

**F KOLKATA PORT TRUST**

**HALDIA DOCK COMPLEX**

**Tender No.: SDM (P&E)/T/34/2018-19**

**E-Tender No. KoPT/Haldia Dock Complex/P&E Div/38/18-19/ET/381**

**E-Tender under two cover system (Cover-I: Pre-qualification, Techno-commercial terms and Cover-II: Price cover) for work of "Design, manufacture, fabrication, supply, Erection, testing, commissioning and handing over Firefighting facilities at HOJ-I, HOJ-II, Barge Jetty I&II and upcoming Outer Terminal -II (OT-II) in EPC mode under two cover systems including Comprehensive operation and maintenance for 10 (ten) years after defect liability period of 02 (two) years.**

**♠ ADDENDUM-V ♠**

**CORRECTIONS / ADDITIONS / DELETIONS, ETC.**

**[Total Number of Pages: 2]**

**NOTE:**

1. This "Addendum-V" should be read in conjunction with this office above Tender Document.
2. Consequential changes, arising out of this Addendum-V, will be deemed to have been effected, even if the same were not incorporated specifically in the Tender Document.
3. One set of this "Addendum-V", shall have to be submitted along with the Offer (in with each page of it, duly signed and stamped, as token of acceptance.
4. All other terms and conditions of this office above Tender Document will remain unchanged

**HALDIA DOCK COMPLEX**  
**♠ ADDENDUM-V ♠**  
**Tender No.: SDM (P&E) / T/34 / 2018-19**  
**Terms and conditions:**

<b>Sl. No.</b>	<b>Clause No./Ref. No.</b>	<b>Para/Line No./Page No.</b>	<b>As specified in the Tender Document.</b>	<b>To be Read as</b>
01.	Sl.No.43 of Addendum-III  Closing date & time of Submission of e-Tender	Page-21 of Addendum-III	[As per Addendum-III]  24.05.2019, up to 15: 00 Hrs. (IST).	07.06.2019, up to 15: 00 Hrs. (IST).
02.	Sl. 44 of Addendum-III  Date & time of opening of Part-I (Techno commercial)	Page-21 of Addendum-III	[As per Addendum-III]  24.05.2019, up to 15: 30 Hrs. (IST).	07.06.2019, after 15: 30 Hrs. (IST).

**REPLIES TO BIDDERS' PRE-BID QUERIES**

**ANNEXURE-A**

Sl.No	Ref clause/sl. no	Bidders queries	Clarifications/confirmations
1	Sl. No:8 Addendum- III Page 4	Kindly clarify following: 1.The size of the pipe and flow available at source. 2.Pressure available at source. 3.Kindly confirm that the pressure at source is adequate to supply water up to tank. No boosting required for same.	Initial filling will be in the scope of contractor, it is upto the contractor to make his own arrangements. For Details please refer <b>Annexure-E</b> of this clarification.
2	Sl. No: 9 Addendum-III Page 4	Kindly clarify following: 1.the feeder available at Wagon tippler substation & Lock substation is adequate to supply the load requirement of all 5 jetties. 2.The feeder available at Wagon Tippler Substation & Lock Substation is available with all switchgear & no modification is required in Wagon Tippler Substation & Lock Substation.	Based on the regulation, contractor need to revamp the existing Substation as per Indian Electricity Rules. The source of power for the revamped Substation is 1.2 kms(approx) from Wagon Tippler Substation and 1.5 kms(approx).from Lock Entrance Substation .Also, two feeders need to be procured by the contractor which should be similar to existing feeder(3.3 kV)at Wagon Tippler Substation/ Lock Entrance Substation with suitable ampere rating & to be connected to the existing bus.  The connected load of the existing substation near the HOJ-2 is sufficient.
3	Sl. No: 17 Addendum-III Page 9	Please find our letter as annexure-1 for payment terms. Request you to kindly accept the terms mentioned in Annexure-1.	The prevailing payment terms will remain unchanged.
4	Sl. No: 25 Addendum-III Page 17	SLD provided at page 35 of addendum-III is not legible. Please provide the legible copy of same.	The SLD provided is only for the format purpose. Tentative. SLD is attached as <b>Annexure-B</b> . The bidder should develop on his SLD to suit as per present requirements.
5	Sl. No: 29 Addendum-III Page 17	SLD provided at page 37 of Addendum-III is not legible. Please provide the legible copy of same.	It is a tentative SCADA system layout drawing. Tentative drawing of Scada System is attached as <b>Annexure-C</b> . Same has to be developed by bidder as per present requirements

