



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी

Indian Institute of Technology Guwahati

गुवाहाटी - 781 039, असम

Phone: (0361) 2582061, 2582075 Fax: (0361) 2692771

Infrastructure, Planning and Management(IPM)
अवसंरचना, योजना एवं प्रबंधन (आई पी एम) अनुभाग

Date: 16.03.2023

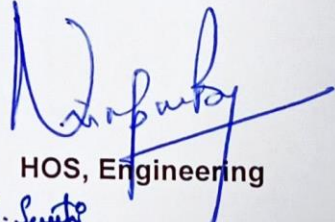
CORRIGENDUM

Name of Work: Supply, installation, testing and commissioning of water supply pump work of F-type Residential Quarters at IITG Campus

NIT No.: IITG/IPM/NIT/C/2022-23/20 dated: 20.02.2023

- 1) The date and time for download, submission and opening of the tender has been rescheduled as below:
 - i. Extended date of download of the tender paper upto 13.59 hrs of 22.03.2023
 - ii. Last date and time of submission of the tender: 14.00 hrs on 22.03.2023
 - iii. Date and time of opening of the tender: 15.00 hrs on 22.03.2023
- 2) A general layout drawing of the pumping system is enclosed at Annexure-I and should be uploaded with the technical bid of the tender.
- 3) Attachment at Annexure-II may be referred for few clarifications.
- 4) Bidders are requested to submit their bids as instructed above.
- 5) All other items and terms & conditions will remain same.

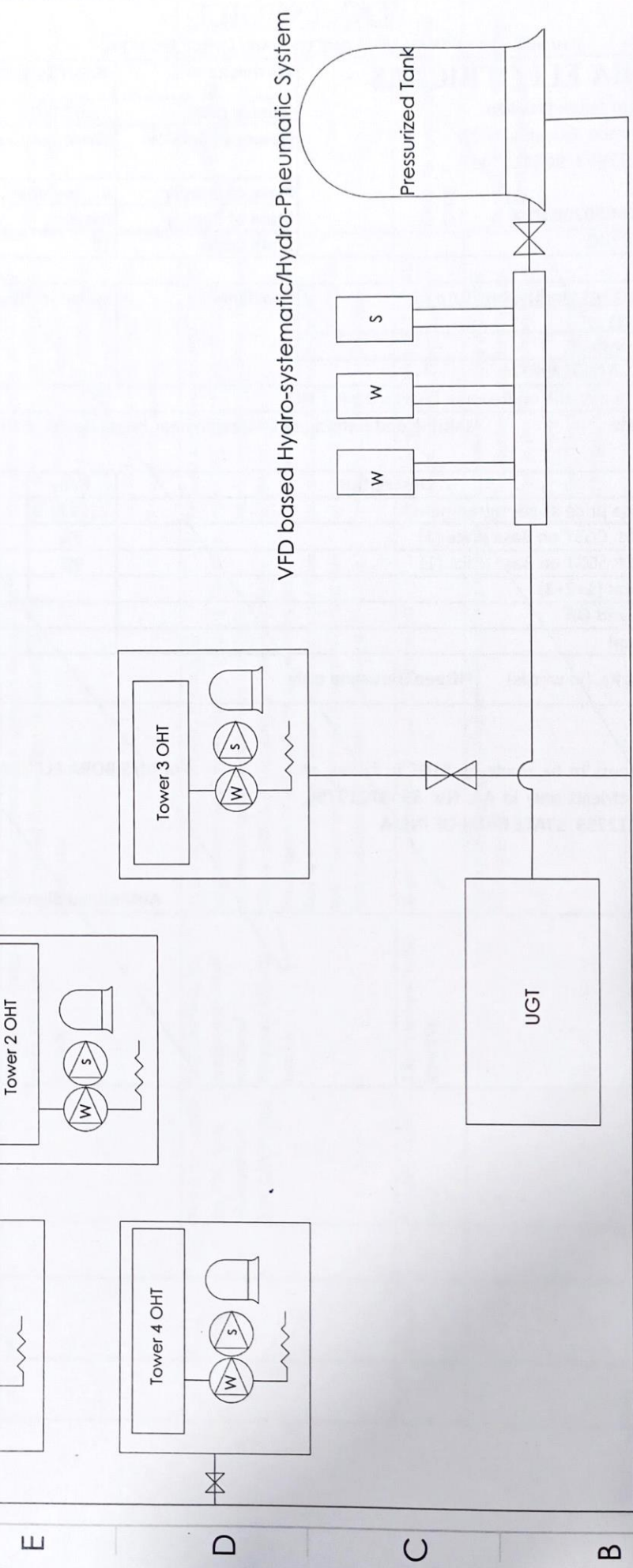
Enclosure: i) Annexure-I
ii) Annexure-II


