

TENDER DOCUMENT FOR PROPOSED REPAIRS & RENOVATION OF 3RD FLOOR

OF INDIAN BANK

HEAD OFFICE BUILDING

66, RAJAJI SALAI, CHENNAI 600001

PART – 2 PRICE BID

Through electronic mode only

CO:EST:TNDR:RG:001:2021-22

Date: 09.04.2021

ARCHITECT:

CREATIVE ARCHITECTS AND INTERIORS 1090, POONAMALLEE HIGH ROAD, 1ST FLOOR, A.R. COMPLEX EGMORE. CHENNAI – 600084

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ABSTRACT

REPAIRS & RENOVATION OF 3RD FLOOR,INDIAN BANK, H.O. MAIN BUILDING AT 66, RAJAJI SALAI, CHENNAI

Description	Amount (Rs.)
Civil work	
Interior work	
Electrical work	
Airconditioning work	
Networking & Accessories	
Modular Furniture work	
Total	
	Civil work Interior work Electrical work Airconditioning work Networking & Accessories Modular Furniture work



	CIVIL WORK ESTIMATE				
S.No	Description	Unit	Qty	Rate	Amount
	Demolishing work				
1	Dismantling the wall of 4.5" thickness B.W in wall removing the debris from 3rd floor, carting away from the site etc, complete.	Sqm	110.00		
2	Dismantling the wall of 9" & above thickness B.W in wall removing the debris from 3rd floor, carting away from the site etc, complete.	Cum	15.00		
3	Removing the Existing wall & floor Tile/Mosaicflooring with cement mortar removing the debris from 3rd floor, carting away the waste from site.	Sqm	820.00		
4	Charges for Chipping the existing ceiling area and at carting away the debris as instruction given by Engineer in charge.	Sqm	100.00		
5	Removing of sanitary item, CP fittings, Pipes etc in the existing Toilet and carting away the waste from the site complete.	lot	1.00		
6	New Work Providing and laying Autoclaved Aerated concrete Block work of thickness 200mm with cement mortor 1:5 (1 cement: 5 sand) for all shape including the cost of materials, labour, scafolding / staging, sampling and testing, cutting and laying the blocks, providing recesses, making opening of any shape and size, finishing the joints above ground level, sealing the gap between masonary and soffit of beam/slab, embedding the fittings and fixturers, curing etc., all complete as per specifications and as directed by the Architects.	Sqm	10.00		
7	Providing and laying Autoclaved Aerated concrete Block work Masonry of 150mm thick cement mortor 1:4 (1 cement: 4 sand) in any shape, including the cost of labour, materails, scafolding/staging, sampling, and testing, cutting and laying of blocks providing and opening of any shape and size, raking out the joints, supplying and placing 2 Nos. 6mm dia. M.S. bars at every fourth course, sealing the gap between masonry and soffit of beam/slab, embedding the fittings and fixturers, curing etc. all complete as per specifications and as directed by the Architects.		27.00		
8	Providing and laying REINFORCED CEMENT CONCRETE 1:2:4 using 20mm and down size graded crushed stone aggregates in Sub Structure of all types e.g. foundations, footings, raft, beams, slabs, retaining walls, jambs, trenches, manholes, pipe encasements, catch pits, drains, RCC Pits, plinth beams, suspended floors, including cost of admixturers if used, providing pockets, openings, recesses, chamfering, providing pvc cover block wherever required to give a smooth and even surface etc. all complete for all depths below and upto the plinth level in any shape, position, thickness, etc. all complete as specified and directed. (Rate exclusive of cost of reinforcement and shuttering)	Cum	2.00		

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	CIVIL WORK ESTIMATE				
S.No	Description	Unit	Qty	Rate	Amount
9	Providing and fixing form work including shuttering in SUPER STRUCTURE with water proof plywood in beam sides, spreading Metal sheets, Props, Jackey upto sufficient level and strutting and propping in super structure, and Proper foams to be placed between the joints, of the sheets column, beams, walls slabs, staircases, (Steps, waist slabs, landing etc.) lintel, sun shades, canopies, cantilevers etc. for all heights including removal of the shuttering after the specified period is over and as directed by the engineer in charge complete with all materials, labour consumable etc. (Form work shall be supplied by the contractor and shall remain the property of the contractor).	Sqm	7.00		
10	Supplying & fabricating and placing in position HIGH STRENGTH DEFORMED STEEL BARS REINFORCEMENT for RCC work straightening, cleaning, decoiling, cutting, bending, butt Welding, to required shapes and lengths as per details, binding wire contractor's own 16 SWG black soft annealed binding wire at every intersection, supplying and placing with proper pvc cover blocks, PVC role covering 19 to 21 gauge width 56" to 59", supports overlaps, welding spacers, fan hooks, etc. for all heights and depths etc., all complete as directed.	Kg	250.00		
11	Providing 12mm thick plaster in cement mortar CM (1:4) on Internal walls / concrete surfaces including cleaning, hacking of concrete surfaces, including chicken mesh fixing, packing of electrical, plumbing works, scaffolding, finishing, curing etc.for all heights and also including cost of cement etc complete.,	Sqm	120.00		
12	Providing 8mm to 10mm thick plaster in cement mortar CM (1:4) on ceiling surfaces including cleaning, hacking of concrete surfaces, including chicken mesh fixing, packing of electrical, plumbing works, scaffolding, finishing, curing etc.for all heights and also including cost of cement etc complete.,	Sqm	100.00		
13	Providing and laying Premium Quality Vitrified floor tiles of size 800mm x 800mm x 10 to 12mm of approved make as per design & pattern colour, first quality approved make with bed of 20mm thick cement mortar 1:3 (1 cement : 3 sand) in line and level including pop covering with the tiles cleaning the finished surfaces, flush pointing of joints of tiles with as per company grout matching the shade of tiles etc. at all and as per specifications, standards and instructions. colour and shade as per choice of Architect. rate and work inclusive of skirting. Basic rate inclusive of tax tile cost. Rs.70/- per sft.	Sqm	600.00		



	CIVIL WORK ESTIMATE				
S.No	Description	Unit	Qty	Rate	Amount
14	Providing and fixing coloured glazed tile of approved make as per design & pattern in dadooing in size of tile 600 x 300 mm first quality approved make with a bed of 15mm mortar 1:3 (1 cement: 3 sand) in line and level, cleaning the finished surfaced including raking out the joints, flush pointing of joints of grout all complete at all heights as per specifications, and instructions colour and shade matching to the floor tiles as per choice of Architect. Basic rate inclusive of GST taken as Rs 50/sft.	Sqm	15.00		
15	Providing and fixing Mat tiles of approved make as matched to the wall tiles in size of tile 300 x 300 mm first quality approved make with a bed of 15mm mortar 1:3 (1 cement : 3 sand) in line and level, cleaning the finished surfaced including raking out the joints, flush pointing of joints of grout all complete at all heights as per specifications, and instructions colour and shade matching to the floor tiles as per choice of Architect. Basic rate inclusive of GST taken as Rs 50/sft.	Sqm	5.00		
16	Providing and Fixing Aluminium work for windows, ventilators with appropriate Z Sections of approved make conforming to IS: 1285, fixed with rawl 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 PVC/ neoprene felt etc. Aluminium sections shall be smooth rust free, straight, snap beeading for glazing/panelling, C.P. brass/Stainless steel screws, all complete as per architechtural drawings and the directions of Engineer-in-charge. (Glazing with 6mm ST 167 Annealed Glass & panelling cost included).	Sqm	120.00		
17	Providing and fixing (thickness as per drawing) grano flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) finishing the top smooth etc, complete.		76.50		
18	Supplying and laying of jamp lining of Toilet doors frames & Ventilator for using 20 mm thick Telephone black Granite with cement mortar & pointing, the edge of granite half round moulded inclusive of all works etc completed (Basic rate Rs.125/- per sft)	Sam	2.00		
19	Supplying and laying of Wash basin counter with Granite and cement mortar & pointing, the edge of granite half round moulded inclusive of all works etc completed (Basic rate Rs.125/- per sft)		1.00		



	CIVIL WORK ESTIMATE				
S.No	Description	Unit	Qty	Rate	Amount
20	Water Proofing Treatment: a. Providing and laying WATER PROOFING TREATMENT coving with CM 1:3 admixed with water proofing admixture/equivalent) at the slab wall junction, cutout openings, corners, junction of pipes and masonry. Applying two coats of Brushbond RFX (acrylic polymer cementitious coating from water proofing material) on the sunken slab after proper surface preparation and pressure grouting if required. b.Providing and laying Light weigh block in toilet portion with CM 1:5 including Material, Labour etc., complete. 150mmthk in single layer to achieve the slope.	Sqm	3.00		
	Plumbing work				
	Supplying, Installing, testing and commissioning of approved make kitchen sink with single bowl &single drain board made of Stainless steel 1 No.40mmdia CP bottle trap with extension pipe,CPwallflange, CPwaste coupling, 1No. 15mm dia C.P sink cock unit wall mounted type with 2 nos swinging spout,		-		
21	C.I.brackets etc.,complete. Kichen Sink: Make Nirali 600mmx 450mm Sink Cock: Make: Jaquar Continental, Model: 347 Waste Coupling: Model No: 709, Make: Jaquar Bottle Trap: Model No: 773, Make: Jaquar	nos	1.00		
22	Supplying, laying, jointing, testing and commission-ing approved make UPVC pipes SWR gradeconfirming to IS 13592 Class "B" with rubber ring jointsconfirming to IS 5382. The quoted rate shallingludenecessary fittings like Tees, Bends,Offsetsetc., MS brackets with GI clamps, nuts & bolts, anchor fasteners, grip bolts, etc,necessary earthwork etc.,complete. To be connected to existing exterior connection.				
	a) 75 mm O.D	Rmt	30.00		
	b) 110 mm O.D	Rmt	30.00		
23	Supplying, Installing, testing & commissioning approved make Astral CPVC Pipes & fittings etc complete. The quoted rate shall include necessary, chasing in walls, making bores in walls, Beam & slabs and making good the chased surfaces (Inside the Shafts) for Cold Water Supply Lines.				
	a) 20 mm dia I.D	Rmt	15.00		
	b) 25 mm dia I.D	Rmt	35.00		
24	Supply,installing, testing and commissioning approved make white colour wall mounted European water closet type colour plastic solid seat andcover with rubber buffers and flap, heavy duty plastichinges, C.I. chair bracket etc., complete. Make: Hindware White - 92051 - Essence	Nos	1.00	来面 / INA.	