6	Sl. No: 32 Addendum-III Page 18	Auto start of tower monitor system linked with hydrocarbon leak detection system and alarm system is not recommended also not in OISD-156. Generally, start of tower monitor system is manual from local or remote-control panel in case there is actual fire.	Same thing has been clarified in earlier clarifications. Please refer Sl. 31 of earlier pre-bid replies uploaded along with Addendum-III.
7	Clause no: 1.2.ii.11. Annexure-VII of Addendum- III Page 40	Please clarify following: 1.Please confirm that the existing substation mentioned here is located onshore near proposed location of fire water pumps house near HOJ-II. 2.Kindly clarify the scope of revamping. As per our understanding this substation is controlling the complete operation of HOJ-II including transfer operation of hydrocarbon. If yes, please provide the SLD of existing substation and provide the detailed scope of work for same. 3.Please clarify the scope of civil for revamping of existing substation at HOJ-II	The present substation near HOJ-2 is meant for the HOJ-2 fireighting system and lighting purpose only. DP panels to be installed by bidder. The bidder should prepare on his own SLD as per the present requirements. If there is any civil refurbishment necessary for the existing substation building; the bidder needs to take care of the works.3.The existing substation house may be used for the proposed project. However any additional civil work for the instant project related to substation is under the scope of the contractor.
8	Annexure-VII of Addendum- III Clause no: 1.2.ii.10 Page 40	<b>Please clarify following:</b> 1.Please confirm that the existing substation mentioned here is located onshore near proposed location of fire water pumps house near HOJ-I. 2.Kindly clarify the scope of revamping. As per our understanding this substation is controlling the complete operation of HOJ-I including transfer operation of hydrocarbon. If yes, please provide the SLD of existing substation and provide the detailed scope of work for same. 3.Please clarify the scope of civil for revamping of existing substation at HOJ-II	The substation near HOJ-1 can be used for your fire fighting pupose like lighting, tower monitors and othe control valves. The necessary DP panels to be installed by bidder. The bidder should prepare on his own SLD as per the present requirements. If there is any civil refurbishment necessary for the existing substation building; the bidder needs to take care of the works.
9	Annexure-VII of Addendum- III Clause no: 1.2.iv Page 41	<b>Kindly clarify following points:</b> 1.During site visit we observed that the barge jetties are floating type. Kindly clarify we can lay firefighting piping from existing structure same as other product piping laid.	1.The same may be decided during detailed engineering after placement of LOI. 2.The design is under the scope of the

		2.As jetties are floating type, kindly clarify from where we can get support to install hydrant and monitors. Please clarify whether we need to consider separate foundation with tower for remote monitor. if yes, please provide the drawing for same.	prospective bidder. However, the monitors shall be installed on-shore which is under the scope of the contractor.
10	Annexure-VII of Addendum-III Clause No: 1.4 Page 46	1.As per OISD-156 jumbo nozzles are not required for Barge jetties. Kindly clarify. 2.If Jumbo Nozzles are need to install at barge jetties, kindly provide the details of supporting arrangement as the jetties are floating type.	It is as per OISD-156 Table-2, sl.no.1.
11	Addendum-IV Sl. No:18 of Annexure-B Page 11	As per clarification, compressor is required only for ROV. As we proposed to use motorized operated valve (MOV) with CCOE approved actuator instead of ROV, there will not be any requirement of instrument air. Hence compressor is not required to be provided. Kindly confirm	If it is CCOE approved then compressor is not required.
12	Addendum-IV Sl. No: 27 of Annexure-B Page 13	Please clarify the arrangement for transfer of water from underground sump to fire water tanks. Please provide the schematic/P&ID for the same.	Under ground water can be lifted only with small submersible or self priming pump with capacity of 10 M3/hr @ 5 kg/cm2.
13	Addendum-IV Sl. No: 28 of Annexure-B Page 13	Major firefighting equipment like tower monitor/jumbo nozzle/ Deluge Valve/ Foam Proportioner/ Foam Concentrate/ Fire Detection & Alarm System/ Clean Agent System shall be UL/FM listed. All other equipment shall not be required to be UL/FM listed and shall be relevant IS/API/ASTM standard. Kindly confirm.	All fire fighting equipments relating to FFF should be UL/FM listed
14	Pre-Bid query reply Sl. No: 39 of Annexure-B Page 16	As per response received from various reputed OEM's of Gas Detection system, SIL-3 Gas detector is not available with any vendor. Hence Gas detector should be SIL-2 certified. Kindly confirm.	SIL-2 Gas Detectors will be acceptable.but there should be provision for upgradation.

