

**INDIAN BANK
SECURITY DEPARTMENT
CORPORATE OFFICE, CHENNAI-600 014**

**TENDER DOCUMENT FOR
FIRE FIGHTING SYSTEM "SUPPLY,INSTALLTION, TESTING AND
COMMISSIONING WORKS AT INDIAN BANK KILPAUK PREMISES BUILDING,
DOOR NO -103, NEW AVADI ROAD, KILPAUK, CHENNAI-600 010**

PART II – FINANCIAL BID

Issued to:

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Last date for submission of Bid	06/05/2023 upto 15:30 HRS at Indian Bank, Corporate Office, Security Department, 254-260,Avvai Shanmugam Salai,Roypettah,Chennai-600 014.
Date of Opening of Technical Bid	06/05/2023 at 16:00 HRS at Indian Bank, Corporate Office, Security Department, 254-260, Avvai Shanmugam Salai,Roypettah, Chennai-600 014.
Date of Opening of Financial Bid	To be intimated separately to the Firms Qualifying in Technical Bids



Schedule of Quantities

Sl. No.	Description	UoM	Quantity	Rate(Rs.) (Exclusive of GST)	Amount(Rs.) (Exclusive of GST)
	Supply, Installation, Testing and Commissioning of CPVC sprinkler piping System as per NBC 2016, IS 15105 and IS 16088.				
1	Supply, Installation, Testing & Commissioning of CPVC Pipes SDR 13.5 pipe costing should include the support and certified technician should handle the fixing and jointing.				
a	25mm	Mtrs	285		
b	32mm	Mtrs	60		
c	40mm	Mtrs	42		
d	50mm	Mtrs	102		
e	65mm	Mtrs	42		
f	80mm	Mtrs	45		
g	100mm	Mtrs	40		
h	150mm	Mtrs	30		
2	Supply, Installation, Testing & Commissioning of Butterfly Valve with matching flanges.(Riser is MS pipe necessary fitting to be considered to fix the riser to tap off)				
a	100NB	Nos	5		
3	Supply & Installation of Pipes Fittings (L BOW, BEND, T , reducers, etc)	Lot	1		
4	Supply ,Installation, Testing & Commissioning of UL listed & FM approved standard response Glass bulb sprinkler pendent type rated 68 Deg. C. 5.6 K-Factor with rosset plate (sprinkler along with coupling to fix in the CPVC pipe)	Nos	115		
5	Supply, Installation, Testing & Commissioning of UL listed & FM approved 100dia Flow Switches with two NO and two NC contacts with necessary nipple & other fittings of System sensor company.	Nos	5		
6	Supply, Installation, Testing & Commissioning of Dial type pressure guage (100mm Industrial type) with necessary nipple & other fittings	Nos	5		
7	Supply, Installation, Testing & Commissioning of 25mm Ball valve with necessary nipple & other fittings(Screwed end)	Nos	10		



Sl. No.	Description	UoM	Quantity	Rate(Rs.) (Exclusive of GST)	Amount (Rs.) (Exclusive of GST)
	Supply, Installation, Testing and Commissioning of hydrant system& Fire Pumps				
1	Supply, Erection, Testing and Commissioning of above ground piping carried out of MS class C Heavy duty pipe as per IS: 1239 for pipes up to 150mm NB and as per IS: 3589 with a wall thickness of 6.35mm for pipes 200mm NB and above together with fittings, valves and accessories as under: pipe grade shall be Fe330.Work will include all structural supports, painting for the above ground piping with one coat of primer and two coat of enamel paint of approved colour. Work will include cleaning of pipe, degreasing, etc.				
a	100mm nominal dia (Sprinkler riser & Internal hydrant riser)	Rmt	40		
b	80mm nominal dia	Rmt	12		
c	50mm nominal dia 9Sprinklerdrain)	Rmt	20		
c	25mm nominal dia	Rmt	20		
3	Supplying, Installing, testing and commissioning gear operated type butterfly valve with required flanges, nuts, bolts etc. complete.				
a	100mm nominal dia	No	5		
4	Supplying, installing, testing and commissioning of Internal Hydrant System comprising of ;				
a	Single headed GM hydrant valve as per IS: 5290 (Type A). The valves should be complete with hand wheels, quick coupling connections, springs and blank caps.	No	5		
b	2 lengths of 15 M long, 63mm dia RRL hose with couplings and Hoses shall be rolled & hug to suitable M.S. structural support fixed inside the Fire duct wall.RRL Hose as per IS: 636.	No	5		
c	1 no. GM branch pipe with nozzle, As per IS: 903	No	5		
d	M.S. cabinet - 18 Gauge with powder coated finish of 750mm x 600mm x 250mm in size and mounted on structural support.	No	5		
e	Supply, installation, testing and commissioning of Fire Hose Reel (as per ISI) wall mounted, swinging type 18 SWG MS sheet, fitted with 19 mm dia x 36 M long, high pressure hose with 5 mm outlet GM nozzle	No	5		

