and Water Proofing Chemical in cement concrete inclu. rate of labour material etc.	7,102.00	cu mt	461,630.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
17	65.00	Providing and laying Ready Mix cement concrete M-250 and finishing smooth with curing etc. complete including cost of formwork and excluding the cost of reinforcement for reinforced concrete work in COLUMN UP TO ALL FLOOR all heights for any cross sectional area including pro & mixing plasticiser and Water Proofing Chemical in cement including scaffolding etc. complete rate of labour material etc.	6,096.00	cu mt	396,240.00
18	15.00	Providing and laying Ready Mix cement concrete M-250 and finishing smooth with curing etc. complete including cost of form work and excluding the cost of reinforcement for PLINTH BEAMS having any cross sectional area for all floors all heights including scaffoldingetc complete including pr& mixing plasticiser and Water Proofing Chemical in cement concrete including labour and material etc	5,556.00	cu mt	83,340.00
19	80.00	Providing and laying Ready Mix cement concrete M-250 and finishing smooth with curing etc. complete including cost of form work and excluding the cost of reinforcement for BEAMS having any cross sectional area for all floors all heights including scaffoldingetc complete including pr& mixing plasticiser and Water Proofing Chemical in cement concrete including labour and material etc	6,156.00	cu mt	492,480.00
20	160.00	Providing and laying Ready Mix cement concrete M-250 and finishing smooth with curing etc. complete including cost of form work and excluding the cost of reinforcement for R.C.C. work in SLAB having thickness of 10 cm and up to 15cm for all floors all heights including scaffoldingetc complete including pr& mixing plasticiser and Water Proofing Chemical in cement concrete including labour and material etc	5,875.00	cu mt	940,000.00
21	8.00	Providing and laying Ready Mix cement concrete M-250 and finishing smooth with curing etc. complete including cost of form work and excluding the cost of reinforcement for R.C.C. work in BOTTOM SLAB having thickness of 10 cm and up to	5,297.00	cu mt	42,376.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
		15cm Complete including pr& mixing plasticiser and Water Proofing Chemical in cement concrete including labour and material etc			
22	12.00	Providing and laying Ready Mix cement concrete M-250 and finishing smooth with curing etc. complete including cost of form work and excluding the cost of reinforcement for RCC STAIR CASE for all floors all heights all cross section area including scaffolding etc complete including pr& mixing plasticiser and Water Proofing Chemical in cement concrete including labour and material etc	5,886.00	cu mt	70,632.00
23	8.00	Providing and laying controlled cement concrete M-200 and finishing smooth with curing etc. complete including cost of form work and excluding the cost of reinforcement for R.C.C. LINTEL WORK having thickness of 10 cm and up to 15cm for all floors all heights including scaffolding etc complete including labour and material etc	5,538.00	cu mt	44,304.00
24	5.00	Providing and laying controlled cement concrete M-200 for RCC CHHAJJAS not exceeding 10 cm thickness including finishing the exposed surfaces with cement mortar 1:3(1-cement, 3-fine sand)to give a smooth and even surface including centering formwork and cring etc. all heights including scaffolding etc. complete including rate of labour material etc.	5,723.00	cu mt	28,615.00
25	550.00	Cement concrete Flooring (IPS) 50mm thick in prppotionof 1:2:4 with a floating coat of neat cement finishing curing etc. complete.	283.00	sqmt	155,650.00
26	134985.00	supplying cutting bending binding and hooking and binding with wire for RCC work tor Steel TMT Round Bar(IS 1786, Fe-500) including all cost	59.00	Kg	7,964,115.00
27	35.00	Foundation Filling With Rubble cement mortar in Proportion 1:6 cement : Mortar	1,493.00	cu mt	52,255.00
28	20.00	Rubble Plinth Massonary work in propotion 1:6 With Brick Massonary or Rubble corner and in cement mortar in Proportion 1:3 cement : Mortar i. thout C	1,513.00	cu mt	30,260.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
		Pointing			
