

# SUKKUR IBA UNIVERSITY

Merit – Quality - Excellence



**TENDER # PROC/238**

**Tender documents for Supply, installation,  
Testing, Commissioning and Training of Reverse  
Osmosis (R.O) Plant and Auto Mineral Injection  
System for Benazir Bhutto Shaheed Institute of  
Management Sciences, Dadu**

## **BBSIMS CAMPUS DADU**

**Duabo Road, near Shahjehan Park, Dadu**

Last Date of Submission:

**7<sup>th</sup> April 2021**

Tender Opening Date:

**7<sup>th</sup> April 2021**

Email: [nazik.hussain@@ibacc.edu.pk](mailto:nazik.hussain@@ibacc.edu.pk)

[aftab.pmu@iba-suk.edu.pk](mailto:aftab.pmu@iba-suk.edu.pk)

Web: [www.iba-suk.edu.pk](http://www.iba-suk.edu.pk)

Tel. No. 025-4551552

**Please see the attachment for Technical Specifications and Quantity**

**Technical Information of Equipment**

S.NO	ITEMS	PRODUCT NAME	MODEL	MAKE OF EQUIPMENT	PART NO	RELATIONSHIP WITH PRINCIPAL
01						
02						
03						
04						
05						

**Cost Estimation of the Equipment**

S.NO	ITEMS	QTY	PRODUCT NAME	MODEL	MAKE OF EQUIPMENT	PART NO	UNIT PRICE	TOTAL COST
01								
02								
03								
04								
05								

## **1. Background**

As Sukkur IBA University intends to get the work done of **Supply, installation, Testing, Commissioning and Training of Reverse Osmosis (R.O) Plant and Auto Mineral Injection System for Benazir Bhutto Shaheed Institute of Management Sciences, Dadu** (detail in BOQ), so a tender is called for execution of said work.

## **2. General Terms and Conditions**

The following General Terms and Conditions apply to all equipment/ works under this tender:

**2.1.** The last date of receipt of Bids is **7<sup>th</sup> April 2021 at 1400 hours**

**2.2.** Detail of repair and maintenance facilities.

**2.3.** Structure /Organizational Chart.

**2.4.** An affidavit to the effect that the firm has not been blacked listed by any Government /semi government organization.

**2.5.** Sukkur IBA University or its representative shall have the right to inspect and/or to test the equipment to confirm their conformity to the contract specifications.

The Technical Specifications shall specify what inspections and Tests Sukkur IBA requires and where they are to be conducted. Sukkur IBA shall notify the Contractor, in writing, of the identity of any representatives entrusted for this purpose.

**2.6.** It is mandatory that the Bidders provide the following documents and information with respect to its relationship with Principal:

**2.6.1** Name and contact details of Principal/Manufacturer representative who is authorized to verify Vendor's local partnership.

**2.6.2** Duration and scope of association in the current capacity with the Principal.

**2.6.3** Copy of Principal's certification (along with its validity period), authorizing the Vendor as local partner / representative in Pakistan to offer/ Bid Principal's equipment and services.

**2.7.** The Bidder shall provide following information with respect to its Company Profile.

**2.7.1** Number of Vendor's offices and addresses, thereof, phone and fax numbers and email address as well as names and designations of responsible persons.

