National Technology Centre for Ports, Waterways & Coasts.

(NTCPWC)

Door no.606, 6th floor New academic complex

IIT Madras -Chennai -600036- PHONE;(044) 22578919/18

Ref: No. PROJECT NO. IC/19-20/OE/376/KOPT/008130 DATE:01.11.2019

Tender ref no. NTCPWC/BUOY/KMUR/016

Item Description: Fabrication and supply of Buoy with mooring components- 1set (as per specification attached)

Due date: 23.11.2019 at 03:00 P.M.

Dear Sir,

1. Sealed Quotations/Tender with compliance sheet are invited in duplicate for the various items shown below/overleaf/enclosed list.
2. The quotations are to be in two parts as Technical Offer and as Commercial offer: (TWO BID SYSTEM) The two parts of the offer are to be clearly marked on the envelopes. The two parts of the offer in separate envelopes must be enclosed in the one bigger envelope duly sealed and super scribed with tender reference number and *due* date and must be addressed to the undersigned so as to reach him on or before the due date stipulated above. Fax and Email quotation and delayed tenders are not acceptable. Bidder qualified in technical bid are only eligible to open price bid.
3. Quotations should be valid for 90 days from the due date and period of delivery required, warranty terms etc. should also be clearly indicated. Warranty clause will be as said in the specification. PBG will be collected as per GFR Rule
4. Imported supplies should *be* quoted for CIP Chennai basis indicating mode of shipment

S. Local firms to quote for free delivery to the delivery destination mentioned. If quoted for Ex-Godown delivery charges be indicated separately.

6. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples / machine/ equipment if called for should be submitted / demonstrated at free of charges and collected back at the supplier's expenses. Compliancy certificate is to be provided indicating conformity to the technical specifications
7. Sales Tax/General Taxes/ED if applicable and such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. If this is not indicated no such claim will be admitted at any stage. The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to Non-Government Educational Institutions run with no profit motive for which a concession is given. GST Concessional Certificate will be issued at the time of final settlement of the bill for 5% GST.
8. Goods should be supplied carriage paid and insured.
9. Goods shall not be supplied without an official supply order.
10. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
11. The Guarantee period of the item may be indicated clearly.
12. No Advance payment will be made for Indigenous purchase. However, 90% Payment against Delivery and acceptance and 10% after successful commissioning are agreed to wherever the Installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful commissioning wherever the installation is being done). (IIT Madras is exempt from payment of Excise Duty and is eligible for concessional rate of custom duty and GST for 5%. Necessary certificate will be issued on demand. IIT Madras will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.
13. Acceptance and Rejection: -1.1.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.
14. All tender amendments will be uploaded on the IITM website only. Bidders should keep themselves updated & conditions mentioned in the specification needs to be strictly followed

Tenders to be addressed to : The project co-ordinator,NTCPWC, room no.606, 6th floor new academic complex, IIT Madras, Chennai- 600036

FABRICATION AND SUPPLY OF BUOY WITH MOORING COMPONENTS

1. The Scope of the supply

Fabrication and supply of the one number of the buoy with suitable accessories as per the technical specification. **(Qty – 1 No)**

2. Requirements

The floating buoy stations are required for the monitoring the environmental parameters for the ports and harbours . It should be sea worthy and in-line with our technical specification.