29	190.00	Brick Masonary work using conventional burnt clay building bricks having crushing strength not less than 35 kg/sq inch foundation and plinth and all above in super structure for all for including scaffolding including labour and material cost in cement mortar 1:6 (1, cement and 6, fine sand) in cement mortar in proportion of 1:6 with	4,196.00	cu mt	797,240.00
30	320.00	Brick Masonary Partition Wall in cement mortar 1:4 (3.5 to 4.5 inch thick) for all floors all heights including suringscaffolding complete	411.00	sqmt	131,520.00
31	300.00	Water Proof Plaster 20mm thick using water proofing compound and the ratio of 1:3 with necessary finishing as directed by EIC/ consultant.	203.00	sqmt	60,900.00
32	1050.00	Cement Plaster 12 mm thick using Cement:Mortar in proportion 1:3 with Niru Finishing curing, etc. complete	182.00	sqmt	191,100.00
33	800.00	20mm thick Sand Face Cement Plaster Work in which 1 paster in proportion of 1:3 and 2nd plaster in the 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)	217.00	sqmt	173,600.00
34	610.00	Cement Plaster Work 1.2 cm average thick using Cement:Mortar in proportion of 1:3 rough cast (without Niru Finishing)	168.00	sqmt	102,480.00
35	170.00	Providing and laying Texture Plaster on exterior walls up to any height above ground level, in two layers, under layers, 12mm cement plaster 1:3 (1 cement : 3 fine sand) in smooth finishing, top layer with 3mm styrene acrylic polymer based material as per approved pattern complete as per specification and direction by engineer in charge.	445.00	sqmt	75,650.00
36	90.00	Decorative Groove Work in Cement Plaster	33.00	R mt	2,970.00
37	600.00	Providing & fixing Chicken Mesh Jali	80.00	Rmt	48,000.00
38	350.00	Supply & fixing Glazed Tiles (1st Class) of required size in cement roga and joints to be filled with white cement after 12 mm	426.00	Sqmt	149,100.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
		Ruff plaster in propotion of 1:3			
39	120.00	Providing and laying 18 mm thick polished granite stone machine cut in flooring, tread of steps over 20 mm (avg.) thick base of Cement Mortar 1:6 (1 Cement : 6 Coarse sand) and jointed with grey cement slurry with matching pigment incl. rubbing and polishing half rounding edge etc. complete colour and shed as approved by architect engineer in charge.	2,876.00	sqmt	345,120.00
40	60.00	Providing and laying 18 mm thick polished granite stone machine cut in single piece (Max. available) in Risers of Step, dado, Pillars, Sill and Jambs of door/window laid over 10 mm thick cement mortar 1 : 3 (1 cement : 3 coarse sand) With Chemical and jointed with grey cement slurry with matching pigment incl. rubbing and polishing half rounding edge etc. complete colour and shedas approved by architect engineer in charge.	2,981.00	sqmt	178,860.00
41	800.00	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	791.00	sqmt	632,800.00
42	6.00	Supply & Fixing graanite stone in Thck ness of 20-25 mm to fix as Urinal Curtain and as per instruction machine cut shoud be Done on this Granite in all tthree side	1,893.00	sqmt	11,358.00
43	50.00	Marbel flooring work 15-20 mm thick as directed by EIC/ consultant.	1,233.00	Sqm	61,650.00
44	1050.00	Plastic Imulsion Paint (Two coats) (Asian Paint, ICI, Dulux, Nerolac, Berger etc. of approved type) (with Prime Coat)	126.00	sqmt	132,300.00
45	970.00	Apex Color work on Outer side of Wall (Two coats) (with Base Coat)	99.00	sqmt	96,030.00
46	80.00	Enemal painting on door/window, iron door, iron grill or woodwork two coat with base Coat as directed by EIC/ consultant.	113.00	sqmt	9,040.00
47	80.00	Providing ad fixing Windows having extruded Alluminiumcolour anodized section frames main outer size 63.50 mm x 38.10 mm x 1.95 mm (of jindal section no.- 4605,@wt. 1.094kg/R.mt) horizontal two track member size 61.85 mm x 31.75 mm x	4,088.00	sqmt	327,040.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
		1.20 mm(of jindal section no.-8687@ wt. of .695 kg/R.mt.) vertical member of size 61.85 mm x 31.75 mm x 1.30 mm (of jindal section no.-8758 @ wt.of .659 kg/R.mt.)with sliding shutters horizontal members size of 40 mm x18 mm x 1.29 mm (of jindal section no.-8949 @ wt. of .456 kg/ R.mt./section no.-8948 @wt. .457 kg/R.mt) with 5 mm think tinted float glass with poweder coated alluminium fittings and fixtures and transparent silicon sealant glass fixing to frame as per details etc complete.)			