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	CIVIL WORK ESTIMATE				
s.No	Description	Unit	Qty	Rate	Amount
25	Supply,installing, testing and commissioning of approved make 15mm CP health faucet including angle cock, bib cock with easy flexible tube 1.0m long, CP crutch, nozzle etc.,complete. Make: Jaquar Allied, Model No: ALD-CHR-565	Nos	1.00		
26	Supplying and fixing Geberit Alpha Kombifix Tank with necessary fittings etc. complete. Make Geberit 110.120.00.1	Nos	1.00		
27	Supply of Geberit Push Plate with necessary fittings etc. complete. Make: Geberit Alpha 15 Shinny Push Plate 115.045.21.1	Nos	1.00		
28	Supply and fixing of Table top Wash Basin with all necessary fittings etc. complete. Wash basin: Make: Hindware INOX Code no: 91050. Pillar cock Make: Jaquar Continental, Model No.: CON-CHR-021KN, Bottle trap: Jaquar ALD-769, Braided hose: Jaquar ALD-803B	Nos	1.00		
29	Supply and fixing mirror using 6mm imported miror over 12mm thk bison board alround wooden bleeding with polish finish etc.complete	Sqm	0.45		
30	Supply,Fixing approved make C.P.Towel ring, Paper holder including C.P.screws etc.,complete.	Nos	1.00		
31	Supplying and fixing Enox shutter in counter Wash basin area with necessary harware fittings etc., complete	Nos	1.00		
32	Dismantling, removing, cleaning and carting away from the site for materials under buy back such as wooden /aluminium, false ceiling, partitions of all types, existing steel windows doors with frames and other demolition materials, electrical fittings, wiring, AC ducts etc as identified by bank officials/Architects Rate Should be inclusive of GST 5%	LS	1.00		
	TOTAL				



INTERIOR WORK ESTIMATE							
SI No	Description	Unit	Quantity	Rate	Amount		
1	Providing and fixing Gypsum Board false ceiling laid in 4 levels with the difference in height to accommodate ceiling lighting consisting: Frame work of intermediate channels (M.F.T) at 122cm centre along one direction M/F ceiling section MF5 at 45.7 cm centre along other direction. Perimeter channels (MF 6A) along walls all-round perimeter side of the ceiling, all to detail as per drawing. The intermediate channels suspended from ceiling, through strap hangers 25x0.5mm (MF8) at 122 cm centre connected to soffit cleats P534 (27x37x25x1.6mm) the cleats connected to ceiling through metal expansion rawl plugs 1/2" dia and 17/16" long with necessary bolts and nuts etc. all connected with additional perimeter channels (MF 6A) for openings for light fixtures, AC ducts, vertical drops, offsets etc. wherever necessary all to detail and as per direction. 12 mm thick Gypsm sheets fixed to underside of suspended grid with 25 mm screws to form grids of 45.7cm x 122cm varied along wall ends etc. including painting the underside of gypsm sheet with 2 coats of plastic emulsion paint of approved colour and shade over a priming coat etc.complete. (as per direction of the Architect) including indirect light in all cabins and vertical step in modular area false ceiling.	Sqm	400.00				
1.a	All the specifications are same as above for Curved Surfaces with necessary fittings and fixtures etc. complete, (attached drawings)	Sqm	260.00				
2	Providing and fixing of "Daiken" Mineral Fiber Ceiling Tiles, with hot dipped galvanized steel grid work, surface chemically cleaned capping pre-finished in baked polyester paint, Main Tees of size 35 (H) x 14.5 mm every 1.2 m centrto centre, stitched Cross Tee at 0.6 m centre to centre to form a grid of size 600 X 600 mm and suspending the grid from RCC roof using 3 mm GI rod, 6 mm nylon rawl plug and6mm J bolt at every 1200 mm intervals. And laying "DaikenMineral Fiber Acoustic Ceiling Tiles (New Venus) of size 60x 600 x 15 mm OCR over the formed grid having fire rating of 60 minutes as per BS 47G / 23 of 1987. Light Reflection of > 85%. Noise Reduction Coefficient (NRC) of 0.70, Sound Attenuation of 32 db, K = 0.52-0.57 W/mk. Humidity Resistance up to 99% at 50°C. (DAIKEN" 5/8" New Venus Mineral Fiber Ceilings with "CKM" UDT Black Regress 14.5 x 35 mm T Bars)	Sqm	265.00				
3	Proving and fixing trap door for indoor units access using aluminium frame of size 50 x 50 mm 1.2mm thick extruded aluminum "L" angle cleats fixed with 12mm galvanized metal screws and support from ceiling and wall with 12mm BWR ply over 3mm mdf, inside wood primer two coats and outside to be finished with two coats of putty, one coat of primer and two coats of paint. Door edges to be covered by 20 x 10mm teak beading with paint finish and necessary hardware like lock, SS tower bolt, magentic catch and SS hinges.		8.00				
4	Supply and laying Calcium silicate board of 8mm thk. with 24mm wide white powder coated channel and suitable downrod 4mm thk necessary hardware fittings. The board finish by Plastic Emulsion Paint of primer one coat and two coats of emulsion paint over two coats of putty etc.complete.,	Sqm	5.00				
	PARTITION						



SI No	Description	Unit	Quantity	Rate	Amount
5	Providing and fixing full height Gypsum board partitions and of overall thickness 75mm consisting of Frame works 50mm x 25mm x 1.2mm thick extruded aluminum box section framework at spacing not exceeding 600mm both ways (horizontal and vertical). Framework formed using 50mm x 25mm x 1.2mm thick extruded aluminum "L" angle support cleats fixed with 12mm galvanized metal screws.and Fibreglass insulation RB slab density 24 kg/m3 50mm thick - NRC - 0.91. Partition framework to be secured to floor, structural support and nearest structural member using galvanized metal screws and wooden / PVC rowel plugs and all joint to be covered by paper tape finished with two coats of putty,one coat of primer & two coats of plastic emulsion paint as per detail drawing. All openings of windows and doors to be done with 19mm x 75mm wide plywood with 3 x 3nmm groove. Glass fixed with beading and finished with paint as per detail drawing. (Measurement will be taken below false ceiling only)	Sqm	20.00		
6	Providing and fixing full height 10mm thick Indowud Natural Fibre Composite (NFC) board partitions (both sides) and of overall thickness 71mm consisting of Frame works 50mm x 50mm x 1.2mm thk & 50mm x 25mm x 1.2mm thick extruded aluminum box section framework at spacing not exceeding 400mm both ways (horizontal and vertical). Framework formed using 50mm x 25mm x 1.2mm thick extruded aluminum "L" angle support cleats fixed with 12mm galvanized metal screws and Fibreglass insulation RB slab density 24 kg/m3 50mm thick - NRC - 0.91. Partition framework to be secured to floor, structural support and nearest structural member using galvanized metal screws and wooden / PVC rowel plugs and all joint to be covered by paper tape finished with two coats of putty, one coat of primer & two coats of plastic emulsion paint as per detail drawing. All openings of windows and doors to be done with 19mm x 75mm wide plywood with 3 x 3 mm groove. Glass fixed with beading and finished with paint as per detail drawing. (Measurement will be taken below false ceiling only).		375.00		
7	Supply and Fixing of Slim Glass partition of 10mm Toughened Glass using Dormakaba Alexa System-45 Frames to a height of maximum 3m or as per drawing. The Fixed glass to be fixed using Dormakaba Alexa BP45 Profiles at Top & Bottom & Alexa SP45 at sides. The profile size to be 45x25MM to be fixed on to the floor/wall/ ceiling as per the architect design. Dormakaba Alexa H Junction profile to be used at all Glass to Glass vertical joints, 90 Deg L Junction Profiles and T Junction profiles necessary as per design. In case of Glass overall panel Alexa MP45 & BP45 Overpanel Profile to be used. In case of Open glass edges EP45 End Profile to be used. The Alexa profiles shall be suitable for Glass thickness of 10mm. The Profile shall be matt natural anodized, the Profile Manufacturer to supply all the necessary clips, seals and fixing accessories for the system. All Profiles to be with 2 mm Gauge thickness Excluding 20 Micron of Anodizing. Approved Manufacturer: Profiles/Frames: Dormakaba, Glass: Saint Gobain.	Sqm	31.00		
8	Supply & Fixing of Glass Door (Single Leaf) of 10mm toughened glass with Dormakaba Alexa System-45 frames all around the door. Alexa DP45 Door Profile frame of size 45X50mm with seals with Dormakaba Junior Office Hinges (3nos) & Studio Gala Locks (1no) in aluminium silver (EV1) finish and Dormakaba TS 89 Slide Channel Door closer with (as per EN 1154) and saddle plate for fixing on the Glass door and necessary seals to be provided all around the door frames. In case of Glass over panel Alexa OHP-DP45 Over Panel Door profile to be used. The Alexa profiles shall be suitable for Glass thickness of 10mm. The Profile shall be matt natural anodized, the Profile Manufacturer to supply all the necessary clips, seals and fixing accessories for the system. All Profiles to be with 2 mm Gauge thickness Excluding 20 Micron of Anodizing. Approved Manufacturer: Profiles/Frames: Dormakaba, Glass: Saint Gobain	Sqm	6.50	्री के प्रति के किया है। जिस्सी के किया किया किया किया किया किया किया किया	To I INDIAN To I

SI No	Description	Unit	Quantity	Rate	Amount
9	Providing and fixing of Powder coated Aluminium Strip/ Skirting of size of 75 and thickness of 5-6mm (+/- 5%) on exisintg Gypsum partition with proper care by using adhesive at back and screwing from front to the existing GI partition frame work complete in line and level as per direction of Architect/PMC. The colour and shade of powder coating shall be as approved Architect.	RM	150.00		
10	Supply and fixing column panelling 50 x 25mm aluminium frame with 19mm Indowud and above Laminate with necessary hardware fittings & fixing etc Complete, The colour and shade shall beselected Architect with corner guard of 10mm L profile & etc complete.	Sqm	50.00		
11	Supply and fixing panelling 50 x 25mm aluminium frame with 19mm thick Indowud and above Laminate with necessary hardware fittings & fixing etc Complete, The colour and shade shall beselected Architect with corner guard of 10mm L profile & etc complete.	Sqm	165		
12	Supply and fixing writing PU coated 6mm thk glass over 6mm thick Indowud with necessary hardware fittings & fixing etc Complete, The colour and shade of glass shall be selected Architect with corner guard of 10mm L profile & etc complete.	Sqm	3.00		
13	Supply and fixing 12mm tk toughened glass door and Partition with dorma patch fittings, SS handle 32mm dia 600 mm high, lock, floor spring and door stopper and 3M frost film as per detail drawing in Main entrance. Rates inclusive of necessary supports with necessary fixtures etc., complete	Sqm	12.00		
14	Providing and fixing of lobby main entry door ply boxing of size 9" using 19mm thk ply wood with laminate finish with necessary frames & fixtures etc. complete as shown in the drawing.	Sqm	13.00		
15	Providing and fixing wooden door frame (2nd class burma teakwood) of size matched to partition with wood to fix 35mm tk flush door Single leaf finished with laminate / metalic laminate and 12mm teak wood lipping and necessary hardware fittings like door lock with key hole flange,SS handle 25mm dia 1.2m high, door stopper, SS ball bearing hinges, SS tower bolt 150mm long & door closer. Door middle portion with 6mm thk toughened glass view panel of size 300 mm x 2.0 mtr fixed with teak wood beading, Lipping, polish finish matching with laminate shade with necessary fixtures, screws etc., complete.		29.00		



S1 No	Description	Unit	Quantity	Rate	Amount
16	Supplying and fixing Full Height Storage 0.38m deep using BWR 19mm plywood with openable shutter at the top & bottom and centre portion open shelf as per detail drawing. Exposed surface area of the storage to be 1mm tk laminate and inside to be 0.8mm tk laminate. Edges of the shutter to be finished with teak wood beading polish finish. Rates including necessary hardware fittings like SS handle 6", Lock, auto close hinges, magnetic catch, tower bolt 8" high, 2" dia SS leg etc., complete in with necessary frames & fixtures etc. complete.	Sqm	50.00		
17	Supplying and Fixing Countertop in Pantry 0.6 m deep using 19mm tk Kadappa Slab at the bottom and 19mm tk polished Granite at top fixed with Adhesive, at the front 50mm height granite to be shown with nosing as per detail. Slab to be fixed with 2" either side bearing on the wall with necessary chipping and packing. Below the counter provide storage using 19mm tk ply on all sides, shelves, partitions, Door Shutter, Drawers finished with 1mm tk laminate and inside to be 0.8mm tk laminate. Edges of the shutter to be finished with teak wood beading polish finish. Rates including necessary hardware fittings like SS handle 6", lock, auto close hinges, magnetic catch, tower bolt 6" high etc, complete.	Sq.m	4.10		
	Supply and fixing Vertical blinds for windows using necessary fittings. (Sheer out) (Fabric cost Rs. 1500/Sq. Mtr.)	Sq.m	135.00		
	Painting work				
10	Prepare surfaces of painting apply one coat of primer, 2 coats of putty and two coats paint and final coat roller finish of Premium emulsion / Royal touch , to interior faces of wall including scraping the existing surfaces shade approval by architect / bank engineer.etc,complete.		740.00		
20	Prepare surfaces of wall and remove dirt, old painting, strains, install level marks and apply POP punning to achieve a perfect plane for receiving the painting treatment. etc, complete as instructed by the architect / Bank Engineer etc., complete.	Sam	360.00		
21	Prepare surfaces of painting apply one coat of primer, putty and two coats paint finish of luster paint , to interior faces of window, door and shutter including scraping the existing surfaces shade approval by architect / bank engineer.etc, complete.		500.00		
22	Prepare surfaces of painting apply one coat of primer, putty and two coats paint and final coat roller finish of OBD to interior faces of wall /ceiling including scraping the existing surfaces shade approval by architect / bank engineer, etc, complete.	Sam	820.00		
23	Applying a trowel based texture coat of Acrylic modified resin and special quality quartz RoughTex Texture which is an intermediate coat (of Asiar Paints or Equivalent brands). Surface preparation for all surfaces like RCC, Rough Plaster/Textured walls etc to be done as per recommended procedure like surface to be cleaned properly, application of a coat of Acrylic exterior grade Primer followed by a coat of desired / recommended pattern of ROUGHTEX texture followed by Acrylic exterior grade Primer and two Coats of Apex Ultima of desired shade.	Sqm	22.00		
24	Providing and Fixing frosted film in glass with necessary fixtures design and drawings as mentioned etc., complete.	Sqiii	20.00		
25	Supplying and fixing carpet flooring SHAW / equivalent carpet (Basic cos Rs. 1500 /- per sqm) over 5mm thk U - form finish.etc complete.	Sqm	240.00		
	TOTAL	4			



