

NIT For Proposed Construction of 06 Trade ITI Building , 30 Seated Boys Hostel, 30 Seated Girls Hostel & 1-F , 2-H , 4-I Type Quarter at Rampur Naikin, District - Sidhi (M.P)

			CIVIL WORK				118548308.23
			ELECTRICAL WORK				17753246.00
			TOTAL				136301554.23
			Say PAC Amount		1363.02		
S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
		Civil Work					
1	2.1	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m. in all kinds of soil.	100 sqm	55.14	803.00	44276.46	
2	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil					
		All kinds of soil.	Cum	8856.32	147.00	1301878.31	
3	2.7	Earth work in excavation/ by mechanical means (Hydraulic Excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.					
	2.7.1	Ordinary rock	Cum	2094.39	287.00	601091.08	
4	2.24	Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	8734.37	95.00	829765.06	
5	2.27	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.					
	2.27.2	Supplying and filing in plinth with soil (other then BC soil) having MDD not less than 1.85 t/m ³ under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 15cm depth and dressing complete.	Cum	4436.63	331.00	1468523.87	
6	2.27.1	With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm)	cum	458.72	393.00	180276.17	
7	2.26	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete Note: - Maximum thickness of this layer shall be 20 cm.	cum	461.57	672.00	310173.70	

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
8	2.32	Preconstruction antitermite treatment to the building underconstruction by providing 1: Treating the bottom and the sides (up to 30cm height of the excavated trench) @litter per sqm of the surface area. Staa=e 2: After masonry/RCC work, the backfill in the immediate contact with the foundation structure treatment .5 litter per sqm. of the vertical surface of the substructure for each side. Staa=e 3: surface treatment by spreading emulsion over the plinth area before laying the base concrete under floors @.0 litres/Sqm. Staa=e 4: Pumping the emulsion in plinth masonry on filling side at floor junction 5 litres/Sqm.	Sqm	2237.66	136.00	304321.76
9	4.17	Making plinth protection 50mm thick of cement concrete grade M10 over 75mm bed of dry metal ballast 40mm nominal size well rammed and consolidated and filled with sand including finishing the top smooth (with 20mm nominal size graded stone aggregate.)	Sqm	456.20	351.00	160126.20
10	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : M - 15				
	4.1.2	With 40mm nominal size graded stone aggregate.				
	4.1.2.1	M 15 - Grade concrete	Cum	240.61	4403.00	1059414.64
11	4.1.2.2	M-10 Nominal (Mix -1 Cement : 3 sand : 6 graded stone aggregate)	cum	266.80	3808.00	1015989.63
12	5.9	Centering and shuttering including strutting, propping etc. and removal of form for:				
	5.9.1	Foundations, footings, bases of columns, etc. for concrete upto plinth level	sqm	2944.81	190.60	561280.79
	5.9.2.1	Walls (any thickness) including attached pilasters buttresses, plinth beams and string courses etc.	sqm	6157.33	219.00	1348456.15
13	5.1	Providing and laying in position specified grade of reinforced cement concrete (with 20mm nominal size graded stone aggregate) excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
	5.1.1	M-20 Grade Concrete	Cum	1543.89	6153.00	9499555.17
14	5.16	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detailing IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete .(Note:- 1.Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge. 2.No extra payment shall be done for overlaps and/or couplers.Couplers shall be conforming to IS code on "Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification")				

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
	5.16.6	Thermo-Mechanically Treated bars. (TMT/TMX) FE 500 D or more conforming to IS 1786	Kg	408642.56	80.00	32691404.80
15	5.9	Centering and shuttering in cluding strutting, propping etc. and removal of form for:				
	5.9.3	Suspended floors, roofs, landings, balconies and access platform.	sqm	4241.31	439.60	1864477.68
	5.9.5	Lintels, beams, girders, bressumers and cantilevers	sqm	3684.61	356.00	1311721.16
	5.9.6	Columns,P i l l a r s ,Piers,Abutments, Posts and Struts.	sqm	3987.10	471.20	1878721.52
	5.9.7	Stairs, (excluding landings) except spiral- Staircases.	sqm	184.27	435.70	80287.31
	5.9.16	Small lintels not exceeding 1.5m clear span, mouldingas incornices, window, sills, courses, bands, copings, bed plates, anchor blocks and the like.	sqm	173.62	191.00	33161.42
	5.9.19	Weather shade, Chajjas, corbels etc., including Edges.	sqm	548.51	534.20	293014.04
16	5.2	Reinforced cement concrete work (with 20 mm nominal size graded stone aggregate) in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, posts and struts etc. above plinth level and upto floor two level excluding cost of centering, shuttering, finishing and reinforcement:				
	5.2.1	M-20 Grade Concrete	Cum	502.87	6231.00	3133407.89
17	5.3	Reinforced cement concrete work (with 20 mm nominal size graded stone aggregate) in beams, suspended floors, roofs having slope of any degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral staircases above plinth level and upto floor two level excluding the cost of centering, shuttering, finishing and reinforcement in concrete grade.				
	5.3.1	M-20 Grade Concrete	Cum	1249.73	6541.00	8174498.65
18	4.1.1	With 20mm nominal size graded stone aggregate.				
	4.1.1.3	M-15 – Grade concrete	cum	85.28	4471.00	381273.47
19	5.24	Providing for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.				
	5.24.1	Preparation of grooves	Rm	1556.84	18.50	28801.54
	5.24.2	Preparation of Drip course	Rm	596.50	30.00	17895.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
20	6.26	Providing and laying Autoclaved Aerated Concrete (AAC) blocks masonry, using AAC blocks (Size length 300, 400, 500, 600mm Height 200, 250, 300 mm Width 100, 150, 200, 250 mm) conforming to IS 2185 PART 3, having compressive strength not less than 4 MPa (Grade II) in super structure, blocks jointed with approved block laying polymer modified adhesive mortar as per ASTM 1660-09, applied in uniform thickness of 2 to 3 mm in horizontal and vertical joints using special trowel, polymer modified mortar having minimum compressive strength and minimum splitting tensile strength of not less than 5MPa and 0.34 MPa respectively as per ASTM international standard including raking out joints. The surface of masonry units (AAC-Block) should be slightly moist prior to application of jointing mortar. Block should be gently pressed down using a rubber mallet to expel out entrapped air and the masonry shall be cured two days. 1st layer of masonry block shall be placed on perfectly leveled surface, which if required, shall be leveled with M-15 cement concrete.				
	6.26.1	AAC Masonry in polymer modified mortar	Cum	1283.50	5500.00	7059258.25
21	9.43	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
	9.43.1	Fixed to steel windows by welding.				
		Total	Kg.	9335.88	119.00	1110969.72
22	9.94	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm) with necessary accessories and screws etc. complete.	Each	7.00	780.00	5460.00
23	9.109	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete:				
	9.109.1	300x16 mm	each	8.00	241.00	1928.00
24	9.110	Providing and fixing aluminium towerbolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete				
	9.110.2	300x10 mm	each	7.00	123.00	861.00
25	9.113	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
	9.113.1	125 mm	each	14.00	75.00	1050.00
26	9.114	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.				
	9.114.2	Twin rubber stopper	each	7.00	86.00	602.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
27	10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm size with top and bottom rail of T-iron 40x40x6mm with 40mm dia steel pulleys complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer. Rate includes recess cutting in floor and making good the same wherever required.	sqm	16.96	4132.00	70078.72
28	9.65	Providing and fixing ISI marked stainless steel sliding door bolts with nuts and screws etc. complete:				
	9.65.1	300x16 mm	Each	74.00	389.00	28786.00
	9.65.2	250x16mm (Single)	Each	241.00	326.00	78566.00
29	9.69	Providing and fixing ISI marked stainless steel handles with necessary screws etc. complete :				
	9.69.1	125mm	Each	607.00	60.00	36420.00
30	9.66	Providing and fixing ISI marked stainless steel tower bolt black finish, (Barrel type) with necessary screws etc. complete :				
	9.66.1	250X10 MM	Each	287.00	148.00	42476.00
31	9.76	Providing and fixing Stainless steel hanging type floor door stopper with necessary screws, etc. complete.	Each	237.00	103.00	24411.00
32	9.128	Providing and fixing bright finished 100mm mortice lock with 6 levers without pair of handles for aluminium door with necessary screws etc complete (Best make of approved quality) as per direction of Engineer-in-charge.	Each	178.00	480.00	85440.00
33	9.170	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid plain flush door shutter of required size comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice .husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawal strength of 1800 N (Face) & 900 N (Edge), minimum compressive strength 50 N/mm ² , modulus of elasticity 850 N/mm ² and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S screws, all as per direction of Engineer-InCharge. (Note: stainless steel butt hinges and necessary S.S screws shall be paid separately)				
	9.170.1	24mmthickWPC(Woodpolymer composite) solid plain flush door shutter	Sq.m.	100.85	2250.00	226912.50

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
34	9.169	Providing and fixing factory made single extruded WPC(Wood Polymer Composite) solid door/window/ceosetory windows and other frames/chowkhat comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice .husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed S.S. screws having minimum density of 750 kg/m3 and screw withdrawal strength of 2200 N (Face) & 900 N (Edge), minimum compressive strength 58 N/mm2, modulus of elasticity 900 N/ mm2 and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixed in position with M.S. hold fast/lugs/S.S.dash fasteners of required dia and length complete as per direction of Engineer-in-Charge. (M.S. hold fast/lugs or S.S. dash fasteners shall be paid separately)				
	9.169.2	Single rebate (100 mm X50 mm)	Rm	319.00	720.00	229680.00
35	9.214	Providing and fixing ISI marked factory made flush door shutters conforming to IS: 2202 (Part I) laminated type, core of block board construction with kiln seasoned and chemically treated 1st class pine wood battens (strips) and frame of kiln seasoned and chemically treated, finger jointed 1st class pine wood of width not less than 65mm for style, top rail, bottom rail and 125mm for lock rail. Block board shall beprovided with well matched 3mm thick commercial 3 ply veneering consisting of vertical grains, cross bands and commercialgrade face veneers on both outer faces of shutters including kiln seasoned and chemically treated, finger jointed. Spacing of finger joints in wood as above shall not be less than 50 cm. Both surfaces of shutters to be provided with 1.00mm thick decorative high pressure laminated sheet on plain/wood grain in gloss/matt/suede finish with high density protective surface layer of make thereby not requiring polish, putty or painting work. Adhesive on reverse side of lamination sheet shall be as per IS: 2046 type S of approved quality. Each shutter shall be factory				
	9.214.2	30 mm thick including 3 nos. 100 mm long, ISI marked heavy weight (2.5mm thick) Stainless Steel butt hinges with necessary screws.	Sqm	398.38	2675.00	1065666.50
36	10.13	Providing and fixing M.S. Tubular frames and shutters or frames only or shutters only for doors, windows, ventilators and cupboard with any sections, made of 1.60 mm or 1.25 mm thick M.S. Sheet, joints mitred, welded and grinded finish, with profiles of required size as per drawing, including fixing of necessary butt hinges, stays and screws and applying a priming coat of approved steel primer excluding cost of all fittings such as handles, tower bolts, sliding door bolts,latches etc. and panels.				

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
	10.13.1	Fixing with 15x3 mm lugs 10 cm. long embedded in cement concrete block 15x10x10 cm of Cement Concrete 1:3:6 (1 Cement : 3 sand : 6 graded stone aggregate 20 mm nominal size).	kg	5044.43	116.20	586162.77
37	10.25	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete i/c fixing the railing with necessary accessories and stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer- in-charge. (For payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)	KG	1079.20	582.00	628094.40
38	10.26	Providing and fixing fly proof wire gauze to windows, clerestory windows and doors with M.S. Flat 15x3mm and nuts and bolts complete.				
	10.26.2	Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides.	Sqm	558.62	1334.00	745199.08
39	11.51	Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (having thickness 9 to 10mm) of 1st quality conforming to IS : 15622 of approved make in all colours white, ivory, grey, fume red brown laid on 20mm thick cement mortar 1:4 (1 Cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete	Sqm	242.19	644.00	155970.36
40	11.52	Providing and laying rectified Glazed Ceramic wall tiles 300x450 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours white, ivory, grey, fume red brown laid on 12 mm thick cement mortar 1:3 (1 Cement : 3 sand) including grouting the joints with white cement and matching pigments etc., complete.	Sqm	673.89	698.00	470375.22
41	11.36	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 sand) 25 mm thick.(Area of slab to be over 0.25 sqm)	Sqm	1970.07	1174.00	2312862.18
42	11.38	Kota stone slabs in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.				
	11.38.1	10-12 mm thick	Sqm	224.96	1177.00	264777.92