**2.7.2** Number of Engineers and Technical Staff in Vendor's Office.

- 2.7.3 Profiles of Technical Staff with relevant experience, resume and number of customers and sites looked after / supported by each.
- 2.7.4 Problem reporting procedure and fault response time in hours for fault rectification, escalation procedures with response to turnaround time in hours.
- 2.8.** The Bidder shall provide following information with respect to its Setup in Pakistan:
- 2.8.1.** Registered Name of the Organization.
- 2.6.2.** National Tax Number, Sales Tax Number.
- 2.6.3.** Head Office address.
- 2.6.4.** Management structure & organization Chart.
- 2.6.5.** Name, Address with Telephone/ Telex and Fax numbers of the contract person.
- 2.7.** Financial status of the Bidders Organization with supporting documents and last two years annual reports.
- 2.8.** Provide a certificate from your bank certifying your sound financial position and credit limits from the bank.
- 2.9.** List of clients and their Acceptance of deliverables, showing separately the items provided and value thereof.
- 2.10.** Company incorporation Certificate and Company Profile.
- 2.11.** The Bidder shall furnish a comprehensive list of reference sites where the likewise tender work has completed already.
- 2.12.** Sukkur IBA University, reserves the right to reject any or all Bids/ Offers without assigning any reason or cancel the process at any time.
- 2.13.** Sukkur IBA University reserves the right to increase/ decrease the quantity of items / scope of the work. Bidder has no right to challenge the decision in Court.

### **3. Proposal Submission Requirements**

- 3.1. For this tender PPRA's **Single stag-two envelope Procedure** as per clause 36 (b) for open competitive bidding is adopted. The bid shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal;
- 3.1.1 The envelopes shall be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion;

- 3.1.2 Initially, only the envelope marked “TECHNICAL PROPOSAL” shall be opened;
- 3.1.3 The envelope marked as “FINANCIAL PROPOSAL” shall be retained in the custody of the procuring agency without being opened;
- 3.1.4 The procuring agency shall evaluate the technical proposal, without reference to the price and reject any proposal which do not conform to the specified requirements;
- 3.1.5 During the technical evaluation no amendments in the technical proposal shall be permitted;
- 3.1.6 The financial proposals of bids shall be opened publicly at a time, date and venue announced afterwards technical assessment and evaluation is completed.
- 3.1.7 After the evaluation and approval of the technical proposal the procuring agency, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders.

### **3.2. Technical Proposal**

- 3.2.1. Technical proposal must include the complete solution proposed by the Bidder.
- 3.2.2. If the specification sheets ask for any detail, those should be provided as attachment to the Technical Proposal.
- 3.2.3 Technical proposal shall comprise the valid Registration certificates of PEC and taxation departments, details of Equipments and material available with the company, details of supervisory technical staff, Completed works details and works in hand of similar nature, Bank statements, enlistment list if with any other department etc. so that a fair scrutiny shall be done.
- 3.2.4 Description of material and equipment specific for this work.
- 3.2.5. Completion schedule on Bar chart, Primavera or other software.
- 3.2.6 Technical proposal shall provide the details of company, its office location, numbers etc.
- 3.2.7. Financial Proposal of only those Bidders will be considered who’s Technical Proposal qualify.
- 3.2.8. Bidders must possess the valid PEC license in such category in which the total bid cost falls, if not than his financial proposal will be rejected.

### **3.3. Financial Proposal**

3.3.1. Financial proposal will include the prices quoted for each item (including all taxes).

3.3.2. For each category the quoted prices must include all taxes, customs and freight charges for delivery at the required locations at own risk and cost of material required for the work.

3.3.2.1 **This Equipment is required for educational Institution, Sukkur IBA, therefore, expects significant educational and volume discounts.**

3.3.3 Financial proposal of the bidders found technically non responsive will be returned unopened.

3.3.4. The Bidder shall furnish s earnest money equivalent to 2% of the total value of bid in the form of Bank Draft issued by a scheduled bank of Pakistan in favor of **“Sukkur IBA University”** valid for **at least one year** and enclosed along with financial proposal. **No Bid shall be entertained without earnest money.** Earnest money of the successful bidder will be released at the time of submission of Ten percent (10%) Performance Guarantee of the Total Contract Value.

3.4 Bid Security is required to compensate Sukkur IBA against the consequences of:

3.4.1 Subsequent unauthorized variations and/or modifications of the terms of Bid.

3.4.2 Pre-mature withdrawal of the Bid before the completion of Bid Evaluation.

3.4.3 Failure of the Bidder to sign the resultant Contract, in the event of such contract being awarded to it.

3.5 Successful Bidder is required to deposit **Ten Percent (10%)** of Total Contract Value as **Performance Guarantee** in the form of **Bank Draft** issued by a scheduled Bank of Pakistan in favour of **“SUKKUR IBA UNIVERSITY”** at the time of signing of Contract agreement and will be released at the time of delivery of equipment at Site.

