

Tender No. : DID3286L15/L2
Tender Date : 19.04.2014
Bid Closing On : 12.06.2014 at 13:00 hrs.(IST)
Bid Opening On : 12.06.2014 at 13:00 hrs.(IST)

Tender issued to following parties only:

Slno	V_Code	Vendor Name	City/Country
1	200140	BINODE ENGINEERING WORKS	TINSUKIA
2	200141	SHARMA & COMPANY,	TINSUKIA
3	200144	TECHNO CRAFT	DULIAJAN
4	200289	SARADA WELDING WORKS	DULIAJAN
5	201654	TECHNO STEEL & CRAFT INDUSTRIES	GUWAHATI
6	201899	SIDDHARTH MACHINERIES PVT LTD	MAKUM
7	202145	SWASTIK ENGINEERING WORKS,	JORHAT
8	202261	COMMERCIAL ENTERPRISES	NAMRUP
9	202911	STEEL & GRIP	CHABUA
10	203157	ES PEE ENGINEERING WORKS	TINSUKIA
11	203772	EASTERN ENGINEERING	TINSUKIA
12	204231	SUDARSHAN STEEL UDYOG (VESSEL)	TINSUKIA
13	204232	HINDUSTHAN PRODUCTS	TINSUKIA - 786 146
14	204599	TITNEX INDUSTRY & TRADE	DIBRUGARH
15	209350	EASTERN ENGINEERING WORKS	CHABUA

OIL INDIA LIMITED
(A Govt. of India Enterprise)
P.O. Duliajan-786602, Assam

E-mail:material@oilindia.in, Fax No.91-374-2800533

Tender No. & Date : DID3286L15/L2 19.04.2014

Bid Security Amount : INR 0.00 OR USD 0.00
(or equivalent Amount in any currency)

Bidding Type : Single Bid (Composite Bid)

Bid Closing On : 12.06.2014 at 13:00 hrs. (IST)
Bid Opening On : 12.06.2014 at 13:00 hrs. (IST)

Performance Guarantee : Not Applicable

OIL INDIA LIMITED invites Limited tenders for items detailed below:

Item No./ Mat. Code	Material Description	Quantity	UOM
10 0C000274	"CABIN FOR OPERATOR / CREW / SECURITY" for Gas Field use as per specification given in ANNEXURE-I ENCLOSED. ENCLOSED : ANNEXURE-II, ANNEXURE-III, ANNEXURE-IV AND ANNEXURE-V -----	2	NO

Standard Notes: (1) VALIDITY : Your offer must be valid for 120 days from the date of bid opening. Offer with inadequate validity will be rejected.

(2) The offer should be submitted in Duplicate.

(3) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of a sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).

(4) In the event you authorize your dealer/stockist/channel partner to quote on your behalf, the dealer/stockist/channel partner while submitting bid should mention on the body of the envelope that they are submitting bid on your behalf.

In the event the dealer/stockist/channel partner do not mention the name of their OEM/principal on the body of the envelope, the offer shall be treated as unsolicited offer and will not be considered for opening.

The dealer/stockist/channel partner should take note of above while submitting bid on behalf of their OEM/principal.

(5) For order with F.O.R. Destination term, 100% payment against despatch documents will not be entertained. In this regards please refer payment terms in ANNEXURE-MM/TENDER/LP/01/06.

(6) To evaluate the inter-se ranking of the offers, Assam Entry Tax on purchase value will be loaded as per prevailing Government of Assam Guidelines as applicable on bid closing date. Bidders may check this with the appropriate authority while submitting their bids.

(7) Bidder must mention page no./nos. in every pages of their offer.

(8) Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.

(9) Bidder should clearly mention their name and address on the outside of the envelope containing their offer.

(10) In the event of receipt of only a single offer against the tender within B.C.date, OIL reserves the right to extend the B.C. date as deemed fit by the company. During the extended period, the bidders who have already submitted the bids on or before the original B.C date, shall not be permitted to revise their quotation.

Special Notes : TECHNICAL CRITERIA

The following technical conditions should be strictly complied with, failing which the bid will be rejected.