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
43	11.33	Providing and laying Granite stone flooring in required design and patterns in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry admixed with pigment of matching shade including rubbing, curing and polishing and as directed by the Engineer-in-Charge Granite stone slab Dark Black. Dark Red, White or equivalent,				
	11.33.2	Leather Finish Granite	sqm	184.17	2809.00	517333.53
44	11.34	Granite stone work 18mm thick of any colour in riser of steps, skirting, dado and pillars laid on 12 mm average thick cement mortar 1:3 (1 cement:3 sand) and jointed with white cement slurry mixed with pigment to match the shade of slab.	sqm	32.77	3413.00	111840.60
45	11.78	Providing and laying vitrified floor tiles Multi/Double charged (Minimum top layer thickness 2.0mm) Neno Polished self design, indifferent size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours & shades, quality/ premium quality in flooring laid on 12mm thick cement mortar 1:4(1cement :4sand) including grouting the joints with white cement and matching pigments etc. complete				
	11.78.1.1	Size 600X600 mm thickness 9-10 mm	sqm	1262.06	1104.00	1393314.24
46	11.79	Providing and laying vitrified floor tiles Multi/Double charged (Minimum top layer thickness 2.0mm) Neno Polished self design, in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours & shades, 1st quality/ premium quality in skirting laid on 12mm thick cement mortar 1:4(1cement :4sand) including grouting the joints with white cement and matching pigments etc. complete				
	11.79.1.1	(a) Size 600X600 mm thickness 9-10 mm	sqm	135.15	1093.00	147716.76
47	11.64	Providing and fixing stone slab table rubbed on both faces edges rounded and polished of size as required and 1.8 cm thick fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement: 2 sand: 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in- charge and finished smooth.				
	11.64.1	White Agaria Marble Stone.	sqm	1.44	3046.00	4386.24

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
48	11.22	Providing and fixing 18mm thick gang saw cut mirror polished (premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing moulding and polishing to edge to give high gloss finish wherever required etc. complete at all levels. Samples approved by Engineer-in- Charge.				
	11.22.2	Granite fine grained dark crystal of other colours and various patterns	sqm	223.33	2356.00	526165.48
49	11.53	Providing and laying Antiskid floor tiles of any sizes, 12 mm thickness with water absorption less than 0.08% and conforming to IS:15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement with matching pigments etc., complete.	sqm	253.00	880.00	222640.00
50	10.15	Design, supply, fabrication, taransportion and erection of structural steel/mild steel built-up sections for steel building in column, rafter, truss, floor joist, wind bracings, tie beam, foundation bolts, fasteners etc. Including two coats ofEpoxy paint and one coat of primer. These structural steel/built-up sections shall be manufactured using advanced CNC Plasma/Oxy Acetylene cutter and H Beam Welding line. Welding shall be in full depth on both sides of the plate adopting relevant I.S Code.	Kg	8368.58	132.00	1104652.56
51	12.18	Providing and Fixing of sky lights consisting of Multi cell/tight cell Polycarbonate Panel System of approved colour, 16 mm thick (minimum) having uniform in color with an integral Tight-Cell core constructed not to exceed 4mmx4mm in a cross section, Vertical Standing Seam manufactured at both sides ofthe panel. Snap-on connector to interlock the panels shall have a grip- lock double tooth locking mechanism to ensure maximum uplift capabilityand shall be of same color as that of panel. Panel shall be factory sealed/end welded panels with additional End- cap/Aluminium U- Profile (mill finish) for ends. Panel shall be co-extruded with special anti- glare compound and UV protected. The full system shall be fitted on MS purlins perpendicular to direction of sheeting with purlin spacing as specified by Manufacturer. The rate includes cost of all the operations, labour and all materials and tests (as applicable) involved such as bolts nuts and screws etc. and labour for cutting bending to required profile, necessary scaffolding, hoisting in				
		12.18.2 16mm thick	Sqm	89.96	3546.00	318998.16

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
52	12.38	<p>Providing and fixing of self-supported mechanically seamed roofing system, made of high quality steel, having 340 MPA yield strength, pre coated galvalume sheet as per ASTM A 792 M of base metal thickness from 0.8mm to 1.6mm (tolerance \pm 0.02mm). High grade steel sheet should have 55% aluminum and 45% zinc coating by hot-dip process of minimum 25 micron on top side & 12 micron on back side with epoxy primer and polyester wash-coat as per AZM 150. Roofing should be designed as per ASCE 7-20 international building code 2002. The analysis should be carried out for span and center arch – rise considering the required live load, wind load, dead load and the seismic factor. The analysis should also determine the thickness of steel and the end reactions at the beam level. Shop drawing of roofing system shall be submitted by the contractor through the consultant, and the same shall be checked and approved by the department. The roof panel formation shall be done as per the required length and curvature using hydraulic</p>					
		12.38.9	Base metal thickness 1.6 mm, up to span 33 meter	sqm	359.84	2585.00	930186.40
53		12.38.11	<p>Providing and fixing advanced type hurricane turbo ventilator to self-supporting roof having neck dia 600mm made of aluminum having 24 nos vertical vanes made of aluminum sheet. Ventilator should be fixed on 1 to 2mm thick G.I. ring which shall be fixed on 2mm thick polycarbonate sheet. Polycarbonate sheet shall have foam tap or rubber gasket under and over it and fixed by 1 to 2 mm thick aluminum angle 25X25mm with self-tapping screw to panels. All joints shall be sealed by silicon. Rates i/c of all material, labour fittings screw, rings, foam tap, aluminum angles etc. complete. Deduction shall not be made for cutting area of self-supported roof.</p>	Each	8.00	9196.00	73568.00
54	12.26		<p>Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 sand : 4 stone aggregate 10mm and down grade) including finishing with cement mortar 1:3 (1 cement : 3 sand) as per standard design : In 75x75mm deep chase</p>	metre	536.25	99.00	53088.75
55	12.27		<p>Making khurras 45x45 cm (sunk area) with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement : 3 sand) and a coat of neat cement rounding the edge and making and finishing the outlet complete so as to receive rain water/ spillage water on roof in a sunk area and completely rain out in a near perfect strain meter motion into rain water pipe.</p>	each	52.00	156.00	8112.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
56	12.32	Providing and fixing on wall face Rigid Unplasticised rigid PVC (upvc) Single socketed rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.				
	12.32.2	110 mm diameter (minimum wall thickness 2.2mm)	metre	474.20	238.00	112859.60
57	12.33.5	Bend 87.5°				
	12.33.5.2	110 mm bend (minimum wall thickness 2.2mm)	each	126.00	112.00	14112.00
58	12.33.6	Shoe (Plain)				
	12.33.6.2	110 mm Shoe (minimum wall thickness 2.2mm)	each	86.00	99.00	8514.00
59	13.1	12mm cement plaster of mix :				
	13.1.2	1:6 (1 cement: 6 sand)	Sq.m.	13209.78	160.00	2113564.80
60	13.2	15 mm cement plaster on the rough side of single or half brick wall of mix				
	13.2.2	1:6 (1 cement : 6 sand)	Sqm	5908.88	168.00	992691.84
61	13.8	6 mm cement plaster of mix : 1:3 (1 cement : 3 sand)				
			Sqm	2645.81	144.00	380996.64
62	13.27	Providing and fixing mesh in vertical and horizontal junction of RCC and brick/AAC work including scaffolding and all lead and lift etc. complete				
	13.27.1	G.I. chicken mesh as per ISI specification and in the required width with 50mm long Bombay nails before plastering upt 10 meter height.	Sqm	644.28	62.00	39945.36
63	13.45	Distempering with 1st quality acrylic distemper (ready mixed) having VOC (Volatile Organic Compound) content less than 50 grams/ltr of approved manufacturer, of required shade and colour complete, as per manufacturer's specification. Two or more coat on new work.				
		Interior paint	Sqm	16540.39	75.00	1240528.88
64	13.67	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
	13.67.3	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre.				
		Qty is Same as Per Plaster work	Sqm	18952.91	24.00	454869.89
65	13.41	Providing and applying white cement based putty of average thickness 1 mm, of approved brand over the plastered wall surface to prepare the surface even and smooth i/c all cost of material, labour and scaffold etc in all position complete. Note : Putty shall be applied only on the internal walls, for application on the exterior walls prior permission of APD/Chief Engineer will be required.				
			Sqm	20401.95	74.00	1509743.93

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
66	13.85	Finishing walls with 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot Tinted) with silicon additives. New work (Two or more coats applied @ 1.43 litre/ 10 sqm. Over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm.	Sqm	2999.46	101.00	302945.46
67	13.64	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work.				
		Two or more coats on new work	Sqm	777.31	53.00	41197.57
68	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately)				
	21.1.1	For fixed portion.				
	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	KG	2665.55	416.00	1108868.80
69	21.1.2	For shutters of doors, windows and ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately).				
	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg.	1802.08	484.00	872206.72
70	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item) :				
	21.3.2	With float glass panes of 5.0 mm thickness (weight not less than 12.50 kg/sqm)	Sqm	520.46	948.00	493396.08
71	21.4	Add extra for providing and fixing froasted glass instead of float glass				
	21.4.2	With glass panes of 5.0 mm thickness (weight not less than 12.50 kg/sqm)	Sqm	449.79	262.00	117844.98

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
72	21.9	Filling the gap in between aluminium frame and adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5 mm depth and 5 mm width				
			RM	1747.03	53.00	92592.59
73	22.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	157.23	207.00	32545.58
74	22.29	Providing and applying waterproofing & Heat reflecting roof coating with 100% acrylic elastomeric polymers. Contains 30% Volume solid, tensile strength 8 kg/cm ² , crack bridging, VOC 30 ± 5 gm/ltr upto 2 mm. then applying two coats with forced coverage of 20 sqft/ltr/two coats. The operation shall be carried out after scrapping & propely clening the surface to remove loose particles with wire brush/Jet washer. Apply 1 coat @1 ltr/10 sqm & 3 undiluted coats @ 8 ltr/10 sqm with 4 hrs interval of each coat.The work shall be carried out as recommended by the manufacturer's specification & the direction of the Engineer- in-Charge..	Sqm	2632.30	342.00	900246.60
75	22.14	Grading roof for water proofing treatment with				
	22.14.1	Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)				
		Total	Cum	166.65	6569.00	1094723.85
76	17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Iron P or S trap, UPVC P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :				
	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests..	Each	20.00	2995.00	59900.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
77	17.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :				
	17.2.1	W.C. pan with ISI marked white solid plastic seat and lid	Each	22.00	3036.00	66792.00
78	18.61	Providing and fixing CP jet assembly to including connection etc complete.	Each	22.00	375.00	8250.00
79	17.70	Providing and fixing toilet paper holder:				
	17.70.1	C.P. brass	Each	26.00	340.00	8840.00
80	17.11	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :				
	17.11.2	White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. brass pillar tap.	Each	47.00	2187.00	102789.00
81	18.44	Providing and fixing PTMT bib cock of approved quality and colour 15mm nominal bore.				
	18.44.4	90mm long weighing not less than 93 gm	Each	81.00	237.00	19197.00
82	18.45	Providing and fixing PTMT stop cock of approved quality and colour.				
	18.45.3	Concealed stop cock, 15mm nominal bore, 108mm long. Weighing not less than 108 gms.	Each	35.00	242.00	8470.00
83	18.46	Providing and fixing PTMT pillar cock of approved quality and colour.				
	18.46.2	15mm nominal bore, 125mm long foam flow weighing not less than 120 gms.	Each	55.00	332.00	18260.00
84	17.73	Providing and fixing CP brass towel rail of approved quality and make				
	17.73.2	450x20mm	Each	41.00	836.00	34276.00
85	17.75	Providing and fixing CP brass soap dish of approved quality and make	Each	41.00	422.00	17302.00
86	17.64	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
	17.64.1	semi rigid pipe				
	17.64.1.1	32 mm	Each	51.00	87.00	4437.00
87	18.48	Providing and fixing PTMT grating of approved quality and colour.				
	18.48.1	Circular type.				
	18.48.1.1	100 mm nominal dia.	Each	107.00	55.00	5885.00
	18.48.1.2	125 mm nominal dia with 25 mm waste hole.	Each	39.00	60.00	2340.00
88	17.68	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shape with 6 mm thick hard board backing :				
	17.68.2	Rectangularshape453x357mm	Each	41.00	642.00	26322.00
89	17.36	Providing and fixing plain bend of required degree.				
	17.36.2	100 mm dia				
	17.36.2.1	Sand cast iron as per IS – 1729 minimum wall thickness 6.5mm	Each	83.00	381.00	31623.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
90	17.57	Providing and fixing trap of self cleansing design with screwedown or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :				
	17.57.1	100 mm inlet and 100 mm outlet				
	17.57.1.1	Spun cast iron S & S as per IS: 3989.	Each	55.00	825.00	45375.00
91	17.55	Providing lead caulked joints to sand cast iron/ centrifugally cast(spun) iron pipes and fittings of diameter:				
	17.55.2	100mm	Each	74.00	234.00	17316.00
92	17.32	Providing and fixing soil, waste and vent pipes :				
	17.32.1	Sand cast iron socket and spigot (S&S) pipe as per IS: 1729				
	17.32.1.2	100 mm dia with wall thickness of 5 mm	METER	446.00	970.00	432620.00
93	17.35	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
	17.35.2	100 mm dia				
	17.35.2.2	Spun cast iron as per IS – 3989 minimum wall thickness 4 mm	Each	119.00	408.00	48552.00
94	17.37	Providing and fixing heel rest sanitary bend				
	17.37.1	100 mm dia				
	17.37.1.2	Spun cast iron as per IS - 3989	Each	84.00	387.00	32508.00
95	17.41	Providing and fixing single equal plain junction of required degree :				
	17.41.2	100x100x100 mm				
	17.41.2.2	Spun cast iron as per IS – 3989	Each	52.00	607.00	31564.00
96	17.52	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts and nuts				
	17.52.1	100mm				
	17.52.1.2	Spun cast iron as per IS - 3989	Each	136.00	547.00	74392.00
97	17.53	Providing and fixing terminal guard:				
	17.53.2	100mm				
	17.53.2.2	Spun cast iron as per IS - 3989	Each	46.00	300.00	13800.00
98	17.54	Providing and fixing collar:				
	17.54.1	100mm	Each			
	17.54.1.2	Sand cast iron S & S as per IS - 3989	Each	46.00	317.00	14582.00
99	17.34	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10cm of Cement Concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. :				
	17.34.2	For 100 mm dia pipe	Each	132.00	66.00	8712.00
100	17.58	Providing and fixing unplasticised Rigid PVC soil and waste pipes conforming to IS: 13592 Type B including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion. Single socketed pipes for working pressure of 4 kg/sqcm. (minimum wall thickness 3.2mm)				
	17.58.2	110 mm diameter	meter	471.10	238.00	112121.80

