

STATE BANK OF INDIA, PREMISES & ESTATES INVITES

TENDER DOCUMENT FOR PROPOSED ELECTRICAL WORKS OF SBI VIKHROLI (EAST) BRANCH

THROUGH E-TENDERING PROCESS

INVITE FROM EMPANELLED CONTRACTORS OF SBI, LHO, MUMBAI METRO IN APPROPRIATE CATEGORY IS ONLY ELIGIBLE TO APPLY (PROOF OF EMPANELMENT SHOULD BE SUBMITTED WITH TENDER)

NOTE: FIRM SHOULD POSSESS VALID DIGITAL SIGNATURE FOR THIS E-TENDER.

PART - B: PRICE BID

: ARCHITECTS & CONSULTANTS:

SANDEEP GOVALKAR DESIGN ASSOCIATES

ARCHITECTS INTERIORS LANDSCAPE DESIGNERS PROJECT MANAGEMENT CONSULTANTS
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BOQ FOR PROPOSED ELECTRICAL WORKS OF SBI VIKHROLI (EAST) BRANCH

S No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	MCCB NEAR ENERGY METER Supply & Installation of 125A,4Pole, 25KA MCCB in a fabricated IP 65 enclosure near Energy Meter (MCCB should not visible to outside).	Nos	1		
2	Supply & Installation of 125A,4Pole, 25KA MCCB in a fabricated IP 65 enclosure near Entrance / Second Entrance (MCCB should not visible to outside).	Nos	1		
3	Supply, installation, testing & commissioning of 14SWG (2mm thick) CRCA fabricated & powder coated after 7 tank process, compartmentalised panel with air ventilation & dust/vermin proof, free standing, floor mounted on 100 mm rigid 'C' MS base supported on concrete base with anchor fasteners, internal wiring, danger board, 2 earthing legs, cable chamber etc as per drawing approved by Architect/Consultant / Bank				
	Panels to be top / bottom entry & accessible from front & rear side or as required by consultant & site conditions. GA to be made by contractor & approved by consultant/ Engineer In charge Prior to fabrication with respect to SLD & spec. Busbar to be of electrolytic Alu with current density of 1.0 amp per sqmm or as mentioned for copper Panel shall confirm to all applicable IS standards. thermal magnetic based MCCB to be used. APFC panels to have D curve MCB. All internal wiring to be done in pvc insulated FRLS copper wires Out going from MCCB to be terminated in bus bars/ panel connectors in cable Chamber. All terminations to have Bi-metallic stirp/washer as per required as required.				
	All MCCB to have spreader links up to cable chamber MCB DB. ALL DB's to be IP43. All MCB to be 'C' & 'D' curve as mentioned & indicators to be LED All MCB & DB to be approved by consultant before procurement. Panel manufacturer must be CPRI approved. EARTH BUS CHAMBER TO BE CONSIDER AT TOP/BOTOOM as per drawing approved by Architect/Consultant / Bank				
а	MAIN LT panel	Nos	1		
	INCOMER -1 125A FP 25KA Thermal Magnetic based MCCB with O/C,S/C & E/F- 01 No. with Multi function meter, RYB LED indication, ON-OFF-TRIP indications with 2Amp MCB. 3 Nos, CT - 150A/5A, 0.5 CL 1.0, Indication lamp with				
	2A MCB, connected with MFM meter etc. & 1 no CT set for APFC relay				