1. QUALIFYING REQUIREMENTS OF THE BIDDER:

a. The bidder should be a reputed fabricator and should have the credentials of executing order for crew cabins/bunk house/operator room in the past.

b. Bidder should have experience of successfully executing Bunk House, Crew Cabin and Operator Room order for at least Rs. 4.50 Lakhs during past 3 years as on Bid Closing Date. Necessary proof in support of the same should be enclosed with the offer, offered without these documents will be rejected.

c. The crew cabins should be manufactured based on proven design and specification.

d. Bidder must forward, along with the quotation, the detailed drawings & specifications of proven design including each and every part (main shell, base frame, skid, flooring, side & end wall, roof, weather shed/rain shed, insulation, inner paneling, doors, windows, personal lockers, shelves, table & bench, electrical fitting/items, details of wiring etc.), failing which the offer will be liable for rejection. Bidder must also forward make and model along with product catalogue for offered bought out furniture and water filter.

e. Bidder should have the required machinery for undertaking the fabrication of crew cabins, viz welding, painting, pressing of sheets (corrugation) etc.

f. Bidder must forward along with the quotation the detailed drawings of corrugated sheets.

2. MATERIALS SPECIFICATION:

2.1 The compliance with technical specifications is the vital criteria for accepting the offer. The offer should meet all the technical specifications and the entire scope of work. Any deviation from the above will lead to rejection of the offer.

2.2 The offer should contain complete technical information and essentially include the following:

- a. Complete set of structural drawing with bill of materials.
- b. Details (like make / brand / model / number etc) of the bought out items.

2.3 Bidders are advised to ensure full compliance with all the requirements and to confirm the same in their offer, to avoid any post tender clarifications.

2.4 Unsolicited post tender clarifications / modifications will lead to the rejection of the bid. However, in case any clarifications sought by the Company, the bidder should submit the replies restricting only to the clarification sought and within the specified timeframe.

2.5 Any variation or non-conformity to the tender specification should be clearly mentioned in the Technical Compliance Check-List (Annexure-III, IV & V) given in the Tender. Deviation taken elsewhere in the offer will not be given cognizance.

3. 1.0 The Cabins to be constructed as per the final drawing submitted (based on drawing enclosed herewith) and approved by OIL.

2.0 All other details are given in Annexure-I.

3.0 Terms & condition as per Annexure-I, II & Notes in the tender.

4.0 Delivery being the essence of the tender, bidder should indicate their best delivery schedule.

4. Each crew cabin should be offered for inspection (4-stage inspection) to representative of GM(Prodn Gas) at the following stages of fabrication:-

- a) At any time during fabrication.
- b) On completion of fabrication job before applying primer coating.
- c) Inspection of wiring work by Electrical dept. of OIL before fixing of panels, at least 15 (fifteen) days in advance.
- d) On completion of the jobs before dispatching the complete cabin.

5. Purchased order no., Approx Weight of Cabin & WBS no. should be weld written on each cabin.

6. User Department's Name and OIL logo should be written on each cabin which will be confirmed during inspection.

7. Minor change in the specification may be done during the course of fabrication of cabin.

8. All the electrical fittings should be tested by competent persons holding valid electrical license. Necessary electrical test certificate duly signed by competent persons holding valid electrical license and schematic diagram of wiring should be submitted along with cabin. Bidder to confirm the same while quoting.

9. Bidder should forward catalogue, drawing (with specification) of all the items along with the quotation wherever necessary.

10. Bidder must confirm/ clarify all the clauses of Annexure-I, Annexure-II & other notes point by point and the offer should be forwarded along with price break up of each and every item. Offer without these will be treated as cancel.

11. WARRANTY/ GUARANTEE

The cabin, including all the bought out items, should have minimum onsite warranty of

one year from the date of supply. Warranty/ guarantee for the painting and coating should be for two years against any failure, rusting etc. For bought out items Bidder may also provide warranty / guarantee certificate from Original Equipment. Bidder to confirm the same along with the quotation. The offer, taking exception to this will be rejected.

ANNEXURE-I**"CABIN FOR OPERATOR / CREW / SECURITY" for Gas Field use as per specification given in ANNEXURE-I****SCOPE OF WORK:**

The scope of work covers manufacture and supply of crew cabins having specified external dimensions complete with resin bonded mineral glass wool insulation, paneling, electric fittings, furniture and other equipments to be provided in the cabins for site personnel. Cabins shall be used as portable modules and shall be deployed at any place. The scope of work covers all the points stated under various heads below. The cabin should be provided with suitable lifting and handling facilities.

1. GENERAL DESIGN & CONSTRUCTION:-**1.1 Main Shell:**

The main fabrication of the structural framework should be of integral and all welded type to comprise of the bottom frame, overall framework, internal external cladding with insulation and other peripherals, sloping self-draining roof and desired doors & windows etc. The main corner vertical support posts should be formed into a press component from 5 mm thick MS tested quality plates as per IS specifications and all the corner posts should be suitably welded at the top with a heavy gauge MS plate which should be able to hold steel forged lifting hooks or corner casting arrangement with 50 mm holes. The corner castings to be provided are similar to the corner castings normally found in marine freight containers. The entire welding process is to be executed by Certified Welder (copy of certificate must be attached with the offer for scrutiny) using ISI quality electrodes.

