

**BILL OF QUANTITIES**  
**ABSTRACT**

Sl.No	DESCRIPTION OF ITEMS	AMOUNT
	<b>PART A - Construction OF Buildings for Transformer Station &amp; Switch Room</b>	
1	CIVIL	
2	ELECTRICAL	
	<b>TOTAL</b>	
	<b>PART B - Construction of Rain Water Harvesting Pond&amp; Fencing</b>	
3	CIVIL	
	<b>TOTAL</b>	
	<b>PART C - Construction of Valuation Centre No. 2</b>	
4	CIVIL	
5	ELECTRICAL	
	<b>TOTAL</b>	
	<b>GRAND TOTAL</b>	

**PART - A: - CONSTRUCTION OF BUILDINGS FOR TRANSFORMER STATION & SWITCH ROOM**

<b>Sl No:</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
	<b>CIVIL WORK</b>				
1	<b>Earthwork</b>				
1.1	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50m outside the periphery of the area covered.	100sqm	443.8		
1.2	Felling trees of the girth (measured at a height of 1m above ground level) including cutting of trunks and branches, removing the trees and stacking of serviceable material and disposal of unserviceable material.				
1.2.1	Beyond 30cm girth upto and including 60cm girth	each	10		
1.2.2	beyond 60cm girth upto and including 120cm girth	each	12		
1.3	Earthwork in excavation by mechanical means (hydraulic excavator)/ manual means in foundation trenches or drains not exceeding 1.5m in width or 10sqm on plan including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.				
1.3.1	All kinds of soil	cum	131		

Sl No:	Description	Unit	Quantity	Rate	Amount
1.4	Earth work by mechanical means (hydraulic excavator)/ manual means in foundation trenches or drains not exceeding 1.5m in width or 10sqm on plan including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m				
1.4.1	Ordinary rock	cum	5		
1.5	Extra for every additional lift of 1.5m or part there of in excavation/ banking excavated or stacked materials.				
1.5.1	All kinds of soil	cum	15		
1.5.2	Ordinary rock	cum	5		
1.6	Filling available excavated earth (excavated 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 50m and lift upto 1.5m	cum	200		
<b>2</b>	<b>CONCRETE AND ALLIED WORKS</b>				
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering- All work upto plinth level:				
	1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size)	cum	6.8		
2.2	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	cum	26		

Sl No:	Description	Unit	Quantity	Rate	Amount
2.3	Providing and laying cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) upto floor five level excluding the cost of centering and shuttering	cum	39.4		
2.4	Providing and laying damp proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size)	sqm	34		
2.5	Applying a coat of residual petroleum bitumen of grade VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil	sqm	34		
2.6	Providing and laying in position specified grade of 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement- All work upto plinth level	cum	20.5		
2.7	Reinforced cement concrete work in walls (any thickness) including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size)	cum	20		

Sl No:	Description	Unit	Quantity	Rate	Amount
2.8	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15 <sup>0</sup> landings, balconies, shelves, chajjas, lintels, bands, plain window sills, stair cases upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	cum	45.3		
2.9	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete				
	Thermo mechanically treated bars	kg	9694.67		
3.1	Centering and shuttering including strutting, propping etc. and removal of formwork for foundations, footings, bases for columns	sqm	67		
3.2	Centering and shuttering including strutting, propping etc. and removal of formwork for floors, roofs, landings, balconies etc	sqm	247		
3.3	Centering and shuttering including strutting, propping etc. and removal of formwork for lintels, beams, plinth beams etc	sqm	228		
3.4	Centering and shuttering including strutting,propping etc. and removal of formwork for columns, pillars, piers etc	sqm	80		

Sl No:	Description	Unit	Quantity	Rate	Amount
<b>4</b>	<b>MASONRY WORK</b>				
4.1	Brick work in cement mortar 1:6 (1 cement : 6 coarse sand) with country burnt bricks approved quality (average compressive strength not less than 50kg/cm <sup>2</sup> ) including scaffolding, raking out the joints, curing, cost and conveyance of all materials, labour, lead, lift etc.complete for superstructure works <b>above highest plinth level</b> as directed by the engineer in charge.	cum	72.5		
<b>5</b>	<b>DOORS, WINDOWS AND VENTILATORS</b>				
5.1	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, fixed withdrawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required EDPM 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/ panelling, CP brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer in Charge. (glazing and panelling to be paid separately)- powder coated aluminium (minimum thickness of powder coating 50micron)	Kg	60		