3. Technical Specification : |Technical Bid format| - A

Sl.no	Location/Part of the Item (To be referred with Annuxure-1)	Detailed description	Compliance (Yes/No)
1	Material	Mild Steel 2062 Grade. B - Hot dip galvanized as per IS 2629	
2	Overall dimensions	1. Overall height is 4.9m with diameter of 2.5m and the mast height 2.2m	
3	MAST(A)	1. Mast is Fabricated on a flange, by NPS 2" SCH40 Height of 2.2m from the bottom level and top diameter of the Mast is 0.310m. 2. Entire mast is made of ISA 55x55x5mm, PCD of 240mm and the Hole Diameter of 12mm to be Provided. 3. Middle Plate of diameter 0.46m at a height of 1.14m from the Flange (815OD). 4. The Flange top is 197mm from deck. The top of the Flange Accommodates Diameter 660mm Vent Cover, Allen Bolted to the Flange.	
4	HANDRAIL (B)	1. Handrail is fabricated by NPS 2''SCH40 Height of 1.2 Meters from Deck. 2. A flange Projection of height 0.15m welded to P.C.D 2.3m on Deck, Whole Handrail is Mounted on this Flange 3. All Flanges are Equally Spaced of 6 Nos and Having Passage Width of 1.150m	
5	BUOY (C)	1. The Buoy part is the buoyancy chamber of Cylindrical shape of Two segments Having Frames inbuilt, 2. Both Segments are Built on NPS 24''SCH 40, of Length 2.15m, Height of0. 490m From Bottom. 3. On top of this Pipe OD 0.815m, Slip –on Flange Class 150 to be Provided, Two Nos. One welded to pipe, another for Mast and both are bolted.	

		4. This pipe is Inserted, Center of Outer Diameter 1500 x 10mm Round Plate. 5. Which is vented in Inner Diameter (574.7mm). 6. First Segment is having 500mm Height, which is Conical type Starting Diameter 1500mm and 2500mm on top, of having Plate Thickness 10mm.Stiffeners of 75 x10mm total 8 Nos Welded to the Plate Internally, all Plates are Welded with Stiffeners. This should be Airtight. 7. Second Segment is Having 1500mm Height and 2500mm Diameter Both the ends., Both Ends Are Welded to form Airtight Chamber, Lower End Plate 2500mm Will have Diameter of 10mm Holes Radially for Stitch weld(Refer Drawing),.8 Nos of Stiffeners(75 x 10mm) Welded Internally on all Sides,. Except Pipe side., All Stiffeners are Supported by GUSSET Piece Refer Drawing. 8. Both Segments Should be Pressure tested of < 2 bar. 9. The Buoy Assembly is Mounted on Diameter 1500 x 10mm Thick Cylinder,8Nos Stiffeners Internally Welded.	
6	EYE PAD (D)	1. Eye Pad is Located on Deck 4 Nos. Equally Spaced, Above Stiffeners Underneath, For Lifting. 2. All Eye Pad is Welded on Rectangle Plate,300x60x10mm on Deck. 3. Refer Drawing for Dimensions. 4. 4 Nos of Eye pad is Provided on Buoy's First Segment Bottom Facing, For Mooring Facility.	
7	CLUMP WEIGHT (I)	1. Clump weight is the Bottom most part of the Vessel of Outer Diameter 1900mm and Inner Diameter 1500mm and Thick of 50mm, Inserted and Welded on Diameter 1500 x 10mm Thick, Height of 490mm.	
8	DECK (F)	1. Deck having Diameter of 2500mm, is the Working Platform Comprising Mast, Eye Pad, Manhole and Handrail.	
9	MANHOLE (G)	1. Manhole to Access the 1500mm Length Cylinder Part, Climbing Provision to be Provided inside of the Cylinder.	
10	VENT COVER (H)	1. Vent cover of Diameter 660mm, Allen Bolted to Flange, Fitted on top of the NPS 24''SCH 40.	

11	VENT PIPE (I)	1. Vent Pipe Starts 490mm From Bottom, has Length of 2.15 m, Running Through Buoy Assembly, and Raised At Height of 150mm Above Deck Level as shown in the Annexure-1	
12	MOORING COMPONENTS	1. Bow Shackle of width 50mm, Suitable for Eye Pad 2. Rope Diameter 6 & 52mm for Mooring Operations. 3. Anchor AC-14 of 300kg,4 Nos 4. Anchor Chain of Diameter 25mm of Standard Length 4 Nos	
13	TEST CERTIFICATES COMPULSORY	1. Material Test Certificates 2. Pressure tested certificate for Buoy (c) 3. Weld Test Certificates, PT, UT 4. Galvanizing thickness test certificate	

*** Technical compliance sheet to be attached in the technical bid.**

4. **Eligibility**

   The bidder must have a strong presence of at least ten years in the Indian market and Should have fabricated and supplied similar type of equipment such as pressure vessels, Boilers etc., to a govt agency

5. **General**

   Detailed Fabrication Drawing will be provided along with the purchase order and Items

6. **Inspection**

   Inspection/s will be made by NTCPWC-IITM officials while fabrication and testing of the item at the vendors fabrication facility

7. **Specification test**

   Specification of all items to be ensured by IITM before acceptance of the same.