1.2 Base Frame:

The main bottom (Base) frame is fabricated and welded out of tested quality MS Steel Channels of size: ISMC 125 mm x 65 mm and all the inter connecting cross members shall also be of steel channels duly welded lengthwise & breadth wise maintaining conveniently equal distance.

1.3 Skid:

The under structure / base frame of cabin is to be mounted on the skid consisting of 3 (three) nos. of medium beam - ISMB 200 mm x 100 mm hot rolled 'I' section. At the end portion of the 'I' section structure on both the sides, Steel Pipe of size 142 mm NB X 9.5 mm W/Thickness should be inserted & welded properly. The 'I' section beam should be placed at equal distance and connected with same size beam at 2000mm apart. Base frame and skid should be made in such a way that no foundation is needed for placement of cabin.

1.4 Flooring:

a) Operator Room and Crew/Security Room- The entire flooring of the cabin should be of 6 mm thick MS chequered plate, welded lengthwise and breadth wise properly with the

base frame of the Skid. The top floor should be covered with PVC sheet of Bhor / Royal Touch / Premier Vinyl.

b) Store Room area flooring should be of 6 mm thick chequered plate.

c) Verandah/Corridor area flooring should be of 6 mm thick chequered plate.

1.5 Side End Walls:

The exterior cladding of the shell should be of Vertical corrugated pressed steel as per IS. The Corrugated steel sheet should be of 3 mm thick and should be welded to the bottom MS channel frame, corner posts, top frame and roof frame. The corrugated version acts as stiffeners and increase strength to weight ratio and eliminates the use of any other vertical supports. All gaps should be sealed at edges and at seams, bottom sills to prevent ingress of insects, moisture etc.

1.6 Roof:

The roof should be of sloping type from the centre towards the walls for efficient drain of rainwater. The roof should be made of 3 mm thick plain MS steel sheets as per IS and is provided with adequately pressed reinforced sections from inside for additional strength and this should be able to comfortably resist loads up to 20 lbs/sq feet. All the structural steel used should be of standard quality as per IS specifications and all steel component / section, machine pressed for rigidity to optimize strength to weight ratio.

1.7 Weather Shed:

a) Foldable Weather Sheds of 1000 mm or suitable width should be provided throughout the cabin length to cover cabin front verandah/ corridor, which will also act as Weather Shed for cabin front doors and windows.

b) All windows on the back of the cabin should be provided with weather shed of suitable size.

c) All Weather sheds should have hook and tie/stay rod as indicated in the drawing. The weather shed should be made out of 2 mm thick MS sheets as per IS.

1.8 Insulation:

75 MM thick resin bonded mineral glass wool of 2 LBS / CFT density confirming to IS 8183 should be filled in voids within the external wall and inner walls, end walls, roof with special weather proof adhesives. This glass wool slab should help in reduction in heat transmission up to 64% and should be 100% inorganic asbestos free, non-toxic and non-flammable, non-hygroscopic & vermin proof.

The Side walls / end walls insulation is required only for the Operator and Crew/Security Rest Rooms and not required for the store Room. However, the roof insulation is required in the Store Rooms also.

1.9 Inner Paneling:

12 mm ply wood boards as per IS 5509 manufactured by reputed manufacturer namely Kitply, Greenply, ITC etc. plus 1 mm decorative laminate (Pre laminated boards) should be screwed on the side wall on the internal 'Z' sections / square tubes. All vertical & horizontal corners should be neatly finished with aluminum anodized heavy gauge

aluminum angles & flats and the vertical joints of the panels should be fixed with decorative PVC bidding patties / aluminum patties to match with the colour of panels for better aesthetic appearance. The internal paneling of the roof should be of 6 mm pre laminated boards with aluminum anodized bidding patties. The ceiling of the roof should be suspended from inside on suitable 'Z' section / angle framework.

The inner paneling is required only for the Operator and Crew / Security Rest Rooms and not required for the Store Room.

1.10 Doors, Windows and Verandah/Corridor:

1.10.1 DOORS: 1 no. Door each in Operator room, Crew / Security rest room & store room of size 2.0 mtr (H) x 0.9 mtr (W). The door should be open from outside. The vertical door-frame should be made of 75 mm sq. box channel welded between the base frame and the roof structure. The main door panel should be made from 40 mm MS angle & 40 mm flat bar as cross members.

The external side should be cladded with 2 mm MS sheet for all the doors. However for the Operator & Crew/Security Rest Rooms the internal side should be cladded with 40 mm plywood, hot pressed and phenol bonded with decorative laminated sheets similar to interior finish.