Sl No:	Description	Unit	Quantity	Rate	Amount
5.2	Providing and fixing glazing in aluminium window shutters with EDPM rubber/ neoprene gasket etc complete as per architectural drawings and the directions of Engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item) with float glass panes of 5.5mm thickness	sqm	17		
5.3	Providing and fixing 1mm thick MS door with frame of 40x40x6mm angle iron and MS gusset plates at junctions and corners, diagonal braces with MS angle 40x40x6mm, all necessary fittings complete, including a priming coat of approved steel primer	sq.m	3.2		
5.4	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws complete 150x10mm	nos	2		
5.5	Providing and fixing 125mm aluminium handles ISI marked anodised (anodic coating not less than grade AC 10as per IS:1868) transparent or dyed to required colour or shade with nuts and screws complete.	nos	16		
5.6	Supplying and fixing fabricated steel gate with angle frame of size 65x65x8 using 10mm square bars with opening size 7.5cm x 7.5cm including fixing and painting with enamel paint two coats over a coat of zinc chromite primer	Kg	1500		
<b>6</b>	<b>PLASTERING</b>				
6.1	12mm cement plaster of mix 1:4 (1 cement : 4 fine sand)	sqm	279.97		
6.2	6mm cement plaster of mix 1:3 (1 cement : 3 fine sand)	sqm	253.3		

Sl No:	Description	Unit	Quantity	Rate	Amount
<b>7</b>	<b>FLOORING</b>				
	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the coat of nosing of steps etc complete. 40mm thick with 20mm nominal size stone aggregate	sqm	217		
<b>8</b>	<b>PAINTING</b>				
8.1	Providing and applying single coat of water cement primer of approved brand and colour to all surfaces such as walls, column etc one coat after scrapping and cleaning the surfaces and providing an even finish to make the water level and smooth including cost and conveyance of all materials, labour etc as directed by engineer in charge at all levels.	sqm	279.97		
8.2	Finishing walls with acrylic smooth exterior paint of required shade on new works (Two or more coat applied @1.67ltr/10 sqm over and including priming coat of exterior primer applied@2.2 kg/10 sqm)	sqm	203.9		
8.3	Painting the interior walls with two coats of ready mix plastic emulsion paint of approved quality and shade to smooth even finish, over a priming coat wall putty including etc.complete	sqm	435.16		
	<b>TOTAL - CIVIL WORK</b>				

Sl No:	Description	Unit	Quantity	Rate	Amount
	<b>ELECTRICAL WORK</b>				
1	Wiring for light/ fan/ exhaust fan/ call bell point with 1.5 sqmm. FR PVC insulated copper conductor single core cable in surface/recessed medium class PVC conduit with modular switch, modular plate, step type electronic fan regulator, suitable GI box, and earthing the point with 1.5 sq.mm FR PVC insulated copper conductor single core cable etc as required (Group B)	each	20		
2	Wiring 5A plug point (in combined position) on switch boxes as per above specifications.	each	3		
3	Supplying & fixing following size/modules, GI box along with modular base and cover plate for modular switches in recess etc. as required				
a	1/2 module (75mmx75mm)	each	2		
b	3 module(100mmx75mm)	each	3		
c	6 module(200mmx75mm)	each	1		
4	Supplying & fixing following type modular switch/socket on the existing modular plate and switch box including connection but excluding modular plate etc. as required				
a	5/6A switch	each	1		
b	3 pin 5/6A socket outlet	each	3		

Sl No:	Description	Unit	Quantity	Rate	Amount
c	15/16A switch	each	3		
d	6 pin 15/16A socket outlet	each	3		
e	Telephone socket outlet	each	1		
f	RJ 45 socket outlet	each	1		
g	Stepped electronic fan regulator	each	3		
h	1m blanking plate	each	3		
5	Supply & installation of suitable size MS rod type fan clamp as required.	each	3		
6	Supply, conveyance, installation, testing & commissioning of 1400mm ceiling fans using standard accessories, wiring the down rod with 16/0.20mm PVC insulated & PVC sheathed 3 core round copper conductor flex wire or with extended original wiring etc. as required.	each	3		
7	Supply, conveyance, installation, testing & commissioning of pre-wired single 28 W T5 lamp with all accessories and lamps directly on wall and giving connections with 16/0.2mm 3 core round copper conductor, flex wire or extending the original wiring as required.	each	15		

Sl No:	Description	Unit	Quantity	Rate	Amount
8	Supply , conveyance, installation, testing & commissioning of 300/305mm, single phase heavy duty (900 rpm) exhaust fan in metal frame including cutting suitable holes, plastering, colour washing, fixing necessary bolts and nuts, making good the damages, giving connections with required length of 24/0.2mm PVC insulated and PVC sheathed 3 core round copper conductor flex wire etc. as required	each	2		
9	Supplying & fixing 20mm medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required	m	40		
10	Wiring for circuit/submain wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/recessed medium class PVC conduit as required.				
a	2x2.5 sq.mm + 1x1.5 sq.mm earth wire	m	75		
b	2x4 sq.mm + 1x4 sq.mm earth wire	m	20		
c	2x1.5 sqmm+ 1x1.5 sqmm earth wire	m	25		
11	Supplying & drawing 2 pair 0.5 sq.mm FR PVC insulated annealed copper conductor, unarmoured telephone cables in the existing surface/recessed PVC conduit as required.	m	20		
12	Supplying & drawing CAT6 UTP cable conforming to relevant Standards through the existing conduit	m	20		