48	6.00	Providing and fixing standard extruded section of size 63 mm x 38.10 mm x 1.20 mm(jindal section no- 2434 w wt. .643 kg/Rmt.) wthColourAnodiesAlluminium frame for VENTILATION 5 mm thick frosted glass as detail etc. complete for ventilations	2,466.00	sqmt	14,796.00
49	20.00	Providing & fixing 32mm thick teakwood panelled door with 125×63 mm teakwood frame, partly glazed (6mm thick) and partly panelled with all neccesarry fixing and oil paint.	5,872.00	Sqmt	117,440.00
50	15.00	Providing & Fixing FRP DOORS	4,189.00	sqmt	62,835.00
51	780.00	Grill work for doors - windows etc. as per design on site with fitting & fixing.	81.00	kg	63,180.00
52	40.00	Supply & Fixing of Stair Hand Railing S.S. Pipe 50mm Dia. Only Single Pipe With fitting comp. as directed by EIC/ consultant.	1,185.00	R mt	47,400.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
53	500.00	<p>Providing and laying integrated cement based proprietary water proofing treatment of required thickness over the roof including 20mm thick cement mortar 1:4 and china Mosaic fitting and finally finishing the surface with white cement slurry and sloping out terrace slabs with following specification laid to required slope not flatter than 1:80(the thickness of water proofing treatment near rainwater outlet or the lowest point of the finished slope shall not be less than 65mm, including treating the vertical surface of the parapet wall upto 30cms. height above finished level of terracing including finishing the top with joint less water proofing plaster, curing, testing etc. complete(area in plan shall only be measured and rounding, vata etc. shall not be measured). Including ten years performance of guarantee bond to be given on stamp paper. (No extra shall be paid for variation in thickness).</p> <p>(a) Applying and grouting a slurry coat of neat cement using 2.75 Kg/sqm. of cement admixed with proprietary water proofing compound conforming to IS-2645 over the RCC slab including cleaning the surface before treatments.</p> <p>(b) Laying cement concrete using broken brick bats 25mm to 100mm size with 50% of cement mortar 1:5(1-cement;5-coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 over 20mm thick layer of cement mortar of mix 1:4(1-cement;4-coarse sand) admixed with proprietary water proofing compound confirming to IS:2645 to required slope and treating similarly the adjoining walls upto 300mm height including rounding of junctions of walls.</p>	710.20	sqmt	355,100.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
54		(c) After two days of proper curing applying a second coat of cement slurry admixed with proprietary water proofing compound conforming to IS: 2645.(d) Finishing the surface with 20mm thick joint less cement mortar of mix 1:4(1-cement;4-coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300 x 300mm square.(e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing for final test. All above operations to be done in order and as directed and specified by the Engineer in charge.			
54	80.00	providing cement vata(10 cm x 10 cm)quarter round in c.m. 1:1 including finishing watering etc complete	17.60	Rmt	1,408.00
55	600.00	Supply & Fixing of Steel characters	69.00	Sq.inc h	41,400.00
56	65.00	Providing, laying and fixing 200 mm wide PVC water stop of approved make and grade thickness in concrete work for water tightstructures like retaining walls of pound water body and underground water tank including cleaning and placing in line level etc. complete, as directed.	196.00	R mt	12,740.00
57	80.00	Providing, fixing, jointing, testing and commissioning of PVC pipe with rubber ring joint conforming to IS : 13592, and confirming to IS : 4985 (Pipe Class III - 6 kg / sq.cm) cut to required lengths including all necessary fittings and specials such as bends, junctions offsets, access pieces (plain or door). Fixing at wall / ceiling level supported by G.I. clamps, hangers etc. duly epoxy coated. Cutting, chases/holes in floors / walls / slab. The piping should be complete with P or S trap as req. (A) 110mm dia.	207.00	R mt	16,560.00
58	35.00	Providing & fixing horizontal ridge support & 85/50 mm vertical support of kaechawood for manglore tiles ceiling with oil painted 50/50mm batten & 200/25mm panpatti.	1,835.00	sqmt	64,225.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