BILL OF QUANTITIES FOR PROVIDING ELECTRICAL WORKS FOR M/S INDIAN BANK 3RD FLOOR AT CHENNAI.											
SI No	DESCRIPTION	UNIT	QTY		JPPLY	ERF	CTION				
		-	V	RATE	AMOUNT	RATE	AMOUNT				
	ABBRIVATION: SETC: Supply, erection, testing & Commissioning.	-									
	I.T.C : Installation, Testing & Commissioning.	-									
	E.T.C : Erection, Testing & Commissioning	-									
I	PART-A DISTRIBUTION BOARDS	-									
_	NOTE:										
a	THE MCB'S IN THE MCB DB SHALL BE OF APPROPRIATE DUTY (CURV										
-	DEPENDING ON THE CONNECTED LOAD. THE MCB SHALL BE OF 10KA	X RUPT	URING	-							
	CAPACITY.	-									
	THE LOD DD GILLY DE DD OLIDED WHEN GUELD DE DIG DAD DE DESCRIPTION										
b	THE MCB DB SHALL BE PROVIDED WITH SUITABLE BUS BARS, INTER										
_	NEUTRAL LINK, EARTH LINKS, EARTH LABELS, DESIGNATION LABE		TODY.	-							
	COMPART- MENT & INTER-COMPARTMENT SHROUDS ETC. AS PER R	EGULA T	TORY								
	MEASURES AND THE SIZE OF THE DB's SHALL BE AS PER THE SITE		_								
	REQUIREMENT / CONDITION. THE DB's SHOULD BE INSTALLED EITH					_					
	CONCEALED / SURFACE MOUNTED WITH REQUIRED ACCESSORIES A	S PER :	SITE								
	CONDITION.	-									
С	THE DB'S SPECIFIED HEREIN UNDER SHALL BE PROVIDED WITH SUIT										
	ADOPTER BOX WITH SHROUDED CONNECTOR SAND WITH INTERCO										
-	SUITABLE SIZE SOLID LINKS / COPPER WIRES TO TAKE THE AL. AR. (ABLE.	AS								
-	SPECIFIED ELSE WHERE IN THE TENDER.										
		-									
1	SETC of double door Industrial pattern SPN MCB DB for 3F Lighting load										
	(with C curve MCB's) comprising of :-										
a	1 - 32A 2 Pole MCB as incomer.										
	6-6/10A SP MCB as outgoing to loads.	Set	1								
b	1 - 32A 2 Pole MCB as incomer.										
	14 - 6/10A SP MCB as outgoing to loads.	Set	3								
		_									
2	S E T C of compartmental type phase segregated double door industrial										
	pattern MCB DB for 3F Power load (with C curve MCB's) comprising of :-	_									
	1 - 63A 4 Pole MCB as incomer.										
	3 - 63A DP 100mA RCCB as phase isolation.										
	24 - 16A/20A SP MCB as outgoing to loads.	Set	2								
3	S E T C of compartmental type phase segregated double door industrial										
	pattern MCB DB for 3F UPS Power load (with C curve MCB's) comprising of :-										
a	1 - 63A 4 Pole MCB as incomer.										
	3 - 63A DP MCB as phase isolation.										
	36 - 16A/20A SP MCB as outgoing to loads.	Set	2								
4	S E T C of VTPN double door industrial pattern MCCB/MCB DB										
	for 3F UPS Power load (with C curve MCCB/MCB's) comprising of :-										
	1 - 100A 4P MCCB 16KA as incomer.										
	4 - 63A TP MCB as outgoing to loads.										
	6 - 32A SP MCB as outgoing to loads.	Set	1								
5	S E T C of compartmental type phase segregated double door industrial										
	pattern MCB DB for 3F AC Power load (with C curve MCB's) comprising of :-										
	1 - 63A 4 Pole MCB as incomer.										
TT / 1	3 - 63A DP MCB as phase isolation.										
10 mg /	12 - 16A/20A SP MCB as outgoing to loads.	Set	2								
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-	BILL OF QUANTITIES FOR PROVIDING	- ELEC	INICAL	, works re	 T -	
_	S E T C of compartmental type phase segregated double door industrial				_	_
-	pattern MCB DB for 1F Lighting, Power & AC load (with C curve MCB's) com	orising of	-			+
\rightarrow	1 - 63A 4 Pole MCB as incomer.	-				4
\neg	3 - 63A DP MCB as phase isolation .	-				
\rightarrow	9 - 16A/20A SP MCB as outgoing to loads	-			_	-
-	3 - 6A/10A SP MCB as outgoing to loads.	Set	1			1
1	S E T C of VTPN type double door industrial pattern MCCB/MCB DB					
$\overline{}$	for 3F Lighting load (with B curve MCCB/MCB's) comprising of :-					
\rightarrow	1 - 125A 4P MCCB 16KA as incomer.					
\exists	2 - 63A TP MCB as outgoing to loads.					
\neg	6 - 40A SP MCB as outgoing to loads.	Set	1			
	A A A A A A A A A A A A A A A A A A A	-				
\neg	S E T C of VTPN type double door industrial pattern MCCB/MCB DB	_				_
_	for 3F AC load (with B curve MCCB/MCB's) comprising of :-	+				
\neg	1 - 125A 4P MCCB 16KA as incomer.		-			
\dashv	6 - 63A TP MCB as outgoing to loads.	Set	11_			
-	1 IAK IN MOOT 1/W	_	-			
b	1 - 125A 4P MCCB 16KA as incomer.	Cat	1			
-	8 - 63A TP MCB as outgoing to loads.	Set	1			
	DADT A CUD TOTAL					
	PART-A SUB-TOTAL				-	
II	PART-B POINT WIRING					
	(WITH MODULAR SWITCHES / SOCKETS)					
1	Supply and wiring for the following Light, Exhaust Fan, 6A independer	t socket	outlets p	oints,		
	using 2.5 Sqmm multi-strand copper conductor 660 Volts Grade ZHFR	PVC ins	ulated w	ires		
	drawn through suitable dia concealed PVC FRLS conduit of thickness r	ot less th	an 2mm			
	conform to I.S. with all necessary conduit accessaries such as junction by					
	etc. The wiring for points should include providing 1.5 Sqmm ZHFR P	VC insula	ited Gree	en colour		
	copper conductor wire loop earth, Modular switch/ receptacles mounted					
	Phospated MS switch box front plate etc. required to complete the point					
	732 with latest revision whether or not all materials required specifically					
	specified conduit shallbe laid in roof slab requirement of site condition.					
	embedding pipes, accessories etc, in wall / ceiling including necessary					
	surface good etc. The surface conduits Shall be PVC FRLS of 2mm thic					
	point rate should include cost of circuit/sub-circuit wiring also (ie) Run					
	conductor ZHFR PVC insulated wire drawn through surface PVC FRL					
	accessories from distribution board to switch box and, switch box to sw					
	to primary points each circuit shall be limited to 800W or 10 points whi				_	
	wiring should be independent of point wiring (The point wiring length	may be c	oncidere	d 6 Mtrs.		
-	Length appx.)		-		-	+
a)	Single light point controlled by one 6A Modular switch all complete.	Pts.	33			
b)	Two light point controlled by one 6A Modular switch all complete.	Pts.	9			
C)	Three light point controlled by one 6A Modular switch all complete.	Pts.	12			
d)	Four light point controlled by one 6A Modular switch all complete.	Pts.	10			
_		tamiala aa	oto oo in	itom		_
	Supply and wiring for the following group control light points with ma				_	
_	above 2.5 Sqmm multi-strand copper conductor 660V grade ZHFR wir					
	suitable dia concealed PVC FRLS conduit of thickness not less than 2n					
_	necessary conduit accessories such as junction boxes bends, couplings should include providing 2.5 Sqmm ZHFR Green colour copper condu					
_					-	
_	required to complete the point wiring in full as per IS 732 with latest rematerials required are specifically brought in here or not. The specified					
-					1/15-	Illia
	roof slab in surface pattern as per requirement of site condition. The rapipes, accessories etc. in wall / ceiling including necessary chasing of				केंग्र	IND
	surface good etc. as per site requirement. The point rate should inc		।CC कि ध्या वं कि			
_	/sub-circuit wiring also (ie) Run of 3R 2.5 Sqmm copper conduct				के सपव	विभाग 🐧
	through PVC FRLS conduit of 2mm thickness with all conduit acc				Promises & Esta	b Deat
					The Court of Long	and the second section of the second