Sl No:	Description	Unit	Quantity	Rate	Amount
13	Supplying & fixing 4 way (4+12), 415V double door TPN MCBDB on surface/ recess, complete with tinned copper busbar, neutral busbar, din bar, inter connections,powder painted including earthing etc. as required. (But without MCB/ RCCB/ Isolator)	each	1		
14	Supplying & fixing 4 way pre-wired SP & N MCB DB of steel sheet for 240V on surface/recess complete with loose wire box, terminal connectors for all incoming and out going circuits, duly pre-wired wth suitable size FR PVC insulated copper conductor upto terminal blocks, pinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, inter connections, powder painted including earthing etc. as required. (But without MCB/RCCB/isolator) [Double DOOR]	each	1		
15	Supplying & fixing 40A, 4 pole, 415V, 300mA RCCB in the existing DB complete with connections, testing and commissioning etc. as required	each	1		
16	Supplying & fixing 40A, 240V, DP isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required	each	1		
17	Supplyig & fixing 5A to 32A 240V "C" curve, single pole MCB in the existing DB complete with connections etc as required.	each	8		
18	Supplying & fixing single pole blanking plate in the existing MCB DB as required	each	4		

Sl No:	Description	Unit	Quantity	Rate	Amount
19	Supply & installation of 63A, 415V, 50 Hz, AC 23A duty, TPN switch disconnector unit in sheet steel enclosure complete with handle assembly, door interlock and pad locking arrangement on angle iron frame work using necessary bolts & nuts, fixing the unit to wall, making good the damages, colour washing, giving necessary connections as required.	each	1		
20	Fabrication, supply, & installation of dust & vermin proof wall mounting type meter board made from 1.60mm CRCA sheet, providing necessary supports made from the same gauge CRCA sheet to fix KSEB meters, fuse units, hinged door construction for the frpnt side, providing vision panel for the meter compartment, painting with 2 coats of enamel paint over a coat of zinc chromate primer, etc as required including fixing it on wall, making good the damages, colour washing etc as required.	m2	1		
21	Supplying, laying and clamping of 1 no. 16 sqmm, 4 core PVC insulated and PVC sheathed armoured aluminium power cable, 1.1 KV grade using clamps noted along with the cables, spacing of clamps not exceeding 60cm, making good the damages, colour washing etc as required.	m	20		
22	Glanding & End termination of 16 sqmm 4 core cable using siemens/ tropodur type nickel plated single compression brass cable gland, earth clamps, aluminium sockets etc as required.	each	2		
23	Supplying & laying 2.00mm (14SWG) bare copper earthing conductor along with wiring/ cables and giving connection as required	m	20		

Sl No:	Description	Unit	Quantity	Rate	Amount
24	Earthing with GI earth plate 600mm x 600mm x 6mm thick including all accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	each	2		
25	Supply and providing test joint for the earthing system using 2 nos 2x25x3 mm GI strips including cutting and bending to shape, drilling necessary holes and fixed to the watering pipe etc. as required.	m	6		
26	Supply & providing earth lead from the test joint to the earth electrode using 4.00mm bare copper conductor (8 SWG) and fixing firmly with plate test joint etc. as required.	m	10		
27	Supply and crimping superior quality copper earth socket including suitable size brass bolts & nuts for 4.00mm (8 SWG) earth conductor as required.	each	20		
	<b>Total ELECTRICAL WORK</b>				
	<b>GRAND TOTAL (CIVIL + ELECTRICAL)</b>				

Sl No:	Description	Unit	Quantity	Rate	Amount
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**PART B :- Construction of Rain Water Harvesting Pond & Fencing**

**BILL OF QUANTITIES**

Sl. No	Item	Unit	Quantity	Rate	Amount
	<b>CIVIL</b>				
1	Earth work excavation by mechanical means (Hydraulic excavator)/ mechanical means over areas (exceeding 30cm in depth, 1.5m width as well as 10sqm on plan) including disposal of excavated earth, within a lead of 1 km and lift upto 1.5m, disposed earth to be levelled and neatly dressed as directed.				
a	All kinds of soil	Cum	15800		
b	Ordinary rock	Cum	<b>QR only</b>		
2	Extra for every additional lift of 1.5m or part thereof				
a	All kinds of soil	Cum	14742		
b	Ordinary rock	Cum	<b>QR only</b>		
3	Earth work in excavation by mechanical means (hydraulic excavator)/ manual means in foundation trenches (not exceeding 1.5m in width or 10sqm on plan) for fencing posts including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed within a lead of 50m.				

Sl No:	Description	Unit	Quantity	Rate	Amount
	All kinds of soil	Cum	23		
4	Providing and laying in position cement concrete of grade 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40mm nominal size) for fixing the posts	Cum	14		
5	R.C.C standard post/ strut of mix 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 12.5mm nominal size) 6mm bar nibs for fixing barbed wire as per drawing and with the direction of Engineer-in-charge including cost of reinforcement, form work etc complete (cost of earth works in excavation, 1:3:6 concrete works in foundation shall be paid under Item no: 3 & 4 above separately)	Cum	2.5		
6	Fencing with R.C.C post placed at required distance, embedded in cement concrete blocks, centre post, last but one end post and corner post shall be strutted on both sides and end post, provided with 9 horizontal lines and two diagonals of barbed wire of weight 9.38 kg per 100 metres (min) between the two posts fitted and fixed with G.I binding wire tied to 6mm bar nibs fixed while casting the posts (cost of R.C.C posts, struts, earth work and concrete to be paid for separately):- Payment to be made per metre cost of total length of barbed wire used.				
	With G.I barbed wire	metre	3100		