Doors should have the provision of locking arrangement externally.

1 no. door of suitable size with locking arrangement should be provided in between crew cabin and attached store room as shown in the drawing. Total nos. of doors will be 4 (four) in the cabin.

Pelmets/Curtain Brackets and rods should be provided in all the doors.

Foldable Weather Sheds of 1000 mm or suitable width should be provided throughout the cabin length to cover cabin front verandah/ corridor, which will also act as Weather Shed for cabin front doors and windows.

1.10.2 WINDOWS : 7 nos. 2 panel Windows, double leaf with Acrylic Panes of 1.2 mtr (H) X 1.0 mtr (W) as per drawing with frame made out of 25 mm MS angle and 2 mm MS sheet, folding type rain Shed (width suitable for each window on the back of cabin). Anti-pilferage MS decorative grills should be provided in all the windows. Pelmets/Curtain Brackets and rods should be provided in all the Windows.

1.10.3 Verandah/Corridor: Cabin front should have 950 mm wide Foldable Verandah / Corridor throughout the cabin length. Verandah/Corridor area flooring should be of 6 mm thick chequered plate. Suitable locking arrangement should be provide in the cabin to fold and lock the verandah/corridor during transportation.

1.11 Specifications of Steel:

(i) Carbon Steel Sheets and Strips - Load bearing members: IS 1079 (SAIL/TATA/ESSAR)

(ii) Structural Steel: I Beams / Rolled sections IS 2062 (SAIL/TATA/ESSAR)

(iii) Side, End walls & Roof panels (Weather & Corrosion Resistant Steel): COR-TEN A / JIS G3125 SPA-H / SAILCOR /IRSM 41

(iv) Steel Tubes for Structural Purpose: IS 1161 (SAIL/TATA/ESSAR)

(v) Hollow steel sections for structural use: IS 4923

(vi) Skid pipes should be of not less than Schedule 80.

Documentary evidence regarding the purchase of the above material is to be provided to OIL during the time of inspection failing which the order is liable for rejection.

1.12 Pretreatment & Painting:

The surface preparation for all steel surfaces should be pre-treated by sand or shot blasting the surface for degreasing and de-rusting followed by painting as detailed below: The under frame should be painted with Zinc rich epoxy primer 25-30 microns DFT bituminous paint of reputed make as per IS.

Interior :- Zinc rich epoxy primer 25-30 microns followed by High build epoxy polyamide 50 microns DFT

Exterior :- Zinc rich epoxy primer 25-30 microns DFT followed by High build epoxy polyamide 50 microns DFT followed by Acrylic aliphatic polyurethane 50 microns DFT .

The colour shades and grade shall be decided at the time of inspection.

The necessary marking / logo should be provided as per requirement.

1.13 Electrical System:

The following electrical items shall be provided in the Operator room, Crew / Security rest room and Store room:

a) One 32 Amp SPN Main Switch, metallic enclosure with side handle shall be mounted outside the cabin, provided with suitable shed for protection against rain. Make: Havells / GE / BCH

b) One no. 8 way MCB DB with 63 Amp Double Pole, 100 mA ELCB as incomer, 6 nos. 10 Amps MCB and 2 nos. 20 Amps MCB as outgoing shall be provided inside the cabin (operator room). All MCBs shall be 10 kA, C curve. DB shall be complete with 63 Amps bus bars and shall be as per IP-21. All circuits shall be marked on DB with paint or metallic marker. MCB DB Make: Legrand / Merlin Gerin / Siemens.

c) Decorative fluorescent fitting (1 x 36 W), totally enclosed, surface mounted, 3 (three) nos. for the operator room, 2 (two) nos. for the operator room & (1 x 20W) 2 (two) nos. for the store room shall be provided (total 36 W-5 nos and 20 W - 2 nos.). Light fittings shall be ceiling mounted and arranged to provide optimal illumination. Make: Philips / Compton Greaves / GE (Fluorescent fitting), Model: TCS 097 136 O (Philips) / GE T K 1x36 E W or equivalent.

d) 2 (two) nos. 10 Amps metal-clad socket and 1 (one) 20 Amps metal-clad socket in the operator room, 2 (two) no. 10 Amps metal-clad sockets in the crew / security rest room and 1 (one) no. 10 Amps metal-clad socket in the store room shall be provided. The sockets shall be mounted in metallic enclosures and have suitably rated MCBs as switches. Matching plugs for the sockets should also be provided. Make: Legrand / Merlin Gerin / Siemens.

e) Fans: 3 (three) nos. of wall mounted fans in the operator room, 3 (three) nos. of wall mounted fans in the crew / security rest room and 3 (three) nos. exhaust fans (one each in operator room, crew /security rest room and store room) will be provided. Exhaust fan openings shall be provided with rain protection shed. Total Wall mounted fans - 6 nos., Total Exhaust fans - 3 nos.).

