

TENDER FORM
FINANCIAL DOCUMENT
Tender # CW/03/26-27

**Providing, Installation, Testing, Commissioning of Fire
Hydrant System at IBA Main Campus Karachi**

BILL OF QUANTITIES

A. Preamble

1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Employer Design given in the Bidding Documents.
2. The rates and prices entered in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract include all costs of Contractor's plant, labour, supervision, materials, execution of work, Testing & Commissioning, Warranty, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. Furthermore, all duties, taxes (Federal, provincial or local) and other levies payable by the Contractor under the Contract, or for any other cause, as on the date of deadline for submission of Bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.
3. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor will have failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
4. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Works.
5. General directions and description of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Bidding Documents shall be made before entering prices against each item in the priced Bill of Quantities.
6. Provisional sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Employer.
7. The Vendor shall provide the shop drawings for approval before execution of work.
8. Upon completion of work the vendor shall submit As Built drawing, Fire Hydrant acceptance test Certificate, hydro static test for which no additional payment shall be made.
9. For Fire Pump the vendor shall submit detail working lay out & fitting drawing including electrical and plumbing drawings for approval.
10. The vendor shall visit the pump room before execution of work and shall submit the foundation drawing for approval before execution of work.

BILL OF QUANTITIES

BILL OF MATERIALS								
1	2 Description	3 Unit	4 Qty	5 Material Charges		6 Installation Charges		7=5+6 Total Amount (Material+ Inst.)
				Rate	Amount	Rate	Amount	
1. FIRE PUMP SET								
	Supply, Installation, Testing & Commissioning of Fire Fighting Pumps Set Comprising of Pump capacity 500GPM , Vertical Turbine Type confirming to NFPA 20 Standard fitted with IP 55 Type Electrical Motor enclosure including Air Release Valve, Casing Relief Valve, Suction & Discharge Pressure Gauge, Dry run protection , Discharge Valves & Accessories, Electric Control Panel Confirming to NFPA 20 , Jockey Pump Confirming to NFPA 20 and Control Panel for Jockey Pump Confirming to NFPA 20. All fittings and fixing accessories complete including wiring of Electrical pump and jockey pump with control panel in all respects ,incl. foundation & support for Pump Assembly fitted over Existing Under Ground Tank. The work is inclusive of cutting hole in existing Tank Roof slab for fitting of the Pump Shaft and also making and fitting Man hole Cover in existing Slab of Under Ground tank. Product should be in Compliance of NFPA20. And as per specification .The bidder shall submit the Technical data sheet of Fire Pumping Set along with i) Certificate from the Manufacture that the product is in compliance with NFPA -20 and local Fire Protection Bye Laws ii) Warranty for minimum 10 years iii) Certificate that spare parts of the model installed shall be available in market for at least 10 years. (The Technical sheet shall be submitted in Technical Envelope)	Set	1					
	The Fire Pumping Set Shall be Comprise of the following component : i) Electric Motor Driven Vertical Turbine Type including shaft Main Pump with capacity of 500 USGPM @ 8 Bar head pressure as per specification of this bidding document in compliance to NFPA 20 .							
	ii) Electric Driven Jockey Fire Pump Vertical Multi Stage Type with Capacity of 50 US GPM @ 9 Bar head pressure as per specification of this bidding document and in compliance to NFPA 20..							

	iii)Fire Pump Controller : Providing & Installation of Fire pump controller Separate for Fire Pump and jockey pump shall meet the updated NFPA 20 and shall be housed in NEMA type 4X housing (IEC IP-66)powdered baked finish free stand and shall be of combined manual and automatic type designed for and all electrical components are of ABB /Schneider or equivalent as per specification. iv) The work includes the Provision of foundation of the pump along with provision of vibration damper . making hole to install shaft of the pump and providing chain Block arrangement at Pump room for removal of pump for maintenance services. Note : The Total depth of the Existing Under ground tank is 10 Ft. and height of the Pump Room is about 11-0 “ from the tank Top.							
2	Fire water line (MS)							
	Supply, Installation, Testing & commissioning of MS Sch.40 Seamless Pipe confirming to ASTM A53 for Fire Fighting System. Pipes shall include Fittings, supports, anchors, rods for all diameters and all accessories necessary to complete the work.(above & below ceiling if required).including core cutting in existing walls & beams etc as required.							
	MS Pipe DN150 (6” dia)	RFT	120					
	MS Pipe DN100 (4 “ dia)	RFT	250					
	MS Pipe DN 65 (2-1/2” dia)	RFT	150					
3	FIRE water Line HDPE							
	Providing & Laying of HDPE pipes density 700 - 960 Kg/ cu.m Carbon black content .2% DIN 8074, 8075 or PS 3580-1997 (rev.) ISO 9001-2000 pressure classification of PF 100(black) for water PN-16 including Road Cutting, Excavation, Back filling ,Jointing, etc complete .							
	HDPE Pipes 700-960 kg/cu.m (160mm)	Rft	80					
	HDPE Pipes 700-960 kg/cu.m (110mm)	Rft	100					
4	Main Power Cable							
	Providing and laying 70mm 4 core PVC/PVC main power cable and making connection from main supply panel to engine control panel and jockey control panel. Pak cable, Fast, New age complete as per specification.	RFT	130					

