

BILL OF QUNATITIES

Name of Work: Carrying out renovation and repairs to proposed PV section in Hangar 2 at AIESL Engineering premises at OAP, Mumbai.					
Tender no.: PFD/05/02/PROJ/2023-24 Date: 28/02/2024					
Sr.no.	Description of Item	Qty	Unit	Rate (INR)	Amount
1	Dismantling brick work work				
	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.				
	In cement mortar	35.00	Cu.Mt		
2	Breaking Aluminum partition				
	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	60.00	Sq.Mt		
3	Removing Door & Windows				
	Dismantling doors, windows and clerestory windows (steel or wood)shutter including chowkhats, architrave, holdfasts etc. complete andstacking within 50 metres lead :	1.00	Each		
4	Breaking Plaster				
	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.	100.00	Sq.Mt		
5	Backfilling/Refulling debris				
	Supplying, filling, spreading & leveling stone boulders of size range 5 cm to 20 cm, in recharge pit, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	50.00	Cu.Mt		
6	Providing Kota stone Flooring				
	Kota stone slab flooring over 20 mm (average) thick base laid over andjointed with grey cement slurry mixed with pigment to match the shade ofthe slab, including surface preparation for kota fixing, rubbing and polishing complete with base of cementmortar 1:4 (1 cement:4 coarse sand)/adhesive for fixing				
	25mm Thick	110.00	Sq.mt		
7	Providing Soling				
	Random rubble masonry with hard stone in foundation and plinth incuding levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with Cement mortar 1:6 (1 cement : 6 coarse sand)	17.00	Cu.Mt		
8	Providing Brick work				
	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS: 2222 in superstructure above plinth level up to floor five level in cement mortar 1:6 (1 cement : 6 coarsesand) With Modular bricks	60.00	Cu.Mt		
9	Providing PCC M-20 grade				
	roviding and laying in position cement concrete of specified gradeexcluding the cost of centering and shuttering - A1 work up to plinthlevel:				
	1:11/2:3 (1 Cement: 1% coarse sand (zone-III) derivedfrom natural sources : 3 graded stone aggregate 20 mmmnominal size derived from natural sources)	15.00	Cu.Mt		

Sr.no.	Description of Item	Qty	Unit	Rate (INR)	Amount
10	Providing plastering in 2 coats				
	15 mm cement plaster 1:2 (1 cement : 2 stone dust) on the rough side of single or half brick wall.	500.00	Sq.Mt		
11	Providing Anodized Aluminium				
	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 / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling to be paid for separately)				
	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	1,400.00	Kg		
12	Providing Partical Board				
	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.				
	Pre-laminated particle board with decorative lamination on both sides	100.00	Sq.Mt		
13	Providing Glass				
	Extra for providing heavy sheet float glass panes instead of ordinary float glass in glazed doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured)				
	5.0 mm thick (weight not less than 12.50 kg per sqm) instead of 4 mm thick (weight not less than 10 kg per sqm).	70.00	Sq.Mt		
14	Polymer				
	Providing and applying rust inhabitation coat/system to exposed reinforcement bars and also new reinforcement bars after removing scales and rust complete as per specification. Providing and applying bond coat to all exposed concrete surface and reinforcement bars prior to any treatment as per specification. Providing and applying single component, fiber reinforced, thixotropic repair mortar of average thickness 50mm and above of "BASF" (MASTER EMACO 348 S) as manufacturer's specifications in specific layers, curing the surface after 72 hours of application with wet gunny bags etc. including carting away debris out of AIESL/Airport premises.	1,000.00	Kg		
15	Providing Painting (Acrylic Distemper)				
	Distemping with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and colour				
	New work (two or more coats) over and including water thinnable primer coat with cement primer having VOC content less than 50 gram/litre	700.00	Sq.Mt		

Sr.no.	Description of Item	Qty	Unit	Rate (INR)	Amount
16	Providing synthetic enamel paint				
	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : One or more coats on old work	50.00	Sq.Mt		
17	Providing Roofing for shed				
	Providing corrugated G.S.sheet roofing including vertical/curved surfacefixed with polymer coated J or L hooks, bolts and nuts 8 mm diameterwith bitumen and G.I. impet washers or with G.I. limpet washers filedwith white lead, including a coat of approved steel primer and two coatsof approved paint on overlapping of sheets complete (up to any pitchin horizontal vertical or curved surfaces), excluding the cost of purlins.rafters and trusses and incuding cutting to size and shape whereverrequired.				
	0.63 mm thick with zinc coating not less than 275 gm/m ²	40.00	Sq.Mt		
18	Providing MS Structure				
	Structural steel work riveted, bolted or welded in built up sections, trussesand framed work, including cutting, hoisting, fixing in position and applyinga priming coat of approved steel primer all complete	1,350.00	Kg		
19	Providing Door Frame				
	Providing wood work in frames of doors, windows, cerestory window sand other frames, wrought framed and fixed in position with hold fast lugsor with dash fasteners of required dia & length (hold fast lugs or dashfastener shall be paid for				
	Second class teak wood	0.90	Cu.Mt		
20	Providing Flooring Tile				
	Providing and laying vitrified floor tiles in different sizes (thickness to bespecified by the manufacturer) with water absorption less than 0.08% andconforming to IS: 15622, of approved make, in all colours and shades,laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand)/adhesive for fixing tiles, jointingwith grey cement slurry @ 3.3 kg/ sqm including including surface preparation for tile fixing, grouting the joints with white cement and matching pigments etc., complete.	150.00	Sq.mt		
	Size of Tile 600x600 mm				
21	Providing Chemical Proof tiles				
	Providing and fixing 10 mm thick acid and/or alkali resistant tiles of approved make and colour using acid/or alkali resisting mortar bedding and joints filled with acid and/or alkali resisting cement as per IS 4457 Complete including surface preparation for kota fixing as per the direction of Engineer-in-Charge.				
	In flooring on a bed of 10mm thick mortar 4(1 acid proof cement : 4coarse sand)/adhesive for fixing tiles.Size of Tile 600x600 mm	30.00	Sq.Mt		
22	Providing Wall Tiles				
	Providing and fixing Ist quality ceramic glazed wal tiles conforming toIS: 15622 (thickness to be specified by the manufacturer), of approved make, in al 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 coarsesand) and jointing with grey cement slurry @ 3.3kg per sqm, inciudingpointing in white cement mixed with pigment of matching shade complete.	300.00	Sq.Mt		
	Size of Tile 600x600 mm				