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
101	17.60	Providing and fixing Unplasticised - PVC pipe clips of approved design to Unplasticised - PVC soil and waste pipes by means of bombay nail of required length including and making good the wall etc. complete.				
	17.60.2	110mm	each	176.00	50.00	8800.00
102	18.6	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge.				
	18.6.2	Concealed work including cutting chases and making good the walls etc.				
	18.6.2.1	15 mm nominal outer dia .Pipes.	meter	1280.00	207.00	264960.00
	18.6.2.2	20 mm nominal outer dia .Pipes.	meter	725.00	234.00	169650.00
103	18.8	Providing and fixing G.I.pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc.				
	18.8.3	External work : including trenching and refilling etc.				
	18.8.3.3	25 mm dia. nominal bore	meter	700.00	263.00	184100.00
104	18.12	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	18.12.1.4	50 mm nominal bore	meter	114.00	976.00	111264.00
	18.12.1.6	80 mm nominal outer dia .Pipes.	meter	63.00	2302.00	145026.00
105	18.13	Providing and fixing CPVC gate valve with knob of approved quality.				
	18.13.1	25 mm nominal bore	Each	58.00	428.00	24824.00
106	18.28	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	Per Litre	20000.00	7.00	140000.00
107	18.15	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
	18.15.1.2	25 mm nominal bore..				
		verticle	each	34.00	474.00	16116.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
108	2.9	Excavating trenches of required width for pipes, cables, etc. including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : (No extra lift is payable if work is done by mechanical means) in all kinds of soil				
	2.9.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	meter	1129.00	156.00	176124.00
109	19.8	Providing and laying non- pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 sand) including testing of joints etc. complete :				
	19.8.4	300 mm dia. R.C.C. pipe	meter	440.00	480.00	211200.00
110	18.57	Cutting holes upto 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.	each	68.00	129.00	8772.00
111	17.7	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors wherever required				
	17.7.2	Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern.	each	6.00	8660.00	51960.00
112	17.14	Providing and fixing Stainless Steel AISI 304 (18/8) kitchen sink as per IS13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required :				
	17.14.1	Kitchen sink with drain board				
	17.14.1.1	510x1040 mm bowl depth 250mm.	each	11.00	8074.00	88814.00
113	17.15	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug 40mm C.P. brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete including painting of fittings and brackets, cutting and making good the wall wherever required :				
	17.15.1	Size 600x450x200mm	each	1.00	3328.00	3328.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
114	12.59	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, bothside inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 27 x 25 x 1.6 mm				
		12.59.1 GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop; made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.	sqm	316.00	1431.00	452196.00
115	26.27	Providing and fixing of carbon-di- oxide type fire extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve fitted with pressure indicating gauge internal discharge tube 30 cm long high pressure discharge hose, discharge nozzle, suspension bracket conforming to IS : 15683 finished externally with red enamel paint and fixed to wall with brackets complete with internal charge.				
		26.27.3 Capacity 4.5 kg	each	16	11351.00	181616.00
116	6.7	Brick work with fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, in super structure above plinth level up to floor two level in :				
		6.7.3 Having 50 kg / cm ² average compressive strength.				
		6.7.3.2 Cement mortar 1:6 (1 cement : 6sand)	CUM	395.62	4936.00	1952780.32
117	13.4	12 mm cement plaster finished with a floating coat of neat cement of mix :				
		13.4.2 1:4 (1 cement : 4 sand)	SQ.m.	36	203.00	7308
118	16.15	Supplying, filling, spreading and leveling stone boulders of size range 5 cm to 20 cm, in recharge pit, in the required thickness, for all leads and lifts, all complete as per direction of Engineer-in- charge.	CUM	7.776	760.00	5909.76

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
119	16.16	Supplying, filling, spreading and leveling gravels of size range 5 mm to 10 mm, in the recharge pit, over the existing layer of boulders, in required thickness, for all leads and lifts, all complete as per direction of Engineer-in-Charge.	CUM	3.888	877.00	3409.78
120	16.17	Supplying, filling, spreading and leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads and lifts, all complete as per direction of Engineer-in- Charge.	CUM	3.888	819.00	3184.27
121	12.33	Providing and fixing on wall face Unplasticised - UPVC moulded fittings/ accessories for Unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.				
		12.33.1 Coupler	EACH	68	102.00	6936
		12.33.1.2 110 mm (minimum wall thickness 2.2mm)				
122	12.34	Providing and fixing unplasticised - PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
		12.34.2 110 mm (minimum wall thickness 2.2mm)	EACH	132	114.00	15048
123	16.21	Rain water filter made out of ABS plastics material, designed to operate on gravity of rainwater from roof through down pipe, having inlet (id) of 110 mm, outlet (id) of 110 mm; provided with SS 304 wire mesh filter element having diameter of not less than 90 mm and height not less than 500 mm with cap of not less than 70 mm height with two holes of not less than 10 mm on cap as a safety feature. Element must have back wash cap at bottom for cleaning dried particles. Filter must have flush outlet of not less than 60 mm moulded opposite to inlet connection. Flush valve must be supplied along with filter. Rainwater filter must be manufactured from injection moulding process, blended with uv stabilizers. Rainwater filters width to be not less than 400 mm, depth to be not less than 140 mm and height must not be less than 600 mm overall. Moulded projection to be given at bottom to fix on wall and a polymer clamp to fix at top.				
		16.21.2 System size 110mm diameter (filterain, tee, door bend, and valve 110mm) For the catchment up to 200 square meter.	EACH	4	7750.00	31000

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
124	16.1	Boring/drilling bore well of required dia perfectly vertical to receive casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire and running charges of all equipments, tools, plants and machineries required for the job, all complete as per direction of Engineer-in-Charge, upto 90 metre depth below ground level.					
		16.1.1	All types of soil upto 90 metre depth.				
		16.1.1.3	200 mm dia.	METER	300	451.00	135300
		16.1.2	Rocky strata including Boulders.Upto 90 metre depth.				
		16.1.2.3	200 mm dia.	METER	360	690.00	248400
125	16.2	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings and accessories etc. all complete, for all depths, as per direction of Engineer-in-Charge.					
		16.2.3	200 mm nominal dia(minimum wall thickness 10mm).	METER	340	559.00	190060
126	16.3	Supplying, assembling, lowering and fixing in vertical position in bore well unplasticized PVC medium well screen (RMS) pipes with ribs, conforming to IS: 12818, including hire and labour charges, fittings and accessories etc. All complete, for all depths, as per direction of Engineer-in-Charge.					
		16.3.3	200 mm nominal size dia.	METER	240	878.00	210720
127	16.4	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed/ plain ended casing pipes of required dia, conforming to IS: 4270, of reputed and approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire and labour charges, fittings and accessories, all complete, for all depths, as per direction of Engineer- in-Charge.					
		16.4.3	200 mm nominal size dia having minimum wall thickness 5.40 mm.	CUM	6	1611.00	9666
128	16.6	Gravel packing in tubewell construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading and sizes as per actual requirement, all complete as per direction of Engineer-in-charge.	EACH	30.16	947.00	28561.52	

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
129	16.10	Providing and fixing Bail plug/ Bottom plug of required dia to the bottom of pipe assembly of tubewell as per IS: 2800 (part I).				
	16.10.3	200 mm dia	EACH	4	265.00	1060
130	16.8	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for borewell of:				
	16.8.3	200 mm dia	each	2	488.00	976.00
131	16.9	Providing and fixing M.S. clamp of required dia made of 100 x10 mm flat to the top of casing/ housing pipe of tubewell as per IS: 2800 (part I), including necessary bolts and nuts of required size complete.				
	16.9.3	200 mm clamp.	each	2	1281.00	2562.00
132	16.14	Providing and placing in position hand pump of India mark II of approved quality for 40 mm diameter G.I. pipe complete with all accessories.	each	2	841.00	1682.00
133	16.12	Providing and placing in position filters to 40 mm diameter G.I. pipe with brass strainer of approved quality. Filter of 32 mm dia				
			Meter	300	545.00	163500.00
134	16.20	Providing and fixing of unplasticised rigid PVC rain water harvesting filter kit including filter of 160 mm diameter wall thickness 3.2mm with PVC valve, 110 mm diameter UV protected conforming to ID: 13592 for working pressure 6 kg\sqcmTypeB capacity 40 kilo liter\hour including all accessories like unplasticied PVC pipe clips of approved design with bombay nail of required length including making good the wall etc complete for catchment area upto 200 sqm.	each	4	8679.00	34716.00
135	16.22	Borewell adaptor for connecting Rain Water Harvesting pipe line to borewell				
	16.22.3	Borewell adaptor 160mm	each	4	400.00	1600.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
136	30.7	Providing and Installing bio digester unit based on DRDO technology made of fiber reinforced plastic having composition and the technical specifications such as:Parentage of fiber glass (glass content in fiber glass should be minimum 30%) :- 33.33%Water absorption (as per ASTM) :- 0.30%Flammability :- as per ASTM Tensile strength :-115 MPA Specific gravityat 25 degree centigrade :-1.45 IZOD impact strength :- 65 KJ/M2 Heat deflection/distort temperature :-65 deg C Corrosion resistance(non corrosive) fitted with Inlet pipe size rigid PVC :-100mmOutlet pipe size rigid PVC :-80mmGas outlet rigid PVCwithvalve:-20mmBacteria immobilization PVC matrix(on all partition) and capacity :-				
	30.7.12	UPTO 500 USER SIZE (6.0m X2.0m X 1.67m) Capacity of bio-digester :- 20,000 liters Area of top, bottom and side walls:- 50.72 sq.m.Area of partition walls:- 13.36 sq.m.Total weight of FRP :- 917.86 kg Bacteria inoculums quantity:- 6000 liter Minimum thickness of side walls/top and bottom :- 9mmNumber of inside partitions :- 4 Minimum thickness of partition wall:- 4mm	Each	1.00	1243438.00	1243438.00
137	4.3.1	4.3.1 Foundation, footing, Bases for Columns,	Sqm	289.00	169.00	48841.00
138	19.37	Providing & Fixing of Precast RCC drain cover of size 750x600 x70mm (thickness) with 6 holes, manufactured by using M-30 grade of concrete reinforced with 8mm dia Tor Steel @100mm c/c both ways, manufactured by vibro compaction process using joint less FRP moulds, so at to achieve shuttering finish on five faces @top face will have broom finish etc complete.	each	533.33	550.00	293333.33
139	3.1	Excavation in Soil by Manual Means Excavation for roadway in soil including loading and unloading in/from truck for carrying of suitable cut earth to embankment site and disposing off unsuitable earth with all lifts and lead up to 1000 meters as per clauses of section-300.				
			Cum	1026	210	215460.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
140	3.14	Construction of embankment with approved materials having CBR>7 deposited at site from roadway cutting and excavation from drain or foundation of structures graded and compacted to meet requirement of table 300-1, 300-2 and as per relevant clauses of section-300.				
			Cum	1026.00	60.00	61560.00
141	4.2	Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller as per clause 410 to form a layer of sub-base/Base in accordance to Table No. 400-14, (i) For 53 mm maximum size				
			Cum	342.00	1186.00	405612.00
142	4.16	Construction of Shoulders with approved material/selected soil i/c excavation all lifts & leads i/c grading to required slope & camber of 4% and compacting on OMC using vibratory roller of 80 to 100 kN static weight. Field compaction shall be done in corresponding layers of carriage way thickness and meet the requirements of MDD to achieve compaction (98% -100%) as per relevant clause of 408.				
		Hard Shoulders (CBR value >12)	Cum	552.60	398.00	219934.80
		Dry Lean Cement Concrete Sub-Base				
143	6.1	Construction of dry lean cement concrete Sub- base over a prepared sub-grade or drainage layer with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver finisher with electronic sensor, compacting with 8- 10 tonnes vibratory roller, finishing and curing as per clause 601 of specification complete in all respect.				
			Cum	252.00	2712.00	683424.00
		Cement Concrete Pavement				