	BILL OF QUANTITIES FOR PROVIDING ELECTRICAL WORKS	FOR	
	Each circuit shall belimited to 800W (or) 10 Pts. whichever is less. Each of the		
	Secondary point length shall be minimum of 4 Mtrs. Rates shall be quoted as a group		
	taking both the primary (13 mtrs) and the number of Secondary points (1 Pts) in each		
	of the group .(The primary or to secondary and sub-sequent connection shall be in an alternate		
	manner as per Architect/ Consultants instruction.) Emergency light points should be grouped		
_	seperately. Grps 10		
	orporation of the state of the		
3	Supply and wiring for the following group control light points with materials as etc.as initem		
	above 2.5 Sqmm multi-strand copper conductor 660V grade ZHFR wires drawn through		
	suitable dia concealed PVC FRLS conduit of thickness not less than 2mm conform to IS with all		
	necessary conduit accessories such as junction boxes bends, couplings etc. The wiring for points		
	should include providing 2.5 Sqmm ZHFR Green colour copper conductor loop earth, as		
	required to complete the point wiring in full as per IS 732 with latest revision whether or not all		
	materials required are specifically brought in here or not. The specified conduit shall be laid in		
	roof slab in surface pattern as per requirement of site condition. The rate shall include embedding		
	pipes, accessories etc. in wall / ceiling including necessary chasing on wall making the		
	surface good etc. as per site requirement. The point rate should include cost of circuit		-
	/sub-circuit wiring also (ie) Run of 3R 2.5 Sqmm copper conductor ZHFR wire drawn		
	through PVC FRLS conduit of 2mm thickness with all conduit accessories from DB		
	Each circuit shall belimited to 800W (or) 10 Pts, whichever is less. Each of the		-
	Secondary point length shall be minimum of 4.5 Mtrs. Rates shall be quoted as a group		-
-	taking both the primary (12 mtrs) and the number of Secondary points (2 Pts) in each		
	of the group. (The primary or to secondary and sub-sequent connection shall be in an alternate		
			-
-	manner as per Architect/ Consultants instruction.) Emergency light points should be grouped		
	seperately. Grps 6		-
4	Supply and wining for the following energy control light maints with materials as ato as inform		
	Supply and wiring for the following group control light points with materials as etc.as initem		
-	above 2.5 Sqmm multi-strand copper conductor 660V grade ZHFR wires drawn through		
-	suitable dia concealed PVC FRLS conduit of thickness not less than 2mm conform to IS with all		
	necessary conduit accessories such as junction boxes bends, couplings etc. The wiring for points		
	should include providing 2.5 Sqmm ZHFR Green colour copper conductor loop earth, as		
-	required to complete the point wiring in full as per IS 732 with latest revision whether or not all		
	materials required are specifically brought in here or not. The specified conduit shall be laid in		
	roof slab in surface pattern as per requirement of site condition. The rate shall include embedding		
-	pipes, accessories etc. in wall / ceiling including necessary chasing on wall making the		
-	surface good etc. as per site requirement. The point rate should include cost of circuit		
-	/sub-circuit wiring also (ie) Run of 3R 2.5 Sqmm copper conductor ZHFR wire drawn		
	through PVC FRLS conduit of 2mm thickness with all conduit accessories from DB		
-	Each circuit shall belimited to 800W (or) 10 Pts. whichever is less. Each of the		
	Secondary point length shall be minimum of 5 Mtrs. Rates shall be quoted as a group		
	taking both the primary (15 mtrs) and the number of Secondary points (3 Pts) in each		
	of the group. (The primary or to secondary and sub-sequent connection shall be in an alternate		
-	manner as per Architect/ Consultants instruction.) Emergency light points should be grouped		
	seperately. Grps 1		
-	Supply and wiring for the following group control light points with materials as etc.as initem		
-	above 2.5 Sqmm multi-strand copper conductor 660V grade ZHFR wires drawn through		
	suitable dia concealed PVC FRLS conduit of thickness not less than 2mm conform to IS with all		
	necessary conduit accessories such as junction boxes bends, couplings etc. The wiring for points		
-	should include providing 2.5 Sqmm ZHFR Green colour copper conductor loop earth, as		
	required to complete the point wiring in full as per IS 732 with latest revision whether or not all		
	materials required are specifically brought in here or not. The specified conduit shall be laid in		
	roof slab in surface pattern as per requirement of site condition. The rate shall include embedding		
	pipes, accessories etc. in wall / ceiling including necessary chasing on wall making the		
	surface good etc. as per site requirement. The point rate should include cost of circuit		
	/sub-circuit wiring also (ie) Run of 3R 2.5 Sqmm copper conductor ZHFR wire drawn	\$TO LINO	
-	through PVC FRLS conduit of 2mm thickness with all conduit accessories from DB	100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	Each circuit shall belimited to 800W (or) 10 Pts. whichever is less. Each of the	ोक परिसा, ध्रय एवं रेह	
	Secondary point length shall be minimum of 5 Mtrs. Rates shall be quoted as a group	विभाग व	
	taking both the primary (12 mtrs) and the number of Secondary points (7 Pts) in each	& Estate Dept	

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-	BILL OF QUANTITIES FOR PROVIDING				FOR	Т		
	of the group .(The primary or to secondary and sub-sequent connection shall					\dashv		
\rightarrow	manner as per Architect/ Consultants instruction.) Emergency light points si	hould t	e group	oed .		-		
4	seperately.		_		-	-		
-		Grps	6			-		
_		_				\rightarrow		
	EMERGENCY LIGHT POINT				ļ	-		
\rightarrow	Supply and wiring for the following group control light points with materia			tem		-		
\rightarrow	above 2.5 Sqmm multi-strand copper conductor 660V grade ZHFR wires di					_		
	suitable dia concealed PVC FRLS conduit of thickness not less than 2mm c					_		
	necessary conduit accessories such as junction boxes bends, couplings etc.			r points				
-	should include providing 2.5 Sqmm ZHFR Green colour copper conductor					-		
-	required to complete the point wiring in full as per IS 732 with latest revision					_		
	materials required are specifically brought in here or not. The specified con				-	_		
	roof slab in surface pattern as per requirement of site condition. The rate sh							
	pipes, accessories etc. in wall / ceiling including necessary chasing on w					_		
_	surface good etc. as per site requirement. The point rate should include					_		
	/sub-circuit wiring also (ie) Run of 3R 2.5 Sqmm copper conductor Z			awn		- 1		
	through PVC FRLS conduit of 2mm thickness with all conduit accesso					_		
	Each circuit shall belimited to 800W (or) 10 Pts. whichever is less. Each							
	Secondary point length shall be minimum of 10 Mtrs. Rates shall be qu							
	taking both the primary (11 mtrs) and the number of Secondary poin							
	of the group .(The primary or to secondary and sub-sequent connection sha							
	manner as per Architect/ Consultants instruction.) Emergency light points s	hould	be grou	ped				
	seperately.	Grps	2					
7	Supply and wiring for 3R of 2.5 Sqmm multi-strand ZHFR copper conductor 660V	grade ·	wire (on	Э				
	wire shall be of green colour)in ISI marked suitable size PVC FRLS conduit (price							
	PVC FRLS conduit) with all standard accessories all complete as circuit wiring fro	m LDB	to					
	Switch box, small power,AC socket to socket etc	Mtrs.	890					
8	Supply and fixing 6A 1 Way modular switch and 6A 3pin shuttered modular sock							
	with plug. In the light control switch box itself with necessary wiring. (The size of							
	control switch box shall be suitable to accommodate the above with necessary from							
	etc. all complete.	Nos	6					
9	Supply and Fixing of 2 nos of 6A 3 Pin Universal sockets controlled by 16 A							
	switch mounted on suitable modular front plate	Nos	120					
10	Supply and Fixing of 3 nos of 6A 3 Pin Universal sockets controlled by 16 A							
	switch mounted on suitable modular front plate	Nos	25					
11	Supply & fixing of 6A Independent socket outlet point including providing							
	6A 3 pin Modular shuttered socket outlet controlled by 6A Modular switch.	Nos	185					
12	Supply & fixing 6/16A 5 pin shuttered socket outlet with front plate							
	controled by 16A single way control switch in PVC switch box,							
	accessories as required per site conditions at locations required. As per site							
	conditions.	Nos	35					
	V		1	1				
13	Supply & fixing 16A 5 pin shuttered socket outlet with front plate							
1.0	controled by 16A single way control switch in PVC switch box,							
	accessories as required per site conditions at locations required. As per site conditions	Nos	10					
	accessories as required per site conditions at rocations required. As per site conditions	1.03	10					
14	Supply & fixing of 4 module furniture popup box with the following switch and							
14		Set	6					
	sockets and accessories etc as required.	Set	0					
	3 Nos-6A 5 pin socket					//	र वक / INDIa	
_	2 Nos - 6A switch					1100	थें.ब./c.o.	1
	1 No-RJ - 45 data socket 1 No-RJ -45 Telephone socket			-		13	परिका ज्या एवं	E

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	BILL OF QUANTITIES FOR PROVIDING	ELEC	TRICAL	works	FOR		
1.5	Course & Swing of Consolute Consolute Approvide the Callegian and the said						
15	Supply & fixing of 6 module floor popup box with the following switch and sockets and accessories etc as required.	C-4	4				
	3 Nos-6A 5 pin socket	Set	4				-
	2 Nos - 6A switch						
	1 No-RJ - 45 data socket						
	1 No-RJ - 45 Telephone socket						
	1 No-HDMI socket						
	110 115 // 000/00						
16	Supply and Fixing of 1 module USB charging point with all accessories						
	etc as required.	Nos	qro				
17	Supply and wiring for 2R of 4+1R of 2.5 Sqmm multi-strand FRLS copper						
	conductor 660V grade wire (one wire shall be of green colour) excluding of PVC l	FRLS co	onduit				
	with all standard accessories all complete as required for 6/16A power sockets fro						
	AC DB to power circuits etc	Mtrs.	370				
18	Supply and laying of 3core 2.5 Sqmm copper flexible wire in existing floo	r					
	race ways required for UPS & RAW power distribution	Mtrs.	4035				
19	Supplying and fixing of following sizes of medium class PVC FRLS conduit along	3					
	with accessories in surface/recess including cutting the wall and making good						
	the same in case of recessed conduit as required.						
a	25 mm	Mtrs.	1105				
	PART-B SUB-TOTAL						
Ш	PART-C CABLES AND TERMINATIONS						
1	LT CABLES						
1.1	Supply and laying of following sizes of 1.1KV grade XLPE insulated armoured FF	RLS gra	de cable				ľ
	with aluminium conductor multistrand cable with ISI markings of approved make	and qua	lity from				
	Existing AHU room Panel to various switch boards / Distribution boards . The cab	le shall	be laid in				
	the cable trays, racks (excluding supply & erection of cable trays / racks) Whereve	r cable a	ire				
	required to be laid on wall, base bracket fitted onto wall / ceiling and necessary cla	amps/ ha	arwares				
_	etc. all complete and the rate for such clamps, hardwares shall be included in the so						
	laying the cable approval for the routing and the manner of laying shall be obtained						
		i iroin u	ne				
	Architect / Owner.						
		-					
a	3.5C 120 Sqmm Al. Ar.Cable	Mtrs.	120				
b	3.5C 70 Sqmm Al. Ar.Cable	Mtrs.	240				
С	4C 70 Sqmm Al. Ar.Cable	Mtrs.	65				
d	4C 25 Sqmm Al. Ar.Cable	Mtrs.	225				
e	4C 16 Sqmm Al. Ar.Cable	Mtrs.	250				
f	4C 10 Sqmm Al. Ar.Cable	Mtrs.	260				
g	3C 10 Sqmm Al. Ar.Cable	Mtrs.	120		3 75 11111		
				-//	A BOTTNOWN		
h	3C 6 Sqmm Al. Ar.Cable	Mtrs.	45	115	कॉ.का. / C.O.	1	
					संपन्न विभाग	J1)	
					CLASS ESTATE	111	
i	1C 70 Sqmm CU. flx.Cable	Mtrs.	110	1/3	Premises: senditure	//	

	BILL OF QUANTITIES FOR PROVIDING	ELECT	RICAL	works 1	FOR			
2.0	LT CABLE TERMINATION							
2.1	Supply and providing cable end termination for following sizes of 1100V grade							
$\overline{}$	XLPE insulated armoured FRLS grade aluminium conductor multi-strand cable							
	with necessary gland sand jointing materials etc. all as per requirement.							
_								
_	3.5C 120 Sqmm Al. Ar.Cable	Nos	6					
a	3.3C 120 Sqiiiii Ai. Ai.Cable	INUS	0					\
		N .	0					
b	3.5C 70 Sqmm Al. Ar.Cable	Nos	8			_		
		-						
С	4C 70 Sqmm Al. Ar.Cable	Nos	2					
d	4C 25 Sqmm Al. Ar.Cable	Nos	10					
е	4C 16 Sqmm Al. Ar.Cable	Nos	14					
f	4C 10 Sqmm Al. Ar.Cable	Nos	8					
g	3C 10 Sqmm Al. Ar.Cable	Nos	6					
h	3C 6 Sqmm Al. Ar.Cable	Nos	2					
i	1C 70 Sqmm CU. flx.Cable	Nos	18					
3	CABLE TRAY / MARKERS & TERMINAL BOX	\vdash						
	CABLE AND A CONTROL OF THE STATE OF THE STAT							
3.1	Design, Fabricating, Supply and Installing varies type MS supports for cable tray	to						
5.1	suit to withstand the weight of the number of cables to be laid as per the site							
-	requirement. The Supports of cable trays shallbe fabricating out of 25mm x 25m	m v			_			
_								
	6mm angle iron with necessary welded cross supports of size 25mm x 6mm MS f				-		-	
	10mm threadred rod with tray support from roof as may be required. The rate sh				-			
	include all supporting brackets, Anchor Fastners including epoxy painting of cabl	_	1000		-			-
	trays.	Kgs	1300		-			
					_			
3.2	Supply, erection, testing & commissioning of following sizes of GI ladder				-			
	type (above 300 mm) / upto 300 perferated type cable trays including Tees,							
	Bends etc. with accessories as required by the site condition.							
a	450mm	Mtre	100					
b	300mm	Mtre	100	====				
С	150mm	Mtre	20					
d	100 mm closed tray (For CCTV)	Mtre	110					
	Cable identification tags made out of round aluminium plates of thickness not							
33	1 Cacit restrictions on the man out of found distinguish places of this miss not	1						
3.3	less than 3mm and trying with cable with appropriate intravels for cable				1		3	
3.3	less than 3mm and tying with cable with appropriate intravels for cable	+						
3.3	emenating from individual SSB. The work should be carried out as required by	Non	7.1					
3.3		Nos.	74					
3.3	emenating from individual SSB. The work should be carried out as required by Inspecting Authorities as well as satisfaction of Architect.	Nos.	74					
3.3	emenating from individual SSB. The work should be carried out as required by	Nos.	74					
3.3	emenating from individual SSB. The work should be carried out as required by Inspecting Authorities as well as satisfaction of Architect.	Nos.	74					
3.3	emenating from individual SSB. The work should be carried out as required by Inspecting Authorities as well as satisfaction of Architect. PART-C SUB-TOTAL	Nos.	74					
3.3 IV	emenating from individual SSB. The work should be carried out as required by Inspecting Authorities as well as satisfaction of Architect.	Nos.	74					
	emenating from individual SSB. The work should be carried out as required by Inspecting Authorities as well as satisfaction of Architect. PART-C SUB-TOTAL	Nos.	74			11/2	TO / INDIA	
	emenating from individual SSB. The work should be carried out as required by Inspecting Authorities as well as satisfaction of Architect. PART-C SUB-TOTAL PART-D EARTH & EARTH CONNECTION	Nos.	74			100	in / INDIA	