Sr.no.	Description of Item	Qty	Unit	Rate (INR)	Amount
23	Providing Reinforcement (Tor Steel)				
	Steel reinforcement for R.C.C. work including straightening cutting bending , placing in position and binding all complete above plinth level				
	Mild steel and Medium Tensile steel bars	1,000.00	Kg		
24	Laying Concrete				
	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. above plinth level up to floor five level , excluding cost of centering , shuttering , finishing and reinforcement				
	1 : 1.5 : 3 (1 cement : 1.5 coarse sand (zone - III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	20.00	Cu.Mt		
25	Providing Block Board door				
	Providing and ing S marked filush door shutlers conforming to S 2202 (Part I) decorative type, core of block board construcion with frame of 1st cass hard wood and wel matched teak 3p veneerding with vertical grains or cross bands and face veneers on bath faces of shuters				
	Marked Stainless Steel butt hinges 35 mm thick incuding IS with necessary screws	30.00	Sq.Mt		
26	Providing Handles				
	Providing and fixing bright /matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete.				
	125 mm	44.00	No		
27	Providing Hinges				
	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete				
	125x75x4mm	66.00	No		
28	Providing Door Tower Bolt				
	Providing and fixing aluminium tower bolts , ISI marked , anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade , with necessary screws etc. complète				
	200x10 mm	11.00	No		
29	Providing Aldrop				
	Providing and fixing aluminium sliding door bolts , ISI marked anodised (anodic coating not less than grade AC 10 as per IS 1868) , transparent or dyed to required colour or shade , with nuts and screws etc. complete				
	300x16 mm	11.00	No		
30	Providing Door Stopper				
	Providing and fixing 150 mm bright finished floor brass door stopper with rubber cushion, necessary brass screws etc. to suit shutter thickness complete	11.00	No		
31	Providing Door Closer				
	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS :3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	11.00	No		

Sr.no.	Description of Item	Qty	Unit	Rate (INR)	Amount
32	Providing POP punning				
	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	700.00	Sq.Mt		
33	Providing Wash basin				
	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:				
	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	2.00	No		
34	Providing Scaffolding				
	Providing and fixing H – Frame steel / bamboo scaffolding at various levels and for various heights including providing necessary lateral supports and jointing with couplets / jute rope / nylon rope at all horizontal and vertical joints and junctions in true line and level including removing the same after completion of work and carting away outside AIESL premises, including providing necessary steel & wooden working platform all as directed etc. complete. Note: Length & height in elevation shall be measured & paid for. Double scaffolding of wooden bamboos upto 15 m height.	700.00	Sq.Mt		
35	Door Laminate				
	Extra for Providing and fixing flush doors with decorative veneering instead of non decorative ISI marked flush door shutters conforming to IS: 2202 (Part I)				
	On one side only	50.00	Sq.Mt		
36	Providing PVC pipes (40mm)				
	Providing and fixing PVC rain / Waste water pipe of ‘‘Prince’’ or equivalent approved make conforming to IS 13592 of SWR quality 4 kg/cm ² pressure rated, at any locations and at all levels, scaffolding etc. including all PVC fittings like bends, shoes, clamps, supports etc. jointing with rubber ring/ solvent cement, leak proof adhesive etc. cutting and making good the walls and floors etc. complete. As per instruction of EIC.40 mm dia with GI clamps & GI brackets(Vertical pipes should be fitted 50 mm away from the wall)	50.00	Rmt		
37	Providing CPVC (40mm)				
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply and 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. Internal work - Exposed on wall				
	40 mm nominal dia Pipes	50.00	Rmt		
38	Providing Waste Pipes				
	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
	Flexible pipe 40 mm dia	5.00	No		

Sr.no.	Description of Item	Qty	Unit	Rate (INR)	Amount
39	Carting away debris				
	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	20.00	Cu.Mt		
	Total			Rs.	
	Rebate % (..... Percentage)			Rs.	
	Grand total in Rs.			Rs.	

Note: The rates shall not include GST. The GST shall be paid separately in the bills as per the applicable rates.

I HAVE FULLY UNDERSTOOD THE SCOPE OF WORK & AGREE TO ABIDE BY GENERAL CONDITION OF

PLACE :

DATE :

NAME, SIGNATURE & ADDRESS OF THE CONTRACTOR WITH SEAL