59	55.00	Providing & fixing precast concrete kerb stone of gray cement based concrete block 30 cm length, height and 15cm thick of M250 grade concrete as approved design and including excavation for fixing in proper line and level filling the joint with C:M 1:3 etcComplete .	313.00	Rmt	17,215.00
60	250.00	Decorative Malhar Plaster Work of 8 mm thick in Propotion of 1:1.5	405.00	sqm	101,250.00
61	1.50	Supply & fixing Granite Tackti with Required carving & fixing it with Cement at Specified Place EtcComplete	10,258.00		15,387.00
62	2.00	Indian type white Porselin W/C 560mm size for aquaprivi	1,852.00	Nos.	3,704.00
63	6.00	Providing & fixing wash down water closet (uropean Type WCPan) with sit cover including jet Spray and Stopcock	2,230.00	Nos.	13,380.00
64	3.00	Supply & Fixing of white porselin Ladies Urinal	1,058.00	Nos.	3,174.00
65	4.00	Providing & fixing Urinal of aproved Quality including connection with trap and with integral longitudinal fluh pipe & brass screw down stop Tap (A)15mm dia (A) squatting plate plate pattern white earthenware 550x300 mm	1,212.00	Nos.	4,848.00
66	4.00	White porselin Wash bassin 560/410 mm indian make c.i. bracket with fitting cromium plated topes 25cm plastic waste pipe & 12mm pillar cock with comp.	1,397.00	Nos.	5,588.00
67	1.00	Providing & fixing S.S.sink 600x450	3,797.00	Nos.	3,797.00
68	16.00	Providing & fixing Brass cock screw down bolt type 15mm dia . Fitting with fixing	250.00	Nos.	4,000.00
69	4.00	Providing & fixing Pillar tap capstan head screw downhighpresure with crews Shanks & back nuts (i) 15mm dia type 15mm dia	355.00	Nos.	1,420.00
70	4.00	Flushing Valve brass Cromium Plated Push cock of handle type with flushing supply & fixing	690.00	Nos.	2,760.00
71	2.00	Brass Wheel Valve 50mm dia fitting & fixing	1,570.00	Nos.	3,140.00
72	2.00	Brass Wheel Valve 40mm dia fitting & fixing	940.00	Nos.	1,880.00
73	50.00	Providing & fixing To wall & ceiling & floor UPVC tubes Schedule -80) of the following normal bore tube fitting & clamp inclu. Making good the wall ceiling and 40 mm dia	200.00	RMT	10,000.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
74	100.00	Providing & fixing To wall & ceiling & floor UPVC tubes Schedule -80) of the following normal bore tube fitting & clamp inclu. Making good the wall ceiling and 25 mm dia	153.00	RMT	15,300.00
75	100.00	Providing & fixing To wall & ceiling & floor UPVC tubes Schedule -80) of the following normal bore tube fitting & clamp inclu. Making good the wall ceiling and 15 mm dia	115.00	RMT	11,500.00
76	210.00	Providing & fixing Jointing testing & commissioning of PVC pipe with rubber ring joint confirming to IS 13592 Tand confirming to IS (pipe class-III -6kg ? Sq.cm)cut To requaried& lengths including all necessary Fitting & specials such as bends Junction offsets (A) 110mm dia	207.00	RMT	43,470.00
77	60.00	Providing & fixing Jonting testing & commissioning of PVC pipe with rubber ring joint confirming to IS 13592 Tand confirming to IS (pipe classIII -6kg ? Sq.cm)cut To requaried& lengths including all necessary Fitting & specials such as bends Junction offsets (A) 75mm dia	101.00	RMT	6,060.00
78	15.00	supply & fixing 110mm PVC cowel	67.00	NOS.	1,005.00
79	10.00	supply & fixing 75mm PVC cowel	46.00	NOS.	460.00
80	200.00	Providing & aying (to leve or slop)& jointing with stuff Mixture of cement mortar in propotion 1:1 solt GLASSED PIPES FOLLOWING Normal Dia 150mm dia	332.00	RMT	66,400.00
81	150.00	Providing & aying (to leve or slop)& jointing with stuff Mixture of cement mortar in propotion 1:1 solt GLASSED PIPES FOLLOWING Normal Dia 100mm dia	216.00	RMT	32,400.00
82	25.00	Cement concrete Bedding Ctype	3,558.00	CU MT.	88,950.00
83	8.00	roviding& laying Inspection Chamber .3x.3mm internal Dia	748.00	NOS.	5,984.00
84	2.00	House conection Chamber up to .60 mt	2,182.00	NOS.	4,364.00
85	3.00	House conection Chamber Above.60 mt	2,692.00	NOS.	8,076.00
86	4.00	Man hole A-type Depthas Per Design	6,368.00	NOS.	25,472.00
87	1.20	Man hole A-type Extra Depthas Per Design	6,052.00	RMT	7,262.40
88	5.00	Pre. Cast R.C.C. Frame cover Circular 5MT. Capacity	1,300.00	PAIR	6,500.00
89	4.00	Pre. Cast R.C.C. Frame cover Circular 5MT. Capacity	1,541.00	PAIR	6,164.00