Sl No:	Description	Unit	Quantity	Rate	Amount
7	Brick work in cement mortar 1:6 (1 cement: 6 coarse sand) with country burnt bricks of approved quality (average compressive strength not less than 50kg/cm <sup>2</sup> ) with country burnt bricks for gate pillars	cum	1		
8	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) in cement mortar 1:6	cum	0.25		
9	12mm cement plaster of mix 1:4 (1 cement : 4 fine sand)	sqm	10		
10	Supplying and fixing in position MS gate as per drawing, with 25 mm square ms rod around for frame, 12mm square MS rods vertical, central plate with 12mm MS plate, locking arrangement, kony blocks etc complete and painting the gate with 1 coat of red oxide primer (excluding the shop coat) and two coats of synthetic enamel paint of approved quality and shade.	each	1		
	<b>Total</b>				

**PART C: CONSTRUCTION OF VALUATION CENTRE NO. 2**

Sl No	Description	Unit	Quantity	Rate	Amount
	<b>CIVIL WORKS</b>				
<b>1</b>	<b>EARTH WORK</b>				
1.1	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50m outside the periphery of the area covered.	sqm	1078.44		

Sl No:	Description	Unit	Quantity	Rate	Amount
1.2	Felling trees of the girth (measured at a height of 1m above ground level) including cutting of trunks and branches, removing the trees and stacking of serviceable material and disposal of unserviceable material.				
a	Beyond 30cm girth upto and including 60cm girth	each	5		
b	Beyond 60cm girth upto and including 120cm girth	each	5		
1.3	Earthwork in excavation by mechanical means (hydraulic excavator)/ manual means in foundation trenches or drains not exceeding 1.5m in width or 10sqm on plan including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.				
	All kinds of soil	cum	75		
1.4	Filling available excavated earth (excavated 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 50m and lift upto 1.5m	cum	202.62		
<b>2</b>	<b>CONCRETE AND ALLIED WORKS</b>				
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering- All work upto plinth level:				
	Cement concrete 1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size)	cum	15		

Sl No:	Description	Unit	Quantity	Rate	Amount
2.2	Providing and laying cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) upto floor five level excluding the cost of centering, shuttering and finishing.	cum	45		
2.3	Providing and laying cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) in kerbs, steps and the like at or near ground level excluding the cost of centering, shuttering and finishing	cum	2.5		
2.4	Providing and laying damp proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size)	sqm	60		
2.5	Applying a coat of residual petroleum bitumen of grade VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil	sqm	60		
2.6	Providing and laying in position specified grade of 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement- All work upto plinth level	cum	40		
2.7	Reinforced cement concrete work in walls (any thickness) including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size)	cum	8		

Sl No:	Description	Unit	Quantity	Rate	Amount
2.8	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15 <sup>0</sup> landings, balconies, shelves, chajjas, lintels, bands, plain window sills, stair cases upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size)	cum	16		
2.9	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete				
	Thermo mechanically treated bars	kg	7000		
<b>3</b>	<b>CENTERING &amp; SHUTTERING</b>				
3.1	Centering and shuttering including strutting, propping etc. and removal of formwork for foundations, footings, bases for columns	sqm	40		
3.2	Centering and shuttering including strutting, propping etc. and removal of formwork for floors, roofs, landings, balconies etc	sqm	110		
3.3	Centering and shuttering including strutting, propping etc. and removal of formwork for lintels, beams, plinth beams etc	sqm	145		
3.4	Centering and shuttering including strutting,propping etc. and removal of formwork for columns,pillars,piers etc	sqm	110		
<b>4</b>	<b>MASONRY WORK</b>				
4.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12graded stone aggregate 20mm nominal size) upto plinth level with cement mortar 1:6 (1 cement : 6 coarse sand)	cum	35		

Sl No:	Description	Unit	Quantity	Rate	Amount
4.2	Brick work in cement mortar 1:6 (1 cement : 6 coarse sand) with country burnt bricks approved quality (average compressive strength not less than 50kg/cm2) including scaffolding, raking out the joints, curing, cost and conveyance of all materials, labour, lead, lift etc.complete				
a	Above highest plinth level as directed by the Engineer-in-charge.	cum	67.91		
b	Below plinth level as directed by the Engineer-in-charge	cum	20		
4.3	Half brick masonry in cement mortar 1:4 (1 cement : 4 coarse sand) with country burnt bricks approved quality (average compressive strength not less than 50kg/cm2) in superstructure above highest plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	33.12		
<b>5</b>	<b>WINDOWS AND VENTILATORS</b>				
5.1	Providing wood work in frames of doors, and fixed in position using <b>pincode wood</b>	cum	0.1		
5.2	Providing and fixing 35mm thick factory made laminated veneer lumber door shutter coming to IS: 14616 and TADS1S: 2001 (Part B) including ISI marked black enamelled butt hinges with necessary screws as per directions of Engineer in charge and panelling with panels of 12mm thick plain grade-Medium densityflat pressed three layer particle board FPT-1 or graded wood particle board FPT-IS:3087 marked bonded with BWPtype synthetic resin adhesive as per IS: 1848	Sqm	6.3		