Wall mounted fans shall have 300 mm sweep and be equipped with in-built speed regulator with OFF position. Make: Usha / Compton Greaves / Bajaj / Orient. Model: Mist Air Ultra / Mist Air ZX (Usha) / Bajaj Midea BW-01-12.

Exhaust fans shall be silent, heavy duty and have 300 mm sweep and 900 RPM. Make: Turbo Heavy duty (USHA).

f) Two cabin earth points (on the skid or body, outside) shall be provided for final termination of earth wires.

1.13.1 Specifications of Materials (Electrical):

All wiring from MCB DB to switchboards/ points/ sockets etc. shall be concealed type inside the paneling, running through PVC conduit.

a) Medium grade, ISI approved, FR PVC conduits shall be used for wiring. Conduit size and no. of wires in conduit shall be as per IS. Corners shall be rounded elbow type for ease of insertion of wires. Make: PLAZA / Finolex/ HAVELLS.

b) The wiring cable shall be PVC insulated, 1100 V grade, fire-retardant, multi-stranded flexible copper conductor and approved by ISI, Fire Insurance Authority & Tariff Advisory Committee.

c) All wires shall be colour coded as Red for Phase, Black for neutral and Green for earth. All wire ends in DB, Main Switch and Socket outlets shall have copper lugs of Dowell's. Make: Finolex / Havells.

d) All points shall have individual switches and independent neutral wire. Separate switchboards shall be provided for crew room, store room & workshop / battery room. All light and fan points shall be suitably distributed in the switchboards with individual switches. In addition, each switchboard shall be provided with one no. 6 Amps switch-socket. For ease of operation, two or more switchboard shall be provided in the crew room.

Switchboards shall be made of 1.6 mm thick MS boxes having 3.0 mm thick white coloured, ISI approved Hylam sheet.

All switches and switch-sockets shall be flush type, of Anchor make, Deluxe model.

1.13.2 Cable Sizes:

i) 1.5 sq mm copper cable with earth wire of 1.5 sq mm for point wiring.

ii) 2.5 sq mm copper cable with 2.5 sq mm earth wire for circuit wiring from DB to switchboard and 5 Amp sockets.

iii) 4.0 sq mm copper cable with 4.0 sq mm diameter bare copper earth wire for power sockets.

iv) The main switch outgoing shall be wired to the DB with 10 sq mm (for phase, neutral and earth) PVC insulated, 1100 V grade, fire-retardant, multi-stranded flexible copper conductor and approved by ISI, Fire Insurance Authority & Tariff Advisory Committee.

1.13.3 Following shall comprise the electrical scope of work:

- a) Bidder shall submit electrical schematic with indicative bill of materials along with quotation.
- b) In case of order, the successful party has to submit detailed electrical drawings, bill of materials and specification of all materials, light fittings, fans etc. at least 30 (thirty) days before start of work. All modifications in the work plan and item description as required by OIL shall have to be agreed by the party.
- c) The electrification job shall start only after approval of drawings and sample of material by Head-Electrical in writing.
- d) Entire electrical installation work has to be done by licensed electrician as per IE Rules and NEC codes. Party will submit the copy of the valid licenses of their work persons to OIL before start of the work.
- e) Party shall notify OIL for inspection of wiring work before fixing of panels, at least 15 (fifteen) days in advance.
- f) Test report of the entire electrical work as per IE Rules will have to be submitted to OIL after completion of the job.
- g) The electrical work shall be treated as complete once installation, testing & commissioning of electrical works are accepted by Head-Electrical and submission of test report for electrical works, as installed drawings & list of electrical items used, spares for lighting system by the party.
- h) Guarantee Certificates of Cabin Fans and Exhaust Fans shall be provided along with supply of materials.