S No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BUSBARS SECTIONS				
	125 amps FP busbar, chamber of suitable length with AL busbars. Insulated with heat shrinkable colour coded sleeves.				
	OUTGOING:-				
	63 A , FP MCB-04 nos Capacitor Bank, ATM & Spare, AC DB				
	40 A , FP MCB-03 nos Lighting DBs, UPS & Spare				
	25-32A SP MCBs - 8 nos for AC POWER POINTS				
b	APFC [8 KVAR] [current & contactor based] 63A, 4P, MCB as incomer a) 4 Stage Relay, Auto/ Manual switch, ON/OFF indicator b)10A, 3P, MCB,10kA-4No c) 16A 3P, Power contactor -4Nos d) 1 KVAR-1 Nos, 2 KVAR - 2 nos, 3 KVAR-1 Nos (Through Contactor)	Nos	1		
5	Supply, Installation, Testing & Commissioning of Distribution Boards recessed in walls/partitions, complete with MCBs/ Bus bars and interconnections. No fabricated DBs shall be allowed. Only DBs of specified makes as per list of materials shall be used (DOUBLE DOOR IP43 Type)				
b	6-way TPN DB -Double Door -(Horizontal type) with 40A, 4P, ELCB 100ma as incomer and 32A DP RCCB - 3 nos & 6-25A SP MCB-12 Nos as outgoing for light DB.	Nos	1		
d	4-way TPN DB -Double Door -(Horizontal type) with 40A, 4P, ELCB 100 mA as incomer & 25A DP RCCB - 3 nos & 6-32A SP MCB-12 Nos as outgoing for light DB AT ATM LOBBY.	Nos	1		
е	2+8 way SPN MCB with metal Double door DB for UPS sockets. 63A DP MCB-1No as Input, 32A SP MCB - 2 Nos, 6-25A SP MCB-4 Nos (Hub/NETWORK RACK,CCTV, Fire panel, Burg alarm and Distribution boards in banking hall) (UPS Output DB Near UPS & ATM)	Nos	1		
f	2+10 way SPN MCB with metal Double door DB for UPS sockets. 32A DP MCB-1No as Input, 6-32A SP MCB-10No Counters and Manger Cabin	Nos	2		
g	2+4 way SPN MCB with metal Double door DB for UPS sockets. 32A DP MCB-1No as Input, 6-32A SP MCB-4No as out going	Nos	1		
h	Supply & Installation of 63 A 4P MCB with suitable enclosure (UPS IN PUT)	Nos	1		
i	Supply & Installation of 63 A DP MCB with suitable enclosure (UPS OUT PUT)	Nos	1		
	3			Cool 9 Ci	on of Contractor

S No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
I	Supply, Installation, testing and commissioning of 63A, 4P, 100 mA RCCB with suitable weatherproof IP65 enclosure etc.	Nos	1		
6	Supply & Laying of following 1100V grade armoured cable having sector / circular shaped aluminium conductor XLPE insulated cores, laid up, PVC tape wrapped inner sheathed, GI strip / wire armoured and overall extruded PVC sheathed confirming to IS: 7098, laid along with 2 Runs of 12 SWG GI Wire on wall or ceiling using GI clamps and spacers as per route shown at site and further as directed by Bank / Architect.				
b	3.5 CX 50 Sq.mm Al Cable along with 2 Runs of 12 SWG GI wire	Rmt	50		
С	4CX 10 Sqmm, CU cable along with 2 Runs of 12SWG GI Wire	Rmt	40		
d	4CX 6 Sqmm, CU cable along with 2 Runs of 12SWG GI Wire	Rmt	45		
е	3CX 6 Sqmm, CU cable along with 2 Runs of 12SWG GI Wire (UPS)	Rmt	35		
7	Supply & end termination of following cables including compressed type brass glands, crimping type Aluminium/ copper lugs, insulation tape etc. as required complete with earthing of glands in following sizes				
b	3.5 CX 35 Sq.mm Al Cable	Nos	4		
С	4CX 10 Sqmm/ 4CX 6 Sqmm/ 4CX4 Sqmm CU cable	Nos	20		
8	SUB MAIN WIRING				
	Supply & Wiring with Flame Retardant Insulated PVC copper wire as per grade IS 994for Circuits, Computer point, Power points within 2mm thk PVC conduits with necessary accessories and with proper clamps and to be concealed below the false ceiling. It comprises as follows: -				
а	2Runs of 4Sqmm copper wire+ 1x 2.5 Sqmm copper wire in PVC conduit	Rmt	25		
b	2Runs of 10 Sqmm copper wire+ 1x 6 Sqmm copper wire in PVC conduit (UPS)	Rmt	25		
С	Supplying and laying 3 CX 2.5Sq.mm 1100V grade PVC insulated Flexible cable along with one run of 12SWG GI earth wire in PVC pipes run on wall/ Ceiling etc as required. (for sign board)	Rmt	40		