3.6 Proposals sent to Sukkur IBA University by fax or email will not be accepted.

3.7 An effort by a Bidder to influence Sukkur IBA University, directly or indirectly THROUGH UNFAIR MEANS may result in the rejection of Bidder’s Proposal and blacklisting for any future tender of Sukkur IBA University.

3.8 Prices quoted will be firm for the entire period of contract. All prices to be quoted in **Pak Rupees**, and must clearly state all applicable taxes which must be included in quoted price.

#### **4. Hardware and Service Requirements**

Following are the minimum requirements which the Bidder / Vendor for the equipment:

4.1. The Vendor must install all equipment and components and must ensure that the proposed equipment is fully operational and function properly at all variables.

4.2 Vendor must furnish components, wires, connectors, materials and parts, equipment for the complete installation of the system, in accordance with recommendations of the equipment manufacturer. Installation shall follow standard broadcast wiring and installation practice and shall meet or exceed industry standards for such work.

4.3 Vendor must ensure that all systems are in first class working condition and free of short circuits, ground loops, video noise and excessive system noise or any fault affecting its efficiency / quality / life.

4.4 At the time of installation, Vendor must provide owner's manuals, manufacturer's data sheets, and a complete equipment list.

4.5 At the time of installation, Vendor must provide comprehensive system schematics, labelling and showing detailed connections to all equipment.

#### **5. Selection Procedure**

Sukkur IBA University intends in issuing this RFP to award a contract to the lowest and best responsive Vendor / Bidder who meets required standard of specifications and other factors. The Vendor's past performance, cooperation, and ability to provide service and training are general factors that will be weighed in the selection process.

All Vendors will provide Demo (Proof or Concept) to verify the claims in the Technical Specifications of the Brochures. This would also determine the quality and specifications of the equipment.

Bids will be evaluated as per evaluation criteria mentioned below:

## 5. Evaluation Criteria

### 5.1. Technical Evaluation Criteria (Weightage 70%)

S.NO	Description	Maximum Score	Score Obtained	Remarks
1	Meeting Specifications	40		
2	Relevant Experience (Years)	05		
3	Experience with Academic Institutions	05		
4	Relationship with Principal	10		
5	Quoted Product Origin	05		
6	International Quality Certifications	05		
7	Warranty / Guarantee	05		
8	Complaints Response Time	05		
9	After Sale Service ( Local Expertise)	05		
10	Lead Time (Order to delivery time)	05		
11	Company Profile	05		
12	Cliental Served Profile	05		
Total		100		

### 5.2. Financial Evaluation Criteria (Weightage 30%)

#### 6. Delivery and Installation

Delivery and installation should be at the Sites/Locations at the risk and cost of successful Bidder.

#### 7. Warranty

Following Warranty Clauses are applicable:

- The successful Bidders shall warrant the equipment and its components to be free from any sort of defects in material and workmanship for a minimum period of 01 year from the date of completed installation and shall repair or replace on a timely basis any defective component, assembly or portion free of cost.



- Technical support should be available on call basis.
- Competent staff of the Bidder will attend each and every call within 3-4 Hours of its notification either on phone or in writing during Business Hours ( 9am – 5pm).
- Delay in attending the call and delay in rectification of fault will lead to consequential financial damages to the Vendor/Bidder.

### **8. Services**

Sukkur IBA shall promptly notify the supplier in writing of any claims arising under this warranty and the Vendor/Supplier will repair / replace the defective stores at reasonable speed but within the specified period and time and without any additional cost, specifications, and/or other Contract commitments.