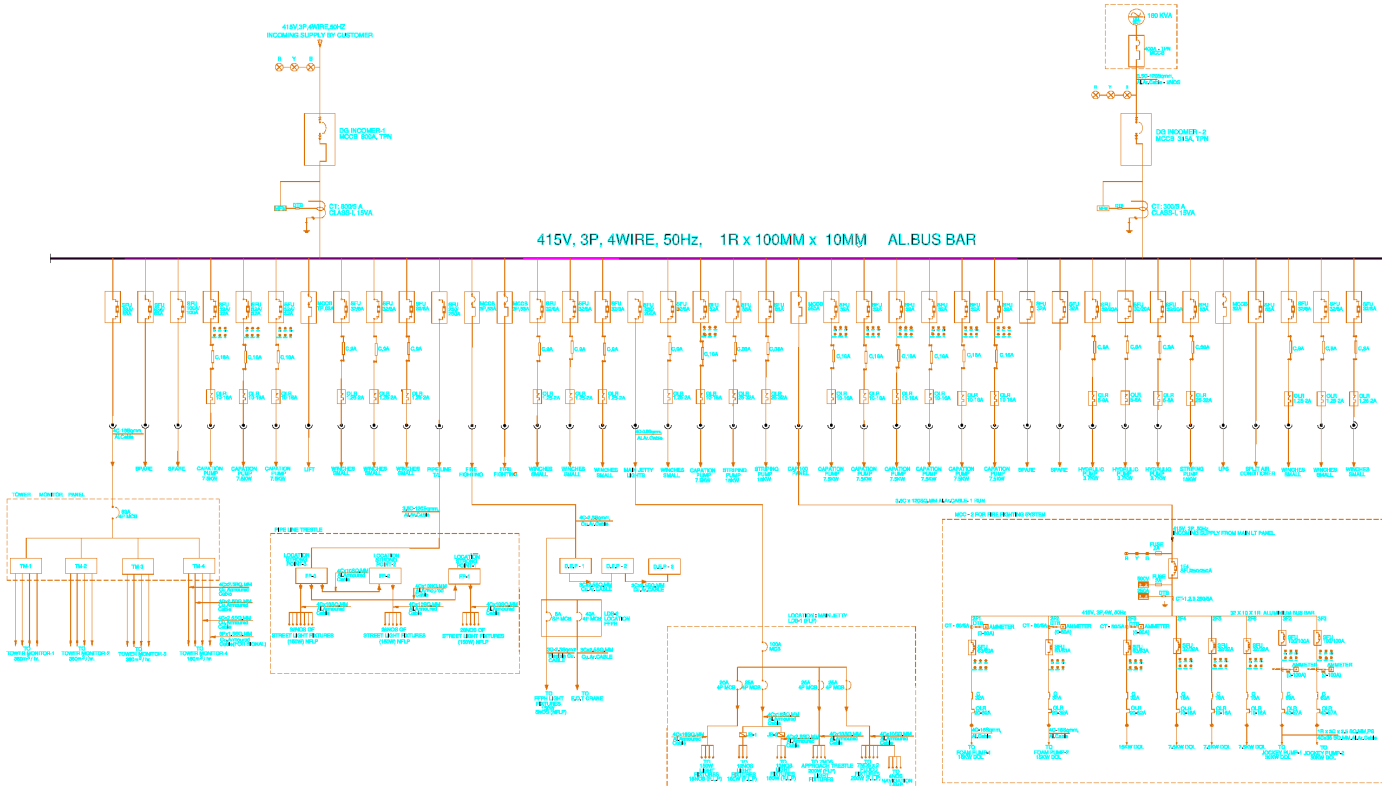
<b>15</b>	Pre-Bid query reply Sl. No: 59 of Annexure-B Page 20	The data sheet provided for Diesel Engine Pump, Jockey Pumps and Foam Pumps are as per IS standard. Also UL/FM pumps are not mandatory as per OISD. Hence all pumps shall be non-UL/FM and complying to IS standard. Also note that make provided in tender for pumps are not supplying UL/FM pumps of required capacity.	All pumps and equipments should be UL/FM listed
<b>16</b>	Addendum-IV Sl. No: 111 of Annexure-B Page 33	Please provide the rating of incomer available at site.	The bidder should visit the HDC site for required information.
<b>17</b>	Addendum-IV Various Sl. No	We have visited site and found that the scope is not clear to site person also. Hence not able to collect the necessary data required for bidding. We request you to kindly provide the data as asked in queries, so that our understanding will be clear and all bidders will be on same platform.	All Queries have been replied in different Addendums and replies to the pre-bid queries.  For further the queries the bidder shall collect from the site.
<b>18</b>	Annexure - Technical Data Sheet 2.a Page 43	The data sheet provided for foam pump is not as per UL/FM requirement. Also, the make mentioned here not supplying UL/FM foam pump. Request you to kindly accept the local pumps complying requirement of OISD-156 and approve local make which is having PTR for foam pump for similar kind of project.	The foam pump should be Scew pump or Gear pump or multi stage centrifugal pump which is capable to handle foam concentrate and all these pumps should be UL/FM listed
<b>9</b>	Annexure - Technical Data Sheet 4 & 19 Page 43	The make provided in make list is not complying the tender requirement and having following deviations: Angus: Not supplying to Indian Market Ansul/Skum: Not having UL/FM approval Acron Brass: Not having monitor in SS316 MOC as required by data sheet. Hence we request you to kindly add Newage/SBJ/Vimal as additional make which is complying the requirement of data sheet.	The MOC of monitors should be either by the SS-316/ Brass which are available.
<b>20</b>	Annexure - Technical Data Sheet 11 & 12	We request you to kindly accept following make as additional make for valve as same is approved by EIL	L & T is acceptable and follow the vendor list or you can add L & T in the list.