Sl No:	Description	Unit	Quantity	Rate	Amount
5.3	<p>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, fixed withdrawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required EDPM 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/ panelling, CP brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer in Charge. (glazing and panelling to be paid separately) powder coated aluminium (minimum thickness of powder coating 50 micron)</p>	Kg	150		
5.4	<p>Providing and fixing glazing in aluminium window/ door shutters with EDPM rubber/ neoprene gasket etc complete as per architectural drawings and the directions of Engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item) with float glass panes of <b>5.5mm thickness</b></p>	sqm	35		

Sl No:	Description	Unit	Quantity	Rate	Amount
5.5	Providing and fixing powder coated aluminium door of Indal sections (Section nos. 9221, 5140, 9241, 9239, 9240, 9200, 9201, 4682 etc) with 5mm thick plain float glass and 12mm thick exterior grade both side laminated particle board of approved brand fixed with aluminium glazing clips, neoprene beading as per drawings with lock systems, concealed tower bolts, pivots, floor mounted door closers, door handles etc including cost of all materials, conveyance, lead, lift etc complete as per specifications nad as directed by Engineer in charge.	sqm	6.3		
5.6	Providing 40x5MM flat iron flat iron hold fast 40cm long including fixing to frame with 10mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size)	nos	200		
5.7	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws complete 150x10mm	nos	8		
5.8	Proving and fixing 125mm aluminium handles ISI marked anodised (anodic coating not less than grade AC 10as per IS:1868) transparent or dyed to required colour or shade with nuts and screws complete.	nos	6		

Sl No:	Description	Unit	Quantity	Rate	Amount
5.9	Providing and fixing fibre glass reinforced plastic (FRP) door frames of cross section 90mmx45mm having single rebate of 32mmx15mm to receive shutter of 30mm thickness. The laminate shall be moulded with fire resistant grade unsaturated polyester resin and chopped mat. Door frame laminate shall be 2mm thick and shall be covered with fibre glass from all sides. M.S stay shall be provided at the bottom to steady the frame.	m	2		
5.10	Providing and fixing to existing door frames 30mm thick fibre glass reinforced plastic (F.R.P) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3mm thick FRP laminate all round, with suitable wooden blocks inside at required places for fixing of fittings and Poly Urethane foam (PUF)/ Polystyrene foam to be used as filler material throughout the hollow panel, casted monolithically with testing parameters of F.R.P laminate conforming to table 3 of IS:14856:2000, complete as per direction of Engineer in charge.	m2	7		
<b>6</b>	<b>FLOORING</b>				
6.1	Providing and laying vitrified floor tiles of thickness 10mm or nearest with water absorption's less than 0.08%and conforming to IS: 15622 of make M/s JOHNSON, KAJARIA, NITCO, SOMANY and as approved by the Engineer in charge in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments complete Basic rate of tile not less than Rs. 865/sqm	sqm	468.56		
	Size of Tile 600x600 mm				

Sl No:	Description	Unit	Quantity	Rate	Amount
6.2	Providing and laying ceramic glazed floor tiles 300x300mm of thickness 7.5mm or nearest of first quality conforming to IS: 15622 of make M/s. JOHNSON, KAJARIA, NITCO, SOMANY and as approved by the Engineer in charge, in colours such as white, ivory, grey, fume red brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement and matching pigment etc.complete Basic rate of tile not less than Rs. 360/sqm	sqm	26.1		
6.3	Providing and laying ceramic glazed wall tiles conforming to IS: 15622 of thickness not less than 5mm and of make M/s. JOHNSON, KAJARIA, NITCO, SOMANY as approved by the Engineer in charge in all colours except burgandy, bottle green, black of any size as approved by Engineer in charge, in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @3.3kg per sqm including pointing in white cement with pigment of matching shade complete Basic rate of tile not less than Rs. 295/sqm	sqm	13.2		
<b>7</b>	<b>PLASTERING</b>				
7.1	12mm cement plaster of mix 1:4 (1 cement : 4 fine sand)	sqm	780		
7.2	6mm cement plaster of mix 1:3 (1 cement : 3 fine sand)	sqm	524.88		
7.3	Supplying and fixing chicken wire mesh of 24 guage including fixing up with etc.at the junction of brick masonry and RCC at all places and levels directed	sqm	34.56		
<b>8</b>	<b>PAINTING</b>				

Sl No:	Description	Unit	Quantity	Rate	Amount
8.1	Providing and applying single coat of water thinnable cement of water cement primer of approved brand and colour to all surfaces such as walls, column etc one coat after scrapping and cleaning the surfaces and providing an even finish to make the water level and smooth including cost and conveyance of all materials, labour etc as directed by engineer in charge at all levels.	sqm	714.82		
8.2	Finishing walls with acrylic smooth exterior paint of required shade:				
	New work( Two or more coat) applied @1.67ltr/10 sqm over and including priming coat of exterior primer applied @2.2 kg/10 sqm	sqm	307.3		
8.3	Painting the interior walls with ready mix plastic emulsion paint of approved quality two to smooth even finish, over a priming coat wall putty including cost and conveyance of all materials to site, labour charges, hire charges for scaffolding etc. complete for all floors	sqm	354.82		
<b>9</b>	<b>MISCELLANEOUS WORKS</b>				
9.1	Providing roofing <b>with GI powder coated</b> sheet including vertical/ curved surface fixed with polymer coated JorL hooks, bolts and nuts 8mm diameter with bitumen and G.I limpet washers or with G.I limpet washers filled with white lead and including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (upto any pitch in horizontal/ vertical or curved surfaces) excuding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.				
	0.8mm thick with zinc coating not less than 275gm/m <sup>2</sup>	sqm	452.3235		

Sl No:	Description	Unit	Quantity	Rate	Amount
9.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	4166		
9.3	Painting on G.S sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:				
	New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution	sqm	452.32		
9.4	Applying a coat of mordant solution on G.S sheet				
	with a solution of 38 gms of copper acetate in a litre of soft water	sqm	452.32		
9.5	Steel work in built up tubular (round, square or rectangular hollow tubes etc) trusses etc. including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc complete	kg	2000		
	Hot finished welded type tubes				

Sl No:	Description	Unit	Quantity	Rate	Amount
9.6	<p>Providing and fixing in position suspended false ceiling using G.I exposed ceiling suspension system of grid size 600mmx600mm/ 1200mmx600mm with main runner 38x24mm, cross tee 29mmx24mm &amp; wall angle 24mmx24mm. Using 6mm thick (High pressure steam cured), pre-painted, self embossed, reinforced designer cement board (Ivory) of Lake and hill/ Oceanic/ Cascade/ Electra texture, conforming to IS 14862:2000, to be placed in a grid of G.I. system duly suspended with 4mm dia G.I/ M.S bar hanger fixed with steel dash fasteners or iron purlins from the roof with adjustment clip providing positions for light fixtures, air conditioning diffuser and ducts, sprinklers, smoke detectors etc. The main runners to be secured to structural soffit by hanger at 1200mm maximum c/c. The last hanger at the end of each main runner should not be placed at more than 450mm from the adjacent wall. Flush fitting 1200mm cross tee to be interlocked between main runners @600mm c/c, so as to form 600mmx600mm or 1200mmx600mm grid. Provide provisions for light fixtures, air conditioning ducts and diffusers, fire alarms, sprinklers or smoke detectors etc. as per the drawing and directions of Engineer in charge.</p>	sqm	410		
9.7	<p>Providing light partitions with powder coated 2.5"x1.5" aluminium sections with double sided laminated hylum sheets 2.8mm thick with necessary rubber beading, clips etc including providing 900 x 1200 mm doors-3 nos, hinges, handles, lock etc complete.</p>	sqm	100.44		
9.8	<p>Providing and fixing emedded plate using 12mm MS plate of size 230mmx230mm with 10 mm dia MS rod lugs etc complete including painting one coat of red oxide primer and two coats of enamel paint.</p>	each	41		

Sl No:	Description	Unit	Quantity	Rate	Amount
<b>10</b>	<b>PLUMBING AND SANITARY WORKS</b>				
10.1	Supplying, laying and jointing hard PVC pipes with specials such as tees, bends, elbows, unions, metal insert specials for fixing fittings etc. with clamps including cutting chases in masonry/ concrete and making good the same. Testing the lines after connecting to mains rectifying any leakages or defects etc complete all as per the direction of Engineer in charge.-				
a	25mm dia (12kg/cm <sup>2</sup> )	M	50		
b	32mm dia(12kg/cm <sup>2</sup> )	M	10		
10.2	Providing and fixing white vitreous china wash basin size 550x400mm, including a pair of 15mm heavy CP brass pillar taps' CP brass wate of standard pattern, including painting of fittings and brackets, cutting and making good the wallsb etc. complete.	each	6		
10.3	Providing and fixing white vitreous china type water closet (European type) with seat and lid, including white duroplastic seat and lid, with CP brass hinges and rubber buffers, 10 litres PVC low level white flushing cistern with fittings and brackets, 40mm dia PVC flush bend over flow pipe with mosquito proof arrangements, 15mm angle valve with PVC connection etc. complete including cutting and making good the walls and floors etc. complete as directed by the Engineer in charge	each	4		
10.4	Providing and fixing approved make CP brass long body tap including CP cup for 15mm dia water lines as directed by Engineer in charge	each	6		