	BILL OF QUANTITIES FOR PROVIDING	ELEC	TRICAL	WORKS	FOR		W.	
	earth electrode 48MM dia ,3mts long, Zinc coated pipe in pipe Electrode							
	Highly conductive non corrosive nature crystalling material along with							
	electrode moisture booster back fill compound of 50KGs filled surround							
	the pipe complete with all as mentioned in the technical specification. The							
	rate include all connected civil work. A brick work masonry shall be							
	constructed of size 450x450x600mm with CI heavy duty cover with lifting							
	arrangement							
_	arrangement	_			_		_	_
	Electrodite25kg -2bags each Pit)							
	NOTE: The job includes submitting test report of resistance of the new							
_	earth pit.	_			-		-	
		Nos	8					
3	Supply and run of following sizes of copper/ Alu flat from earth electrode to neutra	al termin	nals of					
	transformer and other requried locations as per statutory requirements and neatly c	amped	to wall,					
	cable tray with necessary hardwares, PVC FRLS conduits at places required as dire							
_	Architects / Consultants.	octed by			+		-	
_	Arcintects / Consultants.				+			_
a)	25 x 6mm GI. flat.	Mtrs.	350					
b)	No. 8 SWG copper	Mtrs.	110					
/					+			
1		1.	id. 07		+		-	+
4	Supplying & providing an earth link made out of copper approximatly 450mm							
	6mm copper flat with 2 Nos.20mm long 3mm dia brass bolt & nut with 30Acable	end soc	kets					
	connected to the main earth strip running along the vertical earth bus inthe cable tr	ay, 8						
	Nos.outgoing connection to be tapped from the strip with 20mm long 3mm dia bra	ss bolt	& nut and					
	30A cable end socket to get connected to the 2 Nos.6 Sqmm multi-stranded copper				1			
	JOA Cable that socker to get connected to the 2 140s.0 Squint main-strained copper		4		+			_
_		Nos.	4		+			
	PART-D SUB-TOTAL							
V	PART-E LUMINARIES							
•					-			_
	General Requirement of Light Fittings:		-		-		-	_
	LEDS-LOW POWER ONLY: 2-MECADUM-LEVEL- with manufacturers certif	icate.						
	2.5 to3KV. along with separate earthing stud.)							
	Lumen Maintanence Certificate: LM-80							
	Lumenar test certificate: LM-79							
	System Lumen efficiency: >120 Lm/W							-
					+			
	CRI:>80							
	THD-I: < 10%							
	Power factor:> 0.9							
	BURNING HOURS : 40000 HOURS-Minimum							
	WARRENTY: 1 years free replacement along with driver							1
	**************************************				+			-
					-			4
	Supply, erection, testing & commissioning of recessed mounting 28 to 30W LED	Nos.	70					
	2x2 down lighter (above 100 lu/w) with necessary ,driver, interconnecting wires	1408.	^{'0}					
1	& fixing hardwares etc , (6500K)							
	Supply, erection, testing & commissioning of recessed mounting 18W LED down	No.	01					
	lighter with necessary ,driver, interconnecting wires & fixing hardwares etc ,	Nos.	82					
2	(4000K)							
		<u>,</u> ,	_,					
	Supply erection, testing & commissioning of recessed mounting QW I ED and	Nos.	71					1
	Supply, erection, testing & commissioning of recessed mounting 9W LED spot							
3	light with necessary ,driver, interconnecting wires & fixing hardwares etc ,						and the second	LI .
3					+			
3	light with necessary ,driver, interconnecting wires & fixing hardwares etc ,							
3	light with necessary ,driver, interconnecting wires & fixing hardwares etc , (4000K)		55			西/IND/		
3	light with necessary ,driver, interconnecting wires & fixing hardwares etc , (4000K) Supply of LED STRIP lights including driver, mounting arrangement, hardwares,	Mtr	55		1161		We .	
3	light with necessary ,driver, interconnecting wires & fixing hardwares etc , (4000K)		55		1161	क / IND//	Se Contraction	
	light with necessary ,driver, interconnecting wires & fixing hardwares etc , (4000K) Supply of LED STRIP lights including driver, mounting arrangement, hardwares,		55		1161		A DAME OF	
	light with necessary ,driver, interconnecting wires & fixing hardwares etc , (4000K) Supply of LED STRIP lights including driver, mounting arrangement, hardwares,		55		1161		The state of the s	

	BILL OF QUANTITIES FOR PROVIDING	ELEC'	TRICAL	WORKS	FOR			
	Supply, erection, testing & commissioning of PIR Sensors (motion sensor 5 meter coverage area) for the light points to be fitted on to ceiling as per site requirement with necessary frame, diffuser, driver, interconnecting wires & fixing hardwares etc.,	Nos.	2					
								_
	PART-E SUB-TOTAL						-	
VI	PART-F LOW VOLTAGE SYSTEM							
,	TELEPHONE & DATA							_
	NOTE:							
1.1	1.Qtys are tentative sujected to change based on clients requirement. Supply and drawing of CAT6 cable in existing surface in floor Raceway							
	complete as required.	Mtrs.	9625					
1.2	Supplying and fixing modular type TV socket outlet and modular plate in cadmius	n /						
	GI plated MS box including making connections etc as required.	Each	3					
2	FLOOR RACE WAYS / CONDUITS							
2.1	Supply, erection, testing & commissioning of in-screed floor raceways consisting of heavy gauage rectangular aluminium anodized pipe sections including chasing and refilling the trench as per the route shown in the drawing and approved by consultant at site including clamping & closing the open pipe ends temporarily by suitable end - covers against entry of dust or any other foreign material.							
a	100 x 40 mm	Mtrs	380					
			100					
ь	50 x 25 mm	Mtrs	180			-		_
2.2	Supply, erection, testing & commissioning of floor junction boxes with top cover of SS with 3mm thick(Cover alone SS) for above raceways of 2.5mm thick, fabricated out of M.S. sheets fully powder coated with removable screwed cover plates on all four sides for blocking the entry.							
a	75 x 75 x 50 mm	Nos.	82					
		N	- ((
b	125 x 125 x 50 mm	Nos.	66					
С	250 x 250 x 50 mm	Nos.	21					
d	500 x 500 x 50 mm	Nos.	6		1			
		N						
e	550 x 550 x 50 mm	Nos.	6					
	PART-F SUB-TOTAL							
VII	PART-G PANEL							
1	EXISTING PANEL.							
	Supply, erection, testing & commissioning of adding Current Transformer for power factor sencing comprising of following:-	in exi	sting pan	el				
	INCOMER:				-			
	1 No Current transformer of ratio 300/5A Class 0.5, 15 VA for power	Set	1		-		-	
-	1 No Current transformer of rano 500/5A Class 0.5, 15 VA for power	361	1					
2	3F APFCR Panel -Oty- 1No.							
						1	TINDE	
	Supply, erection, testing & commissioning of floor/wall mounting dust &			1	-	A ST ST	1100.	
-	cubicle pattern noncompartmentalised APFCR Panel fabricated out of 14 sheet comprising of the following:-	/16 SV	VG CRC.	A .		कि परिसर	विभाग व	_
-	sneet comprising of the following					Premise	Spenditure >	
L.	INCOMER:		1			110	tatte Dept.	

1 No 125A TP & N 25KA MCCB with manual closing mechanism with R	otary				_
handle, fitted with over current and short circuit protection and with		hunt			_
trip releases Aux switch of 1 NO + 1 N/C for contacts multiplication					_
incomer and provided with an instrument chamber having	T T				_
modules and provided with an instrument chamber having	_				_
1 - 8 stage APFCR Relay.	_			_	+
1 - Auto manual selector switch.	_			+	+
Digital type flush mounting meter with inbuilt selector to indicate the selector of the s	e the				_
following parameters suitable for operation with 5A CT secondar				_	+
Current, Voltage, Frequency	1 y.			-	_
1 Set 3 Nos. R, Y, B indicating lamp to indicate supply position.	-				+
1 Set 2 Nos. Red & Green indicating lamp to indicate ON-OFF	-				_
position of breaker.	-+-				+
1 Set Amber Breaker trip due to fault indication	-				+
1Set - Potential protection HRC fuses/MCB of suitable rating for	-				+
indicating lamp, meter, control circuit etc.	-				+
indicating famp, meter, control circuit etc.	-				+
DIICD AD.	-				_
BUSBAR:				+	+
1 125 A TD & N Also has having a summer dancity of 0.7 A sum	Sam				+
1 - 125A TP & N Alu. bus bar having a current density of 0.7A per					_
and with adequate number of FRP/SMC bus supports at suitable		u	_		+
as per IS. The busbar shall be PVC sleeved with heat shrukable	colour		_		
coded PVC sleeves with the exception of joint.				_	-
OUTCOINCS.	_		_		
OUTGOINGS:			-	-	_
1 No Consider consistency of side C2 A TD 10V A MCD side side 11					_
1 Nos Capacitor compartment each with 63A TP 10KA MCB with suitably	rated	_			_
having specific duty contactor with accessories etc. all	_		_	+	_
complete for control of 15 KVAr capacitors. ON - OFF push button					-
ON -OFF indicating lamp, provided with a 15 KVar capacitor bank					_
reactors, control wiring from the APFC relay all complete for proper				+	
operation of bringing in or out of the capacitors connected to mainta					_
Power Factor as stipulated by the supply authorities. As per details a	given.			_	-
2 N	1				+
2 Nos Capacitor compartment each with 63A TP 10KA MCB with suitably	rated			_	-
having specific duty contactor with accessories etc. all				+	-
complete for control of 10 KVAr capacitors. ON - OFF push button					+
ON -OFF indicating lamp, provided with a 10 KVar capacitor bank					-
reactors, control wiring from the APFC relay all complete for proper					
operation of bringing in or out of the capacitors connected to mainta			_		
Power Factor as stipulated by the supply authorities. As per details	given.			_	-
1 N			_		-
1 No Capacitor compartment each with 32A TP 10KA MCB with suitably	rated				-
having specific duty contactor with accessories etc. all					
complete for control of 5 KVAr capacitors. ON - OFF push buttons					-
ON -OFF indicating lamp, provided with a 5 KVar capacitor bank v					
reactors, control wiring from the APFC relay all complete for proper					-
operation of bringing in or out of the capacitors connected to mainta					
Power Factor as stipulated by the supply authorities. As per details	given.				_
131 0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4					
1 No Capacitor compartment each with 32A TP 10KA MCB with suitably	rated				-
having specific duty contactor with accessories etc. all					
complete for control of 4 KVAr capacitors. ON - OFF push buttons					_
ON -OFF indicating lamp, provided with a 4 KVar capacitor bank v					
reactors, control wiring from the APFC relay all complete for proper			-		
operation of bringing in or out of the capacitors connected to mainta					
Power Factor as stipulated by the supply authorities. As per details a	given.		विक	11104	
			(A) 1 1 1	100/01	
1 No Capacitor compartment each with 32A TP 10KA MCB with suitably	rated		कि परिसर,	नय एवं 🕺	
having specific duty contactor with accessories etc. all			Phones (Actions of	
complete for control of 3 KVAr capacitors. ON - OFF push buttons		11	100	1 2 11	