	Page 43	also and having PTR of many installation in India for similar Job: GM Valve Nilon Valve Zed Valve Hawa Valve	
<b>21</b>	Annexure - Technical Data Sheet 13 Page 44	Kindly add Sterling Generators as additional make for DG set.	As per approved list of vendors
<b>22</b>	Vol 2 of 2 Page 53	As per data sheet foam concentrate shall be AFFF. However as per this clause AR-AFFF foam is required. Kindly clarify what need to consider.	Foam concentrate should be AFFF only
<b>23</b>	General	During site visit we observed that existing structure of HOJ-II from Mooring berth near TM-4 to main deck and from main deck up to TM-6 is rusted and cannot bear the weight of filled fire fighting line. Hence pipe trestle from onshore up to last mooring berth i.e up to TM-6 need to be constructed. Kindly confirm	The bidder to quote as per the present scope of work only. No additional scope is required.
<b>24</b>	Addendum – III Sl.No.39 Addendum III, Annexure III, Part I, Section – XI	Tower Monitors - 9 No's and Jumbo curtain Nozzles - 9 No's. Whereas in in Breakup of tentative items for OT-II, HOJ – I & II and BJ – I & II, B- Procurement shows that Tower Monitors - 6 No's and Jumbo curtain Nozzles – 6 No's. Please clarify the same.	The BOQ is tentative. Total Tower Monitors are 9 nos. and Jumbo Nozzles are 11 nos. minimum. However the bidder is to follow OISD 156 standard.
<b>25</b>	Annexure – III,	Breakup of tentative items, B - Procurement shows Quick Release Mooring Hooks – 8 No's, please confirm the capacity of each hook and area of installation. (We understand that these hooks are for new OT – II terminal), Please clarify.	Each Hook should carry 25 Tons and THREE HOOK configuration with four nos. in HOJ-1 another four in HOJ-2
<b>26</b>	Annexure – IV	SLD of Electrical system is not visible clearly, kindly provide us the clear SLD diagram.	The SLD is only for the format purpose. Please refer Sl. No.4 above. The bidder should develop on his own SLD as per