1.14 Furniture: Should be supplied as per following.

- a) 8 nos. of hooks should be provided in each room (operator room and crew / security rest room) for operator/crew members to hang their belongings.
- b) 2 nos. (1 no. each for 2 rooms) MILTON make or equivalent water filter (candle type) water filter of capacity minimum 20 litres should be supplied along with a stand. Stand should be fixed on one side of sitting room and the location to be confirmed during the course of routine inspection.
- c) 2 nos. of table and bench of standard height as per the drawing should be provided (1 no. each for 2 rooms). The table and bench frame should be made out of 25 mm MS angle. Table and bench top should be made out of 25 mm marine grade ply board plus 1 mm laminated board (pre-laminated board) suitable for extreme rough conditions. The legs of table and bench should be 1.5" inch M. S. Sq. bar fitted/bolted on the floor.
- d) Individual type steel lockers (10 nos. in operator room and 8 nos. in crew/security rest room) along the periphery of the inside wall under the roof with locking arrangements along with pad locks (45 mm, Nayyar's make or equivalent locks). Approximate sizes of each locker 450mm (L) X 300 mm (H) X 350mm (D). Uniformity along the wall should be maintained for aesthetic appearance.

e) Store room should have 4 shelves rack, made of suitable MS angles and MS plates for storing heavy spares and tools.

f) 2 nos. Table Godrej make, model T-9 or equivalent, 6 nos. Office Chairs Godrej make, model CHR-6 be provided for Operator and Crew/Security Rest Rooms.

g) 1 no. Godrej Steel Plain Almirah with Gordian Lock and 4 shelves in Operator Room.

h) Crew Room should have a Work Table with 10 mm chequered plate top and strong supports. A heavy duty, 150 mm size, Fixed base bench vices as per IS 2586 should be supplied and fixed on the work table.

1.15 LADDER:

A ladder should be placed outside cabin as shown in drawing for fixing up slings at top of the corner.

1.16 WELDING:

The containerized crew cabin should be of all welded steel construction using the latest method of MIG (Co2) argon shield gas.

1.17 HANDLING:

The cabin should have arrangement for handling without any strain or damage under the following condition:

Lifting of the unit by lifting slings; separate lifting provisions should be kept on both bottom and top of the unit so that the same can be lifted by using wire ropes slings from any one of the above provisions.

To avoid any out side surface damage cause by the wire rope slings while lifting, 50 mm angle should be welded all the four sides of the crew cabin 50 mm below the top.

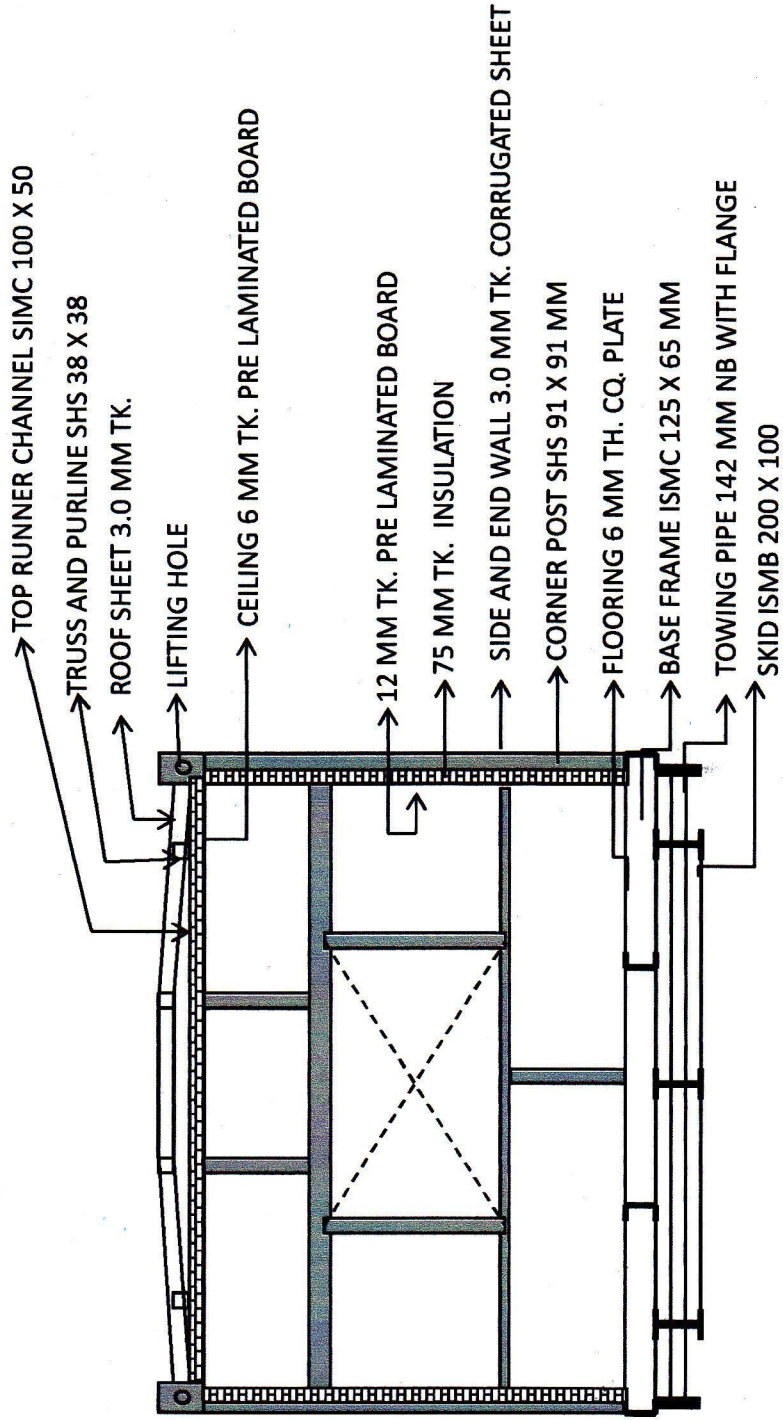
Tentative DRAWING for the cabin - Hard copy Attached. (Annexure-II)