Sr. No	Quantity	Item Description	Rate	Unit	Estimated Cost
			in Rs.		In Rs.
90	10000.00	Providing erecting & fixing Double coated syntex equivalent PVC (ISI) mark water tank of require capacity each with all necessary fitting & connection etc. comp. on terrace .	5.00	LTR	50,000.00

Electrical(BOQ)

Sr. No	Qty.	Item Details	Rate	Unit	Amount
1	137.00	Point wiring for Light / Bell with 2-1.5 sq.mm & earthwire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in/ on surface on wall/ceiling complete with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic box, single mounting base frame covered with textured/metallic front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed.(a) with medium class Rigid PVC pipe and accessories Cat. III	420.00	Pt.	57540.00
2	41.00	Point wiring for FAN with 2-1.5 sq.mm & earthwire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in / flushed on wall/ceiling complete with 6A Modular type switch and hum free EME four or more step type electronic fan regulator with separately mounted and accessories with earth continuity of following type erected on PVC / Metallic box, single mounting base frame covered with textured/metallic 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 Cat. III	600.00	Pt.	24600.00

3	3.00	Point wiring for Individual Plug with & earthwire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of to be erected concealed in / on surface of wall / ceiling complete with Modular type switch & 5 pin Plug erected on PVC / Metallic 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 with 2-1.5 sq.mm Cu. Wire (a) with medium class Rigid PVC pipe and accessories Cat. III	445.00	Pt.	1335.00
4	3.00	[II] For 16A Plug with 2-2.5 sq.mm Cu. Wire (a) with medium class Rigid PVC pipe and accessories Cat. III	670.00	Pt.	2010.00
5	40.00	Point wiring for Looped Plug with 6A Modular type switch & 5 pin socket erected on PVC / Metallic box, single mounting base frame covered with textured / metallic front plate modules erected on / in wall / ceiling with following type accessories Cat. III	240.00	Pt.	9600.00
6	100.00	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	23.00	Mtr.	2300.00
7	50.00	(b) 25 mm	32.00	Mtr.	1600.00
8	10.00	Providing & erecting PVC Corrugated Flexible Conduit with required nos. of coupling, PVC bushes, Check-nuts etc. complete of following sizes. (1) 20 mm	15.00	Mtr.	150.00
9	10.00	(2) 25 mm	20.00	Mtr.	200.00
10	200.00	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	60.00	Mtr	12000.00
11	400.00	(b) 2 wire 2.5 sq. mm	80.00	Mtr	32000.00