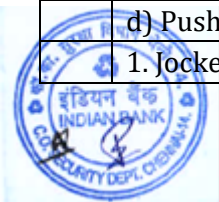


	with shut off valve (IS: 884-1969)includes Gate valve. and chrome plated nozzle with all necessary fixing materials complete.				
5	Supplying, installing and commissioning of fire brigade inlet connection of 2 ways with 2 nos. 63 mm dia. built - in Gun Metal Non-return valves instantaneous coupling type arranged on 100 mm dia. Pipe manifold and connected to fire water sump for tank filling by external source. Quoted rate shall be included with Butterfly valve, check valve and M.S. cabinet of suitable size with mounting supports etc. complete.	No	1		
6	Supplying and fixing approved make 25mm dia. Automatic air release valve with ball valve, unions etc. complete.	No	2		
7	Supply, Installation, Testing & Commissioning of Diesel Engine driven horizontal Split casing pump capable to deliver 2280LPM @ 88 Mtrs head. Including controller, complete with Diesel Engine with following Accessories. Diesel Engine Controller, Exhaust Pipe with insulation, Diesel oil Tank with piping, Battery with terminals, Cooling water piping. The rate shall include pressure gauge, pressure switch, valves and all accessories. (NEGATIVE SUCTION)	No	1		
8	Supply, Installation, Testing & Commissioning of electrical motor driven sprinkler pump of horizontal centrifugal end suction back pull out type with gland packing and capable to deliver 2280LPM @ 88Mtrs head The pump shall be coupled to TEFC motor of suitable HP with speed of 2900 RPM and complete set shall mounted on common MS base frame. The rate includes pressure gauge, pressure switch, valves and all accessories. (NEGATIVE SUCTION)	No	1		
9	Supply, Installation, Testing & Commissioning of electrical motor driven vertical in line Jockey pump of 10.8 cum/hr @ 88 Mtrs head. The pump shall be coupled to TEFC motor of suitable speed of 2900 RPM and complete set shall mounted on common MS base frame. The rate includes pressure gauge, pressure switch, valves and all accessories. (NEGATIVE SUCTION)	No	1		





10	Common Pump Control Centre	No	1		
	compartmentalized common control panel for Electrical motor driven Main Pump and jockey pumps with all accessories.				
	INCOMING				
	1 no. 250 A TPN MCCB (25 KA).				
	1 Set of 250 Amps. TPN Al. Bus bars with colour coded heat shrinkable PVC sleeves.				
	1 Set of RYB indicating lamps with MCB.				
	1 No. 96 Sq.mm 0-250 Amps. Ammeter with selector selector switch and suitable rated current transformers.				
	1 No. 0-500 96 Sq.mm Voltmeter with selector switch.				
	OUTGOING				
	Feeder for main pumps - 1 No.				
	- 1 Nos. 125 A TPN MCCB with back up fuses				
	Star Delta starter with over load relay, single phase preventor and indicating lamps with ON / OFF push buttons.				
	Feeder for Jockey pump - 1 No.				
	-1 No 63 A TPN MCCB with back up fuses				
	Star Delta starter with over load relay, single phase preventor and indicating lamps with ON / OFF push buttons.				
	-1 No. Auto manual selector switch				
	DIESEL ENGINE MAIN PUMP - 1 No.				
	a) 20Amps DPMCB - 2 Nos.				
	b) Battery charger with transformer with rectifier resistance DC ammeter, DC voltmeter, Trickle / booster / off selector switch - 2 Nos.				
	c) Indicating lamps for the following :				
	1. phase indication				
	2. battery charger on				
	3. over load relay				
	4. DC supply on				
	5. control switch on				
	6. fault communication				
	7. Engine fails to start				
	8. Pump on				
	9. Low oil pressure				
	10. High water temperature				
	11. Auto manual selector switch				
	d) Push button stations for the following :				
	1. Jockey pump start				