S No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
d	EMERGENCY LIGHTING (UPS SUPPLY) Supply & laying of 3 core 1.5 sqmm copper flexible cable in a suitable FRLS PVC pipe for emergency lighting. The scope of work includes supply & fixing of 2A DP MCB in a suitable enclosure. No of points: One primary point & Three secondary points. The scope of work extends to supply & fixing of 4 no of square type 15 watts recess mounted LED lights also.	Nos	4		
9	MODULAR SOCKETS FOR UPS & RAW POWER				
a	Supply and fixing of 2nos. 6A sockets fixed Above the table with 2 no 6A switch fixed above the table on suitable module metal box and white front plate (Modular type) with 2runs of 2.5 sq.mm FRLS and 1 run of 1.5sqmm FRLS 1100 V grade PVC insulated multi strand copper conductor wires conforming to IS 694 (with latest amendments) with 25mm dia PVC conduit of 2mm thick concealed in wall/floor and supply of all fixing materials and accessories, interconnections complete as required for the raw power primary sockets (DB to work stations Primary point)	Nos	6		
b	same as above but looped from nearest Raw Power point (Primary point to Secondary point) including 2nos. 6A sockets fixed Above the table with 2 no 6A switch fixed above the table on 3 module metal box and white front plate (Modular type)with 2runs of 2.5 sq.mm FRLS and 1 run of 1.5sqmm	Nos	5		
С	PRIMARY POINT: RAW POWER Supply and fixing of 1 no of 16A socket with 1 no of 16A switch on suitable Modular metal box and modular front plate including Supply and wiring with 2runs of 4.0 sq.mm & one run of 2.5sqmm 1100 V grade PVC insulated multi strand FRLS copper conductor wires conforming to IS 694 (with latest amendments) with 25mm dia PVC conduit of 2mm thick concealed in wall/floor and supply of all fixing materials and accessories, interconnections complete as required for the UPS/ raw power sockets etc (No Loop point)	Nos	4		
d	PRIMARY POINT: RAW POWER Supply and fixing of 1 no of 6A/16A socket with 1 no of 6A/16A switch on suitable Modular metal box and modular front plate including Supply and wiring with 3 runs of 2.5 sq.mm 1100 V grade PVC insulated multi strand FRLS copper conductor wires conforming to IS 694 (with latest amendments) with 25mm dia PVC conduit of 2mm thick concealed in wall/floor and supply of all fixing materials and accessories, interconnections complete as required for the AC VRF IDU sockets etc	Nos	4		

S No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
е	SECONDARY POINT: RAW POWER (Primary point to Secondary point) Same as about but looping from the above point: Supply and fixing of 1 no of 6A/16A socket with 1 no of 6A/16A switch on suitable Modular metal box and modular front plate including Supply and wiring with 3 runs of 2.5 sq.mm 1100 V grade PVC insulated multi strand FRLS copper conductor wires conforming to IS 694 (with latest amendments) in suitable size FRLS PVC Conduit of 2mm thick concealed in the above ducts in the floor and supply of all fixing materials and accessories, interconnections complete as required for the AC VRF IDU sockets etc	Nos	4		
f	PRIMARY POINT: RAW POWER Supply and fixing of 2 Nos of 16A socket with 2 Nos of 16A switch on suitable Modular metal box and modular front plate including Supply and wiring with 2runs of 4.0 sq.mm & one run of 2.5sqmm 1100 V grade PVC insulated multi strand FRLS copper conductor wires conforming to IS 694 (with latest amendments) with 25mm dia PVC conduit of 2mm thick concealed in wall/floor and supply of all fixing materials and accessories, interconnections complete as required for the UPS/ raw power sockets etc (No Loop point)	Nos	2		
g	Primary: Supply & Installation of point wiring for UPS or stabilized power plug points on workstations / table for computers using 3C X2.5 Sqmm FR sheathed WHITE/BLACK colour flexible cable with 25mm dia PVC conduit of 2mm thick concealed in wall/floor/partitions. Each point consisting of 3 nos of 5A, 2/3 pin sockets below table top & 1 No., 15A Switch above table top, PVC Conduits wired together forming one point. The earth wire of 3 core flexible cable to be of yellow-green colour only. (ONLY Two tables served by one circuit from DB)	Nos	8		
h	Secondary: Supply & Installation of point wiring for UPS or stabilized power plug points on workstations / table for computers using 3C X2.5 Sqmm FR sheathed WHITE/BLACK colour flexible cable with 25mm dia PVC conduit of 2mm thick concealed in wall/floor/ metal partitions. Each point consisting of 3 nos of 5A, 2/3 pin sockets below table top & 1 No., 15A Switch above table top, wired together forming one point. The earth wire of 3 core flexible cable to be of yellow-green colour only. (ONLY Two tables served by one circuit from DB)	Nos	8		