### **9. Liquidated Damages**

Liquidated damages shall be applicable as under:

- a) Delay of one week to handover the equipment as per specifications: = 0.5 % of the total Cost.
- b) Delay of two weeks to handover the equipment as per specifications: = 1.0 % of the total Cost.
- c) Delay of three weeks to handover the equipment as per specifications: = 2.0 % of the total Cost.
- d) Delay of four weeks to handover the equipment as per specifications: = 4.0 % of the total Cost.

**Note: In case of delay beyond four weeks, Sukkur IBA University reserves the right to cancel the order and impose penalty up to 10% of the ordered Value.**

### **10. Terms of Payment**

Payment of contract price shall be made in the following manner:

Sukkur IBA University, being an educational Institute, is exempted from GST and whole of Custom duty as per S.R.O 362(I)/2000 in case of imports therefore prefers to open LC directly in favour of Principal to avail GST and Custom Duties exemption but sometimes if the equipment is required urgently and import time wait is not operationally feasible then Sukkur IBA University opt to buy on availability basis.

1. Please quote the rates on C & F (Cost & Freight) till Karachi port in US \$ or Euro, for in case Sukkur IBA open LC. Please clearly mention mode by Air or By Sea.

2. Please also quote rates in Pak Rupees in case Sukkur IBA opts to buy on availability basis, payment will be within 30 days after satisfactory delivery of items for this case (if opted).

**Note: Please quote rates for above both cases, it will be entirely Sukkur IBA discretion to opt whatever option (Open LC or buy on availability basis) as per requirement and situation.**

**11. Other Terms & Conditions**

1. Warranty/ Guarantee and Product Origin must be mentioned clearly.
2. Installation and Transportation must be clearly mentioned.
3. Sukkur IBA reserves the right to increase or decrease the quantities at the time of order placement.

## **TECHNICAL SPECIFICATIONS AND QUANTITY**

**Supply, Testing, Commissioning, and Training of reverse Osmosis (R.O) Plants and Auto Mineral Injection System**

**Quantity: 01**

### **(i) Reverse Osmosis Systems 6,000 GPD per day on 3,000 TDS**

#### **1. Raw Water Feed Pump**

Quantity:	1 No.
Make	CNP
Material	SS 304
Horse power:	1.5 HP
Electrical:	220v / 50Hz

#### **2. Pressure Sand Filter**

-

Model:	FRP-16
Make	Pentair
Flow rate:	20 GPM continuous
Pressure drop:	5 psi
Filtration chamber:	16" x 65"
Material of filtration chamber:	FRP
Total height:	6 ft
Inlet & outlet:	1"
Valve:	Multiport valve Imported

#### **Filter Media**

High-grade silica 0.45 mm grade washed and graded. 1/2", 3/4", and 1/4" in size with accurate bedding in the sand filter shell.

#### **3. Antiscallent / Biocide Dosing**

Type:	Metering Pump
Make	Aqua Italy
Quantity:	1 No.
Chemical tank capacity	80 gallons
Qty	1 No.
Material	PE

#### **4. Granular Activated Carbon Filter**

Model:	FRP-16
Make	Pentair
Flow rate:	20 US GPM
Pressure drop:	5 psi
Material of filtration chamber:	FRP
Dia:	16"
Height:	65"
Inlet & outlet:	1"
Valve:	Multiport valve

### **Activate Carbon**

Granular activated carbon coconut shell based acid washed

Made in Malaysia / Sri Lanka

Packing: 25 kg bags

### **5. Reverse Osmosis System**

Make:	So~Safe Or Equivalent
Model:	SS-5000DLX-BW
Maximum feed water:	Up to 3000 ppm TDS
Temperature:	25° C (+/- 15%)
Capacity:	6000 GPD
Electricity:	380 VAC / 50 Hz
Rejection:	98%
Product water	<200 ppm