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
144	6.4	Construction of un-reinforced, dowel jointed, plain cement concrete pavement with M-30 grade concrete over a prepared sub base with cement , coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with electronic sensor slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, admixtures as approved, curing compound, finishing to lines and grades as per drawing as per IRC 15 2011 and as per relevant clauses of section 602 of specifications complete but excluding cost of steel in dowel bar and tie rods etc. including groove cutting for width of 4 mm- 6mm and 1/3rd depth of PQC within 8-10 hrs of	Cum	540.00	5532.00	2987280.00
145	6.8	Providing and fixing Steel in dowel bar and tie rod including cradle, laps etc. complete required as per design.				
	A	Mild steel conforming to IS: 432:1982	MT	7.45	57734.00	430233.77
	B	Tor steel conforming to IS: 1786:2008	MT	7.45	58734.00	437685.77
146	8.2	Construction of cement concrete kerb with channel with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M15 grade foundation 150 mm thick, kerb channel 300 mm wide, 50 mm thick in PCC M20 grade, sloped towards the kerb, kerb stone with channel laid with kerb laying machine,				
		Using Concrete Mixer	meter	720.00	495.00	356400.00
147	11.72	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc. of required colour strength, thickness pattern, surface texture (smooth/rough) and size/shape, conforming to 15658-2006 made by table vibratory method using PU mould, laid in required colour and pattern over 50mm thick compacted bed of sand, compacting and proper embedding/ laying of inter locking paver blocks into the bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand including locking with M15 cement concrete in footpath, parks, lawns, drive ways or light traffic parking etc. complete as per manufacturer's specifications and direction of Engineer-in-Charge.				
	11.72.1	80 mm thick C.C. paver block of M-35 grade	SQM	630.00	805.00	507150.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
148	28.10	Grassing with Selection No.1 grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the grass and good earth shall be paid for separately):				
	28.10.5	Providing and laying Selected type of Grass turf with earth 50mm to 60mm thickness on existing ground prepared with proper level and ramming with required tools wooden and than rolling the surface with light roller, making the surface smoothen and light watering the same, as per direction of Engineer-in-Charge	SQM	350.00	99.00	34650.00
149	28.15	Providing and planting different variety of plants of approved quality and sizes as mentioned including making pits of required size at site, refilled with B.C. Soil mixture manuring and pesticide etc. complete (to be paid separately) including watering and 90 days maintenance from the date of final bill as per direction of Engineer-in-Charge complete in all respect (B.C. Mixture paid separately).				
	28.15.1	Bahunia Tomentosa, Beloperone Species, Caselpinnia Pulcherima, Bird of Paradise, Callandra Emarginata, Callandra Hybrida, Cassia Bi flora, Cassia Laevigata, Cestrum Nocturnum, Dombeya Mastersii, Euphorbia Caracasana, Euphorbia Pulcherima, Excorea bi color, Excorea tri color, Ficus Blackii, Ficus Reginold, Ficus Panda, Gardenia, Gulphinia, Jasminoides, Hamelia Pattens, Heliconia, Hibiscus Rosasinensis, Hibiscus Verigated, Hibiscus Viceroy, Jatropha Multifida, Largestomia Indica, Malpighia Coccigera, Murraya Exotica, Murraya Koeniggi, Murraya Sambucum, Mussaenda Erythrophylla, Nerium Oleander, Nyctanthus Arbortristis, Plumbego Capensis, Putranjeeva Roxburghii, Tabernaemontana Coronaria, Tabernaemontana Divaricata, Tecoma Gaudi Chaudi, Tecoma Stans, Thevetia Nerifolia, Thuja Compacta and equivalent plants.	sqm	9.00	80.00	720.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
150	28.15.3	Alpinia Verigated, Alternanthera species, Aspyragus Myerri, Aspyragus Springenii, Aspidistra, Canna (regular, Dwarf), Chlorodendron Inermii, Chlorophytum (Green), Chlorophytum verigated, Coffea Chinensis, Dianella Verigated, Durranta (Goldiana, Green, Verigated), Euphorbia Milli hybrid, Ipomea (Golden leaves), Iresine herbstii, Juniper Prostata, Juniper Africana, Ophiopogon plant, Ophiopogon jaburan, Portulacaria Afra (jade Plant), Schefflera Green, Schefflera verigated, Setcreasea Purpurea, Syngonium (Butterfly) species, Syngonium miniature, Syngonium Dwarf, Syngonium variegated, Tradescantia, Wadelia Trilobata, Zebrina Tradescantia, Pandanas, Spider Lily Black, Spider Lily verigated, Aclypha (Red, Green,Mini), Lantana (Red, Yellow, Purple, White, verigated), Haemalia Mini and similar plants.	each	10.00	50.00	500.00
151	28.15.5	Any of one from Celosia, Caladium Hybrid, Cockscomb, Cosmos, Gaillardia, Gomphorena, Kochchea, Portulacca, Sunflower Hybrid, Sunflower Single, Tapiocca Variegated (Manihot Esculenta), Vinca, Zinnia Hybrids.	each	5.00	42.00	210.00
152	28.15.6	Budded Roses of H.T variety and miniature Roses.	each	5.00	170.00	850.00
153	12.15	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm + 0.05 %, total coated thickness with zinc coating 120 gsm as per IS:277 in 240 mpa steel grade, 5-7microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self-drilling /self-tapping screws of size (5.5x 55mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	sqm	310.00	652.00	202120.00
154	11.1	40 mm thick Cement concrete flooring 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate) 20mm nominal size stone aggregate in panels finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete.(Area of panel not to exceed 2.0 sqm)	sqm	310.00	270.00	83700.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
155	2.25	Extra for every additional lift of 1.5 m or part thereof in excavation. (No extra lift is payable if work is done by mechanical means)				
	2.25.1	All kinds of soil.	Cum	154.38	30.00	4631.40
156	10.22	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
	10.22.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	kg	410.40	105.00	43092.00
157	13.65	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	sqm	12.31	77.00	948.02
158	13.54	Finishing walls by any mechanical or manual means with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications :				
	13.54.3	Two or more coats applied on walls @ 1.25 ltr/10 sqm. Over and including one coat of Special primer applied @ 0.75 ltr / 10 sqm.	sqm	3792.98	81.00	307231.22
159	10.36	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5 mm thick) wire of high tensile strength of 165 kg/ sq mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately).	metre	903.09	275.00	248349.75
160	5.35	Providing and fixing in position pre moulded compressible filler board made from polymer base in black color approved make conforming to the specifications having minimum density of 95 kg / cum, non- staining, with less than 1 percent water absorption and compression recovery of 93 percent minimum including cost of double sided adhesive tape, sealant etc. in expansion joints.				
	5.35.2	25MM THICK	sqm	67.32	894.00	60184.08

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
161	19.27	Constructing brick masonry road gully chamber 50x45x60cm with bricks in cement mortar 1:4 (1 cement : 4 sand) including 500x450 mm precast R.C.C. horizontal grating with frame complete as per standard design :				
	19.27.1	With well burnt bricks	EACH	25.00	3941.00	98,525.00
162	19.9	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 sand) R.C.C. top slab with Cement Concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design				
	19.9.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :				
	19.9.1.1	With well burnt bricks	EACH	20.00	7997.00	1,59,940.00
163	19.8	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 sand) including testing of joints etc. complete :				
	19.8.1	100 mm dia. R.C.C. pipe	metre	250.00	243.00	60,750.00
	19.8.2	150 mm dia. R.C.C. pipe	metre	200.00	285.00	57,000.00
	19.8.3	250 mm dia. R.C.C. pipe	metre	150.00	385.00	57,750.00
	19.8.4	300 mm dia. R.C.C. pipe	metre	100.00	480.00	48,000.00
164	19.6	Providing and laying cement concrete 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 20 mm nominal size) up to haunches of PVC. pipes including bed concrete as per standard design :				
	19.6.1	110 mm diameter PVC. pipe	metre	250.00	274.00	68,500.00
	19.6.2	160 mm diameter PVC. pipe	metre	200.00	444.00	88,800.00
	19.6.4	250 mm diameter PVC. Pipe	metre	150.00	607.00	91,050.00
	19.6.5	300 mm diameter PVC pipe	metre	100.00	700.00	70,000.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
165	19.7	Providing and fixing square-mouth S.W. gully trap class SP1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :				
	19.7.2	150 x 100 mm size P type.				
	19.7.2.1	With well burnt bricks	EACH	10.00	1803.00	18,030.00
166	19.10	Extra for depth for manholes				
	19.10.1	Size 90x80 cm				
	19.10.1.1	With well burnt bricks	metre	2.00	6176.00	12,352.00
167	22.33	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage.	SQM			
	22.33.2	HORIZONTAL		36.00	319	11484
	22.33.1	VERTICAL		20.00	412	8240
168	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level				
	4.1.1.4	M-10Nominal (Mix-1 Cement : 3 sand : 6 graded stone aggregate)				
			Cum	39.200	3890.0	152488.00
169	5.9	Centering and shuttering including strutting, propping etc. and removal of form for:				
	5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.				
	5.9.2.2	Above plinth upto 3.6 m height from plinth level	Sqm	800.60	330.00	264198.00
170	5.34	Smooth finishing of the exposed surface of RCC work with 6mm thick cement mortar 1:3 (1 cement: 3 sand)..				
			Sqm	433.00	144.0	62352.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
171	13.52	Finishing walls by any mechanical or manual means with Acrylic Smooth exterior paint (Economy Exterior) of required shade including all scaffolding. New work (Two or more coat applied @1.67ltr/10sqm over and including one coat undiluted exterior waterproofing coating @ 2.39 litre/10 sqm with crack bridging ability of upto 0.5mm on horizontal surfaces with an elongationof 150% and water proofing of upto 3 bars on vertical surface	Sqm	433.00	138.0	59754.00
172	5.9	Centering and shuttering in cluding strutting, propping etc. and removal of form for:				
	5.9.4	Shelves(Cast in situ)	sqm	48.00	290.00	13920.00
173	5.42	Providing and fixing Scaffolding net of required width made of high density Polyethylene UV stabilized knitted on warp knitting machines having density 100gm/sqm and shading coefficient minimum 75% around the construction site/ for vertical extension as per requirement including fastening/tying with building/scaffolding pipes or with any other fixtures etc. complete as per direction of Engineer-in-Charge. (One time payment shall be made for providing Scaffolding net from start of work till completion of work including shifting if any. The Scaffolding net shall be the property of the contractor on completion of the work)	sqm	7332.00	20.00	146640.00
174	13.104	Providing and fixing of roller blinds / vertical blinds of washable fabric duly fixed with powder coated aluminum channel and clamps having nylon rope for manual operation of approved colour and company as per director by Engineer-In-Charge.	sqm	165.00	950.00	156750.00
175	5.9	Centering and shuttering in cluding strutting, propping etc. and removal of form for:				
	5.9.2	Walls (any thickness) in cluding attached pilasters butter esses, plinth beams and string courses etc.	sqm	341.28	219.00	74740.32
176	11.29	Granite work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement: 3 sand) including pointing with white cement mortar 1:2 (1 white cement: 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately).				
	11.29.1	Area of slab over 0.50 sqm				
	11.29.1.1	Fine grained granite dark Black/dark Red/ White or equivalent with self design/ pattern/crystals of other colors of glitter	Sqm	34.25	2919.00	99975.75

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
177	13.53	Finishing walls by any mechanical or manual means with Premium Acrylic Smooth exterior paint (Premium exterior) of required shade including all scaffolding. New work (Two or more coat applied @1.67ltr/10sqm over and including one coat undiluted exterior waterproofing coating @ 2.39 litre/10 sqm with crack bridging ability of upto 0.5mm on horizontal surfaces with an elongation of 150% and water proofing of upto 3 bars on vertical surface)	Sqm	187.20	130.00	24335.35
178	17.64	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
	17.64.2	Flexible pipe				
	17.64.2.1	32 mm	each	4.00	87.00	348.00
179	26.28	Providing and fixing of ABC Power type fire extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve fitted with pressure indicating gauge internal discharge tube 30 cm long high pressure discharge hose, discharge nozzle, suspension bracket. Conforming to IS: 15683 finished externally with red enamel paint fixed to wall with brackets complete with internal charge.				
	26.28.5	Capacity 4.0 kg	Each	7	4091	28637
180	9.11	Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	SQ.m.	4.00	236.00	944.00
181	9.96	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	Each	4.00	777.00	3108.00
182	9.161	Providing and fixing 25mm thick PVC flush door shutters made out of a one piece Multi chamber extruded PVC section of the size of 762mmx25mm or less as per requirement with an average wall thickness of 1mm (\pm 0.3mm). PVC foam end cap of size 23x10mm are provided on both vertical edges to ensure the overall thickness of 25mm. An M.S. tube having dimensions 19mm x 19mm and 1.0 mm (\pm 0.1mm) is inserted along the hinge side of the door. Core of the door shutter should be filled with High Density Polyurethane foam. The Top and Bottom edges of the shutter are covered with an end-cap of the size 25mmx11mm. Door shutter shall be reinforced with special polymeric reinforcements as per required specification and direction of Engineer-in-charge to take up necessary hardware and fixtures. Stickers indicating the locations of hardware will be pasted at appropriate places.				