S No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
j	Providing 3 meter length of flexible 3core 2.5sqmm multi core copper cable one end connected to plug top 15A and the other connected to the SB inside and a suitable hook arrangement as required for hanging the cable (This item excludes wiring from DB to Socket and socket to inside switch box which already considered in point wiring)	Nos	2		
k	Supply and fixing of 1nos. 16A socket with 1 no 16A switch fixed on a 3 module metal box and white front plate (Modular type) including all interconnections as required for locker, safe room, Record room/Stationary room.	Nos	2		
10	LIGHT & FAN POINT WIRING				
	Supply and wiring for Primary light point with 2Runs of 1.5sq.mm+ 1 Run of 1.5 Sqmm (Earth) 650V grade PVC insulated Copper Conductor multi strand wires in heavy gauge 20/25mm dia PVC conduit concealed in wall or with suitable width casing and capping of approved quality along with required accessories when laid on ceiling / below work stations and fixing of 5 Amp Modular type switch in anodised GI box complete with front plate, supplying and fixing 3way ceiling rose or straight / slant batten holder including interconnections required. The rate shall include circuit wiring with 2 runs of 2.5sq.mm multi strand copper conductor wire& 1 run of 1.5sq.mm wire for earth in suitable size heavy gauge 25mm dia PVC conduit from DB to switch & switch board to switch board, ceiling rose and angle holders for cfl light fixtures all complete.				
а	Primary points	Pts	42		
b	same as above but for Extending the existing point in the office room	Pts	33		
С	Supply and installation of 6A modular socket with a switch in the above modular switch boards.	Nos	6		
d	Wiring for the wall mounting fans from the nearest switch board with 1.5sqmm 650V grade multistranded PVC insulated copper wire in PVC Conduit and all interconnections as required including the supply and fixing of 6A modular socket near the wall mounted fan and 6A switch in the near switch board below fan as required.	Nos	5		
е	Supply and wiring similar to item7 above but for ceiling fan point including GI box and 5 Amp. Control switch, 100W step type Electronic fan regulator etc.	Nos	7		
f	Bell point with indicator type bell	Nos	1		
44	ELOOD TRENCH ROYES / CARLE TRAVS				
11	FLOOR TRENCH BOXES / CABLE TRAYS				

S No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Supply and laying Raceways / Conduits (for under floor trenches / On trays) on existing flooring. Raceways / conduits shall be fixed to the flooring with GI clamps for finished levels as per the site conditions or through partitions with all accessories. The rate shall include preparation of trenches of required sizes by carefully removing the malwa on existing floor for laying Raceways/conduits for power, data, telephone cables etc. The depth of the trenches shall be at least 2 inches from the finished floor level or upto RCC of the slab. The rate shall include the cost of the Raceways/conduits. The rate shall also include the activity of clearing the debris generated from the preparation of trenches & filling the same with PCC.				
а	80 x 40 x 1.6mm thick Aluminium Raceways	Rmt	12		
b	60 x 40 x 1.6mm thick Aluminium Raceways	Rmt	12		
12	Supply & Laying of following size PVC conduit of 2mm thick concealed in wall/floor with all accessories, bends, pull wire etc. For CCTV and LAN 25 mm Heavy gauge PVC Conduit	Rmt	155		
13	Supply & Installation of floor junction boxes with 2mm thick removable cover plate screwed on all four sides of M.S. sheet, fully powder coated for above raceways, of following sizes, fabricated out of M.S. sheets, fully powder coated with provision for removable M.S. / S.S. screwed cover plates on all four sides for blocking the entry into the junction box. All the junction boxes to be (with stud) 'properly earth bonded with the raceways pipe using 12 SWG Copper bare wire as directed at site.				
а	size 200mm x 200mm x 50mm x 2.5mm thick	Nos	6		
b	size 300mm x 300mm x 50mm x 2.5mm thick	Nos	6		
	LED LIGHT FIXTURES (COMMERCIAL TYPE ONLY)				
14	/FANS				
а	Supply & Installation of 34W 2X2 LED Light fixtures (Havells – VENUS NEO HE 2X2PLR 34WLED 8XXS or CROMPTON: LCTLRNE-36-FO-CDL or Philips RC 375B30S 6500K or Equivalent models in other approved makes) including cost and conveyance of all materials, taxes and all labour charges etc., complete. Weight of the light should not be on the grid/ Gypsum ceiling. light has to be fixed with the help of Gl/chain wires and to the anchored to the ceiling.	Nos	23		
b	Supply & Installation of 610x610 Led Light fixtures Frames including cost and conveyance of all materials, taxes and all labour charges etc., complete	Nos	2		

S No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
С	Supply & Installation of 15W LED down light fixture . (Havells:- Integra NEO15W, 857 CROMPTON: LCDRQ-15-CDL/LCDRO-15-CDL or DN296B LED15S 6500K in Philips or equivalent models in other make) including cost and conveyance of all materials, taxes and all labour charges etc., complete.	Nos	40		
d	Supply & Installation of 3W LED down light fixture of approved make including cost and conveyance of all materials, taxes and all labour charges etc., complete.	Nos	3		
	Cove / Indirect Lighting & Other Area Lighting				
e	Supply & Installation of single colour (warm white 2800k light / any other approved colour) flexible LED strip light including required rated driver / power supply in multiples of 1 Rmtr as approved by category & models in other as approved make by client / architect / Engineer.) including cost and conveyance of all materials, taxes and all labor charges etc., complete.	Rmt	25		
f	Supply and Installation of 20W Batten LED light fixtures SURFACE type with all interconnections and fixing arrangement as required. (LUMILINEBS18WLED857SPCWH - Havells or BN021-21S in Philips or CROMPTON: LDL-20-CDL or equivalent)	Nos	11		
g	WALL MOUNTING FANS Supply and Fixing of 18 inch Metal body & Blades wall mounted fans with 3 pin plug top, fan body should be earthed if 3 pin socket not available in the market, Make: Storm model in CG or equivalent	Nos	5		
h	EXHAUST Supply & Installation of fresh air exhaust fan 50W of light duty 300mm size (9"), Metallic body & blades, wire mesh, bird louvers etc. including cost and conveyance of all materials, taxes and all labor charges etc., complete for erection	Nos	3		
i	CEILING FAN:- supply &Fixing of 1200mm sweep 5 star High speed ceiling fan with electronic step regulator in suitable locations as required. And Supplying of double anchor fastener hooks and down rods. complete in all respects as directed by Bank. Ref Model: Crompton Greaves Rivera high speed model (or) equivalent in other approved make	Nos	7		
j	SUPPLY & FIXING OF EXHAUST FANS WITH TIMER Supply & fixing of 2 no of bird cage 9 " exhaust fans with timer control for the exhaust fans in the UPS room. The scope of work includes point wiring & making provision in the wall for installation of exhaust fans and bring back to original finish.	Nos	1		
k	Removing, safely keeping, Servicing and refixing of existing LED light fixtures with proper supports etc	Nos	10		