12	25.00	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	110.00	Mtr.	2750.00
13	350.00	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(g) 4 wire 4 sq. mm	180.00	Mtr.	63000.00
14	100.00	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/CRC Polyester powder coated and high U.V. & corrosion resistance with diffuser and/or Polycarbonate optics with company mark/name 120 to 300 V, Power Factor more than 0.9, THD < 10 %, CCT 4000 K to 6500K, Uniformity ratio > 0.7, Luminaire efficacy > 85 lumens/watt, LED driver efficiency > 85 % CREE / OSRAM / PHILIPS Lumileds / NICHIA / SEOUL/Bridgelux(U.S.A.) make LED used for luminaire. (Each fitting required LM-79 & LM-80 Certificates) (A) Tube Light with integral/ non-integral driver (d) 20-22 Watts, Surge - 4KV, IP-20, 4 feet Cat-III	970.00	Ea.	97000.00
15	30.00	Miniature circuit breaker single pole 6A to 32A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. conforming to IS 8828/1996 with ISI Mark Cat.III	115.00	Ea.	3450.00
16	5.00	Providing and erecting double pole MCB isolator A.C. 22 duty confirms to IS 13947-3 240V 40A in existing box. Cat.III	320.00	Ea.	1600.00
17	7.00	Providing and erecting four pole MCB isolator A.C. 22 duty confirms to IS 13947-3 in existing box. (b) for 63 Amp. Cat.III	610.00	Ea.	4270.00

18	2.00	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, confirming to IS 13032 and BS 5486-1986 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) (D) Single phase 6way SS Double door	760.00	Ea.	1520.00
19	4.00	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, confirming to IS 13032 and BS 5486-1986 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) (L) Three phase 6 way SS Double door for single phase outgoing horizontal box	2490.00	Ea.	9960.00
20	4.00	Approved make ELCBs / RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 6 KA and suitable for operation on 3 phase and neutral 415V. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed.(iii) 63 Amps. FP	3550.00	Ea.	14200.00
21	5.00	Providing and erecting Annealed bare Copper wire 8 to 16 SWG.	710.00	Kg.	3550.00
22	35.00	Providing & erecting Approved make Power Saving 50 Watt Ceiling Fan with double ball bearing ISI mark with Condenser 230 volt A.C. 50 Hz 1200 mm sweep complete having 3blades with aluminium blades with , canopy & 30 cms. down rod erected with 24/ 0.2, 3 core flexible wire with earthing.(Make shall be approved by Engineer in charge))	2070.00	Ea.	72450.00
23	100.00	Supplying and erecting 19 / 20 mm. nominal bore Medium Class M.S. Pipe down rod erected duly painted for fan complete with necessary 24/ O.20, 3 core flexible wire with earthing.	125.00	Mtr.	12500.00
24	50.00	Supplying & erecting fan hook box of 10 mm M.S. round bar bounded to the RCC bars up to 50mm length each side and pierced through a 16 Gauge M.S. box / Heavy Duty PVC box complete erected concealed in Ceiling with necessary finishing.	125.00	Ea.	6250.00

25	50.00	Providing 2.5mm. thick laminated acrylic sheet to cover the fan hook or Fan box.	20.00	Ea.	1000.00
26	8.00	Supplying & erecting single phase approved make industrial exhaust fan suitable for medium duty ring mounted low noise operation suitable for medium duty having following dia size and maximum speed in RPM[E] 450 mm dia 1400 RPM Cat.- II	4600.00	Ea.	36800.00
27	6.00	Supplying and erecting approved make panel mounting type Digital Ammeter having 3 digits LED display, external CT operated, calibrated for 0 to 1000 Amps suitable to operate on 500 Volt AC , erected on existing panel board with all connection, wiring etc .with manufacturers calibration certificate.	1820.00	Ea.	10920.00
28	1.00	Supplying and erecting approved make panel mounting type Digital Voltmeter having 3 digits LED display, 0 to 750 AC Volts range erected on existing panel board with all connection, wiring etc .with manufacturers calibration certificate.	1490.00	Ea.	1490.00
29	7.00	Supplying and erecting Ammeter / Voltmeter selector switch for 3 phase AC Supply 500 V on existing panel board with necessary connections.	370.00	Ea.	2590.00
30	18.00	Providing & erecting L.T. Current Transformer with bar primary 50/5 to 1000/5 ratio 15 VA burden erected in existing CRCA box duly secured with insulating materials connected to the meter	320.00	Ea.	5760.00
31	30.00	Supplying and erecting approved make set of indicator lamps of LED type lamp, lens cover, Bakelite holder complete erected with necessary connections.	125.00	Ea.	3750.00
32	1.00	Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 35 KA. at 415 V. having Normal current rating up to 200A.with variable Thermal & magnetic release suitable to work on A.C.supply 50 c/s. with all internal connections & complete erected in existing 16 G.M.S.housing	16500.00	Ea.	16500.00
33	5.00	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	6290.00	Ea.	31450.00