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
			Sq.m.	13.44	1968.00	26449.92
183	13.50	Finishing walls by any mechanical or manual means with water proofing cement paint of required shade: New work (Two or more coats applied @ 3.84 kg/10 sqm).	Sqm	503.20	48.00	24153.36
Civil Total						11,85,48,308.23
Electrical Work						
1	4.1	Point wiring (excluding metallic switch box & sheet but including switches, sockets, lamp holders/ceiling roses etc) with 1.5sq. mm. PVC insulated cable FR-LSH with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size and 1.5sq. mm. PVC insulated FR-LSH copper earth continuity conductor of green colour inside conduit, screwless connector for joints etc. as required as per specification for :-				
		4.1.1 Light Point/Fan Points.				
		4.1.1.1 a) Short point	Each	147	451.00	66297.00
		4.1.1.2 b) Medium point	Each	237	830.00	196710.00
		4.1.1.3 c) Long point	Each	351	1300.00	456300.00
		4.1.2 (Light point/fan points) looping point				
		4.1.2.1 Secondary short point	Each	37	226.00	8362.00
		4.1.2.2 Secondary medium point	Each	59	415.00	24485.00
		4.1.2.3 Secondary long point	Each	88	650.00	57200.00
		4.1.3 3 Pin 6 Amp socket outlet on Separate Board				
		4.1.3.2 b) Medium point	Each	46	990.00	45540.00
		4.1.3.3 c) Long point	Each	106	1515.00	160590.00
		4.1.4 Call Bell / Buzzer Points				
		4.1.4.3 c) Long point	Each	6	1183.00	7098.00
		4.1.5 4.4 Twin Control light points				
		4.1.5.3 c) Long point	Each	22	1453.00	31966.00
2	4.2	Point wiring (excluding metallic switch box & sheet but including switches, sockets) for 3 pin 6 Amp. socket outlet point with 1.5sq. mm. PVC insulated cable FR-LSH with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size and 1.5sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board.	Each	197	265.00	52205.00
3	4.3	Wiring for circuit wiring with PVC insulated cable FR-LSH with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) of ISI marked suitable size etc. as required as per specification				
		4.3.1 a) 2x2.5 Sq.mm.	Mtr.	2616	139.00	363624.00
		4.3.2 b) 4x2.5 Sq.mm.	Mtr.	1742	224.00	390208.00
		4.3.3 c) 6x2.5 Sq.mm.	Mtr.	736	288.00	211968.00
		4.3.4 d) 8x2.5 Sq.mm.	Mtr.	192	353.00	67776.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
4	9.1	Point wiring (excluding metallic switch box & sheet) for 3 Pin 16 Amp. socket outlet point with 4sq. mm. PVC insulated cable FR-LSH with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size etc. with 20/16 Amp. F.T. switch & socket/S.S. combined 20/16/6 Amp. of ISI marked and 4sq. mm. PVC insulated FR-LSH copper earth continuity conductor of green colour inside conduit, screwless connector for joints as per specification for :-				
		9.1.1 On separate board				
		9.1.1.1 Short point	Each	8	985.00	7880.00
		9.1.1.3 Long point	Each	15	2612.00	39180.00
		9.1.1.4 Extra long-I	Each	19	3648.00	69312.00
		9.1.1.5 Extra long-II	Each	21	4771.00	100191.00
		9.1.1.6 Extra long-III	Each	21	5986.00	125706.00
5	9.2	Same board switch & socket 16 Amp./S.S. combined 20/16/6 Amp	Each	89	437.00	38893.00
6	16.1	Supply and fixing PVC conduits required confirming to IS 9537 (Part-3), ISI marked along with the accessories in concealed system etc. as required.				
		16.1.2 PVC . Conduit 25 mm (HMS)	MTR	1650	74.00	122100.00
7	18.2	Supplying and fixing of approved make modular type G.I. metal box 1.2mm minimum thick and depth 50mm for single row boxes and 60mm depth for two/three row boxes earth terminal stud with nut and washer with modular base and cover plate including fixing in concealed etc. as required for:-				
		18.2.1 1Or 2 Module metal box	Each	99	182.00	18018.00
		18.2.2 3 Module	Each	135	216.00	29160.00
		18.2.3 4 Module	Each	32	244.00	7808.00
		18.2.4 6 Module	Each	77	309.00	23793.00
		18.2.5 8/9 Module metal box	Each	131	373.00	48863.00
		18.2.6 12 Module	Each	68	502.00	34136.00
		18.2.8 18 Module	Each	34	642.00	21828.00
8	19.1	Supplying and drawing single core PVC insulated cable FR LSH with copper multi strand conductor ISI marked in existing rigid PVC casing and capping/conduit in surface or concealed as per specification.				
		19.1.1 1.5 sq. mm. wire				
		19.1.1.1 (a) 1 X 1.5 sq mm	Mtr	5245	19.00	99655.00
		19.1.1.2 (b) 2 X 1.5 sq mm	Mtr	827	38.00	31426.00
		19.1.1.3 (c) 3 X 1.5 sq. mm.	Mtr	1355	56.00	75880.00
		19.1.2 2.5 sq mm wire				
		19.1.2.1 (a) 1 X 2.5 sq mm	Mtr	5245	30.00	157350.00
		19.1.3 4 sq mm wire				
		19.1.3.1 1 X 4.00 sq mm	Mtr	1359	45.00	61155.00
		19.1.3.3 (c) 3 X 4.00 sq mm	Mtr	314	134.00	42076.00
		19.1.4 6.00 sq. mm. wire				
		19.1.4.1 (a) 1 X 6.00 sq mm	mtr	745	68.00	50660.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
9	23.1	Wiring for sub-mains with PVC insulated cable FR-LSH with copper multi strand conductor ISI marked in recessed/concealed rigid PVC conduit (HMS) ISI marked of suitable size (conduit included) including 2mm thick accessories, connection etc, as required as per specification. (Refer General Notes for Classification of Conduit Wiring Point No.10)				
		23.1.4 4 WIRE SUB-MAIN				
		23.1.4.3 6.0 sq. mm. cable	Metre	665	398.00	264670.00
		23.1.4.4 10.0 sq. mm. cable	Metre	480	601.00	288480.00
10	25.16	Supply & fixing of I.S.I.marked Porecelain Rewireable fuse unit of approved make or confirming to I.S.S. 2086-1982				
		25.16.7 300 Amps /415 Volts	Each	6	1178.00	7068.00
11	27.1	Supply of ISI marked and approved make of moulded case circuit breaker (MCCB) suitable for 3 phase,3 pole, 50 Hz, 415 Volts, AC supply with respective interrupting capacity (KA) at 415 Volts cited against their range standard conforming to IS – 8828				
		27.1.1 MCCB current rating – upto 63 Amp , 10kA, 3P 415V AC	Each	5	2721.00	13605.00
		27.1.2 MCCB current rating -80 to 100Amp , 10kA, 3P 415V AC	Each	5	3256.00	16280.00
		27.1.11 MCCB 36kA current rating, 3P -400Amp &adjustable: 80% -100% thermal	Each	1	24413.00	24413.00
12	27.8	Supply of ISI marked and accepted standard of miniature circuit breaker (MCB) of 'C' series with short circuit indication, suitable for 240/415 Volts,50 Cycle, 10 kA/15 kA Value AC supply conforming to IS : 8828 : 1996, IEC : 60898 :2002 & 60947-2 but without enclosures :-				
		27.8.1 Single pole				
		27.8.1.2 MCB SP 6Amp to 32Amp 10kA rating	Each	310	263.00	81530.00
		27.8.2 Double pole				
		27.8.2.2 MCB DP 6Amp to 32Amp 10kA rating	Each	60	887.00	53220.00
		27.8.3 For Triple pole				
		27.8.3.4 MCB TP 50Amp to 63Amp 10kA rating	Each	72	2157.00	155304.00
		27.8.4 Four pole				
		27.8.4.4 MCB FP 50Amp to 63 Amp 10kA rating	Each	16	2795.00	44720.00
13	27.11	Supply of approved make powder coated sheet steel encloser SPN MCB DB inclusive of busbar, neutral bar, earth bar, connection copper wire not less than 16 sq.mm & two earth terminals etc. complete as per IS:13032(exclusive of MCB & isolator)-				
		27.11.6 12 Way double door IP 43 protection	Each	7	2738.00	19166.00
14	27.12	Supplying of approved make TPN MCB DB metal double door IP 43 protection with provision for FP MCB/ Isolator/ RCCB/ RCBO as incomer and SP MCBs as outgoing inclusive of busbar, neutral bar, earth bar, connection copper wire not less than 16 sq.mm & two earth terminals etc. complete as per IS:13032(exclusive of MCB & isolator):				
		27.12.1 4 way (4+12)	Each	8	5126.00	41008.00
		27.12.3 6 Way (8+18)	Each	8	5526.00	44208.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
15	27.14	Supplying of approved make, powder coated metal double door vertical TPN MCB DB IP 43 protection with provision for MCCB upto160A TP/FP 36kA as incomer and space for SP/TP MCBs as outgoing (without MCCB/MCBs) inclusive of busbar & connections etc					
		27.14.2	6 Way without MCCB	Each	4	15671.00	62684.00
		27.14.4	12 Way without MCCB	Each	4	21911.00	87644.00
16	27.18	Supplying & fixing of approved make Industrial type metal plug & socket DBs (without MCB) SPN sheet encloser (dust protected) inclusive of 2 pole and earth metal plug and socket and space to incorporate SP MCB complete as per specification as required.					
		27.18.2	20 Amps	Each	1	1095.00	1095.00
17	27.21	Supplying and installing of RCBOs (Residual current circuit breaker with overload and short circuit protection) ISI marked complete as per I.S. standard conforming to IEC:61009-1 & IS:12640-2, 240/415V 50 Hz with 10 kA short circuit withstand capacity for earth leakage, overload & short circuit protection including connection in existing enclosure in approved manner as per specification.					
		27.21.2	FP (8module)				
		27.21.2.4	4 pole 63Amp, 30mA sensitivity	Each	6	7908.00	47448.00
18	28.4	Fixing of MCB/MCCB/Isolator in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete (labour only)					
		28.4.1	MCB / Isolator SP/DP	Each	320	22.00	7040.00
		28.4.2	MCB /MCCB Isolator TP /TPN/FP	Each	22	28.00	616.00
19	28.8	Labour charges for fixing sheet steel enclosures, MCB/MCCBDB flush mounting type , as per accepted practice, duly embedded and end plate completely flushed in wall, cable connection etc. complete :-					
			For item no :-				
		28.8.1	27.11.1 to 27.11.7 ; 27.12.1 to 27.12.3 & 27.13.1	Each	18	268.00	4824.00
		28.8.2	27.12.4 & 27.12.5 ; 27.13.2 to 27.13.4 ; 27.14.1 to 27.14.4 & 27.15.1 to 27.15.4	Each	10	297.00	2970.00
20	29.3	Supply and fixing as per specification call bell/buzzer of approved make with necessary materials complete.					
		29.3.3	Ding Dong bell	Each	6	185.00	1110.00
21	29.5	AUDIO CABLES					
		29.5.1	Supply and fixing of PVC insulated copper flexible speaker wire twin FR-LSH 1100 Volts as per IS:694-1990 of approved make				
		29.5.1.3	(48/0.20 mm) Twin core 1.50 sq.mm.	Metre	320	58.00	18560.00
22	29.6	Supply and fixing of multi core round FR-LSH PVC insulated copper (flexible) conductor & PVC sheathed cables 1100Volts as per IS:694-1990 of approved make					
		29.6.2	(24/0.2 mm) Three core 0.75 sq.mm.	Meter	759	25.00	18975.00
		29.6.3	(30/0.25 mm) Three core 1.5 sq.mm.	Metre	750	50.00	37500.00
23	29.7	Supply and fixing in position LED lamp of approved make					
		29.7.7	15 Watt250Volt	Each	128	223.00	28544.00
24	29.25	Supply and fixing of approved make step type modular electronic fan regulator including connection etc. as required on existing board					

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
		29.25.2	100 Watt (2 Module)	Each	199	484.00	96316.00
25	29.27		Supply, fixing, testing & commissioning wall/floor mounted LT panel primer coated with powder coated paint & provided with required gasket for dust/vermin proof with degree of protection IP42 suitable for 415Volt 3 phase, 50 Hz, 4 wire system fabricated out of CRCA sheet upto 2 mm thick (1.6 mm for doors) duly compartmentalized for incomer, bus section, outgoing, cable alleys & CT, PT Ampere Metre, Volt Metre, selector switches, frequency Metre, phase indicating lamp, Energy Metre complete including cost of busbar supports, detachable cable gland plates, 2 earthing terminals, internal wiring & fixing of separately supplied MCBs, MCCBs, ACB, panel mounted changeover switch/SFUs, etc. as required but excluding cost of busbar strips, Ampere Metre, Volt Metre, selector switch as per approved design & specification	Kg.	670	397.00	265990.00
26	29.28		Supply and fixing of LT panel accessories of approved make in existing LT panel including connections etc. as required as per specification.				
		29.28.1	Digital Ampere Metre with CTs with selector switch	P.SET	5	2125.00	10625.00
		29.28.2	Digital Volt Metre with selector switch & HRC fuse	P.SET	5	2398.00	11990.00
		29.28.3	Frequency Metre	Each	5	1435.00	7175.00
		29.28.6	Aluminium bus bar strips with PVC sleeves	Kg.	239	284.00	67947.00
		29.28.7	LED lamp indicator	Each	15	255.00	3825.00
27	30.1		Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete of approved as required confirming to IS :374/2019 with upto date amendments.				
		30.1.2	Ceiling Fan (ISI marked)-1200 mm Sweep, with minimum air delivery 210 m ³ /min and service value ≥ 4.00 as per BEE..	Each	199	2292.00	456108.00
28	30.5		Supplying and fixing of deluxe fresh air fan with louvers (ventilating fan) with self-closing louvers of decorative PVC blades mounting square frame of approved make complete with all necessary material as required				
		30.5.4	300mm RPM1300/1400	Each	27	2004.00	54108.00
29	30.6		Supplying, erecting and testing of approved make exhaust fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/anchor hole fasteners etc. complete finished and as required.				
		30.6.1	300mm sweep RPM 900 / 1400	Each	13	2571.00	33423.00
30	30.13		Supply and fixing M.S. down rod 14 SWG (2mm) thick for ceiling fan including threading, painting, making holes etc. as required complete. Note: For new works difference of installed & standard down rod length shall be paid.	Meter	100	114.00	11400.00
			LED LIGHTING				