HOS, Engineering
S. Senthil

1 2 3 4 5 6 7 8

Annexure-I

Legend:
 (1)- Booster Pump (Non VFD)
 (2)- Pressure tank
 OHT- Overhead Tank
 UGT- Underground Tank
 W- Working
 S- Standby



TITLE: General Layout Diagram for Hydro-Pneumatic System at IIT G Campus
 DWG NO. 1 A3
 SHEET 1 OF 1

1 2 3 4 5 6 7 8

Handwritten signature

Annexure-II

NIT NO:-IITG/IPM/NIT/C/2022-23/20

Sl.No	Ref.	BOQ	Item	Specification	Queries	Date-14th Feb'2023	Request from Contractor side	Replies from IITG
1	Pressure Pump	1	Pumps	Hydro-systematic Pump	As per market information, Hydro-Pneumatic pumps are available. Request kindly elaborate about the Hydro-systematic Pump. Recommended manufacturers recommends Hydro-Pneumatic Pumping system for the application.	Kindly review and Confirm Hydro-Pneumatic Pumping system.	It implies the same as mentioned in BOQ	
1.1	VFD			VFD driven pump control as Float Switch	It indicates that pump control is through tank's water level through float switch and On-off condition.	Please confirm what would be the sensor for VFD speed control. If it is through terminal pressure sensor then this should be included in the BOQ. At present BOQ is silent about it and its control wiring till last point of the high-rise building.	Kindly Comply with the Tender Specifications and BOQ	
1.2	Duty Point	2a	Pump duty point for 2 Working + 1 Stand-by = Total 3 set Pumps	10 Cu.m/hr at 90-meter with 4KW motor of Kirloskar/Wilo/Grundfos	As per site visit, it appears that it is for approximately 30-meter high-rise building. The duty conditions appears to be very very high. Please note that if actual duty-head condition is much lower, it will result into increases in water flow & motor rating should increase as per Pump law. This might affect the sizing of electrical side and operation during commissioning and testing.	Request kindly review and Confirm operating operating hydro-static head, proposed Pipe sizes, material, length etc... Please note that this hi-pressure has effect on discharge piping's pressure withstanding capacity. It is normally 2.5 times the operating pressure.	Follow BOQ Item	
	Quantity		Quantity as per BOQ	1 Each shown in the quantity	As per description, it required 3-pump set	It should be 3-nos. pumping set with motor and not one. Please confirm.	Refer to Item No. 1 (a) in BOQ	
1.2					Is the pumping application is for closed loop or open loop system?	These pumps are being proposed for Residential water distribution system as per BOQ. It should then be Open loop system. Please confirm. This has an effect on hydrostatic head calculations.	Please refer to drawing at Annexure-I and it is open loop	
2	Tank	2	Pressure tank	100 litre Pressure tank	As per hydro-Pneumatic system, this tank is pneumatically pressurized over diaphragm bladder. BOQ is silent about the detailed specs.	This should be generally pressurized with dry Nitrogen only for Hydro-Pneumatic pumping system. Please confirm.	A VFD operated hydro-pneumatic system has a predefined Pressurized tank in its design and it is pre-charged by default.	
	Quantity			Each 1 shown in the quantity	As per description, it should be only one for all 3-pump sets. It should not be one each for 3-pumping set.	Please confirm.	Please refer to drawing at Annexure-I and comply to BOQ	