		internal connections & complete erected in existing 16 G.M.S. housing. ICS=100% of ICU only Cat III			
34	5.00	Supplying and erecting triple pole & neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 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 bar, erected in existing cubical panel with necessary connections.(C) Suitable for 200 Amp. capacity	3000.00	Rn.Mt r	15000.00
35	3.50	Providing & erecting weather proof, dust & vermin proof, floor mounted front operated indoor type cubical panel board having IP-54 protection 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 supporting angles, flats 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, with suitable size of inter connecting PVC copper wire / copper-aluminium strips, rubber grommets, rib, bakelite control fuses for measuring instruments, earth bus & earth bolts, foundation flange - bolts-base Plates, sufficient nos. of hinged doors, handles with locking arrangement and rubber gasket 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. (A) The standard companies switch gear shall be used and only manufacturers at CPRI approved factory and shall be certified by that company whose switch gears are used	17410.00	Sq.Mt r	60935.00

		after fabrication for beneficial use (i) with 350mm depth			
36	10.00	Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required.(h) One wire 25.00 sq. mm	235.00	Mtr	2350.00
37	15.00	(f) One wire 10.00 sq. mm	90.00	Mtr	1350.00
38	50.00	(a) One wire 1.00 sq. mm	10.00	Mtr	500.00
39	30	(b) One wire 1.50 sq. mm	15	Mtr	450.00
40	20	(c) One wire 2.50 sq. mm	25	Mtr	500.00
41	4.00	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 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.(a) For Electrical Installation up to 440V in normal soil Length of pipe - 1 Mtr Back filling compound - 1 Nos Bag of 15 Kg.	7150.00	Ea.	28600.00
42	80.00	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 cables.(E) 3 1/2 core 95 Sq. mm (50 Sq. mm 1/2 core)	5600.00	Mtr.	448000.00
43	12.00	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	2945.00	Mtr.	35340.00

		trench / pipe at road crossing or floor of following size of cables. (C) 3 1/2 core 50 Sq. mm (25 Sq. mm 1/2 core)			
44	10.00	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 cables.(C) 4 core 10 Sq. mm	780.00	Mtr.	7800.00
45	4.00	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) 3 & 1/2 core 95 Sq. mm	140.00	Ea.	560.00
46	6.00	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) 3 & 1/2 core 35/50 Sq. mm	80.00	Ea.	480.00
47	4.00	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 10 Sq. mm	40.00	Ea.	160.00
48	20.00	Solderless crimping type Copper 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. (E) 35/50 Sq.mm.	22.00	Ea.	440.00
49	18.00	(G) 95 Sq.mm.	50.00	Ea.	900.00
50	12.00	(B) 10 Sq.mm	12.00	Ea.	144.00
51	1.00	Design, supply, Installation, testing and commissioning of electrical based cremation furnace with 05 years Comprehensive Maintenance	1,04,00,000.00	per Unit	10400000.00
52	1.00	Design, supply, Installation, testing and commissioning of Gas based cremation furnace with 05 years Comprehensive Maintenance	97,50,000.00	per Unit	97,50,000.00
			TOTAL RS		4,19,62,067.00
			Say Rs.		4,19,63,000.00

Addl.Asstt.Er
Rajkot Muni. Corporation

Dy.Ex.Engineer
Rajkot Muni. Corporation

City Engineer
Rajkot Muni. Corporation

I/We agree to carry out the above said work at _____
_____ % Equal / above / below
on the tendered rates shown in Schedule.

Signature of Contractor: