

Name Of Work:- Renovation of A.O. Building at Jetty,Vadinar.

**Schedule - B**

**PART - A Civil Work**

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
1	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead						
1a	.Of area 3 sq. metres and below	317.00			each	each	
1b	.Of area beyond 3 sq. metres	2.00			each	each	
2	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	348.14			m2	One square metre	
3	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.	27.51			m3	One Cubic metre	
4	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in-charge.	6.42			m3	One Cubic metre	
5	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.(a).CC (1:4:8)	0.98			m3	One Cubic metre	
6	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 25 mm to 40 mm	1117.87			m2	One square metre	
7	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	3318.89			m2	One square metre	
8	Brick masonry with common burnt clay F.P.S. ( non modular) bricks of class designation 7.5 in super structure above plinth level upto floor V level in all shapes and sizes in cement mortar (1:6)	17.48			m3	One Cubic metre	
9	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level. In cement mortar (1:4)	11.86			m2	One square metre	
10	Reinforced cement concrete work in walls (any thickness), including attachedb pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :(a)1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	1.12			m3	One Cubic metre	
11	Centering ang shuttering including strutting,propping etc. and removal of form for all height (a).For plinth beams , Lintel ,beam and Coping shuttering	10.29			m2	One square metre	
12	Steel reinforcement for R.C.C. works including strenghtening,cutting, bending,placing in position and binding all complete above plinth level .7(a).Thermo mechanically Treated bars of grade Fe-500D or more	112.00			Kg	One Kilogramme	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
13	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias,drops and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.(a) Granite of any colour and shade - area of slab upto 0.50sqm	612.29			m2	One square metre	
14	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. <b>(a).35 mm thick including ISI marked Stainless Steel butt hinges(heavy weight)with necessary screws</b>	129.38			m2	One square metre	
15	24 mm thick factory made PVC door shutters made of styles and rails of a uPVC hollow section of size 59x24 mm and wall thickness 2 mm ( $\pm 0.2$ mm) with inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm ( $\pm 0.2$ mm) wall thickness, fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter).	15.48			m2	One square metre	
16	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	292.69			m2	One square metre	
17	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) : <b>For shutters of doors, windows &amp; 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).Powder coated aluminium (minimum thickness of powder coating 50 micron)</b>	156.93			Kg	One Kilogramme	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
18	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): With float glass panes of 4.0 mm thickness	11.20			m2	One square metre	
19	Providing and fixing the stainless steel round pipe of 18 gauge staircase railing consiting corner vertical support of 2" dia. Pipe, internal (steps) vertical pipe of 1.5" dia. Pipe and parallel 3nos. Pipes of 0.75" dia. With all fitting, fixtures, screws,nut, bolts, etc. complete as directed by engineer in charge. (Grade of SS- 304 )	25.30			Rmt	One metre	
20	Providing and fixing following aluminium fixtures , 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 :						
20a	sliding door bolts - 250x16mm (Aldrop/latch)	144.00			each	each	
20b	Tower bolts - 200x10 mm	72.00			each	each	
20c	Handles - 125mm	144.00			each	each	
20d	Hanging floor door stopper - Twin rubber stopper	89.00			each	each	
21	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	15.00			each	each	
22	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) 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 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm and Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness. including grouting the joints with white cement and matching pigments etc., complete. (a). size of Tile 600 x 600mm	766.41			m2	One square metre	
23	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.(a). size of Tile 600 x 600mm	766.41			m2	One square metre	
24	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sq.m and Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness including pointing the joints with white cement and matching pigments etc., complete.	29.52			m2	One square metre	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
25	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.(a). size of Tile 600 x 600mm	109.74			m2	One square metre	
26	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer- in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, and Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness including pointing in white cement mixed with pigment of matching shade complete.	185.62			m2	One square metre	
27	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @ 10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer-in-Charge.	579.39			m2	One square metre	
28	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with o1 layer of birla white cement and grey cement slurry @ 3.3kg/sqm including pointing the joints with white cement and matching pigments etc., complete. including rounding off the junction and extending them upto 15cm along the wall including water pond test and clearing with water and oxalic acid etc complete as directed.	579.39			m2	One square metre	
29	Plastering with cement mortar including scrubbing, cleaning, finishing smooth, curing, etc complete.(a). 12mm thick (1:3) with a floating coat a neat cement of mix	422.95			m2	One square metre	
30	Washed stone grit plaster on exterior walls height upto 10 metre above ground level, in two layers, under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand ), furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 Kg of cement per square metre, top layer 15 mm cement plaster 1:1/ 2:2 (1 cement: 1/2 coarse sand : 2 stone chipping 10 mm nominal size), in panels with groove all around as per approved pattern, including scrubbing and washing the top layer with brushes and water to expose the stone chippings ,complete as per specification and direction of Engineer-in- charge (payment for providing grooves shall be made separately).	142.77			m2	One square metre	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
31	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge :15 mm wide and 15 mm deep groove	282.34			Rmt	One metre	
32	Providing textured plaster on exterior walls height upto 10 metre above ground level, in two layers, under layer 20 mm cement plaster 1:4 (1 cement : 4 coarse sand ), all around as per approved pattern complete as per specification and direction of Engineer-in- charge	879.96			m2	One square metre	
33	Providing and applying on wall exterior of Heritage surface texture granules finish of Bakelite Hylam Limited (No.21-3005, 3006, 3007, 3008, 3013, 3014, 3015 and 3016). trowelled over 20 mm thick mala plastered (Two coat of 12 mm in CM 1:3 & 8 mm coat in CM 1:1) sub strata to get an average finish coat thickness of 0.08 to 1.2 mm comprising of three components viz. Dry granules, Granules, bonding agent and top coat of glossy finish (Dry granules shall be made from Silica sand, pigments, chiefly inorganic) homopolymer emulsion mix etc, of Bakelite Hylam product banding agent made of acrylic copolymer emulsion, broad spectrum fungicide of Bakelite Hylam product etc and top coat made from solvent based acrylic polymer of Bakelite Hylam product including scaffolding.	484.53			m2	One square metre	
34	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) and a top layer 6 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge.	1068.74			m2	One square metre	
35	Finishing walls with Premium Acrylic Smooth exterior paint of required shade :New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	1068.74			m2	One square metre	
36	Providing and applying white cement based putty of average thickness 1 mm,of approved brand and manufacturer, over the plastered wall surface with removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	5455.36			m2	One square metre	
37	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications : 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	6280.96			m2	One square metre	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
38	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with : (a).12.5 mm thick tapered edge gypsum moisture resistant board	825.60			m2	One square metre	
39	Proving and fixing 8 to 10mm thick stainless steel sheet (304) with CNC cutting as per Architect design and instruction of site incharge including all necessary fittings. Etc Complete.	139.58			m2	One square metre	
40	Providing and fixing Structural Glazing with using the 17 Micron anodised of approved colour alluminium section as transium, mullium of size 63.5mm x 38.1mm x 2 mm with using 5 mm thick reflective structural glass and fixed with silicone sealant and spacer tap and at corner sealed neoprene foam dust and Air sealed gasket mirred including scaffolding etc.complete with all necessary fitting and fixtures for openable window as per Architectural drawing and as directed by EIC	201.39			m2	One square metre	
41	Providing and applying of swellable type water stop tape, <u>(Width 0.30m x 25mm thick required to consider as per site )</u> 19mm x 25mm thick in linear meter (expansive nature) for construction joints treatment of RCC structure such as raft slab, retaining walls, water storage tank and at the junctions of raft slab with the retaining walls etc.. After cleaning the surface, one coat of required primer for swellable water stop tape shall be applied throughout the length of the joint @3.78 litre per 240 running meter. Over the primed surface swellable type water stop tape shall be placed. 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.	99.48			m2	One metre	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	

## **PART - B Plumbing Work**

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
1	Dismantling W.C. Pan / W.B./ Gryser /Urinal/mirror of all sizes including disposal of dismantled materials i/e malba all complete as per directions of Engineer-in-Charge.	17.00			each	each	
2	Dismantling 15 to 40 mm dia G.I. pipe/rain water pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer-in-Charge.(a) Internal Work- Exposed on wall	505.00			m	metre	
3	Disconnecting damaged overhead/terrace PVC water storage tank of any size from water supply line and removing from the terrace including shifting at ground level as per direction of Engineer-in-charge.	6.00			each	each	
4	Providing and fixing Coloured vitreous china pedestal type water closet (European type ISI marked) with coloured solid plastic seat and lid (other than black & white),8mm dia. C.P./S.S. jett with flexible tube upto 1metre long with S.S. triangular plate to EWC and P & Fixing G.I./CPVC inlet connection for flush pipe connecting with W.C.Pan (for concealed flush valve 25mm dia.(make Plumber model no.UT-6601),Angle Cock Two - way with wall flange 15mm dia. Make Plumber (model no. AZT-2155),Bidet spray "italian" with C.P.Make Plumber (model no. 1904M) etc cutting and making good the walls and floors wherever required including all labours and material as directed by Engineer in charge :(a).E.W.C. pan(Coloured) with ISI marked Coloured solid plastic seat and lid & all necessary accessories	3.00			each	each	
5	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 including 32mm dia.flexible pvc waste pipe,15mm dia.C.P. brass stop cock (Concealed)of approved quality IS:8931,15mm dia. and 45cm long Unplasticised PVC Connection pipe with brass union etc as directed by Engineer in charge: (a) White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps & all accessories	3.00			each	each	
6	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm 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 : (a).Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern	1.00			each	each	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
7	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required including 32mm dia.flexible pvc waste pipe,15mm dia.C.P. brass stop cock (Concealed)of approved quality IS:8931,15mm dia. and 45cm long Unplasticised PVC Connection pipe with brass union and 15mm dia. C.P. brass long body bib cock of approved quality as per IS wt. 690 gms etc as directed by Engineer in charge::(a). Kitchen sink without drain board - Size 610x460mm bowl depth 200mm & all accessories	1.00			each	each	
8	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :15 mm nominal bore	3.00			each	each	
9	Providing and fixing C.P. brass stop cock(concealed quarter turn) of standard design and of approved make conforming to IS:8931.(a). 15 mm nominal bore (make Plumber model no.UF- 0415 or equivalent)	2.00			each	each	
10	Providing and fixing gun metal non- return valve of approved quality (screwed end) :						
	(a). 25 mm nominal bore - Horizontal	1.00			each	each	
	(b). 25 mm nominal bore - vertical -	3.00			each	each	
	(c). 40/25 mm nominal bore - Horizontal	7.00			each	each	
	(e). 40 mm nominal bore - vertical	2.00			each	each	
	(f). 50 mm nominal bore - Horizontal	1.00			each	each	
11	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : (a).25 mm nominal bore	4.00			each	each	
12	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.(a). <b>External work -</b>						
(a)	50mm nominal outer dia Pipes - For Water supply	65.00			m	metre	
(b)	150mm nominal outer dia Pipes - For SWD (Below G.L.)	190.00			m	metre	
(c)	100mm nominal outer dia Pipes - For SWD (On Wall)	83.00			m	metre	
(d)	75mm nominal outer dia Pipes - For SWD/rain water (On Wall)	273.60			m	metre	
13	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. <b>Internal work - Exposed on wall</b>						
(a).	40m nominal outer dia Pipes - For Water supply	92.00			m	metre	
(b)	25mm nominal outer dia Pipes - For Water supply	67.00			m	metre	



It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
14	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. <b>Concealed work</b> , including cutting chases and making good the walls etc.						
(a)	25mm nominal outer dia Pipes - For Water supply	44.00			m	metre	
(b)	15mm nominal outer dia Pipes - For Water supply	9.00			m	metre	
15	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :						
(a)	<b>Inside size 90x80 cm and 45 cm deep</b> 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) :With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	21.00			each	each	
16	Extra for depth for manholes :						
(a)	Size 90x80 cm - With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	5.00			m	metre	
17	Providing and fixing square-mouth S.W. gully trap class SP-1 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: <b>150mm x 100mm size P type (with Common burnt clay F.P.S (non modular) bricks of class designation 7.5</b>	3.00			each	each	
18	Providing and fixing 100 mm sand cast Iron grating for gully trap.	10.00			each	each	
19	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	3.00			each	each	
20	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but with fittings and without the base support for tank.(a).Circular tank (2000 litres)	12000			per lit	per lit	

## **PART - C Site Development work**

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
1	<b>Lawn</b> : Grassing with 'Carpet' grass (selection no. 1) 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 moving including supplying good earth if needed.(The good earth shall be paid separately) With grass Turf	1780.00			smt	smt	
2	<b>Hedge</b> : Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with farmyard manure, supplied at the rate of 4.65 cum per 100 metres and supplying and planting hedge plants at 30 cm apart.	250.00			rmt	rmt	
3	<b>Ground Cover Plants</b> : Supply and planting following in poly bags / earthen pots well branched, well established & free from disease of 300 mm min. height ground covers at site in 0.3 m dia holes, 0.3 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, backfilling the hole watering etc as required. Wedelia trilobata ( SunFlower Family)	90.00			sqm	sqm	
4	Alternanthera green (Parrot Leaf)	90.00			sqm	sqm	
5	<b>Shurbs</b> : Supply and planting following in poly bags / earthen pots well branched, well established & free from disease of 600 mm min. height shurbs at site in 0.45 m dia holes, 0.45 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, backfilling the hole watering etc as required. Rhaphis excelsa with 3-4 suckers ( Lady Palm)	20.00			each	each	
6	Phoenix sylvertris ( Date Palm)	20.00			each	each	
7	Supply and planting following species best quality container grown healthy trees of 2 mt. min. height, well established & free from disease at site in 0.90 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, backfilling the hole watering etc as required. Plumeria alba ( Champa)	20.00			each	each	
8	Gulmohar(Delonix regia)	20.00			each	each	
9	Bauhinia blakeana (Arckid)	20.00			each	each	
10	Quis quallis indica ( Madhu Malti)	20.00			each	each	
11	Vernonium ( Parda Bel)	20.00			each	each	
12	Bougain villea	20.00			each	each	
13	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. - All kinds of soil.	33.60			m3	Cubic metre	
14	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	4.80			m3	Cubic metre	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
15	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: designation 7.5 in foundation and plinth in: Cement mortar 1:4 (1 cement : 4 coarse sand)	32.64			m3	Cubic metre	
16	Providing and laying in position cement concrete of 1:1½:3 grade consisting of ingredient of cement, sand and crushed graded trap stone metal etc including deposition, consolidating, leveling, curing etc complete upto plinth level, excluding the cost of centering, shuttering.	2.72			m3	Cubic metre	
17	Centering and shuttering including strutting, propping etc. and removal of form for all height	16.07			m2	square metre	
18	12 mm cement plaster of mix : 1:4 (1 cement: 4 fine sand) as directed by Engineer in charge.	155.74			m2	square metre	
19	Finishing walls with Premium Acrylic Smooth exterior paint of required shade : New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	155.74			m2	square metre	

#### **PART - D Furniture work**

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
1	Steel slotted angles Racks size 1990 x 915 x 380 mm with five partition makes four shelves 18/20 gauge heavy duty, spray paints	59			each	each	
2	Storage Unit SDU 12 Metal Door Partition Models : 1200 mm (W) x 450 mm (D) ; Center Partition with half shelves on each side. VSDU12 (1167.5 mm H); Construction & Material, : Rigid Knock down construction. ; Prime Quality CRCA Steel – 0.8 mm Thick ; Sliding Door Arrangement- Sliding Door with top hanging arrangement to prevent derailment., Each door provided with 2 Plastic roller having steel ball bearing for smooth movement of door & less noise.; Locking & handle : Snap on type aesthetically appealing die cast 5 Lever Cam lock for safe locking. Plastic flush & recessed handle ; Shelving : Height wise Adjustable Shelf Mounting.; Uniformly Distributed Load Capacity per each maximum for half shelf it is 40 Kg. VSDU 12 – 4 Nos. of Adjustable Half Shelves; Leveler -Screw type leveler with hex plastic base (add in unit height min. 8mm & additional 5 mm max for adjustment); Finish- Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10).	47			each	each	
3	Office Table : (size 1525 x 915 x 750 mm) with pre laminated particle board with STD fitting & lock one side 3 drawers and Steel filing cabinet 4 drawers unit with central locking system size 1400 x 460 x 690 mm ( KB 210+ KB 108 A )	31			each	each	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
4	<b>Main Desk in Reception Area</b> Rubber Wood Top-Clean matt PU finish 18mm thick(Inside radius - 700.0 mm,Outside radius – 1350.0 mm,Depth – 650 mm); Cork- Rubberized cork – 18mm thick ; Glass- Frosted Glass 10mm thick Diamond cut finishing on edges, (Inside Radius – 1202.5mm , Outside radius – 1402.5mm, Depth – 200mm)- Modesty Panel-MS Perforated sheet, Below Worksurface : 0.8 mm (thick) x 665.0 mm (height) x 1345.0 mm (flat length),Above Worksurface : 0.8mm (Thick) x 260 mm (height) x 1345.0 mm (flat length); Legs- MS tube 1.6 mm thick, Diameter 50.8 mm, Height 604 mm. (KB 303)	15			each	each	
5	<b>Main Table with Side Unit</b> Proving & Fixing 5 ft Table having top and side panel 25mm thick plain particle board(PPB) clad with 0.6 mm thick post formed laminate and 1mm thick backing laminate (BDL). Flat edge duly sealed with 2mm thick PVC beading and modesty panel of 18mm thick plain particle board(PPB) clad with 1.0mm thick decorative laminate(DL) on both sides. Edge sealed with 2mm thick PVC beading with Side Unit with 25mm thick plain particle board(PPB) clad with 0.6 mm thick post formed laminate and 1mm thick backing laminate (BDL). Flat edge duly sealed with 2mm thick PVC beading and 18mm thick plain particle board(PPB) clad with 1.0mm thick decorative laminate(DL) on both sides. Edge sealed with 2mm thick PVC beading.also do as per drawings.	27			each	each	
6	Table Providing and constructing confarence table of size 27mt x 0.90mt x 0.75mt , made out of 19mm thk 7160 1976 BWP marine ply finished with all exposed (external) surfaces shall be 1.5mm thk laminate of approved make and shade. The table top edges shall be 38mm thk with 5mm chamfer as per detail drawing. All plys shall be fixed with proper architectural joinery and with required screws. The table base shall have plastics buffers.All as per detail drawings and approvals.	2			each	each	
7	<b>Visitor Chair Visitor</b> Chair Proving & Fixing Greenguard certified chair Product size : 61.4 cm W*64.5 cm D*89.5 cm H*46.5 cm seat height , Seat/Back Assembly : The Seat and back are made up of 1.2 +/- 0.1 cm. Thick hot pressed plywood measured and upholstered with the fabric upholstrey covers and moulded polyurethane foam. The back foam is designed with contoured lumber support for extra thick foam on front edge to give comfort to popliteal area. High Resilience(HR) Polyureethene Foam: The HR polyurethane foam is moulded with density 45 +_ 2 kg/m3 and hardness load 16 +_ 2 kgf as per IS: 7888 for 25% compression. Armrests : The one piece armrests are injection moulded from black Co-polymer polypropylene. Tubular Frame: The powder coated tubular frame is cantilever type & made of 2.54+ _ 0.03 cm (dia) x 0.2 + _ 0.016 cm (thk). M.S.ER.W. Tube. The rate shall include all materials, hardware and labour etc. The rate shall include all materials, hardware and labour etc. complete as per instruction of engineer-in charge and consultant.	212			each	each	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
8	<b>Mid Back Chair</b> Medium back chair Proving & Fixing Greenguard certified chair - Product back size : 47.5 cm(W) x 58.0 cm (H) , Seat/Back Assembly : The Seat and back are made up of 1.2 +/- 0.1 cm. Thick hot pressed plywood measured and upholstered with the fabric upholstrey covers and moulded polyurethane foam. The back foam is designed with contoured lumber support for extra thick foam on front edge to give comfort to popliteal area. High Resilience(HR) Polyureethene Foam: The HR polyurethane foam is moulded with density 45 +_ 2 kg/m3 and hardness load 16 +_ 2 kgf as per IS: 7888 for 25% compression. Armrests : The one piece armrests are injection moulded from black Co-polymer polypropylene. Centre – Tilt Synchro Mechanism: The mechanism is designed with following features : 360 degree revolving type. Upright position locking. Tilt tension adjustment. Seat/Back tilting ratio of 1:3. Tubular Frame: The powder coated tubular frame is cantilever type & made of 2.54+_ 0.03 cm (dia) x 0.2 +_ 0.016 cm (thk). M.S.ER.W. Overall size-763W*763D*855-975H*425-545SH mm. Tube Pnematic height Adjustment: The pneumatic height adjustment has an adjustment stroke of 12.0 +_ 0.3 cm. Telescopic Bellow Assembly : the bellow is 3 piece telescopic tyoe and injection back in polypropylene. Pedestal Assembly : The pedestal is injection moulded in black 33% glass-filled Nylon-66 and fitted with 5 nos. Twin wheel castors. The pedestal is 66.3 +_ 0.5 cm. Pitch-center dia.(76.3 +_ 1.0 cm with castors). Twin Wheel Castors : The twin wheel castors are injection moulded in black nylon. Tube Pnematic height Adjustment: The pneumatic height adjustment has an adjustment stroke of 12.0 +_ 0.3 cm. The rate shall include all materials, hardware and labour etc. The rate shall include all materials, hardware and labour etc. complete as per instruction of engineer-in charge and consultant.	33			each		
9	<b>High Back Chair</b> Supplying and Fixing High Back Greenguard Chair Providing Revolving Chair of size 760mm W x 760mm D x 850-970 mm H. The seat & back made from 1.2cm thick hot pressed plywood and upholstered with frabic and moulded polyurethane foam. The back foam is deigned with contoured lumber support for extra comfort. The Seat Size: 470mm W X 480mm D and Back Size 470mm W x 695mm H. The HR polyurethane foam is moulded with density of 45 +/- 2 kg per meter cube and hardness load of 16 +/- 2 kgf as per IS 7888 for 25% Compression. The chair should be Greenguard certified. The Armerest should be of one-piece armrest are fitted to the seat are injection moulded black copolymemer. There should be a synchrnous tilt mechanism designed with 360 degree revolving type and upright locking. There should be gas lift having Height adjustment of stroke of 120mm. Below should have 3 piece telescopic type and injection moulded in black Polypropylene. The ped should be injection in black 30% glass-filled nylon and with 5 twin wheel castors in injection moulded type of balck nylon. The ped of 660mm +/- 5mm pitch-center dia.	16			each		

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
10	Sofa 3 seater Proving & Fixing 3 seater - Size: 183.0cm(W) x 77.5cm(D) x 74.5cm(H), Seat height (SH): 41.5 cm. LH/RH Side Frame: The LH/Rh side frame is fitted to the two ends of the seat/back mounting frame to form the leg assembly. It is made of SS J4 Grade tube Dia 4.44cm x 1.5mm thick. Seat/Back mounting Frame: the seat/back mounting frame assy. Holds the two side frames together. The mounting frames 2 nos. Are used to connect the side frames. The mounting frame is made of MS. E.R.W. Tube 5.08+ _0.03cm(dia) x 3.15+ _0.0252cm(thk) black painted.The seat/back is mounted on 4.0+ _0.03cm x 2.0+ _0.02cm x 0.2+ _0.016cm M.S. Rectangular tube which is welded on the beam of seat/back mounting frame. Seat/back Assembly : The Seat/back Assemblyconsists of 1.2+ _0.1cm thk plywood insert with polyurethane foam having density 45 +_ 2 kg/m3 and the hardness of the P.U. Foam = 18 to 22 kg on Hampden m/c for 25% compression of the foam. The complete moulded seat/back assembly is covered with a replaceable fabric upholstrey. The rate shall include all materials, hardware and labour etc. complete as per instruction of engineer-in charge and consultant.	6			each		
11	Sofa 1 seater Proving & Fixing 1 seater - Size: 100.0cm(W) x 77.5cm(D) x 74.5cm(H), Seat height (SH): 41.5 cm. LH/RH Side Frame: The LH/Rh side frame is fitted to the two ends of the seat/back mounting frame to form the leg assembly. It is made of SS J4 Grade tube Dia 4.44cm x 1.5mm thick. Seat/Back mounting Frame: the seat/back mounting frame assy. Holds the two side frames together. The mounting frames 2 nos. Are used to connect the side frames. The mounting frame is made of MS. E.R.W. Tube 5.08+ _0.03cm(dia) x 3.15+ _0.0252cm(thk) black painted. The seat/back is mounted on 4.0+ _0.03cm x 2.0+ _0.02cm x 0.2+ _0.016cm M.S. Rectangular tube which is welded on the beam of seat/back mounting frame. Seat/back Assembly : The Seat/back Assemblyconsists of 1.2+ _0.1cm thk plywood insert with polyurethane foam having density 45 +_ 2 kg/m3 and the hardness of the P.U. Foam = 18 to 22 kg on Hampden m/c for 25% compression of the foam. The complete moulded seat/back assembly is covered with a replaceable fabric upholstrey. The rate shall include all materials, hardware and labour etc. complete as per instruction of engineer-in charge and consultant.	6			each	each	
12	Center Table Provinding Center Table 1120mm W 600m D and 351cm H Center tabel glass to be 12mm thick black tinted Toughened Glass UV glued with bushes made in SS 202 Grade fro fixing with understructure. Understructure welded Assembly made in SS 202 grade having DIA 12 mm +/-0.04mm as per IS 1762	4			each	each	
13	Providing and fixing Storage Cabinet of 1.8 x 2.2 X .45 m made by 2 Shutters of 19mm thick ply with laminate finish, inside 0.8mm laminate with, inside 2 Drawer with Telescopic Slides,S.S. Handle, Lock & Dressing Counter made by of 18.mm thick ply with laminate finish, inside 0.8mm laminate 2 Drawer with Telescopic Slides,S.S. Handle, Lock & as per Design, all the edges as directed Hardware fixtures as per specification & detail drawings.(square measurement will be consider of the top surface only)	6			each	each	

**(Part - E) Electrical work**

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
1	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed.	355			Ea	Ea	
2	Point wiring for Two Way Controlled Light Point with 2-1.5 sq.mm & earthwire of 1.5 sq.mm (green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in / flushed on wall / ceiling complete with 6A Tissino Type ISI marked accessories with earth continuity erected on Metal/PVC box covered with 3 mm thick PC(Polycarbonet) / Acrylic sheet. with necessary Lamp holder/ ceiling rose/ H.D.Connector as directed. <b>(a) with medium class Rigid PVC pipe and accessories</b>	10			Ea	Ea	
3	Point wiring for <b>FAN</b> with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch and hum free EME four or more step type electronic fan regulator with separately mounted and accessories with earth continuity of following type erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed.	57			Ea	Ea	
4	Point wiring for Individual Plug with & earthwire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of to be erected concealed in / on surface of wall / ceiling complete with Modular type switch & 5 pin Plug erected on PVC / Metallic box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. ,___ <b>[I] For 6A Plug with 2-1.5 sq.mm Cu. Wire, (a) with medium class Rigid PVC pipe and accessories Cat. III</b>	102			Ea	Ea	
5	Point wiring for Individual Plug with & earthwire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of to be erected concealed in / on surface of wall / ceiling complete with Modular type switch & 5 pin Plug erected on PVC / Metallic box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories.,___ <b>[II] For 16A Plug with 2-2.5 sq.mm Cu. Wire, (a) with medium class Rigid PVC pipe and accessories Cat. III</b>	39			Ea	Ea	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
6	Providing and erecting following type of Modular Type Accessories mounted with pvc / metallic box (concealed) open box with single mounting base frame covered with textured / metallic/white front plate , modules erected with necessary connection. As desired by Engineer In charge <b>(22) 16/20/25 Amp. 2 pole MCB for AC Unit</b>	51			Ea	Ea	
7	Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate , modules erected with necessary connection. As desired by Engineer In charge. <b>(19) Modular Indicating Call Bell Cat.III</b>	3			Ea	Ea	
8	Providing & erecting <b>Switch board for Computer or electric apparatus</b> consisting of following modular type accessories mounted with PVC / Metallic concealed/open box with single mounting base frame covered with textured/metallic /white front plate,modules erected with necessary connections as directed 1 no. 6A/16A plug 6A/16A Switch. 3 nos. 6A Switch 3 nos. 6A 5 pin Plug	82			Ea	Ea	
9	Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate , modules erected with necessary connection. As desired by Engineer In charge.__ <b>(7) Blank Plate Single Cat.III</b>	50			Ea	Ea	
10	Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate , modules erected with necessary connection. As desired by Engineer In charge,__ <b>(3) Two Pin/RJ-11 Telephone Socket [A] For One Gang</b>	66			Ea	Ea	
11	Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate , modules erected with necessary connection. As desired by Engineer In charge,__ <b>(4) TV Co-axial Socket outlet cat.III</b>	5			Ea	Ea	
12	Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate , modules erected with necessary connection. As desired by Engineer In charge,__ <b>(5) Electronic hum Free four or more steps EME Fan regulator cat.III</b>	57			Ea	Ea	
13	Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate , modules erected with necessary connection. As desired by Engineer In charge,__ <b>(8) Modem Jack for Computer Open RJ-45 Cat.III</b>	82			Pt	Pt	



It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
14	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected <b>concealed in /flushed on wall/ceiling</b> , with <b>1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth</b> continuity of following size (a) with medium class Rigid PVC pipe and accessories (a) 2 wire 1.5 sq. mm	6615			Mtr	Mtr	
15	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected <b>concealed in /flushed on wall/ceiling</b> , with <b>2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth</b> continuity of following size (a) with medium class Rigid PVC pipe and accessories (a) 2 wire 2.5 sq. mm	3440			Mtr	Mtr	
16	Providing and erecting ISI mark Medium class <b>RIGID PVC PIPES</b> of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (B) 25mm dia	1500			Mtr	Mtr	
17	Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size,___ <b>(a) with medium class Rigid PVC pipe and accessories,___ (a) 2 wire 4 sq. mm</b>	200			Mtr	Mtr	
18	Supplying & erecting approved make LAN cable of following size in existing pipe as per direction <b>[c] CAT - 6</b>	3000			Mtr	Mtr	
19	Providing & Erecting approved make following size of TV Co-axial flexible cable comprising inner conductor of solid bare copper insulated with Foam PE & Secondary conductor made of poly - Aluminium film bonded Al. Braids @ suitable coverage overall sheathed with black PVC insulation.___ <b>e).RG-11</b>	200			Mtr	Mtr	
20	Supplying and erecting 19 / 20 mm. nominal bore Medium Class M.S. Pipe down rod erected duly painted for fan complete with necessary 24/ O.20, 3 core flexible wire with earthing.	34			Mtr	Mtr	
21	Supplying & erecting Fan Hook of 10 mm M.S. Round bar grouted in RCC slab with Making the site as original.	57			Ea	Ea	
22	Providing 2.5mm.thick laminated acrylic sheet to cover the fan hook or Fan box.	57			Ea	Ea	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
23	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA polyester powder coated and high U.V. & corrosion resistance with diffuser and/or Polycarbonate optics with company mark/name __ 120 to 300 V,Power Factor more than 0.9, THD < 10 %,__ CCT 4000 K to 6500K, Uniformity ratio >0.7, Luminaire efficiency> 85 lumens/watt,__ LED driver efficiency > 85 %__ CREE / OSRAM / PHILIPS Lumileds / NICHIA / SEOUL/Bridgelux(U.S.A.) make LED used for luminaire. (Each fitting__ <b>required LM-79 &amp; LM-80 Certificates)</b> __ <b>(A) Tube Light with integral/ non-integral driver</b> __ <b>(d) 20-22 Watts, Surge - 4KV,IP-20, 4 feet Cat-III</b>	4			Ea	Ea	
24	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA polyester powder coated and high U.V. & corrosion resistance with diffuser and/or Polycarbonate optics with company mark/name,__ 120 to 300 V,Power Factor more than 0.9, THD < 10 %,__ CCT 4000 K to 6500K, Uniformity ratio >0.7,__ Luminaire efficiency> 85 lumens/watt,__ LED driver efficiency > 85 %,__ CREE / OSRAM / PHILIPS Lumileds / NICHIA / SEOUL/ Bridgelux (U.S.A.) make LED used for luminaire. (Each fitting required LM-79 & LM-80 Certificates)__ <b>(C) Square/ Circular Surface/Recessed Mounted Downlight with provision for spring loaded mounting clips complete.</b> __ <b>(C) 20-24 watts, Surge-4 KV Cat-III</b>	35			Ea	Ea	
25	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA polyester powder coated and high U.V. & corrosion resistance with diffuser and/or Polycarbonate optics with company mark/name__ <b>120 to 300 V,Power Factor more than 0.9, THD &lt; 10 %,__ CCT 4000 K to 6500K, Uniformity ratio &gt;0.7,__ Luminaire efficiency&gt; 85 lumens/watt,__ LED driver efficiency &gt; 85 %,__ CREE / OSRAM / PHILIPS Lumileds / NICHIA / SEOUL/ Bridgelux (U.S.A.) make LED used for luminaire. (Each fitting required LM-79 &amp; LM-80 Certificates) (B) LED Lamps integral type,cool white with PC diffuser suitable for B22 LAMP holder (b) 5 to 8 watts</b>	15			Ea	Ea	
26	Supplying & erecting approved make low noise decorative exhaust fan having size 200mm with 1350 RPM with square frame ABS body with inbuilt lowers & square frame.	22			Ea	Ea	
27	Miniature circuit breaker single pole 6A to 32A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark <b>Cat. III</b>	179			Ea	Ea	
28	providing and erecting Approved make <b>ELCBs / RCCBs</b> conforming to IS: 12640 and having sensitivity of <b>30 mA</b> and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed 40 AMPS DP	15			Ea	Ea	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
29	Plastic enclosure fitted with DIN rail suitable for incorporating <b>Three /Four nos. MCB</b>	5			Ea	Ea	
30	Sheets steel powder coated enclosure suitable for incorporating <b>One/Two nos. MCB.</b>	5			Ea	Ea	
31	Providing and erecting <b>Sheet Steel powder coated MCB distribution board - flush / surface</b> mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for Double door three phase : 12way TPN DD DB	4			Ea	Ea	
32	Providing and erecting <b>Sheet Steel powder coated MCB distribution board - flush / surface</b> mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for Double door three phase : 8way TPN DD DB	1			Ea	Ea	
33	Providing and erecting Sheet Steel powder coated <b>Vertical</b> MCB distribution board ( <b>VTPN</b> ) - flush / surface mounted double door (IP54) fitted with insulated copper busbar, isolated neutral link, earth bar and DIN rail, confirming to IS 13032 and BS 5486-1986,IP-54 <b>suitable for 250 AMP TPN MCCB + RCCB as incomer and three phase outgoing as per following .(The DBs should be used of same company of MCB to be used) : 12way VTPN DD DB</b>	2			Ea	Ea	
34	Providing & erecting <b>415 V MCB three Pole for Motor &amp; Inductive Load (C Curve)</b> having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity : 10A TP MCB	2			Ea	Ea	
35	Providing & erecting <b>415 V MCB three Pole for Motor &amp; Inductive Load (C Curve)</b> having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity : 20A TP MCB	2			Ea	Ea	
36	Providing & erecting <b>415 V MCB three Pole for Motor &amp; Inductive Load (C Curve)</b> having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity : 40A TP MCB	1			Ea	Ea	
37	Providing & erecting <b>415 V MCB three Pole for Motor &amp; Inductive Load (C Curve)</b> having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity : 63A TP MCB	1			Ea	Ea	
38	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity <b>(b)40 Amp.</b>	4			Ea	Ea	
39	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity <b>(c)63 Amp.</b>	9			Ea	Ea	
40	providing and erecting Approved make <b>Four pole moulded case circuit breaker</b> having breaking capacity <b>ICU of 35 KA.</b> and above at 415 V . having normal current rating <b>250A.</b> with <b>variable thermal &amp; magnetic release</b> suitable to work on A.C.supply 50 c/s. with all internal connections & complete erected in existing 16 G.M.S. housing.	2			Ea	Ea	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
41	providing and erecting Approved make <b>Four pole moulded case circuit breaker</b> having breaking capacity ICU of <b>25 KA. at 415 V</b> ,having normal current rating up to <b>25 A to 100A.</b> with <b>Fixed thermal &amp; magnetic release</b> suitable to work on A.C. supply 50 c/s. with all internal connections & complete erected in existing 16 G.M.S. housing.	2			Ea	Ea	
42	Providing and fixing printed <b>instruction chart</b> both in English and Gujarati and duly framed with front glasses, for treatment of person suffering from Electric shock with minimum 50" diagonally size.	1			Ea	Ea	
43	Providing and erecting Annealed bare Copper wire 8 to 16 SWG.	2			Ea	Ea	
44	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	2			Ea	Ea	
45	Supplying & erecting in earthpit of minimum bore dia. 225mm size ASH or approved make Safe Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free G.I.Pipes having Outer pipe dia of 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications... <b>[B] For Electrical installation up to 11 KV located in other than normal soil i.e. Soft Rock, Marshy Soil etc.</b> <b>-Length of Pipe : 2 mtr</b> <b>-Back filling Compound :1 no. Bag of 25 Kg.</b>	2			Kg	Kg	
46	Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size with required size of copper lugs, nuts and bolts if required. <b>__(e) One wire 6.00 sq. mm</b>	20			Kg	Kg	
47	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables <b>(C) 4 core 10 Sq. mm</b>	70			Ea	Ea	
48	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables <b>__(d) 4 core 16 Sq. mm</b>	60			Mtr	Mtr	
49	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables <b>(C) 3 1/2 core 95 Sq. mm ( 50 Sq. mm 1/2 core)</b>	30			Mtr	Mtr	
50	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. <b>(d) 2 to 4 core 10 Sq. mm</b>	10			Mtr	Mtr	
51	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. <b>(e) 2 to 4 core 16 Sq. mm</b>	10			Mtr	Mtr	
52	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. <b>(C) 3 &amp; 1/2 core 95 Sq. mm</b>	5			Mtr	Mtr	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
53	Solderless crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner.__(B) 10 Sq.mm	40			Ea	Ea	
54	Solderless crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner.__(C) 16 Sq.mm	40			Ea	Ea	
55	Solderless crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner.__(F) 95 Sq.mm	15			Ea	Ea	
56	Solderless crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner.__(D) 50 Sq.mm	5			Ea	Ea	
57	Solder less crimping type <b>Copper lugs conforming to IS</b> suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. --(F) 70 Sq.mm	8			Ea	Ea	
58	(B) locally fabricated panel board (ii) With 550 mm. Depth	1			Ea	Ea	
59	Supplying & erecting Digital / PCM / TDM EPABX System having SMT design, system with flexible universal slots, Inbuilt Auto attendant facility, Minimum 15 Nos. conference, Analog extension line, Calling GSM, E&M line, PRI / E1 & VOIP program me through Analog telephone digital key from Ethernet, public address cord, shall have unrestricted simultaneous dialling facility, QSIG protocol on PRI, 95 / STD / ISD / Local- Locking ,Class of Service, Quick Dial- Single Digit dialling of any two external numbers, Once only ring device, Boss/Secretary- Do not Disturb Facility, Power Down Mode, Hot Line, Hot Outward Dialling, Day Night Mode, Auto Call Back, Barge-in, Call Pick Up & Call Transfer, Call transfer while Ringing. With Voice Guide System, (DISA), Caller ID (CLI), CLI Base ECF,CLI Base routing Internet Ready Port, External Music Port, Call Budgeting, Call Most Calculation(ASMDR), DID Direct Inverse Dialling, External Music Input, Fax Homing, Global Directory Printing. with following capacities <b>[B] No of Extension 24, No of Junctions 8, No of expandable ports:96, Operators Console - 01 Compatible: ISDN</b>	1			Ea	Ea	
60	Supplying & erecting approved make of <b>2 MP Dome type</b> Camera with specification of 2MP CMOS Image Sensor,H.264+ and H.264 Dual Video Stream Encoding,H.264+ provides bandwidth savings,Real Time 1080P Video Stream for Recording,30 fps at 1080P (1920 x 1080),3.6mm Fixed Lens for 83° angle of view,Up to 100ft of infrared night vision,Smart IR for intelligent IR intensity control,___ DWDR, IR Cut Filter (ICR), 3D Noise Reduction,Built in Web Server,___ IP67 Weather Proof for outdoor use,12VDC or PoE power input.	9			Ea	Ea	
61	Supply and erecting aproved make of 4 TB Hard Drive.	1			Ea	Ea	
62	SITC of <b>Patch Panel UTP Keystone- 24 Port- Unloaded (Cat 5e,Cat 6 &amp; Cat 6 A )</b>	4			Ea	Ea	
63	SITC of <b>CAT6 UTP 24AWG PATCH CORD:1M,Plug 30U' Snag less</b>	50			Ea	Ea	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
64	SITC of <b>CAT6 UTP 24AWG PATCH CORD:2M,Plug 30U' Snag less</b>	50			Ea	Ea	
65	SITC of <b>24 x 10/100/1000BASE-T PoE ports</b> <b>4 x Gigabit RJ45/SFP Combo ports</b> Advanced L2 switching and security features L2+ Static Routing Optional "standard mode" or "surveillance mode" management user interface 193 W PoE budget	4			Ea	Ea	
66	Supply and erecting aproved make RACK 4U with required wires and accessories	1			Ea	Ea	
67	Providing & erecting weather proof, dust & vermin proof, floor mounted front operated indoor type cubical panel board having necessary IP-42 protection & above as per requirment made from 14 SWG thick CRC M.S. sheet for outer body & doors, 16 SWG thick CRC M.S.sheet for internal partitions with necessary supporting angles, flats including cutting, bending, drilling, welding, riveting with internal partitions & cable alley as per requirements & instruction of engineer-in-charge with erection of supplied switch gears, BUSBARS, with suitable size of inter connecting PVC copper wire / copper-aluminium strips, rubber grommets, rib, bakelite control fuses for measuring instruments, earth bus & earth bolts, foundation flange - bolts-base Plates, sufficient nos. of hinged doors, handles with locking arrangement and rubber gasket, heavy duty end terminal connection complete. The Panel shall be painted with epoxy powder coating. (The rates excludes the cost of switchgears, bus bars, inter connecting mains & Copper Aluminium strips, meters, Fuses etc. The dimension shall be measured excluding base beams) The panel shall be supplied with following approved manufacturers with following size. (A) The standard companies switch gear shall be used and only manufacturers at CPRI approved factory for beneficial use (i) with 350mm depth	2			Ea	Ea	
68	Supplying and erecting approved make suitable panel indicator lamps of LED type lamp, lens cover, Bakelite holder complete erected with necessary connections.	3			Ea	Ea	
69	Providing & erecting <b>L.T. Current Transformer with bar primary 50/5 to 1000/5 ratio 15 VA burden</b> erected in existing CRCA box duly secured with insulating materials connected to the meter	4			Ea	Ea	
70	providing and erecting <b>Miniature circuit breaker single pole 0.5A to 2A</b> system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark	3			Ea	Ea	
71	Supplying and erecting <b>Ammeter / Voltmeter selector switch</b> for 3 phase AC Supply 500 V on existing panel board with necessary connections.	2			Sq Mt	Sq Mt	
72	Providing & erecting <b>capacitor duty contactor</b> 3 phase, 415 V with proper connection for following rating: <b>10 KVAR</b>	3			Ea	Ea	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
73	Supplying and erecting triple pole & neutral 440V/ 500V <b>panel mounting Aluminium Busbars</b> with four equal Nos. of bus having current density not more than 0.8 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each busbar,erected in existing cubical panel with necessary connections.(i) 300 Amp capacity	2			Ea	Ea	

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
74	SITC of Vertical Air Termination Solid aluminium with Base - 10mm dia and 1000mm long.Air Termination Base tested for conditioning, Ageing Test & Lightning impulse current withstand test:100KA of 10/350µs waveform in an accredited Third party laboratory as per 6.3 & 6.4 of IEC 62561-1 2017 protocol with MAST 34mm dia 3000 mm long - Cold Galvanized.	2			Ea	Ea	

**(PART - F) CREDIT ITEM of Civil work**

It.	Description	Qty.	Rate		Unit		Amount
no.			In Fig.	In words	In Fig.	In words	
1	Taking out dismantled following materials from jetty area including loading, transportation, unloading, taxes and taken away by the contractor as it is where it is basis and as directed by engineer in charge.						
a	Flush Door shutter with fixtures	76			each	each	
b	GI/CI/pvc pipe	505			kg	kilogramme	
c	Aluminium windows , Ventilator & railing	2785.12			kg	kilogramme	
d	Polythelene water storage tank with cover	11000			litr.	litre	
e	MS grill & & Collapsible gate	4737.58			kg	kilogramme	