ON -OFF indicating lamp, provided with a 3 KVar capacitor bar		TRICAL WOI	1	
reactors, control wiring from the APFC relay all complete for pr				
operation of bringing in or out of the capacitors connected to ma				
			_	-
Power Factor as stipulated by the supply authorities. As per det	ills giver	1.		-
11 44 4 mp 10 V 1 3 6 mp 10 V		1		-
No Capacitor compartment each with 32A TP 10KA MCB with suit	ably rate	d		-
having specific duty contactor with accessories etc. all				-
complete for control of 2 KVAr capacitors. ON - OFF push but			_	-
ON -OFF indicating lamp, provided with a 2 KVar capacitor bar			_	-
reactors, control wiring from the APFC relay all complete for pr				1
operation of bringing in or out of the capacitors connected to ma				
Power Factor as stipulated by the supply authorities. As per det	ails give	n.		-
				-
No Capacitor compartment each with 32A TP 10KA MCB with suit	ably rate	d		
having specific duty contactor with accessories etc. all				_
complete for control of 1 KVAr capacitors. ON - OFF push but				
ON -OFF indicating lamp, provided with a 1 KVar capacitor ba				
reactors, control wiring from the APFC relay all complete for pr				
operation of bringing in or out of the capacitors connected to m				
Power Factor as stipulated by the supply authorities. As per det				
The instrument chamber meter /instruments shall be wired with 2.5 Sqmr	1 for CT	's &		
1.5 Sqmm for other circuits multi-strand copper conductor wire with dou	ble sleev	ring &		
with appropriate colour code and the terminal ferruled and connected with	h suitabl	le lugs.		
The above panel shall be fabricated as per IS and complete with specified	lbus			
par, bus supports, interconnections from bus to MCB, MCB to capacitor	banks			
duly taped or sleeved wirings providing 2 Nos.earth bus with 25 x 6mm.				
flat, door earthing with braided copper etc. all complte as per IS as accept	table			
to Architects in conformity with the Local Electrical Inspectorate whether	r or			
not all items has brought in this. The board shall be provided with nonce	mpartm	ental		
and intercompartment shrouds, terminal extensions for receiving cable, s				
for terminals etc. The aggregated capacity of each of the bank shall be of				
KVAr. The board shall be finished with powder coated paint of approv				
after duly treated for rust prevention and appllying 2 coats of metal prim				
board shall be provided with necessary warning, feeder designation labe.				
IS and as per site requirement and cater to General requirement of switch				
specification given in the tender.	Set	1		
PART-G SUB-TOTAL				



HVAC WORK FOR INDIAN BANK - 3RD FLOOR

Sl No	Description	Unit	Qty	Unit Rate (in Rs.)	Total Amount (in Rs.)	installatio n price	Total Amount (in Rs.)
A				1,874			
1							
	Supply, Installation, testing and commissioning of Outdoor units consists of 100% inverter scroll compressor / Twin Rotary compressors, DC fan motor with aero-spiral fan blade, e-pass heat exchanger, safety valves, solenoid valves, receiver, capillary tube, check valve, electronic expansion valve, high pressure switch, low pressure sensor, pressure regulating valve, refrigerant filter, stop valve, accumulator and refnet kits. Rate inclusive of R-410A refrigerant & oil pre charging, power cable from nearest isolator, vibration isolators, supports, necessary foundation / pedestal works etc. The units shall be selected for Chennai ambient conditions as specified. The capacities are as mentioned below:-						
1	VRV OUTDOOR UNITS						
a	14 HP	Nos.	2				
b	16 HP	Nos.	3				
	Design, Supply, Installation, testing and commissioning of Indoor air conditioning units with direct driven fan, high efficient filter, inbuilt microprocessor thermostat, electronic expansion valve, provision of fresh air duct connection, remote controller including cable, drain pump set (for cessette units and hi-static ductable units), necessary ceiling supports & vibration isolators, refrigerant charging, Refnet joints (Refrigerant branch kit) for both liquid and gas line branch kits, oil charging, control wiring, power cable from the nearest socket including plug, and drain connection, etc. The capacities are as mentioned below:- VRV INDOOR UNITS (CASSETTE) Cooling Capacity - 1.6 TR (2x2) Cooling Capacity - 2.0 TR Cooling Capacity - 3.2 TR Cooling Capacity - 4 TR SUB TOTAL	Nos. Nos. Nos. Nos.	8 3 5 4 5				
D							
	LOW SIDE WORKS	T	1	100 600		A. D. T.	
1	Pressure Testing & Pressure holding nitrigen Testing and commissioning of entire system VRV Units	Lot	1				
2	Testing and commissioning of entire system VRV Units and other accessories.	НР	76				
3	Supply, Installation, Testing & commissioning of hard/soft drawn refrigeration piping. The copper brazing to be carried out with bleeding of Nitrogen.	Dona	1 €			at tinola.	
	6.4mm dia	Rmt	15		16	. St. 7 C.O.	
	9.5mm dia	Rmt	80			सर्, ध्यय एवं 🌾	
b	12.7mm dia	Rmt	40		(C) Pres	पदा विभाग 💩	
С	15.9mm dia	Rmt	62			Estate Dept.	-

d	19.1mm dia	Rmt	28				
e	22.2mm dia	Rmt	20				
f	28.6mm dia	Rmt	38				
g	34.9mm dia	Rmt	7				
h	41.3mm dia	Rmt	11				
4	The copper Pipes to be insulated with 19mm thick/13mm thick Nitrile rubber slevees	Rmt	300				
5	Supply and laying of 2C x 1.5 Sqmm PVC Copper Cable - Communication and Control cabling between indoor and outdoor units. The rate shall be including suitable size MS conduit with conduit accessories and necessary fixing arrangement.	Rmt	286				
6	Providing, fixing, testing and commissioning insulated PVC drain piping for indoor unit with 6 mm thick Nitrile Rubber insulation.						
a	32 mm	Rmt	80				
b	40 mm	Rmt	60				
7	Design, Supply, installation, testing and commissioning of Fresh air Fan Units. The unit shall be double skin 25±5mm thick panel with PUF insulation, belt driven centrifugal fan, High efficiency motor, spring vibration isolator for fan and motor, Fire retardant canvass connections, internal power and control wiring, GI base frame complete as per specifications as required. The cost shall inclusive of starter panel, required power cabling between the starter panel and fans, mounting arrangements, etc.						
a	Air Qty: 1100 CFM, ESP: 15mmWC, With MERV 8 filter	Nos.	1				
b	Air Qty: 780 CFM, ESP: 15mmWC, With MERV 8 filter	Nos.	1				
8	Supply & installations of hi-density PVC pipe with necessories (Elbow, coulpling,tee joints)and supporting materials.						
a	250mm dia with necessorie fittings	Rmt	2				
b	200mm dia with necessorie fittings	Rmt	27				
С	150mm dia with necessorie fittings	Rmt	23				
d	100mm dia with necessorie fittings	Rmt	45				
9	Insulated Flexible Ducting The flexible duct shall me made of triple lamination of aluminium foil, polyester and metalised polyester film						
	permanently bonded to a coated spring steel wire helix. The exterior shal be wrapped with 25mm thick 16 kg/cum fibreglass insulation. The outer insulation jacket / vapour barrier made of fibreglass reinforced metalised polyester film laminate.						
a	100 mm dia	Rmt	32				
10	Supply and Erection of ODU Stands	Nos.	5				
11	Additional Gas charging -R 410 A	Lot	1				
12	Supply and Installation of PVC Pipe for Exposed Pipes	Rmt	76				
13	Lifting and shifting of VRV IDU's to the respective floors	Lot	25				
14	Lifting and shifting of VRV ODU's to the respective floors	Lot	5				
15	Transport charges	Lot	1		//	者币/INDIA	
	Anti Corrosive Paints for all the VRV IDU's	Nos.	25		1 As	朝.朝. / C.O.	*
_	Anti Corrosive Paints for all the VKV 11708				1142		11 21
16 17	Anti Corrosive Paints for all the VRV IDU's Anti Corrosive Paints for all the VRV ODU's	Nos.	5		1 2	पारतर, ध्या एव	

MA	SUB TOTAL	ME.	V. 10-3			
		Bullet	and Visit		Viva R	
	DX Unit - 3rd Floor					
	Design, Supply, Installation, testing and commissioning of Indoor and outdoor units with direct driven fan, high					
1	efficient filter, inbuilt microprocessor thermostat, electronic expansion valve, provision of fresh air duct connection, remote controller including cable, necessary					
	ceiling supports & vibration isolators, oil charging, control wiring, power cable from the nearest socket including plug, and drain connection, etc. The capacities are as mentioned below:-					
1	NON VRV UNITS					
a	Non inverter Cooling Capacity - 3.8TR	Nos.	4			
	SUB TOTAL			A Ku	I DELWEY	16 E-
В	LOW SIDE WORKS	23 1				
1	Pressure Testing & Pressure holding nitrigen	Nos	4			
2	Supply, Installation, Testing & commissioning of hard/soft drawn refrigeration piping. The brazing to be carried out with bleeding of Nitrogen.					
a	9.5mm dia	Rmt	101			
b	15.9mm dia	Rmt	101			
3	The copper Pipes to be insulated with 19mm thick/13mm thick Nitrile rubber slevees	Rmt	202			
4	Supply and laying of Copper Cable - Communication and Control cabling between indoor and outdoor units. The rate shall be including suitable size MS conduit with conduit accessories and necessary fixing arrangement.	Rmt	122			
5	Providing, fixing, testing and commissioning insulated PVC drain piping for indoor unit with 6 mm thick Nitrile Rubber insulation.					
a	32 mm	Rmt	45			
ъ	40 mm	Rmt	20			
6	Supply and Erection of ODU Stands	Nos.	4			
7	Supply and Installation of PVC Pipe for Exposed Pipes	Rmt	35			
8	Lifting and shifting of NON VRV IDU's to the respective floors	Lot	4			
9	Lifting and shifting of NON VRV ODU's to the respective floors	Lot	4			
10	Anti Corrosive Paints for all the NON VRV IDU's	Nos.	4			
11	Anti Corrosive Paints for all the NON VRV ODU's	Nos.	4			
	SUB TOTAL	1 5				