1) Bidder must forward, along with the quotation, the detailed drawings & specifications of proven design including each and every part (main shell, base frame, skid, flooring, side & end wall, roof, weather shed/rain shed, insulation, inner paneling, doors, windows, personal lockers, shelves, table & bench, electrical fitting/items, details of wiring etc.), failing which the offer will be liable for rejection. Bidder must also forward make and model along with product catalogue for offered bought out furniture and water filter.

2) The successful bidder shall make final drawings of the cabin with constructional details to meet OIL's specifications / requirements and shall submit the same for OIL's approval within 07 days time from the date of placement of firm order. OIL will communicate the approval along with any changes/ modification, if required and the Cabins shall be constructed as per approved drawing.

3) Final drawings should indicate the approx. weight of each Cabin.

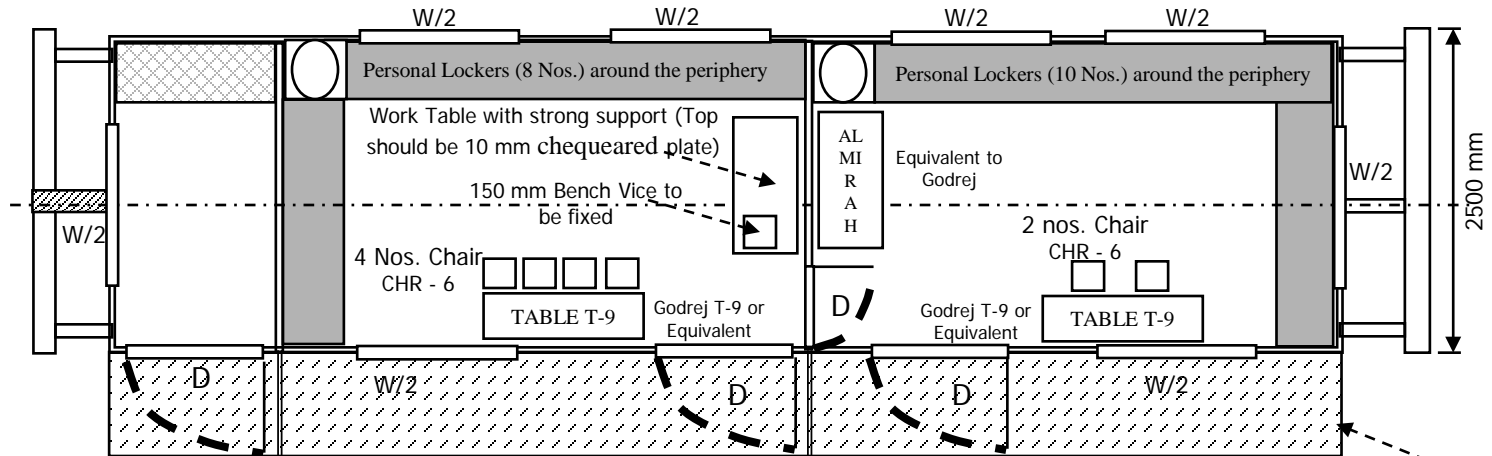
ANNEXURE-II



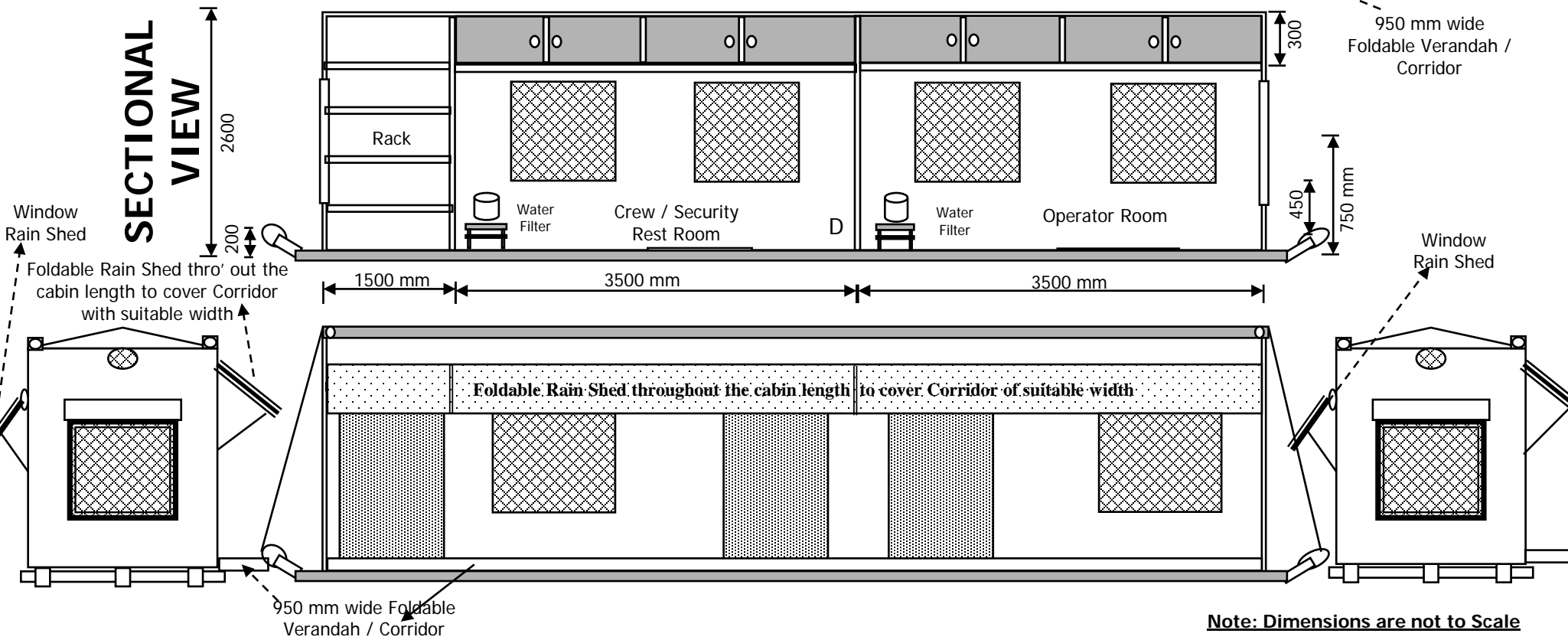
Note: The Above Dimensions are NOT TO SCALE.

CABIN FOR OPERATOR & CREW / SECURITY REST ROOM

PLAN VIEW



SECTIONAL VIEW



Note: Dimensions are not to Scale

ANNEXURE-III**TECHNICAL COMPLIANCE CHECK-LIST FOR ANNEXURE-I**

Sl. No.	NIT Requirement	Compliance		Vendors' Deviation/ Remarks
		Yes	No	
	<p><u>SCOPE OF WORK:</u> The scope of work covers manufacture and supply of crew cabins having specified external dimensions complete with resin bonded mineral glass wool insulation, paneling, electric fittings, furniture and other equipments to be provided