S No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
NO					
15	TELEPHONE CABLING				
а	Supply, laying and connection of high Conductivity Solid Annealed Bare Copper industrial 2 Pair 0.5 sq mm dia Telephone Cables with High Density Polyethylene Insulation, Paired, Polyester and Sheathed with High Oxygen Index, Fire Retardant, PVC Compound, Grey Outer Sheath generally conforming ITD Specification. the scope of work inclusive of all fixing accessories & laying in a suitable ISI medium PVC conduit. The scope of work extends to Supply and Fixing of modular type RJ11 Telephone outlet with anodized GI box and front plate complete as required.	Nos	11		
b	Supply, installation, testing & commissioning of 10 Pair Telephone Krone DB in an MS powder coated enclosure in suitable location	Nos	2		
16	PA & MUSIC SYSTEM				
а	Supply & Installation of point wiring for music - cum PA system comprising of 2x 1.0 sqmm stranded, copper conductor, flexible PVC insulated and PVC Sheathed wire with 20 mm dia PVC heavy gauge conduits and looped from one speaker to other and to the volume control and control switch wherever applicable and finally terminated at Tag Block.	Nos	5		
b	S & I of Philips / Bosch/Ahuja make music 6W (101.6mm Diameter) speaker flush mounted on the false ceiling with proper clamping arrangement	Nos	5		
С	S & I of 100 Watts BOSCH/Ahuja make Central Music System Amplifier and MP3/CD/USB Player with FM facility of make Samsung/Onida/LG	Nos	1		
17	EARTHING				
17 a	COPPER Providing independent earthing for sophisticated electronic equipment with 600 mm x 600 mm x 3.5 mm thick copper plate rigidly fixed to 40 mm dia G.I. pipe of 3 mtr length connected with reducer providing .GI. funnel with wire mesh as per national electric code including C.C. Chamber of size 400 mm x 400 mm x 400 mm covered with RCC slab filling with salt and charcoal giving earth connection from electrode copper strip 2 runs of 50 mm x 6 mm x 3000 mm length with all accessories and labour charges complete, as per IS specifications 732/1982 (Part II)	Nos	2		

S No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	GI EARTHING:				
b	Providing independent earthing for important equipment with 40 mm dia "B" class 2.5m long G.I pipe and 19mm dia "B" class G.I pipe of 0.3 mtr. Long connected with reducer providing G.I. funnel with mesh enclosed in C.C. Chamber of 400mm x 400 mm x 400 mm with RCC slab cover duly providing staggered holes filling with salt and charcoal from the bottom of the pipe giving earth connection from electrode through G.I. strip 2 runs of 50 x 6 mm x 3000 mm length with all accessories and labour charges complete, as per IS specifications 732/1982 (part II)	Nos	2		
С	S.I.T.C. of 2 RUNS X 8 SWG COPPER through PVC sleeve (Electrical Earthing) (From Electrical Earthing Pit to Main Electrical Earthing Busbar)	Rmt	25		
d	S.I.T.C. of 25 x 5 GI. Strip through PVC sleeve (Electrical Earthing) (From Electrical Earthing Pit to Main Electrical Earthing Busbar)	Rmt	20		
е	Supply & Laying of 100mmX 25mmX 5mm Copper strip with supporting insulator and holes	Nos	2		
18	BUY BACK (amount to be paid to the Bank)				
	Removing the existing Wiring, Light Fittings, Distribution boards, Power cable, panel board etc,. at appropriate time when new work is nearing completion without disturbing the working environment of the bank premises and taking away on as is where is basis of the following items from the branch with prior approval of the Bank officials. Proof must be attached along with bill. The work also includes providing temporary arrangements of Lighting, UPS wiring and LAN without effecting of branch working hours.				
а	Electrical panel	Nos	-1		
b	Distribution boards	Nos	-5		
С	cables/ Wires	Ls	-1		
d	Light fixtures	Nos	-20		
	TOTAL AMOUNT (Excluding GST) (Rs.)				
	Discount if Any				
	GRAND TOTAL (Excluding GST)				