			present requirements.
<b>27</b>	Annexure – V	P& ID of Fire Fighting system is not visible clearly, kindly provide us the clear P& ID diagram.	Reference P & ID Attached. Please refer Annxeure-D.
<b>28</b>	Annexure – VI	SLD communication system is not visible clearly, kindly provide us the clear SLD communication system diagram.	It is not SLD, it is a tentative SCADA SYSTEM LAYOUT drawing. Please refer SI.no. 5 above. Same has to be developed by bidder as per present requirements
<b>29</b>	Annexure – VII, Volume – II of section I	It is specified that HOJ – I & II jetties shall be provided with illumination on jetty, approach area, escape route etc., on old structures. However, it is understood that all these structures at HOJ – I & II are already been illuminated. Request you to kindly clarify the same as it is confusing	Replacement of existing lighting arrangement with new one (flame proof fittings with accessories including FRLS cables, switch gear etc.) is under the scope of the contractor. Illumination shall be maintained by contractor as per Dock safety rules in HOJ-I,HOJ-II,OT-II and Barge Jetty 1 & II.
<b>30</b>		It is understood that, for comprehensive Operation & Maintenance of Fire Fighting system for 12 years, Contractor shall provide 24 x 7 Engineer and Technicians. However, Firemen will be in the scope of Haldia Port Trust. Kindly Clarify the same.	Yes, tender conditions prevail.



# SINGLE LINE DIAGRAM FOR JETTY FIRE FIGHTING SYSTEM



REFERENCE DRAWINGS TO DETAILS :-

SLNO	SUPPLIER	DRAWNO
1	100MM MONITOR PANEL	VPC/ACT/TP/APP/200 & 300/210 - SHEET 1 TO 10 - & VPC/TP/ST/TP/200/300 & 200 X 311 - SHEET - 1 TO 3
2	EP1, 100, & 170	PAP/107/RT/PLA - SHEET 1 TO 11
3	0.5, 1, & 3	PAP/104/NO - RT/TP/200-GB - SHEET 15 OF 25
4	0.2, 1	

### MOTOR FEEDER SELECTION DETAILS

SE NO	TASK NO	DESCRIPTION	MOTION RATING	QTY	FETTER RATING	TYPE	POWER CABLE SIZE	CONTROL CABLE
1	GRIP TIGHTEN	LOUVER TIGHTEN	2.5 RM	980	1.5 RM	SCREW	---	---
2	GRIP TIGHTEN	LOUVER TIGHTEN	2.5 RM	980	1.5 RM	SCREW	---	---
3	POWER TIGHTEN	PIPE TIGHTEN	3.5 RM	570	1.5 RM	SCREW	3.500 INCHES	SCREW SCREW
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191	WPC TO EX	WPC TO EX	1.5 RM	---	---	---	---	---
192	WPC TO EX	WPC TO EX	1.5 RM	---	---	---	---	---
193	WPC TO EX	WPC TO EX	1.5 RM	---	---	---	---	---
194	WPC TO EX	W						

NOTE :

1. BUSBAR SIZE - 1R x 100MM x 10MM FOR PHASE ALUMINIUM
2. FOR STAR/DELTA STARTERS AND DOL STARTERS TM RELAY IS USED.
3. THE MATERIAL OF THE BUSBAR IS ALUMINIUM PER STRANDED
4. WIRING DETAILS: FOR CT WIRING-2.5SQMM COPPED FOR CONTROL WIRING-2.5SQMM COPPER STRAN