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
31	31.3	Supply and fixing Led tube rod comprising of LED tube with non-integral/integral driver, upto 6500K color temp having 40000 burning hrs life with minimum @ L 70, system lumen output should be minimum with system efficacy> 100 lm/Watt. LED driver PF> 0.95 & THD < 20%. The colour rendering index of LED light should be more than 70. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job.					
		31.3.3	Tube light LED 1 X 18Watt, Integral i/c batten aluminium body, PC diffuser.	Each	495	713.00	352935.00
		31.3.4	Tube light LED 1 X 20/22Watt, Integral i/c batten aluminium body, PC diffuser.	Each	20	782.00	15640.00
32	31.4	Supply and fixing of recessed mounting type Led light fixture, LED of 1 to 3 Watt each assembled on single MCPCB, having color temp upto 6500K & having 50000 burning hrs life with minimum @ L 70, system lumen output should be minimum with efficacy>100 lm/Watt. LED driver PF> 0.95, THD < 20% & surge protection 4KV. The colour rendering index of LED light should be more than 70. Housing made of CRCA powder coated frame with glare free diffused polycarbonate cover. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job.					
		31.4.2	LED luminaire 2' X 2', 42/45Watt, color temp 3000-6500k as required.	Each	17	4215.00	71655.00
33	31.6	Supply and fixing recessed mounting LED down lighter, LED of 1 to 3 Watt each assembled on single MCPCB, having color temp upto 6500K & having 50000 burning hrs. life with minimum @ L 70, system lumen output should be minimum with efficacy>100 lm/Watt. LED driver PF > 0.95, THD < 20% & surge protection 4KV. The colour rendering index of LED light should be more than 70. Housing made of pressure die cast aluminium/CRCA powder coated frame with glare free diffused polycarbonate cover. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job..					
		31.6.3	7/8/10 Watt, color temp 3000-6500k as required.	Each	2	761.00	1522.00
		31.6.6	18/20Watt, color temp 3000-6500k as required.	Each	18	1651.00	29718.00
34	31.11	Supply and fixing integral post top lantern LED fitting comprises of copper dust finish cast aluminium spigot and spun aluminium canopy fixed with opal polycarbonate, pipe arrangement for vertical mounting, open construction driver and accessories are wired upto terminal block. LED of 1 to 3 Watt each assembled on single MCPCB, having color temp upto 6500K & having 50000 burning hrs. life with minimum @ L 70, system lumen output should be minimum with efficacy>100lm/Watt. LED driver PF > 0.95 & surge protection 10KV. The colour rendering index of LED light should be more than 70. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job.					
		31.11.2	25 Watt LED, color temp 3000-6500k as required.	Each	2	4106.00	8212.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
35	31.13	Supply and fixing street light with high power LED of 3 to 6 Watt each on existing bracket assembled on single MCPCB and additional unique peanut lens on each LED, system lumens output with efficacy>120 lm/Watt. luminaire having color temp upto 6500K & 50000 hrs. burning life with minimum @ L 70, The colour rendering index of LED light should be more than 70. Luminaire comprises of driver, PF> 0.95 & surge protection 10KV. Housing made of pressure die cast aluminium with heat resistant flat glass, IP65 protection. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347 i/c connection wire, testing etc. to complete the job.					
		31.13.2	60Watt, color temp 3000-6500k as required.	Each	77	9791.00	753907.00
36	32.3	Providing and fixing circular/hexagonal cast iron or M.S. sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, top lid of 1.5mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/M.S. sheet box by mean of 3.3mm dia. round headed screws, one lock at the corners. Clamp shall be made of 12mm dia M.S. bar bent to shape as per standard drawing.	Each	199	90.00	17910.00	
37	32.17	Supply, Installation, Testing and Commissioning of Electrical Napkin Incinerator Wall mounted factory fabricated with CRCA sheet steel of 1.2mm thickness duly powder coated suitable for 230V 50Hz AC Supply with auto cut-off feature having insulation of thermal ceramic sheet with glass wool of 4-5mm thick with MCB protection & aprox.2 meter flexible flue gas pipe with clamp.					
		32.17.1	Sanitary Napkin Incinerator(Capacity 30 per Day)	Each	2	30874.00	61748.00
38	34.4	Painting of poles					
		34.4.2	Prima coat over new steel and other metallic surface with red oxide zinc chromide paint complete with supply of material labour etc. including preparation of surface.	Per sq meter	117	76.00	8892.00
		34.4.3	Prima coat with aluminium paint, brushing complete with material and labour including preparation of surface	per sq meter	117	96.00	11232.00
39	35.4	Dismantling the existing armoured/unarmoured cable or 2/3/4 wires of submain, main, in any system of wiring including recoiling.	Metre	100	8.00	800.00	
40	35.5	Dismantling of existing underground cable safely with its accessories and refilling the trench to ground level including recoiling of dismantled cable.	Metre	150	29.00	4350.00	
41	35.9	Dismantling of existing steel pole, R.S. Joist, girder with bracket clamp insulator or stay from the cement concrete foundation and making the site clear by refilling the pit to ground level i/c transportation to required destination within township.	Each	10	953.00	9530.00	
42	35.10	Dismantling of existing overhead ACSR, AAAC, GI, conductor and making the site clear i/c transportation to required destination within township.	Metre	600	3.00	1800.00	
43	35.12	Dismantling of existing water tight fitting S.V/M.H/L.E.D lamp fitting with extension bracket, clamp from pole or wall with making the site clear.	Each	20	35.00	700.00	

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
44	37.2	Add extra for using salt and charcoal/coke for pipe earth electrode as required including excavation & refilling				
		37.2.2 Excavation by making hole with auger	each	6	1622.00	9732.00
45	37.3	Earthing with G.I. earth plate 600mm X 600mm X 6mm thick including accessories and providing masonry encloser in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 metre long etc. (but without charcoal or coke and salt) complete as required	Each	9	7487.00	67383.00
46	37.4	Earthing with copper earth plate 600mm X 600mm X 3mm thick including accessories and providing masonry encloser in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 metre long etc. (but without charcoal or coke and salt) complete as required	Each	10	16341.00	163410.00
47	37.5	Add extra for using salt and charcoal/coke for G.I. plate or copper plate earth electrode as required including excavation and refilling the pit in all type of soil, murrum	Each	6	1655.00	9930.00
		37.5.1 Add extra for using salt and charcoal/coke for G.I. plate or copper plate earth electrode as required including excavation in hard rock and refilling the pit with black soil.	Each	16	2783.00	44528.00
48	37.7	Supply and laying 4mm dia. copper wire at 0.5 metre below ground level as conductor earth electrode including soldering etc. as required.	Metre	208	114.00	23712.00
49	37.10	Supply and laying 25mm X 6mm G.I. strip at 0.5 metre below ground level/surface as strip earth electrode including jointing etc. as required.	Metre	40	147.00	5880.00
50	37.11	Providing and fixing 25mm X 5mm copper strip in 40 mm dia G.I. Pipe from earth electrode as required	Mtr	153	1490.00	227970.00
51	37.14	Providing and laying earth connections from earth electrode with 4.00 mm dia copper wire in 15mm dia G.I. Pipe from earth electrode as required.	Mtr	32	308.00	9856.00
52	37.21	Lightning conductor				
		37.21.1 Providing and fixing of lightning conductor finial made of 18mm dia 500mm long bright nickel plated copper tube tapered having single prong at top with bright nickel plated brass base M10 for connection and intersection of flat or round conductor including holes, clamp complete as required.	Each	3	3947.00	11841.00
53	37.25	Providing and fixing copper tape 20mm X 3mm thick on parapet and surface of wall of lightning conductor as required (for horizontal runs)	Metre	450	567.00	255150.00
54	37.26	Providing and fixing copper tape 20mm X 3mm thick on parapet and surface of wall of lightning conductor as required (for vertical runs)	Metre	130	591.00	76830.00
55	37.35	Earthing For Domestic Electrical Installation				
		37.35.2 Providing and fixing earthing arrangement with 38.1mm dia 2.5 metre long galvanized iron pipe electrode including packing of charcoal powder and salt as per specification watering pipe 19mm dia G.I. connection, cover plate having locking arrangement on the top etc. complete with refilling the pit as required, including excavation of earth pit in soil / soft rock	Each	3	3670.00	11010.00

S.No.	SOR Item NO.		Description Of Item	Unit	Quantity	Rate	Amount
1	2		3	4	5	6	7
56	37.39		Supply and drawing PVC insulated copper cable (earth continuity conductor) of green colour FR-LSH with copper multi strand conductor ISI mark in existing conduit along with other wires as required as per specification :				
		37.39.2	6 sq. mm.	Metre	688	71.00	48848.00
		37.39.3	10 sq. mm.	Metre	542	102.00	55284.00
57	38.1		Supplying and drawing co-axial T.V. cable RG-6 Grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tined copper braid and protected with PVC sheathed in existing surface/concealed, steel/PVC conduit as required.	mtr	160	30.00	4800.00
58	38.7		Supply, fixing and testing of T.V. Outlet F.T	Each	4	82.00	328.00
59	38.9		Supply, installation testing and commissioning RJ - 45 computer jack cat 6 with shutter modular (1Module)				
		38.9.1	RJ - 45 computer socket cat 6 with shutter modular (1Module)	each	14	288.00	4032.00
60	38.10		Supply, installation testing and commissioning RJ - 45 computer jack cat 6 with shutter modular (2Module)	each	34	689.00	23426.00
61	38.11		Supplying and drawing 4 pair un-shielded twisted pair (UTP), 0.5 mm PVC insulated copper conductor un-armoured Cat-6 computer cable FR-LSH in existing surface/concealed, steel/PVC. conduit/ casing-n-capping as required.	Metre	1620	56.00	90720.00
62	38.12		Supplying and drawing 4 pair shielded twisted pair (STP), 0.5 mm PVC insulated copper conductor un-armoured Cat-6 computer cable FR-LSH in existing surface/concealed, steel/PVC. conduit/ casing-n-capping as required.	Metre	2060	104.00	214240.00
63	38.15		Supply, installation testing and commissioning of 19" modular patch - 1 U patch panel 24, RJ 45 cat-6 connector	each	2	11792.00	23584.00
64	38.17		Supply, installation testing and commissioning of wall mounting rack, for computer switches/Patch Panel etc complete as mentioned below :-				
		38.17.1	6U cabinet with min. Dimensions 366X600X600, wall mounting with 6 point 5 Amp. socket power supply strip, and fan, cable manager, tray as per Site requirement	each	3	9753.00	29259.00
		38.17.2	9U cabinet with min. Dimension 488X600X600, wall mounting with 6 point 5 Amp. socket power supply strip, and fan, cable manager, tray as per Site requirement	each	2	13087.00	26174.00
		38.17.3	12U cabinet with min. Dimension 590X600X600, wall mounting with 6 point 5 Amp. socket power supply strip, and fan, cable manager, tray as per Site requirement	each	2	18211.00	36422.00
65	39.2		Supplying & installation of required capacity of three phase, 50 Hz, 415V, deep well submersible pump steel body, as per IS of approved make, suitable upto 6 " tube well with control panel starter suitable for submersible pump with dry run protection, single phase preventer, connections, including clamp, bore cap etc. as required as per specifications but excluding pipe and connection cable.				