### **Special Features of Reverse Osmosis System**

1. Lightweight non-corrosive mild steel frame.
2. Heavy-duty 20" (5 micron) pre filter housing. Material polypropylene. Cartridge polypropylene yarn.  
Make: Italy
3. Corrosion resistant & efficient high pressure R/O pump and TEFC heavy duty motor. Air-cooled, Heavy-duty.  
Make: CNP or Equivalent  
Material: SS304
4. High rejection thin film composite FDA approval membrane. DOW chemical.  
Model: BW30-4040  
Make: Dow Filmtec USA  
Qty: 4 nos.
5. Automatic operation Panel

6. Reverse Osmosis ASME approved housing heavy duty Reverse Osmosis pressure vessel made of fiberglass tested and certified by American Society of Mechanical Engineers (ASME) and the boilers association of the USA also recommended by Filmtec DOW Chemicals.
7. Online tds meter

**6. Piping**

UPVC

**7. CIP SYSTEM**

This system will be use to clean the membranes with chemicals as well as for flushing the membranes.

8. Product water tank 1000 gallons: 1 No Material: PE

9. Feed water tank 500 gallons: 1 No.

**Buyers Responsibility**

- i. To provide electric power into the plant room.
- ii. To provide drain line near plant room.
- iii. All civil work. Plant room size 18' x 12' x 11'
- iv. Site clearance.

Delivery:	30 DAYS
Payment:	50% advance
	50% on delivery

## (ii) **AUTO MINERAL INJECTION SYSTEM**

### 1. DOZING PUMPS

Make : Etatron Italy  
Capacity : 5 lph  
Electrical : 220v/50 hz.  
Qty : 3 nos

### 2. DOZING CHEMICAL TANK

Make : Master or Equivalent  
Capacity : 80 liters  
Qty : 3 Nos

### 3. SKID

Make : So Safe or Equivalent  
Material : Powdered coated MS channel.  
Qty : 1 No