Sl No:	Description	Unit	Quantity	Rate	Amount
10.5	Providing and fixing approved make Health faucet with flexible pipe and wall hook, 1 no: CP brass angle valve of approved make with CP cup as directed by Engineer in charge	each	4		
10.6	Providing and fixing gun metal gate valve with CI wheel of approved quality (screwed end) - 32 mm nominal bore	each	3		
10.7	Supplying and erecting PVC water tank conforming to BIS specifications and ISI marking (Sintex or equivalent of approved make) 1000 litre capacity including cost of erecting the same above toilet roof, cutting holes in the tank for inlet, outlet, overflow pipe etc complete	no	1		
10.8	Providing and constructing brick masonry man hole with 2nd class bricks in cement mortar 1:6 (1 cement : 6 coarse sand) base concrete 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 20mm nominal size) 10 cm thick. inside and outside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a flushing coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) neatly finished complete as per standard design including cost of materials, labour etc complete, inside size 60x60x60cm in plan area including CI cover weight not less than 50kg with frame	each	1		

Sl No:	Description	Unit	Quantity	Rate	Amount
10.9	Supplying and fixing 10mm PVC gully trap for waste lines with brick jelly concrete in lime mortar, necessary brick masonry around, plastering with cement mortar 1:3, 12 mm thick with neat cement flushing coat etc. complete including providing 2 nos heavy CI gratings 150x150mm and 2250mmx225mm inside and outside, painted with black Japan paint two coats, necessary earth work excavation PCC bed etc. complete as directed by the Engineer in charge.	each	4		
10.10	Providing and fixing floor trap of PVC, 110mm outer dia including CP grating as directed by Engineer in charge	each	4		
10.11	Supplying and fixing approved quality and make sanitary fixtures of approved colour				
a	Soap tray	each	4		
b	CP towel rod with end fixtures 600mm	each	4		
10.12	Providing and fixing 600x450 mm bevelled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with CP brass screws and washers complete	each	4		
10.13	Supplying and fixing CI manhole cover with frame 600x600 mm weighing not less than 110kg in concrete slab for manholes in water tanks, slumps etc, including cost and conveyance of all materials, labour charges, sundries etc, complete as directed by Engineer in charge	each	1		
	<b>Total - Civil Works</b>				
	<b>ELECTRICAL WORKS</b>				

Sl No:	Description	Unit	Quantity	Rate	Amount
1	Wiring for light/ fan/ exhaustfan/ call bell point with 1.5 sqmm. FR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit with modular switch, modular plate, step type electronic fan regulator, suitable GI box, and earthing the point with 1.5 sq.mm FR PVC insulated copper conductor single core cable etc as required (Group B)	each	72		
2	Wiring 5A plug point (in combined position) on switch boxes as per above specifications.	each	5		
3	Supplying & fixing following size/modules, GI box along with modular base and cover plate for modular switches in recess etc. as required				
a	3 module(100mmx75mm)	each	2		
b	4 module(125mmx75mm)	each	4		
c	6 module(200mmx75mm)	each	3		
d	8module(125mmx125mm)	each	12		
4	Supplying & fixing following type modular switch/ socket on the existing modular plate and switch box including connection but excluding modular plate etc. as required				
a	5/6A switch	each	5		
b	15/16A switch	each	20		

Sl No:	Description	Unit	Quantity	Rate	Amount
c	3 pin 5/6A socket outlet	each	38		
d	6 pin 15/16A socket outlet	each	2		
e	Telephone socket outlet	each	1		
f	1M blanking plate	each	25		
5	Supplying & fixing follolwing sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required				
a	20mm	m	150		
b	25mm	m	50		
6	supplying & drawing follwing sizes of FR PVC insulated copper conductor, single core cable in the existing surface/recessed PVC conduit as required.				
a	3x1.5 sq.mm	m	50		
b	3x2.5 sq.mm	m	50		
7	Supplying & drawing 2 pair 0.5 sq.mm FR PVC insulated annealed copper conductor, unarmoured telephone cables in the existing surface/recessed PVC conduit as required.	m	25		

Sl No:	Description	Unit	Quantity	Rate	Amount
8	Supplying & drawing CAT6 UTP cable conforming to relevant Standards through the existing conduit	m	120		
9	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
a	2x2.5 sq.mm + 1x1.5 sq.mm earth wire	m	200		
b	2x4 sq.mm + 1x4 sq.mm earth wire	m	100		
10	Supplying & installation of RJ 45 Jack (2 plate modular type) with all accessories mounted in suitable metal box surface/ recessed providing necessary connctions as require and making good the damages to the wall if any	each	12		
11	Providing & fixing 4mm dia copper wire on surface/ in recess along with the existing wiring as required	m	30		
12	Providing & fixing 2mm dia copper wire on surface/ in recess along with the existing wiring as required	m	100		
13	Supplying & fixing 2+8 way pre-wired SP & N MCB DB of steel sheet for 240V on surface/ recess complete with loose wire box, terminal connectors for all incoming and out going circuits, duly pre-wired wth suitable size FR PVC insulated copper conductor upto terminal blocks, pinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, inter connections, powder painted including earthing etc. as required. (But without MCB/RCCB/isolator) [Double DOOR]	each	5		