S.No.	SOR Item NO.		Description Of Item	Unit	Quantity	Rate	Amount
1	2		3	4	5	6	7
		39.2.8	5 HP with 8-11 stages, head metre 101-32, discharge LPM 60-270	Each	2	65323.00	130646.00
66	39.3		Supplying and laying of submersible flat cable ISI marked 3 core copper wire of suitable size with proper clamping of approved make.				
		39.3.2	4.0 Sq.mm multi strand	Metre	200	205.00	41000.00
67	39.4		Supplying and laying of approved make HDPE pipe as per IS:4984 and IS:14333 with latest amendment for installation of submersible pump with necessary connection, socket/couplings, tees, etc. as required (PE-63 & working pressure 6 kgf/sq cm)				
		39.4.2	32 mm Outer Dia.	Metre	200	120.00	24000.00
68	39.5		Supplying and laying of approved make nylon rope 12 mm thick complete with binding for support of pump and motor.	Metre	200	76.00	15200.00
69	39.10		Supplying & installation of approved make required capacity 3 phase, 50 Hz, 415V, open well submersible pump, with control panel starter with dry run protection, single phase preventer, connections, etc. as required as per specifications but excluding pipe and connection cable.				
		39.10.1	3.0 HP head metre 12-36, discharge LPM 528-120	Each	4	47724.00	190896.00
70	40.1		Supply, installation, testing and commissioning of G.I. floor raceway of mention below sizes 1/3 compartments including all necessary civil works.				
		40.1.1	75 x 25 x 1.2 mm	Metre	10	885.00	8850.00
		40.1.2	100 x 25 x 1.2 mm	Metre	10	1018.00	10180.00
		40.1.3	150 x 25 x 1.2 mm	Metre	5	1319.00	6595.00
71	41.1		Supply of XLPE insulated power cable (conforming IS-7098 Part-I) 1100 Volt grade, 1 core/2 core/3½ core/4 core ISI marked with alu. stranded /solid conductor				
		41.1.1	Unarmoured 1 core				
		41.1.1.8	150 sq. mm.	Metre	80	266.00	21280.00
		41.1.1.9	300 Sq. Mm.	Metre	80	483.00	38640.00
		41.1.7	3½ core anarmoured				
		41.1.7.1	25 sq. mm	Metre	120	210.00	25200.00
		41.1.8	3½ core armoured				
		41.1.7.1	25 sq. mm	Metre	160	210.00	33600.00
		41.1.8.2	35 sq. mm	Metre	80	280.00	22400.00
		41.1.8.11	400 sq. mm.	Metre	150	2288.00	343200.00
		41.1.10	4 core armoured				
		41.1.10.2	10 sq. mm.	Metre	1290	181.00	233490.00
		41.1.10.3	16 sq. mm.	Metre	1180	218.00	257240.00
		41.1.10.4	25 sq. mm	Metre	50	279.00	13950.00
72	41.5		Brass compression gland				
		41.5.1	Supplying and fixing heavy duty cable gland for P.V.C. insulated armoured cable with brass washer, rubber ring complete erected with cable and lead connection etc. as per specification complete.				
		41.5.1.9	Gland size 70 mm, 3 x 240 sq. mm, 3½ x 300 sq. mm	Each	16	605.00	9680.00
		41.5.1.10	Gland size 82 mm 3½ x 400 sq. mm	Each	28	864.00	24192.00
73	41.7		Crimping type alum. lugs				
		41.7.8	150 sq. mm.	Each	16	66.00	1056.00
		41.7.11	300 sq. mm.	Each	92	138.00	12696.00
		41.7.12	400 sq. mm.	Each	16	213.00	3408.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
74	41.9	Providing & making cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 33 KV/11 KV single core XLPE alum. conductor cable as required as per specification and as per accepted standard including connection testing complete.				
	41.9.1	Heat shrinkable joint, kit 11 KV XLPE single core				
	41.9.1.1	Heat shrinkable Jointing kit 11 KV XLPE cable O.D. termination				
	41.9.1.1.3	1 x 150-300 sq. mm.	Each	3	3960.00	11880.00
	41.9.1.1.4	1 x 400-630 sq. mm.	Each	3	5714.00	17142.00
75	41.12	Supplying & installing G.I. pipe for protection of underground cable fixed on wall/support/in trench/fixed between two rigid existing support of wall/beam for erection of ceiling Fan/down rod for stiff pendent for light luminaries /fan/protective for earthing, lightning conductor down strip/overhead service line/for submersible cable or centrifugal pump for water supply with necessary iron clamp coupler, bend, tee, elbow, nuts and bolts etc. complete in an approved manner as required to complete excluding cost of excavation/dismantling & other finished masonry item complete.				
	41.12.1	For 'B' class pipe				
	41.12.1.1	150.00mm	Metre	230	2062.00	474260.00
76	41.14	Supplying and installing double wall corrugated pipes (DWC) of HDPE (IS 14930 Part II -marked) for cable laid underground with necessary material and at required depth upto 90cm. below road/ground surface, excluding excavation, back filling with excavated material, ramming and making the surface good.				
	41.14.2	63.00mm outside dia.	Metre	1350	175.00	236250.00
77	41.15	Cable laying				
	41.15.2	Laying of one number armoured / unarmoured power cable 1.1.KV grade of size exceeding 25sq. mm but not exceeding 120 sq. mm direct in ground including excavation in all soil/ murrum /soft rock, sand cushioning, protective covering and refilling the pit etc. as required.	Metre	80	246.00	19680.00
78	41.17	Laying of one number armoured / unarmoured cable 1.1.KV grade of size exceeding 120 sq. mm. but not exceeding 400 sq. mm direct in ground including excavation in all soil/ murrum /soft rock, and sand cushioning protective covering and refilling the pit etc. as required.	Metre	80	266.00	21280.00
79	41.20	Laying of underground cable armoured./unarmoured as per specification in air suspended on existing approved type of iron clamp, G.I wire 7/1.6mm & shackle insulator/insulated strip complete.				
	41.20.1	1/2/3/4 Core cable upto 16 sq. mm	Metre	420	25.00	10500.00
	41.20.2	1/2/3/3½/4 Core cable 25 sq. mm to 120 sq. mm	Metre		40.00	

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
80	41.24	Supply and erection of hot dip G.I. cable tray perforation not more than 17.5% for specific dimensions along with tees, bends. The cable tray shall be hang from ceiling/ fixed to wall with necessary angle/flat iron/hanging rod, for ceiling suspensions, clamp, anchor fastener, nuts, bolts, washers, not more than 1.0 mtr. apart complete as per specification to complete the job. The tray shall be as follows :-					
		41.24.2	150x50x1.6mm thick	Meter	15	699.00	10485.00
		41.24.3	300x50x1.6mm thick	Meter	15	1027.00	15405.00
81	41.28	Supply of XLPE insulated 1.5 sq. mm. Armoured 2 core FRLSZH fire alarm cable (RED) Fire Survival Cable conforming IS-7098 (Part-1) 1988, 1100 Volt grade, 2/3/4/8/10/12 core ISI marked with copper stranded/solid conductor.	Metre	1410	154.00	217140.00	
82	41.48	Excavation of the trenches in hard rock not exceeding 1.5 metre in width and lift upto 1.5 metre including getting out the excavated metal and disposal of surplus excavated soil/metal as directed within the lead of 50 metre (without blasting)	Cu. Mtr.	20	691.00	13820.00	
83	42.2	Supply of support for overhead line RS joist of I.S. standard including drilling of required hole etc. complete as required.					
		42.2.6	H - Beam 152x152mm, Std weight 37.1 Kg/Mtr	meter	130	2843.00	369590.00
84	42.5	Supplying and drawing all aluminium alloy conductor (AAAC) of approved make conforming to IS 398-1979 Pt. IV, including binding at existing insulator, jointing, jumpering, tearing off, connecting etc. as required including clearing of obstacles (if any)					
		42.5.2	AAAC 0.05 sq inch (55 sq.mm Al. EQ.)-(Rabbit)	km.	2	61509.00	92264.00
85	42.9	Supplying and drawing guard wire/earth wire/bearer wire 13 sq mm (4mm. dia) G.I. including stringing, binding at existing insulators or brackets, jointing, jumpering, connecting & cradle etc. as required and clearing of obstacles (if any)	km.	1	15675.00	7838.00	
86	42.10	Supplying and drawing guard wire/earth wire/bearer wire 18.62 sq mm (4.87mm. dia/6swg) G.I. including stringing, binding at existing insulators or brackets, jointing, jumpering, connecting & cradle etc. as required and clearing of obstacles (if any)	km.	1	18761.00	18761.00	
87	42.20	Erection of RS Joist pole/'H' beam/steel tubular/steel rail pole of length exceeding 10 metres but not exceeding 15 metres in cement concrete M-10 (1 cement:3 core sand: 6 graded stone aggregate 40mm nominal size) base, foundation, muffing including excavation and back refilling etc. as required.	each	10	5289.00	52890.00	
88	42.26	Supplying and erection of stay set complete (galvanized) 19mm. dia x 1.8 metre long stay rod anchor plate of size 300 mm x 300 mm x7.5mm thimble stay clamp, turn buckle (19mm dia x 600mm), 7/4.00mm dia G.I. stay wire etc. in cement concrete M-10 (1 Cement: 3 Coarse sand: 6 graded stone aggregate 40mm nominal size) foundation including excavation and refilling etc. as required.	each	8	4600.00	36800.00	

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
89	42.42	Supply, fabrication and erection of angle/channel/flat iron fitting for overhead line & sub-station etc such as 'D' bracket, cross arms, top clamp, 'V' cross arms, back/support clamp or other similar work etc. including nut bolts of required size, making holes, fabrication, welding, cutting, etc. and painting with one coat of red oxide paint & two coat of aluminium paint as required as per specification.	kg.	400	105.00	42000.00	
90	42.44	Supplying and erection of 11KV porcelain pin insulator complete with long steel head G.I. pin, nut, washer etc. as required.	each	24	375.00	9000.00	
91	42.45	Supplying and erection of 11KV porcelain disc insulator for 11KV overhead lines with galvanized insulator fittings, ball and socket type, and complete with galvanized strain clamp, bolts, nuts washer etc. as required.	each	6	750.00	4500.00	
92	42.58	Supplying and erection of single piece nonlinear resistor type lightning arrester (set of 3 nos) for 3 wire, 11KV overhead lines/sub-station with rated voltage of 9KV (rms) with a nominal discharge current rating of 5 KA and complete with galvanized clamping arrangement, G.I. bolts, nuts, washer etc. as required.	set	1	3832.00	3832.00	
93	42.62	Supplying installing, testing & commissioning of outdoor H.T., AB switch assembly set gang operated with brass contact parts, including required GI pipe operating rod, handle & locking arrangement on On-Off position conforming to IS complete with required material and installing on existing DP structure to complete the job as required as per specification.(Set of 3 nos.)					
		42.62.1	11 KV, 400Amp	set	1	8989.00	8989.00
94	42.63	Supplying installing, testing & commissioning D.O. fuse assembly with brass part contact for 33 or 11/0.4 KV DP Structure set of 3 Nos. with fuse barrel i/c required fuse element & other materials as per specification on existing D.P. structure as required.					
		42.63.1		set	1	4721.00	4721.00
95	42.67	Supply & fixing anti climbing device with 2 ply G.I. barbed wire 1 Kg. per pole complete as per MPMKVVCO. Specification.	each	8	231.00	1848.00	
96	42.68	Supply, laying and fixing of G.I. earth coil of 4mm dia G.I. wire having 120 turns of nearly 50mm dia. and 3 mt. long tail in existing pit duly earthed with pole etc complete as required as per specification.	each	10	293.00	2930.00	
97	42.69	Supplying and fixing 33/11/0.4 KV enamel coated danger board size 200x250mm with clamp on existing HT/LT structure/poles.	each	12	205.00	2460.00	

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
98	42.70	Supplying, installing, testing and commissioning of 11/0.4 KV 3 Phase 50 cycle oil immersed, naturally cooled, outdoor type transformer connected delta on H.T. side and star on L.T. side, dehydrating silica gel breather on eye level, rating and diagram plate, two earthing terminal, lifting lugs, oil level gauge, drain valve with plug, temperature not exceeding 50°C on load, oil filling hole with plug, four unidirectional roller, arcing horns, explosion vent, terminal arrangement bushing on H.V. side and cable box on LV side, first filling of oil upto desired level and transformer installing on existing structure with all required materials arrangement as required ISI marked & as per IS specification, hand operated off load tap changer switch above 100 KVA, oil conservator with drain valve, plug 63 KVA and above.				
		Energy efficiency level -3 (New level-2)				
		42.70.3 Aluminium wound				
		42.70.3.4 200 KVA	Each	1	714495.00	714495.00
99	42.73	Shifting, erection, & commissioning of 100/200/315/500 KVA (11/0.433 KV) distribution transformer on existing structure including Bi-metallic clamp, ACSR/AAAC Conductor i/c colour code sleeve, for connection from H.T. Line to transformer as required as per specification.	Each	1	10846.00	10846.00
100	42.75	Supply & fixing fencing of chain link mesh 100 x 100 mm, 12 SWG GI wire for for D.P. structure electric sub-station switch yard including single post of angle iron size 50x50x5mm, 2.5 mt long should be provided upto 2.00 mt. apart or as required. The panel frame with required angle iron/ flat iron members/cross members including mesh welded in frame panel shall be erected between the posts. The angle iron post shall be erected in cement concrete M-15 (1:2:4) (20 mm graded metal) foundation, including excavation of pit and refilling the same. The fencing shall be provided with one entrance gate including locking arrangement as required as per specification. The height of fencing shall be 2 mt. above ground level. Fencing shall be painted with required shade.	sq.mtr.	48	1821.00	87408.00
101	42.90	Supplying & drawing/laying of PVC insulated XLPE aerial bunch power cable conductor H2/H4 grade aluminium solid/stranded conforming to IS-14255- 1995, alu. alloy insulated messenger 1100 volts grade cable of approved make in air with necessary material as per specification of required size as mentioned below –				
		42.90.2 Single core cable(insulated neutral messenger)				
		42.90.2.7 3x150 sq.mm, 1x35(st. light), 1x95(insulated neutral messenger)	P.Mt.	50	922.00	46100.00
102	42.91	Supplying & fixing of aerial bunch cable accessories suspension clamp i/c required attachment for single core cable of approved make on pole with clamp, necessary material as per specification for required size.	Each	4	427.00	1708.00

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
103	42.92	Supplying & fixing of aerial bunch cable accessories tension clamp (dead end) i/c required attachment for single core cable of approved make in air with clamp, necessary material as per specification for required size.	Each	4	446.00	1784.00
104	42.93	Supplying & fixing of waterproof insulation piercing connector for aerial bunch cable i/c required attachment for single core cable of approved make in air with necessary material as per specification of required size as mentioned below –				
		42.93.2 Main:50-150sq.mm, tap:6-50sq.mm	Each	4	220.00	880.00
105	42.94	Supplying & fixing of spring loaded busbar screwless connector with enclosure of approved make including required clamp, nut, bolt, connection, testing as per specification to complete the job.				
		42.94.2 Three Phase				
		42.94.2.1 3Ph, 1In+2Out	Each	1	4746.00	4746.00
106	42.98	Providing and erection of hot dipped galvanized octagonal poles in single section made from 3mm thick sheet having lockable weather proof flush door junction box, suitable size & type of foundation bolts 4 nos. 'J' type (EN8 grade) complete, erected in an approved manner on provided foundation.				
		42.98.6 8 meter height, 135 X 70mm A/F, 225x225x16mm base plate having weight 70 kg ± 3%, 4 nos. X 20 x 750mm bolt having weight 8.2 kg ± 3%.	Each	55	13415.00	737825.00
107	42.99	Providing and fixing of bakelite sheet 10mm thick, one MCB 6Amp-32Amp SP & 16sq.mm stud type 4 way epoxy connector for decorative designer poles /octagonal pole box.	Each	55	323.00	17765.00
108	42.101	Providing and fixing of sword canopy type single arm GI bracket upto 2 meter Long for 90mm A/F top octagonal pole	Each	57	2071.00	118047.00
109	42.103	Providing and fixing of sword canopy type double arm GI bracket upto 2 meter Long for 90mm A/F top octagonal pole	Each	10	3496.00	34960.00
110	42.111	Designing and construction of footing foundation for octagonal pole of desired size including excavation in soil/soft rock, base concrete M-7.5 (1:4:8), 15mm thick and pedestal of RCC M-20 (1:1.5:3), required tar steel reinforcement for required size from base concrete, shuttering, curing etc. with existing foundation bolts complete as per specifications in an approved manner as per manufacturer drawing or engineer-in-charge.	Cu. Mt.	28	6770.00	186175.00


S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
111	46.11	SPLIT AC (inverter model) :- Supply, installation, testing and commissioning of Split type wall mounted air conditioning unit of following capacity including indoor, outdoor unit fitted with inverter based rotary compressor, copper condenser and first charge refrigerant R410A. The condensing unit working range should be capable for providing cooling between +/-5 deg. C to 50 deg. C & heating within 0 deg. C to 15 deg. C including connection of copper pipe of required size upto 3 mtr., insulation, cordless remote control, auto air swing louvers, wall stand for outdoor unit, connection copper lead wire, condensed water outlet pipe 2 mtr. complete etc as required. Outdoor/indoor units should be of same make (brand).				
		46.11.2 SPLIT AC (inverter model, Cooling only)				
		46.11.2.6 1.8/2 TR star rating 5 star	Each	1	67800.00	67800.00
112	46.31	Drain piping :- Providing and fixing of CPVC, 6Kg/cm2 drain water piping with fittings, support and insulated with 6 mm thick closed cell elastomeric nitrile rubber insulation complete as per specification.				
		46.31.2 25 mm dia ID	Rmt	5	202.00	1010.00
113	46.41	Controlcable: - Supply and laying, testing & commissioning of following sizes of copper conductor control cables on existing tray including fixing clamps & proper connections to equipment etc. complete as required.				
		46.41.6 4Cx 10 sq.mm	Rmt	20	899.00	17980.00
114	46.42	Controlcable: - Supply and laying, testing & commissioning of following sizes of shielded copper conductor Communication cables on existing tray including fixing clamps & proper connections to equipment etc. complete as required.				
		46.42.1 2Cx1.5 sq.mm	Rmt	5	255.00	1275.00
115	47.3	Supply, installation, testing and commissioning of UPS with isolation transformer & battery for backup, having three phases input three phase output. Online double conversion VFI-SS-111 technology, with sinusoidal wave form, architecture (standalone of distributed parallel up to 8 units), having input characteristics i.e. input voltage (380v, 400v, 415v, 3Ph+N+PE), input frequency (45 -65 Hz), input voltage range (Ph - Ph) : (half load 208v - 467v/full load 312v - 467v), total harmonic distortion of input current < 3% (at full linear load), compatibility with diesel generators configurable for synchronization between the input and output frequencies even for high frequency variations, input power factor > 0.99, having output characteristics i.e. output voltage (380v, 400v, 415v, 3Ph+N (adjustable from front panel), efficiency up to 96%, efficiency in ECO mode up to 98.5%, output frequency (nominal) 50 /60 Hz 0.01% free run (adjustable from front panel), crest factor 3 : 1, total harmonic distortion of output voltage < 2 % (at full linear load), output power factor 0.9, output voltage tolerance				
		47.3.1 10 KVA (3 phase input & 3 phase output)				
		47.3.1.2 For 60 minute backup, min. 16000 VAH	Each	1	442808.00	442808.00

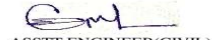
S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount
1	2	3	4	5	6	7
116	49.1	Supply, installation, testing and commissioning of 2 loop microprocessor based intelligent and electronically addressable, modular, loop capacity of 159 detectors. Fire alarm control panel with 5.7 inch touch screen LCD display, multiple access levels, 10,000 event history logs in the nonvolatile memory (EEPROM). The panel should be modular microprocessor based in nature. The panel shall have 240V AC power supply, automatic battery charger, 24 V, ceiled lead acid maintenance free batteries sufficient for 24 hours normal working and then be capable of operating the system for 30 mints during emergency condition. The panel shall be EN 54/UL certification.	Each	3	188534.00	565602.00
117	49.6	Supply, installation, testing and commissioning of addressable–optical thermal detector with inbuilt isolator, automatic addressing shall be UL/EN54 certified	Each	2	5654.00	11308.00
118	49.7	Supply, installation, testing and commissioning of addressable– automatic dual LED smoke detector with two integrated light-scattering smoke sensors using LEDs with different colors/wavelengths (blue/infrared) to avoid false alarm & should comply to test fire 1, Inbuilt Isolator, automatic addressing shall be UL/EN54 certified	Each	92	6300.00	579600.00
119	49.10	Supply, installation, testing and commissioning of indoor addressable manual break glass unit (double action) with inbuilt isolators, with flexible network structures & necessary fixing arrangements with key complete as required shall be UL/EN54 certified	Each	10	5224.00	52240.00
120	49.16	Supply, installation, testing and commissioning of addressable control relay module with inbuilt isolators & with flexible network structures with a maximum switching current of 1A @ 30V DC, shall be UL/EN54 certified	Each	3	18038.00	54114.00
121	49.19	Supply, installation, testing and commissioning of response Indicator shall be UL/EN54certified	Each	14	267.00	3738.00
122	50.8	Internal hooter: Providing &fixing of internal hooter with working AC Voltage 220V A.C./24V D.C. current consumption, sound output 120 DB, material M.S. sheet.	Each	6	794.00	4764.00
123	53.3	Amplifiers				
		53.3.4 Supply, installation, testing and commissioning of 240W power amplifier with 100,70V speaker op, combination XLR/RCA line in line out connectors. Speaker OP short circuit protection.(with require mounting arrangement)	Each	3	53845.00	161535.00
124	53.4	Mixer				
		53.4.1 Supply, installation, testing and commissioning of 8-Channel Mixer with Low-cost, high-performance Lexicon effects mixers. 8+2 and 12+2 channel frame sizes. Built-in 24 bit Lexicon digital effects processor. 32 FX settings	Each	1	63800.00	63800.00
125	53.5	Speakers				

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
		53.5.1	Supply, installation, testing and commissioning of 6W ceiling speaker with max SPL1M/1W 96dB. Frequency response of 80Hz-20KHz with a dispersion angle of 160 deg. The speaker should have tapings at 6W/3W/1.5W (with require mounting arrangement)	Each	16	1703.00	27248.00
126	53.7	Microphones					
		53.7.1	Supply, installation, testing and commissioning of Professional Dyanamic Vocal Microphone Audio frequency bandwidth: 70 to 20000 Hz Sensitivity: 2.6 mV/Pa Electrical impedance: 600 Ohms Recommended load impedance: 2000 Ohms Polar Pattern: Supercardioid	Each	3	16252.00	48756.00
127	54.1	2 MP IP IR eyeball camera with H.264 video compression					
		54.1.1	Supply, Installation testing and commissioning of the IP dome camera shall be equipped with a 1/2.8 2 MP progressive scan CMOS imager to capture full HD 1080p (25/30 fps) images, a 3.6 mm fixed lens, and a waterproof (IP66) enclosure. As a true day/night solution, the camera shall use smart IR technology and provide up to 98 ft (30 m) of IR illumination. The camera shall accept PoE (802.3af) or 12 V DC power input. min. illumination:-0.1 lux @F1.2, AGC ON, 0 lux with IR video compression :- H.264, noise reduction: 3DNR,backlight compensation :- BLC/HLC/DWDR, encode mode:- CBR/VBR (freely adjustable in CBR, 5 levels in VBR). UL listed	Each	30	10221.00	306630.00
128	54.2	2 MP IP IR bullet camera with H.264 Video compression					
		54.2.1	Supply, Installation testing and commissioning of the IP bullet camera shall be equipped with a 1/2.8 2 MP progressive scan CMOS imager to capture full HD 1080p (25/30 fps) images, a 3.6 mm fixed lens, and a waterproof (IP66) enclosure. As a true day/night solution, the camera shall use smart IR technology and provide up to 98 ft (30 m) of IR illumination. The camera shall accept PoE (802.3af) or 12 V DC power input. min. illumination:-0.1 lux @F1.2, AGC ON, 0 lux with IR video compression :- H.264, noise reduction: 3DNR,backlight compensation :- BLC/HLC/DWDR, encode mode:- CBR/VBR (freely adjustable in CBR, 5 levels in VBR).	Each	24	12480.00	299520.00
129	54.17	4 channel NVR with 1 SATA					
		54.17.1	Supply, installation testing and commissioning of 4CH network video recorder with real-time recording: up to 4 MP resolution live view, preview and playback/up to 4 channels at 108Op,withinbuilt PoE, up to 1TB supports complete with UL certification	Each	1	41629.00	41629.00
130	54.21	16 channel NVR with 2 SATA					

S.No.	SOR Item NO.	Description Of Item	Unit	Quantity	Rate	Amount	
1	2	3	4	5	6	7	
		54.21.1	Supply, installation testing and commissioning of 16 channel NVR with 1080p real-time live view H.265/H.264 MJPEG dual codec decoding up to 12 MP resolution preview & playback max 320 MBPS incoming bandwidth support 2 SATA HDDs up to 16TB, supports fisheye video de-warping in local and web user interface, supports visual or auditory notifications(a flashing light, bell, or siren) complete with UL certification	Each	2	84721.00	169442.00
131	54.23		32 channel NVR with 4 SATA				
		54.23.1	Supply, installation testing and commissioning of 32 channel NVR with 1080p real-time live view H.265/H.264 MJPEG dual codec decoding Up to 12 MP resolution preview & playback max 320 MBPS incoming bandwidth support 4 SATA HDDs up to 32TB, supports fisheye video de-warping in local and web user interface, supports visual or auditory notifications(a flashing light, bell, or siren) complete with UL certification	Each	1	140084.00	140084.00
132	54.27		8 port PoE switch with 2 SFP ports				
		54.27.1	Supply, installation testing and commissioning of 8 port PoE switch with 2 SFP ports, having security features like port security supports 64 MACs per port, auto surveillance VLAN, loopback detection automatically disables a port when a loop is detected, cable diagnostics allows administrators to determine cable status, UTP cat. 5, cat. 5e (100 m max.), full/half-duplex for 10/100 MBPS, full-duplex for 1000 MBPS, auto MDI/MDIX adjustment for all twisted-pair ports, switching capacity, 40 GBPS, maximum 64 bytes packet forwarding rate, 14.88 MBPS, ports 1 to 8 compliant with 802.3at	Each	8	23024.00	184192.00
133	54.30		Hard disk				
		54.30.1	Providing & fixing of 2 TB hard disk	Each	5	6414.00	32070.00
		54.30.2	Providing & fixing of 4 TB hard disk	Each	1	10825.00	10825.00
134	57.2		Supply, installation, testing & commissioning of L.E.D. Television (4K L.E.D. Display O.S. Webos /Android or equivalent, minimum 50 Hz refresh rate Min. 20 W speaker, Wifi/bluetooth enabled, minimum 2 HDMI & 1USB Port, i/c remote and wall/table top accessories)				
		57.2.1	32"	Each	2	20257.00	40514.00
		57.2.3	49"/50"	Each	2	46494.00	92988.00
		57.2.4	55"	Each	1	50997.00	50997.00
		57.2.5	65"	Each	1	73740.00	73740.00
135	57.3		Supply, installation, testing & commissioning of Water Cooler with Eco Friendly Refrigerant, IN-SITU PUF Insulation, Anti-corrosive Pre-coated Body with storage of required capacity				
		57.3.2	WATER COOLER 40 LITRE	Each	4	30815.00	123260.00
		57.3.3	WATER COOLER 80 LITRE	Each	2	32525.00	65050.00
136	57.6		Supply, installation, testing & commissioning of 50 LPH RO Plant with sediment filtration having minimum purifying capacity of 50LPH per hour. Suitable for reducing hardness, TDS, heavy metal contaminants, and pathogenic micro organism, operating input voltage 230V AC/50 Hz	Each	6	53406.00	320436.00

S.No.	SOR Item NO.		Description Of Item	Unit	Quantity	Rate	Amount
1	2	3		4	5	6	7
						Electrical Total	17753246.00
						Civil Total	118548308.23
						Total Civil and Electrical	136301554.23
Sub Engineer (Building) P.W.D. Sidhi		Asstt. Engineer(Building) P.W.D. Sidhi		Executive Engineer (Building) P.W.D. Sidhi			


SUB ENGINEER (CIVIL)
PWD.(B) SIDHI


ASSTT.ENGINEER(CIVIL)
PWD(B) SIDHI


EXECUTIVEENGINEER
PWD (B) SIDHI