8. **Training**

   Hands on training to be provided to get operating knowledge of the items.

9. **Dispatch & Delivery Destination**

   All items should be properly packed in the suitable box and it should be dispatched to Kolkata Port Trust, West Bengal.

10. **Delivery**

    Items should be supplied **within 3-4 weeks** from the date of receipt of purchase order to be strictly followed.

11. **Validity**

    The offer should be valid for 90 days.

12. **Warranty**

    One-year warranty from the date of invoice for material and work man ship.

Technical Clarification : leo@ntcpwc.iitm.ac.in

Price bid format to be followed – B

Sl.No	Item	Qty	Price (Inr)
1	Fabrication and supply of buoy	1 no	
2	Mooring components Sl.No.12/Technical Specification1	1 set	
3	Testing as per Sl.no.13/Technical specification	1 no	
4	Packaging and forwarding transport of buoys and mooring components to KoPT, Kolkata-36	1 set	
5	With out GST inclusive of all Sub-total for (1 Set)		
6	If any GST as applicable		
7	Total		

*** Total value of the Bid inclusive of all above item will be considered for selection of lowest bidder.**

I/We the bidder accept all the terms and conditions as per **Tender No: NTCPWC/BUOY/KMUR/016** including all technical & Commercial conditions.

Date :

Authorised Signatory

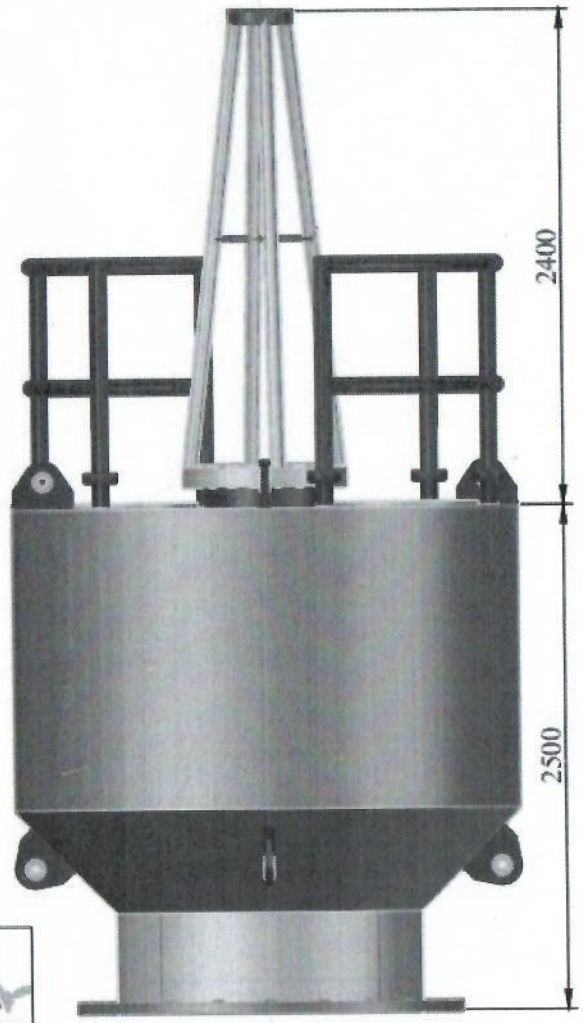
Place :

(for_____)