Design, Supply, Installation, testing and commissioning of indoor and outdoor units with direct driven fan, high efficient filter, inbuilt microprocessor thermostat, electronic expansion valve, provision of fresh air duct connection, remote controller including cable, necessary reiling supports & vibration isolators, oil charging, control viring, power cable from the nearest socket including olug, and drain connection, etc. The capacities are as mentioned below: NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL TOTAL	Nos. Nos.	2 2 2 2					
Indoor and outdoor units with direct driven fan, high afficient filter, inbuilt microprocessor thermostat, electronic expansion valve, provision of fresh air duct connection, remote controller including cable, necessary reiling supports & vibration isolators, oil charging, control viring, power cable from the nearest socket including olug, and drain connection, etc. The capacities are as mentioned below: NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL	Nos.	2					
Indoor and outdoor units with direct driven fan, high afficient filter, inbuilt microprocessor thermostat, electronic expansion valve, provision of fresh air duct connection, remote controller including cable, necessary reiling supports & vibration isolators, oil charging, control viring, power cable from the nearest socket including olug, and drain connection, etc. The capacities are as mentioned below: NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL	Nos.	2					
Indoor and outdoor units with direct driven fan, high afficient filter, inbuilt microprocessor thermostat, electronic expansion valve, provision of fresh air duct connection, remote controller including cable, necessary reiling supports & vibration isolators, oil charging, control viring, power cable from the nearest socket including olug, and drain connection, etc. The capacities are as mentioned below: NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL	Nos.	2					
efficient filter, inbuilt microprocessor thermostat, electronic expansion valve, provision of fresh air duct connection, remote controller including cable, necessary reiling supports & vibration isolators, oil charging, control viring, power cable from the nearest socket including olug, and drain connection, etc. The capacities are as mentioned below: NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL	Nos.	2					
electronic expansion valve, provision of fresh air duct connection, remote controller including cable, necessary reiling supports & vibration isolators, oil charging, control wiring, power cable from the nearest socket including olug, and drain connection, etc. The capacities are as mentioned below: NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL TOTAL	Nos.	2					
connection, remote controller including cable, necessary reiling supports & vibration isolators, oil charging, control viring, power cable from the nearest socket including olug, and drain connection, etc. The capacities are as mentioned below: NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL TOTAL	Nos.	2					
reiling supports & vibration isolators, oil charging, control wiring, power cable from the nearest socket including olug, and drain connection, etc. The capacities are as mentioned below:- NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL	Nos.	2					
wiring, power cable from the nearest socket including blug, and drain connection, etc. The capacities are as mentioned below:- NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL	Nos.	2					
olug, and drain connection, etc. The capacities are as mentioned below:- NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL	Nos.	2					
nentioned below:- NON VRV UNITS Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL TOTAL	Nos.	2					
Non Inverter Hiwall Split - 1 TR Non Inverter Hiwall Split - 1.5 TR Non Inverter Hiwall Split - 1.8 TR SUB TOTAL TOTAL	Nos.	2					
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Pressure Testing & Pressure holding nitrigen	Nos	6					
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	D4	(2			-		
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12.7mm dia	Rmt	53			-		
The common Dimes to be imposted with 10mm thick/12mm							
	Rmt	126					
Supply and laying of 2C x 1.5 Sqmm PVC Copper Cable -							
Communication and Control cabling between indoor and							
outdoor units. The rate shall be including suitable size MS	Rmt	88					
conduit with conduit accessories and necessary fixing							
arrangement.							
Providing, fixing, testing and commissioning insulated							
PVC drain piping for indoor unit with 6 mm thick Nitrile							
Rubber insulation.							
32 mm	Rmt	28					
40 mm	Rmt	10					
g I IP d CODY C	NT.				-		
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Anti Corrosive Paints for all the Non VRV ODU's	Nos.	6			-	-	
SUB TOTAL		12.07				/	TO I INDIA
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TOTAL	17/4/1	ge ve				hor	भारतार, ध्येष एवं भारतार विभाग
			10			12	Premises: Expenditure
	Supply, Installation, Testing & commissioning of hard/soft lawn refrigeration piping. The brazing to be carried out with bleeding of Nitrogen. 5.4mm dia 2.5mm dia 2.7mm dia 2.7mm dia 2.7mm dia 2.7mm dia Copper Pipes to be insulated with 19mm thick/13mm hick Nitrile rubber slevees Supply and laying of 2C x 1.5 Sqmm PVC Copper Cable-Communication and Control cabling between indoor and butdoor units. The rate shall be including suitable size MS conduit with conduit accessories and necessary fixing arrangement. Providing, fixing, testing and commissioning insulated PVC drain piping for indoor unit with 6 mm thick Nitrile Rubber insulation. 32 mm 40 mm Supply and Erection of ODU Stands Supply and Installation of PVC Pipe for Exposed Pipes Lifting and shifting of Non VRV IDU's to the respective Lifting and shifting of Non VRV ODU's to the respective Anti Corrosive Paints for all the Non VRV ODU's SUB TOTAL	Supply, Installation, Testing & commissioning of hard/soft trawn refrigeration piping. The brazing to be carried out with bleeding of Nitrogen. 5.4mm dia Rmt 2.7mm dia Rmt 2.7mm dia Rmt 7.5mm dia Rmt 2.7mm dia Rmt 7.5mm dia Rmt 8.5mm dia Rmt 8.5mm PVC Copper Cable - Communication and Control cabling between indoor and control cabling between indoor and conduit with conduit accessories and necessary fixing arrangement. 7.5mm dia Rmt 7.5mm dia Rmt 8.5mm dia Rmt 8.5mply and laying of 2C x 1.5 Sqmm PVC Copper Cable - Communication and Control cabling between indoor and control cabling between indoor and conduit with conduit accessories and necessary fixing arrangement. 7.5mm dia Rmt 8.5mm dia dia Rmt 8.	Supply, Installation, Testing & commissioning of hard/soft trawn refrigeration piping. The brazing to be carried out with bleeding of Nitrogen. 5.4mm dia 7.5mm dia 8.7mm dia	Supply, Installation, Testing & commissioning of hard/soft Irawn refrigeration piping. The brazing to be carried out with bleeding of Nitrogen. 3.4mm dia 2.5mm dia 2.7mm dia Rmt 10 2.7mm dia Rmt 53 The copper Pipes to be insulated with 19mm thick/13mm hick Nitrile rubber slevees Supply and laying of 2C x 1.5 Sqmm PVC Copper Cable-Communication and Control cabling between indoor and outdoor units. The rate shall be including suitable size MS conduit with conduit accessories and necessary fixing arrangement. Providing, fixing, testing and commissioning insulated PVC drain piping for indoor unit with 6 mm thick Nitrile Rubber insulation. 32 mm Rmt 40 mm Rmt 10 Supply and Installation of PVC Pipe for Exposed Pipes Lifting and shifting of Non VRV IDU's to the respective Lot Anti Corrosive Paints for all the Non VRV IDU's Nos. 6 SUB TOTAL	Supply, Installation, Testing & commissioning of hard/soft trawn refrigeration piping. The brazing to be carried out with bleeding of Nitrogen. 8.4mm dia Rmt 63 2.5mm dia Rmt 10 2.7mm dia Rmt 53 The copper Pipes to be insulated with 19mm thick/13mm hick Nitrile rubber slevees Supply and laying of 2C x 1.5 Sqmm PVC Copper Cable-Communication and Control cabling between indoor and outdoor units. The rate shall be including suitable size MS conduit with conduit accessories and necessary fixing urrangement. Providing, fixing, testing and commissioning insulated PVC drain piping for indoor unit with 6 mm thick Nitrile Rubber insulation. 82 mm Rmt 28 840 mm Rmt 10 Supply and Installation of PVC Pipe for Exposed Pipes Lifting and shifting of Non VRV IDU's to the respective Lot 6 Lifting and shifting of Non VRV ODU's to the respective Lot 6 Anti Corrosive Paints for all the Non VRV ODU's Nos. 6 SUB TOTAL	Supply, Installation, Testing & commissioning of hard/soft trawn refrigeration piping. The brazing to be carried out with bleeding of Nitrogen. 2.4mm dia Rmt 2.5mm dia Rmt 3.5mm dia Rmt 5.3 Che copper Pipes to be insulated with 19mm thick/13mm hick Nitrile rubber slevees Supply and laying of 2C x 1.5 Sqmm PVC Copper Cable-Communication and Control cabling between indoor and outdoor units. The rate shall be including suitable size MS conduit with conduit accessories and necessary fixing urrangement. Providing, fixing, testing and commissioning insulated PVC drain piping for indoor unit with 6 mm thick Nitrile Rubber insulation. Rmt 28 30 mm Rmt 10 Supply and Installation of PVC Pipe for Exposed Pipes Lifting and shifting of Non VRV IDU's to the respective Lifting and shifting of Non VRV ODU's to the respective Lifting and shifting of Non VRV ODU's to the respective Lot 6 Anti Corrosive Paints for all the Non VRV IDU's Nos. 6 SUBTOTAL	Supply, Installation, Testing & commissioning of hard/soft trawn refrigeration piping. The brazing to be carried out with bleeding of Nitrogen. 3.4mm dia Rmt 63 2.5mm dia Rmt 10 2.7mm dia Rmt 53 The copper Pipes to be insulated with 19mm thick/13mm Rmt 53 The copper Pipes to be insulated with 19mm thick/13mm Rmt 126 Supply and laying of 2C x 1.5 Sqmm PVC Copper Cable-Communication and Control cabling between indoor and outdoor units. The rate shall be including suitable size MS conduit with conduit accessories and necessary fixing urrangement. Providing, fixing, testing and commissioning insulated PVC drain piping for indoor unit with 6 mm thick Nitrile Rubber insulation. Rmt 28 Supply and Erection of ODU Stands Supply and Installation of PVC Pipe for Exposed Pipes Lifting and shifting of Non VRV IDU's to the respective Lot 6 Lifting and shifting of Non VRV ODU's to the respective Lot 6 Anti Corrosive Paints for all the Non VRV ODU's Nos. 6 SUB TOTAL TOTAL

CCTV WORK FOR INDIAN BANK - 3RD FLOOR, 66, RAJAJI SALAI, CHENNAI	
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	II EM DESCRIPTION	MOM	ty	Rate	Amount	Rate	Amount	Installation)
	Section A - Third Floor - CCTV system							
1.01	Supply, Installation, Testing & Commissioning of 2 MP IR IP Dome Camera	No.s	10					
1.02	Supply, Installation, Testing & Commissioning of CCTV Camera Accessories required for complete installation	No.s	10					
1.03	Supply, Installation, Testing & Commissioning of 24-Port Smart Managed POE Gigabit Switch with all accessories(To be procured based on approval from bank).	No.s	-					
9.1	Supply, Installation, Testing & Commissioning of Cat6 24 Port Fully Loaded Patch Panel with all accessories	No.s	-1					
1.05	Supply, Installation, Testing & Commissioning of Cat6 Patch Cable - I Metre with all accessories	No.s	11					
1.06	Supply, Installation, Testing & Commissioning of CAT6 Cable in 25mm PVC Conduit with Wall/Ceiling Clamping as layout shared by the Architect with all accessories	Mtrs	915					
1.07	Supply, Installation, Testing & Commissioning of Wall Mount 12U x 500 W x 450 D, Front Glass Door with Lock, 2 pairs of 19" Mounting Rails: St a n d a r d Ac c e s s o r i e s: - 1U Ca b 1 e Manager, Roof Mounted Fan Unit / 90 CFM /230V AC, 6 Way 5 Amp Power Distribution Unit, Mounting Hardware with all accessories	No.s	П					
1.08	Supply, Installation, Testing & Commissioning of 6 Core Single Mode Armoured Optic Fibre Cable with - To CCTV Ground Floor Hub with all accessories	Mtrs	100					
1.09	Supply, Installation, Testing & Commissioning of Necessary for 6 core OFC - 12 Core rack mounted Fully Loaded LIU, Core Splicing, Patch Cables, SFP Module & OFC connectors for connectivity to ground floor Hub (To be integated with the ground floor CCTV Hub & Commissioned with the required accessories). (To be procured based on approval from bank).	LS	-					
	Sub Total (A) (Exclusive of taxes)						STATE OF THE STATE	
	Section B- Third Floor - NETWORKING							
2.01	Supply, Installation, Testing & Commissioning of 24-Port Smart Managed Gigabit Switch with all accessories (To be procured based upon the approval from Bank)	No.s	13					



Supply, Installation, Testing & Commissioning of Rack 27U 600Wx1000D Floor Mount Network Rack with Accessories:: (1) 90 CFM Fan-2 Nos. (2) 1U Cable Manager-2 Nos. (3) 10 Socket 6/16A PDU-1 Nos. (4) Monitor 475D Tray -1 Nos. (5) Mounting Hardware packet of 20Nos with all accessories(To be procured based on approval from bank). Supply, Installation, Testing & Commissioning of Wall Mount 12U x 500 W x 450 D, Front Glass Door with Lock, 2 pairs of 19" Mounting Rails:- St an d ar d Ac c e s s or i e s:- 1U Ca b 1e Manager, Roof Mounted Fan Unit / 90 CFM /230V AC,6 Way 5 Amp Power Distribution Unit, Mounting Hardware with all accessories Supply, Installation, Testing & Commissioning of Cat 6 24 2.04 Port Loaded Patch Panel with all accessories Supply, Installation Testing & Commissioning of Cat 6 patch cable - 1 Metre with all accessories	ing of Rack 27U ith Accessories :: er-2 Nos. (3) 10 Tray -1 Nos. (5) accessories(To be accessories(To be ing of Wall Mount th Lock, 2 pairs of or i e s: -1U Ca FM/230V AC,6 ing Hardware with ing of Cat 6 24	N N N N N N N N N N N N N N N N N N N	2 1 13 150		
Supply, Installation, Testing & Commissioning of Cat 6 patch cable - 2 Metres with all accessories	ing of Cat 6 patch	No.s	150		
2.07 Supply , Installation , Testing & Commissioning of Cat 6 patch cable - 2 Metres (End User Side) with all accessories	ing of Cat 6 patch essories	No.s	290		





4.01 Supply, Installation, Testing & Commissioning of Ceiling Speakers - 6W	No.s	33		
Supply, Installation, Testing & Commissioning of 0.75sq.mm Speaker Cable / CAT6 Cable in 25mm PVC Conduit. Junction 6.02 box with on/off switch to be connected in the fourth floor. From fourth floor Junction box, one 2 x 0.75 sq.mm cable needs to be connected to the 1st floor hub.	Mtrs	1500		
Sub Total (D) (Exclusive of Taxes)				



Reference Images				
Rate (Rs) Amount				
Unit	Nos		Nos	
Oty. 1	41		46	
Description	LINEAR WORKSTATION - Size 1200W x 600D x 1050HT - BTB	Desking System considered Main Privacy screen: 305H 8mm thk Frameless sandwich glass screen fixed to worktop with special metal brackets. Divider screen: 305H 8mm thik Frameless frosed flim glass special metal brackets. Divider screen in 305H 8mm thik Frameless frosed flim glass special metal brackets. Partition height: 1050H considered from floor level. Table Top - 25mm thk pre laminate table top with PVC edge lipping 3 side and Reverse conformered edge on user side. Legs +40x40 MS powder coated siant open legs with MS powder coated cross[50x25] member for table support. Modesty: Front powdercoated modesty considered with square perforation below cable beam 300H. Electricals & Data - Powder coated cable beam below the electricals & data cut outs.	LINEAR WORKSTATION - Size 1200W x 600D x 1050HT -	Desking System considered Main Privacy screen: 305H 8mm thk Frameless sandwich glass screen fixed to worktop with special metal brackets. Divider screen: 305H 8mm thk Francless frosed lim glass screen fixed to worktop with special metal brackets. Partition height: 1050H considered from floor level. Table Top - 25mm thk pre laminate table top with PVC edge lipping 3 side and Reverse chamfered edge on user side. Legs: 40X40 MS powder coated slant open legs with MS powder coated cross[50x25] member for table support. Modesty: Front powdercoated modesty considered with square perforation below cable
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Nos		Nos		RMts
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CM CABIN TABLE MAIN : Size 1500W x 750D x 745HT; RETURN STRG - 900W x 425D x 745H	Table Top - 25mm thk pre laminate table top with PVC edge lipping Legs: 40x40 MS powder coated closed legs with MS powder coated cross member for table support. Modesty: Front powdercoated modesty considered with square perforation below worktop 450.4. Electricals & Data - Powder coated cable tray below the table top for wire managment with electricals & data cut outs. Wire managment through MS powder coated vertical duct. Access flap: 450W Aluminium access flap considered 1 nos no table top. Return combo storage -: 900W x 450D x 745H with d handles. Pedestal: Not considered. Keboard tray and CPU trolly: Not considered.	AGM CABIN TABLE MAIN: Size 1800W x 750D x 745HT; BEUTRN THE - 1350W x 450D x 745H; BACK CETTS - 160W - 460D x 745H;	Table Top - 25mm this pre laminate table top with PVC edge lipping. Table Top - 25mm this pre laminate table top with PVC edge lipping. Legs :40x40 MS powder coated closed legs with MS powder coated cross member for table support. Modesty: Front powdercoated modesty considered with square perforation below worktop 450H. Electricals & Data - Powder coated cable tray below the table top for wire managment with electricals & data cut outs. Wire managment through MS powder coated vertical duct. Access flap: 450W Aluminium access flap considered 1 nos on table top. Back - Shutter door strg : 1500W x 450D x 745H with d handles. Pedestal Not Considered	CM, AGM CABIN 50 mm PARTITIONS Height - 1200 mm
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2) Si 24 12 Si 25				
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oor level thout & sidered). tile back larker las aure las	Nos	No No		
oor level back back life back life back life life life life life life life life	-	-		
Partition Height - 1200mm Hi is considered from Floor Main panel: SOTHK-1200HJ Ist Module Laminate tile for back; 2nd module-Mdf fabric front & back side considered from the back side on back; 2nd module-Mdf fabric front side and back side considered. Special tile - 1 nos MGP fabric and 1 nos laminate mark tile considered in each workstation. Frame Horizontals a mide of 1.5mm thick CRCA sheets & the verticals are not Aluminium Extrusions of 1.5mm thick, All the frames along with 2 - way, 3-way connectors, top curve trims, are duly powder coated using nano powdercoating color will be as per Customers choice, which will be inline with the Top trimmend frims. All the frames are flastened together by means M6 NUTS & BOLIS. Raceway caps are made out of Die-Mnminum. The raceways are made out of Die-Mnminum. The raceway caps are made out of Die-MnMinum. The raceways are made out of Die-MnMinum. The raceway caps are made out of Die-MnMinum. The raceway to Die-MnMinum. The die-Die-MnMinum. The die-Die-Die-Die-Die-Die-Die-Die-Die-Die-D	square perforation below worktop 450H. Electricals & Data - Powder coated cable trey below the table top for wire management with electricals & data cut outs. Wire management through MS powder coated vertical duct. Access flap: 450W Aluminium access flap considered 1 nos on table top. Back - Shutter door strg: 1500W x 450D x 745H with d handles. Back - Shutter door strg: 1500W x 450D x 745H with d handles. Pedestal: BBF Prelam pedestal with D handles & castors - data - s.co. III. GM CABIN TABL. MAIN: Size 2100W x 750D x 745HT; RETURN TBL - 1500W x 600D x 680H; RETURN TBL - 1500W x 600D x 680H; RETURN TBL - 1500W x 600D x 680H; Caps: MS powder coated closed MINI TRIA legs with MS powder coated cross member for table support. Modesty: Front Acrylic modesty considered below worktop 400H. Electricals & Data - Powder coated cabic tray below the table 600H. Wire management through MS powder coated vertical duct. Access flap: 300W Aluminium access flap considered 1 nos on table top. Side storage - Shutter + open strg: 1350W x 450D x 680H with I handles. Back - Shutter door strg: 1500W x 450D x 745H with I handles.	MAIN: Size 800W x 750D x 745HT; RETURN TBL - 1350W x 450D x 745H; BACK STRG - 1500W x 450D x 745H; Table Top - 25mm thk pre laminate table top with PVC edge lipping. Legs: 40040 MS powder coated closed legs with MS powder coated cross member for table support.	front & back; 2nd module-Mdf fabric front side and back side considered). Special tile - 1 nos MGP fabric and 1 nos laminate marker tile considered in each workstation. Frame Horizontals are made of 1.5mm thick GRCA sheets & the verticals are made of Aluminium Extrusions of 1.5mm thick, All the frames along with 2 - way, 3-way connectors, top curve trims, caps are duly powder coated using nano powdercoating technlogyaat colour, powder coating color will be as per Customers choice, which will be inline with the Top trims & end trims All the frames are fastened together by means of the coated the coated using and the coated together by means of the coated the coated together by means of the coated together by the coated toge	Partition Height - 1200mm Ht is considered from Floor level Main panel: 50THK-1200H(1st Module Laminate tile front & back; 2nd module- Mdf flabric front & back side considered). Return panel:50 THK - 1200H(1st Module Laminate tile front & back; 2nd module-Mdf flabric front side and back side considered).
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MEETING TABLE TYP 1 - 1800W x 1100D x 729H	Worktop: 25thk Prelaminated top with access flap cutouts. Height of the Tabletop - 729mm Ht is considered from Floor level. Leg. Powder coated ALUMINIUM leg considered. Accessflap: 450w Inos Aluminium make considered. Electricals & Data Powder coated cable tray below the table top for wire managment with electricals & data cut outs. Wire managment through legs.	MEETING TABLE TYP 2 - 2600W x 1200D x 729H	Worktop: 25thk Prelaminated top with access flap cutouts. Height of the Tabletop - 729mm Ht is considered from Floor level	3D BBF PRELAM PEDESTAL - 400W x 470D x 620H	PRELAM PDSL TOP: 18 MM THK, PRELAM TABLE TOP WITH 2 MM THK, FLAT EDGE PVC LIPPING. BODY & DOOR: 18 MM THK, PRELAM TABLE TOP WITH 2 MM THK, FLAT EDGE PVC LIPPING. DOOR TYPE: DRAWER, HANDLES: 1" SHAPE. LOCK: CENTER LOCK. REST ON: CASTORS.	PRELAM STORAGE MEDIUM HEIGHT - 900W x 425D x 1200H	PRELAM STORAGE TOP: 18 MM THK. PRELAM TABLE TOP WITH 2 MM THK. FLAT EDGE PVC LIPPING. BODY & DOOR: 18 MM THK. PRELAM TABLE TOP WITH 2 MM THK. FLAT EDGE PVC LIPPING. DOOR TYPE: SHUTTER. HANDLES: TOP GROVE. LOCK: MULTIPURPOSE LOCK. SHELF: 2 NOS (1 ADJUSTABLE & 1 FIXED).
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PRELAM STORAGE LOW HEIGHT - 1200W x 425D x 1200H	PRELAM STORAGE TOP: 18 MM THK. PRELAM TABLE TOP WITH 2 MM THK. FLAT EDGE PVC LIPPING. BODY & DOOR: 18 MM THK. PRELAM TABLE TOP WITH 2 MM THK. FLAT EDGE PVC LIPPING. DOOR TYPE: SHUTTER. IAMNDLES: TOP GROVE. LOCK: MULTIPURPOSE LOCK. SHELF: SHELF: 2 NOS (1 ADJUSTABLE & 1 FIXED).	ERIC METAL STORAGE - 750W x 450D x 1660H	ERIC METAL STORAGE TOP: CRCA POWDERCOATED. BODY & DORS: CRCA POWDERCOATED. BOOR TYPE: SHUTTER. HANDLES: FLUSH TYPE. LOCK: MULTIPURPOSE LOCK. SHELP: 4 NOS (4 ADJUSTABLE).	METAL KEY BOARD TRAY WITHOUT MOUSE PAD	METAL CPU TROLLY WITH CASTORS	Alysia double seater: The seat, armrest & backrest assembly shall consists of a Pine understructure with plywood frame consisting layers of foam with wadding. The complete assembly shall be covered with Leatherette upholstery. The size of seat shall be: 55.0cm. (W) X 25.0cm. (D) X 22.0cm. 77.0cm. (H) X 22.0cm. (T) Approx. Elastic Webbing is used to give a soft contour to the seat. It consists of a fabricated inner-frame hardboard assembly with layers of foam. The hardness of the P.U. foam= 16-20 Kgs. on Hampden m/c for 25% compression of the foam. The leg is made of wood and 4 tier packing is used to minimize damage & reduce wastage. Overall Dinensions of Chair shall be Seat Width - 54.5 cm, Height - 74 cm, Total width - 85 cm, Total length - 154 cm. Dimensions tolerance / variations shall be within +/- cm.	Elliptical shape Ws: 1300Wx600Dx740H, Top: prelaminated particle board with melamine finish. Wire management: grommet, wiring tray & housing. Leg: 38mm sq leg, In between tower leg. Modesty: metal modesty.	BASIC TOTAL
12		13		14	15	16	17	