**LEGEND:**

- ⬢ INDICATION LAMP
  - ⬢ CURRENT TRANSFORMER
  - ⬢ CONTROL FUSE
  - ⬢ GPU
  - ⬢ LAMININE
  - ⬢ POTENTIAL TRANSFORMER
  - ⬢ VOLTMETER SELECTOR SWITCH
  - ⬢ VOLTMETER
  - ⬢ AMMETER SELECTOR SWITCH
  - ⬢ AMMETER
  - ⬢ WIREMESH CIRCUIT BREAKER
  - ⬢ LIGHTING ARRESTER
  - ⬢ SA - SURGE ARRESTER
  - ⬢ TROUBLESHOOTING METER
  - ⬢ CONTACTOR
  - ⬢ MICRO
  - ⬢ CAPACITOR
  - ⬢ STAR/DELTA
  - ⬢ POL. STARTER
- MECHANICAL & ELECTRICAL INTERLOCK

### REFERENCE DRAWING

PROJECT: **FIRE FIGHTING HYDRANT  
SYSTEM LAYOUT AS PER OISD-156**

CLIENT: **HALDIA DOCK COMPLEX**

**TITLE:**  
**SINGLE LINE DIAGRAM FOR JETTY FIRE FIGHTING SYSTEM**  
**AT HALDIA DOCK COMPLEX**

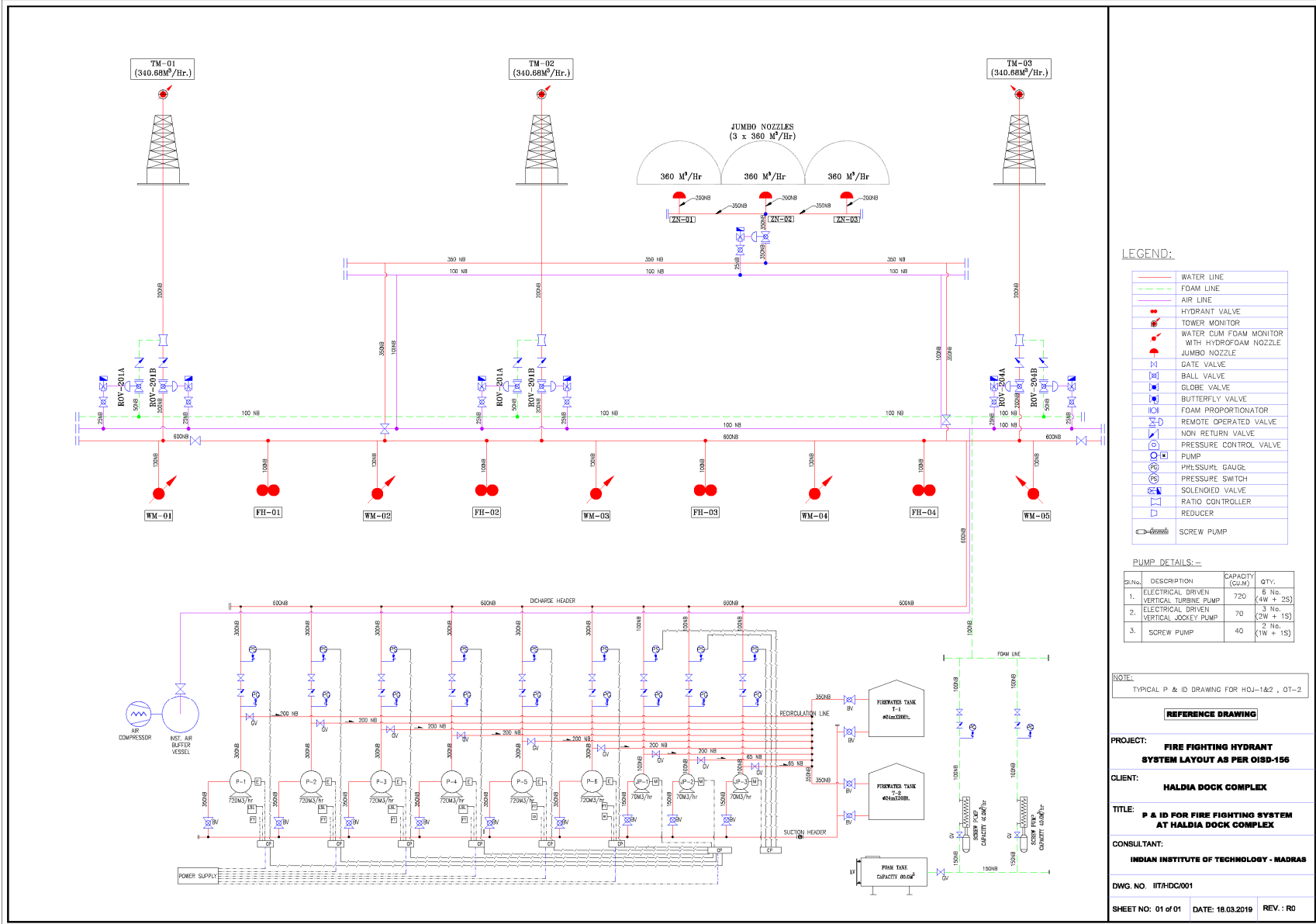
**CONSULTANT:**  
**INDIAN INSTITUTE OF TECHNOLOGY - MADRAS**

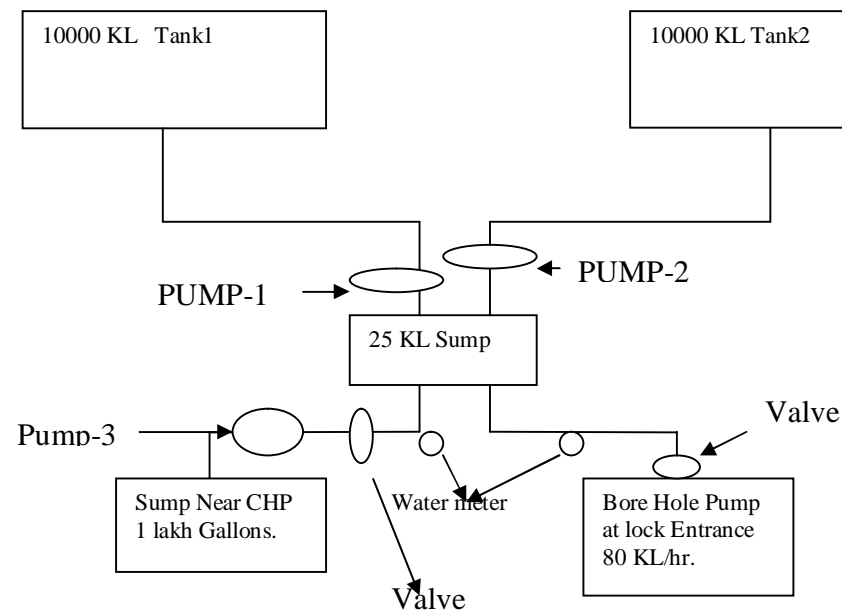
DWG. NO. IIT/HDC/002

SHEET NO: 01 of 01	DATE: 18.03.2019	REV.: R0
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## Annexure-D





The two nos. 10,000 KL Tanks will be filled through a 25 KL Sump. The contractor have to make all arrangements at his own cost for laying pipe line required for filling the Sump and Tank from the sources identified by Haldia Dock complex.

There are two sources identified by Haldia Dock Complex for filling the Sump. They are as follows:

1. Sump of capacity 1 Lakh Gallon near Coal Handling Plant at a distance of approx. 1.5 KM(approx.)
2. Bore hole pump of capacity 80 KL/hr near Lock Entrance about 1.5 KM(aprox) from HOJ-II.
3. The bidder shall arrange for supply and installation of the pump for pumping the water from the Sump near CHP to the sump( 25 KL Capacity).