### 4. AUTO CONTROL PANEL

Make : So Safe or Equivalent

### 5. PE TANK 500 GALLONS

Make : Master or Equivalent  
Qty : 1 No

### 6. TRANSFER PUMP

Make : CNP or Equivalent  
Material : SS304  
Qty : 1 No

### 7. Plumbing Materials

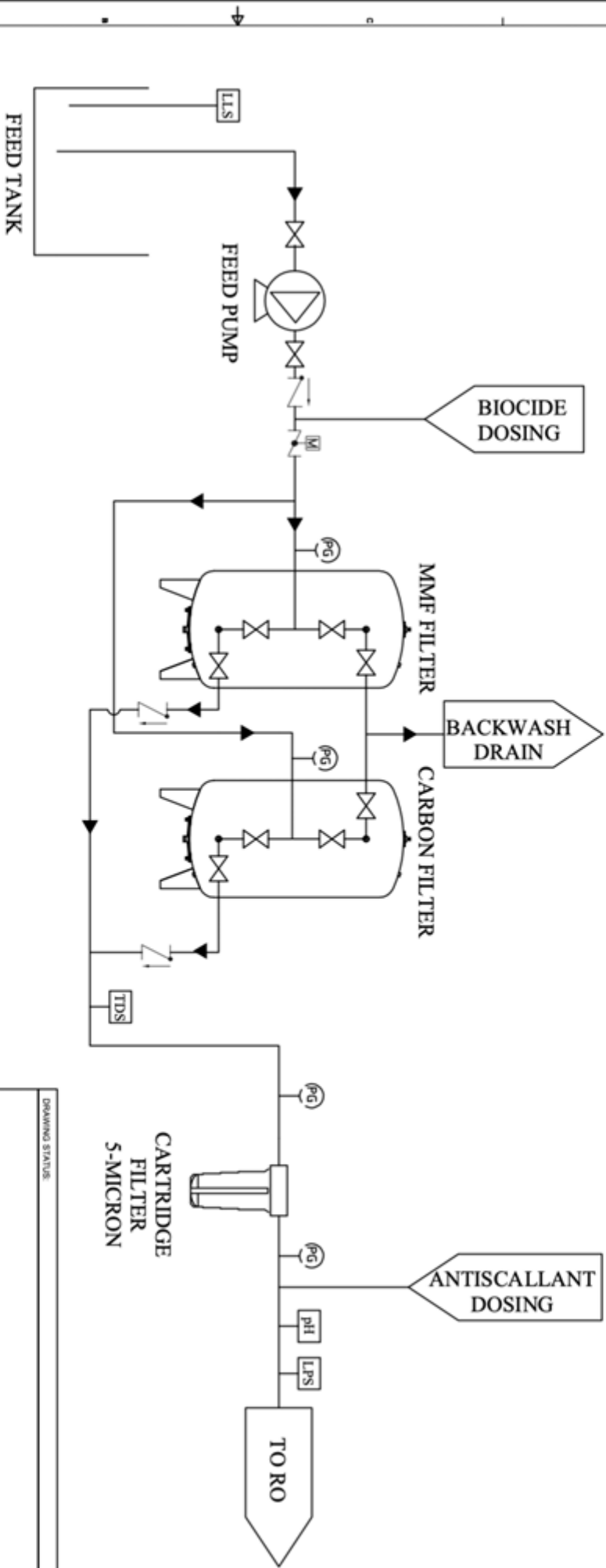
## **METHODOLOGY**

Three minerals will be needed to doze in the product water of the RO plant. Ro water will be stored in the one 500 gallons PE tank. Minerals will be injected in the product water line of the RO plant and one transfer pump of ½ hp is required to shift the water to another 500 gallons PE tank, during this transfer minerals will be injected in the water to maintain the level as per your requirement.

Following is the 3 minerals need to be injected.

1. Calcium chloride
2. Magnesium sulphate
3. Sodium bi carbonate

# PRE FILTRATION

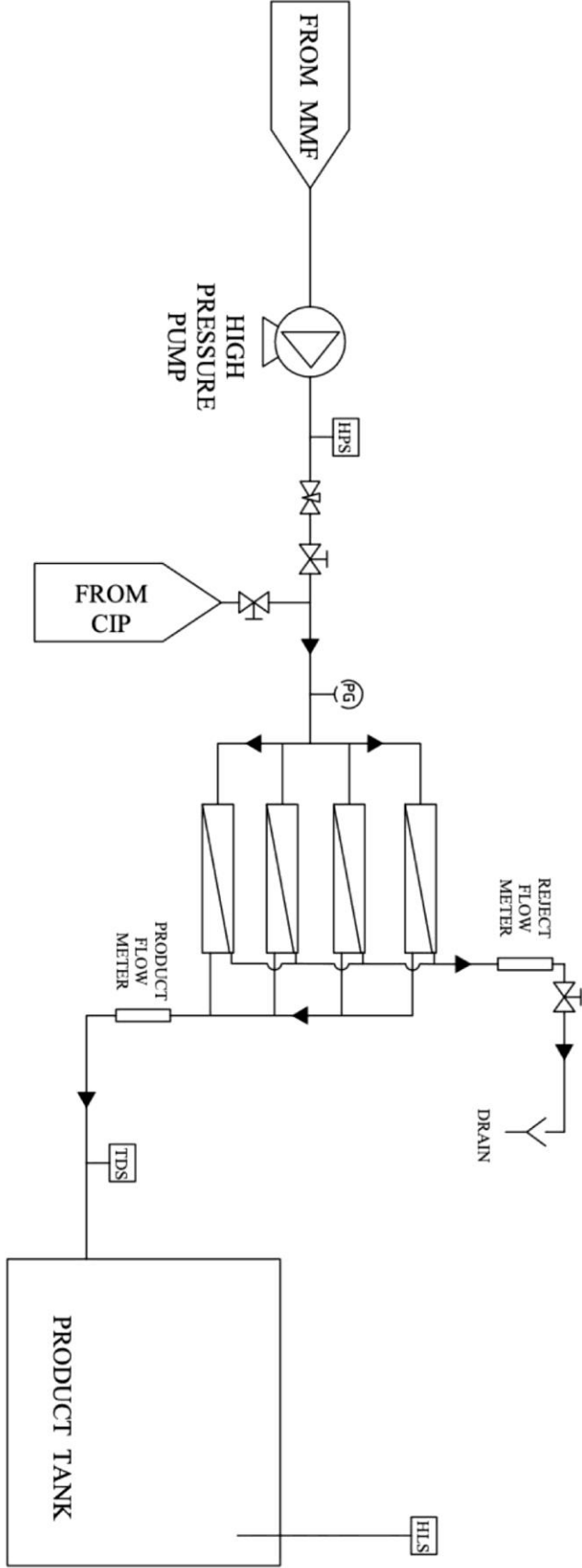


## LEGENDS:

	Motorized Valve		Pressure Gauge		pH Meter
	Manual Valve		TDS Meter		Low Pressure Switch
	High Pressure Switch		NRV		Low Level Switch

DRAWING STATUS:					
PROJECT:					
CUSTOMER:				SCALE:	
TITLE: PAID FOR RO PLANT				NTS	
PREPARED BY: 1		DATE:	DWG NO: PAID-GEN-DWG-00101	REV:	
CHECKED BY:		DATE:	JOB NO:	0	
APPROVED BY:		DATE:	PIN NO:		
					SHEET 1 OF 3