[Signature]

3	Booster Pump	3	Hydro-systematic booster Pump- 1-working and 1-standby.	As per market information, Hydro-Pneumatic pumps are available. Request kindly elaborate about Hydro-systematic Pump. Recommended manufacturer recommends Hydro-Pneumatic Pumps.	It Implies the same as mentioned in BOQ
	VFD control		VFD drive with Fixed speed Control Sensor for VFD	In the specification fixed speed pump is not clear. Kindly clarify. Please review and confirm.	Please comply to BOQ as it is without VFD
	Duty point	3a	3Ph, 0.46KW motor & 2900rpm	Proposed pumping duty point like flow and head are silent in the BOQ and particular specs.	Kindly refer manufacturer and comply to BOQ
	Quantity		Each 4 shown in the quantity	As per description, it required 2-pump sets in item 3 of the BOQ.	Please refer to drawing at Annexure-I and comply to BOQ
4	Tank	4	100 litre Pressure tank	As per hydro-Pneumatic system, this tank is pneumatically pressurized over diaphragm bladder.	As already addressed in point no. 2
	Quantity		Each 4 shown in the quantity	As per BOQ description, it should be only one for all 2-pump sets.	Please refer to drawing at Annexure-I and comply to BOQ
5	I/T/C	5	Civil Foundation required Ant vibration Mount	BOQ is silent about it BOQ is silent about it.	Please visit site
			Quantity of detailed valves, NRV, Strainer, Piping material	Each Pump should have 2-valves, 1-NRV, 1 Strainer, 2-pressure gauges, 1-Purging valves at suction and discharge header. For Each pressurized tank, one supply, one drain valve and one purge valve are required. Incoming supply water valve is also required.	Refer to Point 5 in BOQ (Vendor Scope)
			Field Pressure sensor with control shielded FR copper cable for VFD control is required.	This is required as per system and BOQ is silent about it	Please confirm the scope.
			Cable supports above the ground inside the pump room	Please advise how to lay the cable for pumps. Cable tray is required or not, BOQ is silent about it	Kindly Review and confirm
				The Air-purging, Auto-Air-vent and Pressure sensor location and inserts must be with client's scope.	Kindly confirm

Woj

										Please comply to BOQ as these are not in the scope of this tender	
			Incoming Feeder Isolator near the Pumping set.	BOQ is silent about it							Please confirm the scope.
			Incoming Feeder Cabling and Earthing.	BOQ is silent about it							Please confirm the scope.
			No mention of any fire ratings.	Does it require fire grade cable and wire							Kindly Review and confirm
			PVC insulated and PVC sheathed/XLPE power cable of 1.1 KV grade armoured....	Specification is silent about it.							Kindly Review and confirm
			Required for pumps and Electrical Panel	Earthing pits and earthing strips or wire is not indicated in the BOQ							Kindly Review and confirm
			1-Ohm Earthing	Since High-pressure Pumping set is proposed, the discharge side piping must be suitable for atleast 2.5 times the operating pressure.							Kindly review and confirm
			T/C- Testing & Commissioning	NPSH of the pump must be ensured by the customer at site. Pump require min 1meter NPSH.							Kindly confirm
				Portable clean water to be supplied with recommended TDS, Ph-7and turbidity for ensuring the pumping operation and warranty period.							Kindly confirm
			I/T/C- Install, Testing & Commissioning	Ditto same as above							Kindly Review and confirm
6	I/T/C	6									Kindly Review and confirm
											Refer to above point