Annexure-1

General assembly drawing of the Buoy station

WEATHER FLOATING VESSEL
G.A.ASSEMBLY



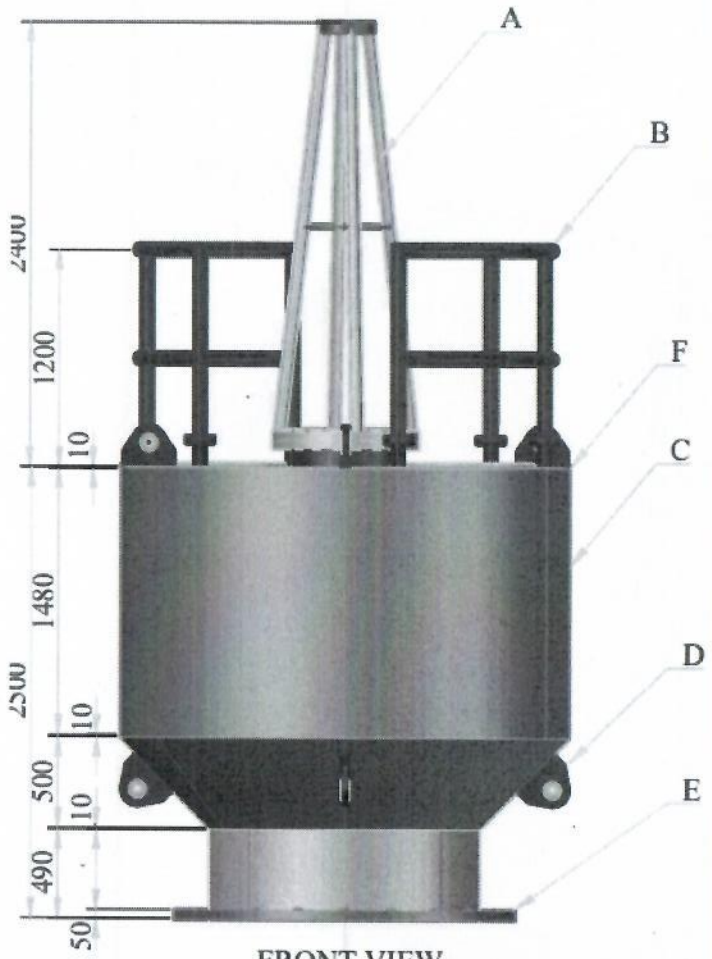
WEATHER FLOATING VESSEL
M.S.2062 Gr.B.,10mm THICK,
HOT DIP GALVANISED,85 µm.