# RO SYSTEM




**LEGENDS:**

- 

Pressure Reducing Valve
- 

Gate Valve
- 

High Pressure Switch
- 

Pressure Gauge
- 

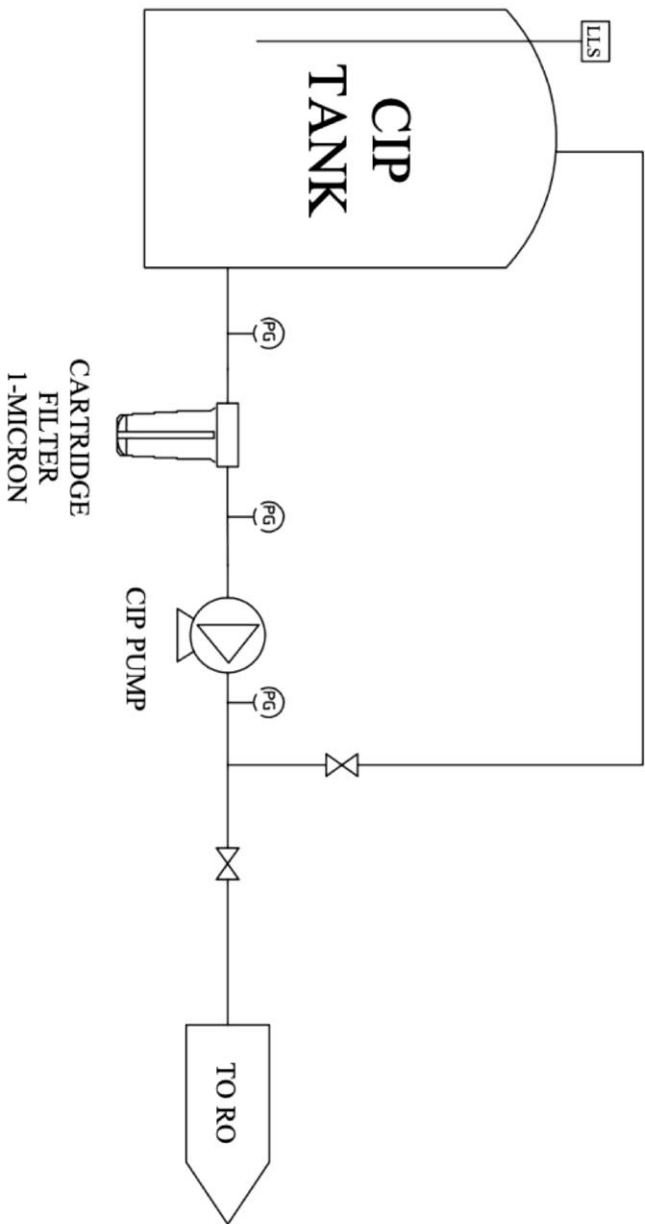
TDS Meter
- 

High Level Switch

DRAWING STATUS	
PROJECT	
CUSTOMER	
TITLE: PAID FOR RO PLANT	
SCALE: NTS	
PREPARED BY:	DATE:
CHECKED BY:	DATE: 1
APPROVED BY: 1	DATE:
DWG NO: PAID-GEN-DWG-00101	JOB NO:
PIN NO:	2 OF 3



# CIP SYSTEM




## LEGENDS:

- Manual Valve
- Pressure Gauge
- Low Level Switch

DRAWING STATUS									
PROJECT:									
CUSTOMER:								SCALE:	
TITLE: PAID FOR RO PLANT								NTS	
PREPARED BY:		DATE:		DWG NO: PAID-GEN-DWG-00101		REV:		0	
CHECKED BY:		DATE:		JOB NO:		PIN NO:		3 OF 3	
APPROVED BY:		DATE:		JOB NO:		PIN NO:		3 OF 3	

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**Sukkur IBA University**  
 Airport Road, Sukkur.  
 www.iba-suk.edu.pk

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## TENDER NOTICE

### Tender # PROC/238

Sealed bids are invited from reputable firms/manufacturers/contractors (Registered with PEC/Sales Tax/Income Tax departments) For S.No. 1 & 2 and from manufacture/authorised distributors/authorised dealers for S.No. 3 & 4 (Registered with Sales Tax/Income Tax departments) **“Single stage two envelope basis”** having vast experience in respective field for execution of following works/goods at the Project **“Benazir Bhutto Shaheed Institute of Management Sciences, Dadu.**

S.#	WORKS/GOODS
01	Cassette Air Conditioning System of BBSIMS, Dadu
02	Networking, Wi Fi, Telephone & Smoke Detectors System for BBSIMS, Dadu
03	Diesel Generator & Synchronizing Panel with ATS System for BBSIMS, Dadu
04	Reverse Osmosis System and Auto Mineral Injection System for BBSIMS, Dadu

Detailed specifications, layout drawings and quantities are mentioned in the tender documents, which can be obtained on provision of demand draft/pay order in the name of **Sukkur IBA University of Rs. 2000/-** (Non-refundable, for each work) from the office of **Project Director, Benazir Bhutto Shaheed Institute of Management Sciences, Dadu** on any working day from **20<sup>th</sup> March 2021 to 07<sup>th</sup> April 2021**. Last date for the submission of bids at **Project Director Office, Sukkur IBA University, Nisar Ahmed Siddiqui Road, Sukkur** is **07<sup>th</sup> April, 2021 upto 1400 Hours**. The technical bids will be opened on the same day at **1430 Hours** at **Project Director Office, Sukkur IBA University, Nisar Ahmed Siddiqui Road, Sukkur** in the presence of bidders or their authorized representatives (who may choose to be present). The financial proposals of only technically eligible firms will be accepted/opened. Bid security i-e 2% of tender amount (refundable) in the shape of bank draft/pay order in the name of **Sukkur IBA University** must be attached with bid documents. The Sukkur IBA University reserves the right to accept or reject any or all bids as per PPRA rules provision.

Please send your queries: [aftab.pmu@iba-suk.edu.pk](mailto:aftab.pmu@iba-suk.edu.pk)  
[nazik.hussain@ibacc.edu.pk](mailto:nazik.hussain@ibacc.edu.pk)

**PROJECT DIRECTOR**  
**Benazir Bhutto Shaheed Institute of Management Sciences**  
 Project Office at IBA Community College, Najam Colony,  
 Dadu. Tel: 025-4551552 Fax: 071-5804419

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Published in Daily Dawn, Express and Kawish March 20, 2021