	2. Jockey pump stop				
	3. Engine Start				
	4. Engine Stop				
	5. Engine - hooter ACK				
	6. Engine - fault reset				
	e) Selector switches (Engine control, mode selector)-1 No.				
	f) Auxilary relays / contactors / timer for sequence operating for starting and stopping of the engine - 1 set.				
	g) Hooter for audio alarm (Industrial type) - 1 No.				
11	All the components mentioned in above point 10 shall be housed in a common cubical made of 16 swg. M.S. sheet with required stiffners (if required). The panel will be powder coated of approved colour both inside & outside. The panel shall have both bottom & top cable entry provisions	No	1		
12	1100 V GRADE POWER / CONTROL CABLES				
	Supplying, laying, testing & commissioning of PVC insulated PVC sheathed, XLPE steel armoured, aluminium / copper conductor, 100v grade power cables.The cables shall be laid in tray / Hume pipe / in trenches/on walls/ floor etc. as required.				
a	3.5C x 120 sq.mm Aluminium.	Rmt	30		
b	4 C x 16 Sqmm. Aluminium	Rmt	15		
c	12 C x 1.5 Sqmm. Copper	Rmt	15		
d	2 C x 1.5 Sqmm. Copper	Rmt	30		
e	3 C x 1.5 Sqmm. Copper	Rmt	15		
13	CABLE TRAY				
a	Supplying and fixing of perforated G.I.sheet cable tray with neccessory angle iron suspension supports, anchor fasteners etc. complete. Maximum height of suspension shall not exceed 500 mm.Size of the tray is 40mm x 200mm x 40mm and 2mm thick.	Rmt.	20		
14	G.I. Earthing strips of, strip shall be run on floor / ceiling / walls, from the equipment to the nearest Earth pit with neccessory accessories as required. (Earth pit shall be executed by other agencies).				
a	25mm x 3mm thick	Rmt.	30		
15	Supplying, installing, testing and commissioning of G.I Pipes confirming to IS 1239, with specials such as Tees, elbows,				



	flanges. Including cutting, Welding, fixing in / on walls, ceiling by using suitable supports etc, as per drawings.				
a	200mm nominal dia	Rmt	36		
16	Supplying, installing, testing and commissioning of Heavy grade G.I. Pipes confirming to IS: 1239 part - I with butt welded specials confirming to IS:1239 part - II, such as Tees, elbows, check nuts, unions, flanges, nipples etc. Including cutting, Welding, fixing in / on walls, ceiling by using suitable supports, including pipes travelling underground etc, as per drawings.				
a	150mm nominal dia	Rmt	18		
b	100mm nominal dia	Rmt	12		
c	80mm nominal dia	Rmt	12		
d	50mm nominal dia	Rmt	18		
e	25mm nominal dia	Rmt	24		
17	Exhaust pipe for Diesel engine of with mineral wool insulation with aluminum sheet.- M.S. 'B' class pipe				
a	100 mm dia	Rmt.	12		
18	Supplying, installing, testing and commissioning of C.I. Non-return Valve type with required flanges, nuts, bolts and gaskets etc. complete.				
a	150 mm nominal dia	No	3		
b	80 mm nominal dia	No	2		
19	Supplying, fabricating, structural steel supports such as MS channels, angles, flats, rods as required at site with anchor fasteners, clamps, threaded rods, nuts, bolts, washers etc. complete with painting.	Kg	100		
20	Supplying, Installing, testing and commissioning CI Gate valves (PN 16) steam rising operated type with required flanges, nuts, bolts etc. complete.				
a	200mm nominal dia	No	4		
b	150mm nominal dia	No	2		
C	100mm nominal dia	No	1		
d	80mm nominal dia	No	2		
e	50mm nominal dia	No	3		
21	Supply, Installation, Testing & Commissioning of pressure switch	No	3		
22	Supply, Installation, Testing & Commissioning of Flow meter (80mm) size with required flanges, nuts, bolts etc. complete.	No	1		





23	Supply, Installation, Testing & Commissioning of Dial type pressure gauge (100mm Industrial type) with necessary nipple & other fittings	No	4		
24	Supplying, installing, testing and commissioning of Gun metal chrome finished Ball valves with fittings of screwed end type.				
a	25mm dia.	No	3		
b	15mm dia	No	3		
25	Supply, fixing, Priming tank 'Sintex' 1000 Lts. Capacity complete with 25mm float valve, level indicator, Drain valve, etc.	No	1		
26	Supply, Installation, Testing & Commissioning of FOOTVALVE with suitable flanges, nuts, bolts, gaskets etc. complete.				
a	200 NB	No	2		
b	100NB	No	1		
27	Supply, fixing, testing and commissioning of M.S. material Air Vessel Tank of size 300 mm dia x 1000 mm long x 6 mm thickness with necessary inlet & outlet flange, 20 NB brass air release valve, 25 NB drain valve with supporting leg and etc., complete as per detailed specification.	No	1		
	Total Amount				
	GST@.....				
	Gross Total				
	Gross Total (in Words)				

Place:

Date:

Signature & Seal of the Tenderer