	Note : This Cost includes the cost of Cable Tray , hanger and its installation over wall as per direction& specification							
5	Fire Sensing Line for Elec. Pump & Jockey Pump							
a	Providing & laying SS tubing ½" dia 15mm and their hook up with fire pump controller as per NFPA -20	RFT	20					
b	Providing & fitting Stainless Steel Tee - Ø 1/2 inch With 1/4 Inch Plug as per NFPA-20	Each	4					
c	Providing & fitting - Stainless Steel Ø1/2 inch Check Valve with 3/32 Inch Orifice in Clapper	Each	2					
d	Providing & fitting Stainless Steel Globe Valve - Ø 1/2 inch	Each	2					
e	Providing & fitting Stainless Steel Globe Valve - Ø 1/2 inch	Each	2					
6	VALVES & ACCESSORIES							
A	OS & Y Gate valves							
	Supply, Installation, testing & commissioning of OS&Y Type Gate Valves Flanged PN16 conforms to BS 5163 & AWWA 515 UL Listed & FM Approved.							
a)	DN 150 6" Dia	Each	4					
b)	DN 100 4" Dia	Each	8					
c)	DN 65 2-1/2" Dia	Each	4					
B	Strainer with Ball valve							
	Supply, Installation, testing & commissioning of Ball Valve with strainer PN16 conforms to BS 5163 & AWWA 515 UL Listed & FM Approved conforms to BS 5163 & AWWA 515							
	DN 65 2-1/2" Dia	Each	1					
C	Check valve							
	Supply, Installation, testing & commissioning of Non Return Valve (Check Valve) UL Listed & FM Approved Make: Europe/USA/Turkey/ UAE/Thailand or equivalent							
i)	DN 65 2-1/2" Dia	Each	1					
ii)	DN 150 6" Dia	Each	1					
7	Flexible Connector							
	Supply ,Installation,testing & commissioning of Flexible fire fighting Connectors complete.							
	a) 6" dia	Each	2					
	b) 4" dia	Each	4					
	c) 2-1/2" dia	Each	4					

8	Landing Valve/ Fire hydrant valve						
	Supply, install, test, set to work, and commission Landing valves oblique type with flanged inlet and manufactured to comply to BS 5041 Part1 standard with delivery hose connection and blank cap complying with BS 336:2010 standard , nominal inlet pressure up to 15 bar. and ancillaries including all accessories and fittings needed for installation as per drawings	Each	4				
9	Supply, install, test, set to work, and commission fire hose 2-1/2 " dia with quick coupling , 2 x 100'-0",2-1/2" dia quick coupling hose ,2 nos diffuser nozzle.	Each	4				
10	Fire Pipe Line Painting						
	Providing, applying Fire Pipe Line Painting including one coat of red oxide 25 ~35 Micron 1-1.5 mm dry film thickness and then coat two coat smooth Red Synthetic enamel each coat have a dry film thickness 1 ~1.2mm 25 ~30 micron in bright red to comply with NFPA						
a	6" dia	RFT	150				
b	4" dia	RFT	300				
c	2-1/2" dia	RFT	200				
12	Stenciling & Identification Tags						
	Providing & Installing Stenciling & Identification tags as per NFPA	LS	1				
Total Amount							
8% SRB							
Total Amount including SRB							
Grand Total Including Material + Installation With Tax							

Grand Total Amount in Words:

Rupees: _____