NTCPWC/DRG/001/VER/00/PROJ00/18OCT1

SHEET 1

NTCPWC
NATIONAL TECHNOLOGY CENTRE FOR PORTS WATERWAYS AND COASTS

SAGARMALA

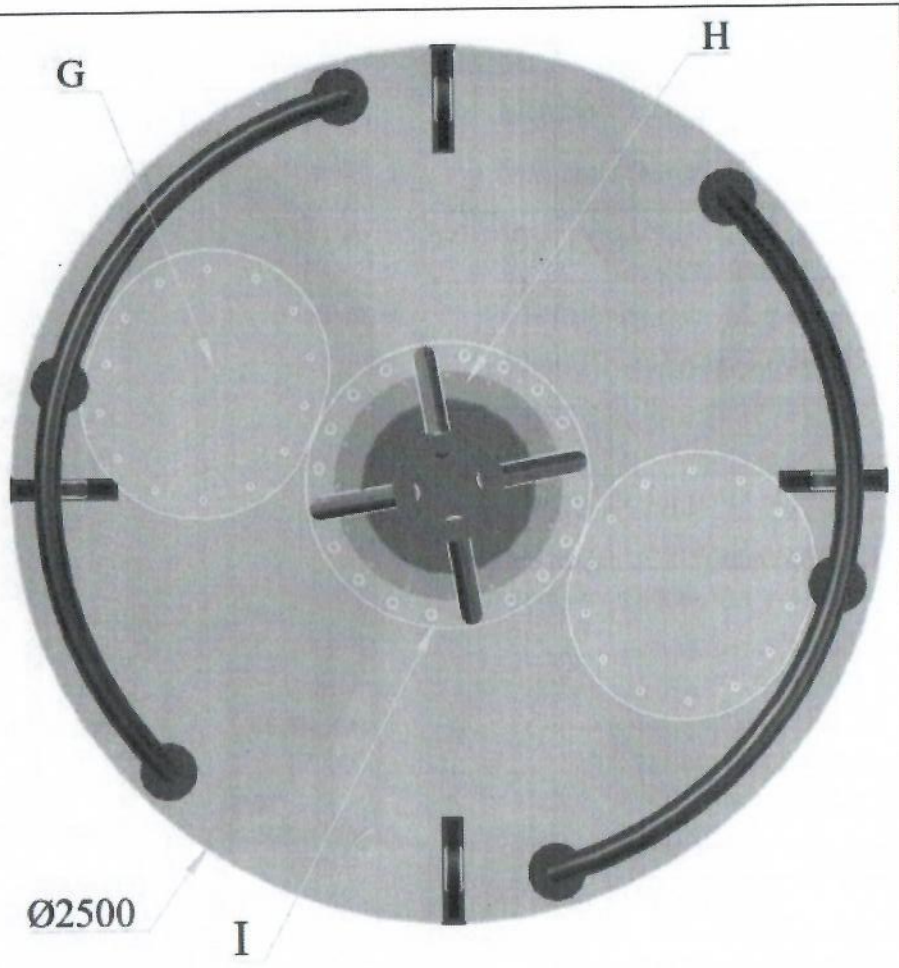


FRONT VIEW

MATERIAL: M.S.2062 Gr.B.10mm Thick,Galvanised.

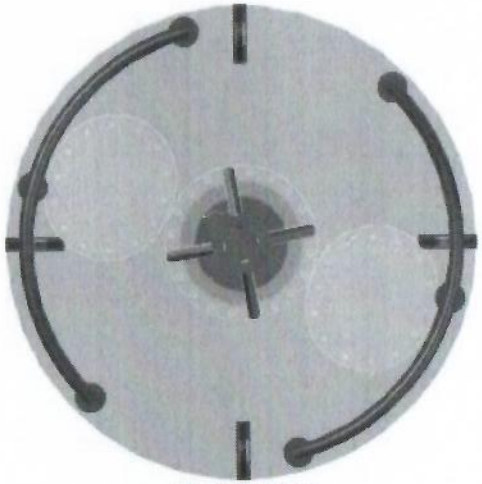
ALL DIMENSIONS ARE IN mm.

A	MAST
	Mast Pipe - 2"SCH40 Mast Height 2.2m. 2.4m from Deck.Accomodated on OD815 Flange.,Bolted Joint.
B	HAND RAIL
	Hand Rail Pipe - 2"SCH40 Hand Rail Height 1.2m from Deck.Accomodated on 150mm height Flanged.,Bolted Joint.
C	BUOY
	BUOY Material M.S.2062 Gr.B.All 10mm Thick. BUOY Ø2.5m & Height 4.9m
D	EYE PAD
	EYE PAD Plate Eye Ø52mm, H 215, L 280,W 30mm, Over all Width 40mm. 4 Nos on DECK for lifting 4 Nos Below For MOORING.
E	CLUMP WEIGHT
	Clump Weight Flange OD1900mm ID1500mm,Thick 50mm Welded Bottom of the BUOY
F	DECK
	Height 2500mm From Bottom,Accomodates Man Hole,Mast, Eye Pad,Hand Rail.



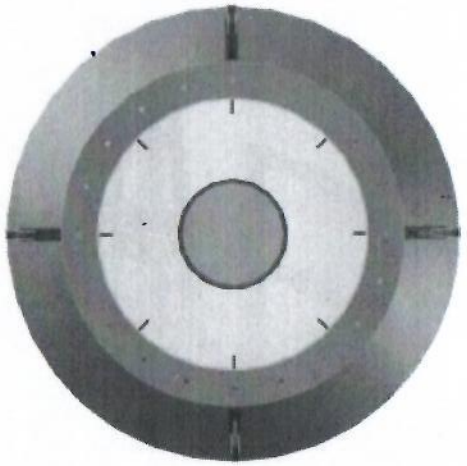
TOP VIEW

G	MAN HOLE
	Man Hole Inner Width 570 x 470mm Man Hole Cover 770 x 670mm
H	VENT COVER
	OD 660mm 10mm Thick Bolted to OD815 Flange
I	VENT PIPE
	NPS 24"SCH40 Pipe length of 2150mm,609.6 OD Flanged 150mm above Deck level.



TOP VIEW

ISOMETRIC VIEW



BOTTOM VIEW

FRONT VIEW

SIDE VIEW

SHEET 4/4