Sl No:	Description	Unit	Quantity	Rate	Amount
14	Supplying & fixing 4 way double door pre wired vertical type TPN MCB DB of steel sheet for 415 V on surface/ recess complete with loose wire box of sheet steel, dust and vermin proof, duly powder painted, inclusive of 200A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs, terminal connectors for all incoming and outgoing circuits, duly prewired with adequate size of FR PVC insulated copper conductor upto thn terminal connector/ neutral link, earthing etc. as required (But without MCB/RCCB/isolator) [MCCB incomer type VDB]	each	1		
15	Fabrication, supply, conveyance and fixing cable entry/wire way box made out of 1.6mm CRCA sheet of suitable size to match VDB and enabling the cables to be connected without strain, painted with 2 coats of enamel paint over a coat of redoxide primer etc. fixed on surface/recess including giving connections as required.	each	1		
16	Providing & fixing 100A,16 KA MCCB in the existing DB including giving connections etc. as required	each	1		
17	Supplying & fixing 63A,4 pole,415V, 300mA RCCB in the existing DB complete with connections, testing and commissioning etc. as required	each	1		
18	Supplying & fixing 40A,240V, DP isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required	each	5		
19	Supplying & fixing 5A to 32A 240V "C" curve, single pole MCB in the existing DB complete with connections etc as required.	each	25		

Sl No:	Description	Unit	Quantity	Rate	Amount
20	Supplying & fixing 40A TP mini break isolator in the existing DB complete with connections etc. as required	each	5		
21	Supplying & fixing single pole blanking plate in the existing MCB DB as required	each	15		
22	Supply & installation of sheet steel phosphatised and painted, dust and vermin proof 4 pole enclosure mounted with 40A 4 pole MCB ("C" curve) fixed on surface/ recessed complete with connections etc. as required.	each	2		
23	Supplying, laying and clamping of 1 no. PVC insulated and PVC sheathed armoured aluminium power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cm, making good the damages, colour washing etc as required.				
a	4 core 16 sq.mm	m	20		
b	2 core 6 sq.mm	m	80		
24	Supply & installation of suitable size MS belt type fan clamb fabricated from MS flat (2 pieces) as required	each	30		
25	Supply, conveyance, installation, testing & commissioning of pre-wired single 28 W T5 lamp with all accessories and lamps etc. including supplying and fixing ball and socket arrangements on TW round block, suspension down rod of 19mm dia MS conduit upto 2x30 cm length including painting and wiring the down rod with 16/0.2mm 3 core round copper conductor flex wire conforming to relevant ISS or extending the original wiring and giving connections etc. as required	each	16		

Sl No:	Description	Unit	Quantity	Rate	Amount
26	Supply, conveyance, installation, testing & commissioning of pre-wired single 28 W T5 lamp with all accessories and lamps directly on wall and giving connections with 16/0.2mm 3 core round copper conductor, flex wire or extending the original wiring as required.	each	22		
27	Supplying & fixing of wall brackets/ ceiling light fittings with brass holder, 9W CF lamp, connection with required length of 16/0.2mm 3 core round copper conductor flex wire etc as required	each	5		
28	Supply, conveyance, installation, testing and commissioning of 1400mm sweep-5 star ceiling fan using standard accessories excluding resistant type regulator, wiring the down rod with 16/0.2mm 3 core round copper conductor flex wire or with extended original wiring etc. as required	each	29		
29	Supply, conveyance, installation, testing & commissioning of 300/305mm, single phase light duty exhaust fan in metal frame including cutting suitable holes, plastering, colour washing, fixing necessary bolts and nuts, making good the damages, giving connections with required length of 24/0.2mm PVC insulated and PVC sheathed 3 core round copper conductor flex wire etc. as required	each	4		
30	Supplying & providing extra HG conduit down rod of 19mm dia 2x1m long with 16/0.2mm 3 core copper conductor flex wire or with the extended original wiring and giving connections etc including painting as required.	m	16		

Sl No:	Description	Unit	Quantity	Rate	Amount
31	Supplying & providing every additional length of down rod for ceiling fan, heavy gauge GI/WI pipe with 16/0.2mm PVC insulated and PVC sheathed 3 core round copper conductor flex wire or with the extended original wiring etc. including painting as required	each	30		
32	Earthing with GI earth plate 600mmx600mmx6mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 m long etc. with charcoal/ coke and salt as required.	each	2		
33	Supply & laying 6 swg GI wire at 0.5m below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required	m	20		
34	Supply & providing earth lead from the test joint to the earth electrode using 4.75mm (6swg) bare copper conductor including cutting, drilling necessary holes and fixing firmly with plate test joint etc. as required.	m	10		
35	Supply & providing Siemens/ Tropodur type nickel plated single compression brass cable gland for PVC insulated and PVC sheathed armoured aluminium/ copper conductor cable 1.1 KV grade and making and end termination suitable for the following cables including earth clamps.				
a	16 sq.mm. 4 core	each	2		
b	6 sq.mm.2 core	each	10		
36	Supply of superior quality aluminium reducer socket/ tubular socket and making cotermination of cables of the following sizes				

<b>Sl No:</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
a	16 sq.mm	each	8		
b	6 sq.mm	each	30		
	<b>Total ELECTRICAL Works</b>				
	<b>GRAND TOTAL (Civil +Electrical )</b>				