in the cabins for site personnel. Cabins shall be used as portable modules and shall be deployed at any place. The scope of work covers all the points stated under various heads below. The cabin should be provided with suitable lifting and handling facilities.</p>			
1.	<u>GENERAL DESIGN & CONSTRUCTION:</u>			
1.1	<p><u>Main Shell:</u> The main fabrication of the structural framework should be of integral and all welded type to comprise of the bottom frame, overall framework, internal external cladding with insulation and other peripherals, sloping self-draining roof and desired doors & windows etc. The main corner vertical support posts should be formed into a press component from 5 mm thick MS tested quality plates as per IS specifications and all the corner posts should be suitably welded at the top with a heavy gauge MS plate which should be able to hold steel forged lifting hooks or corner casting arrangement with 50 mm holes. The corner castings to be provided are similar to the corner castings normally found in marine freight containers. The entire welding process is to be executed by Certified Welder (copy of certificate must be attached with the offer for scrutiny) using ISI quality electrodes.</p>			
1.2	<p><u>Base Frame:</u> The main bottom (Base) frame is fabricated and welded out of tested quality MS Steel Channels of size: ISMC 125 mm x 65 mm and all the inter connecting cross members shall also be of steel channels duly welded lengthwise & breadth wise maintaining conveniently equal distance.</p>			
1.3	<p><u>Skid:</u> The under structure / base frame of cabin is to be mounted on the skid consisting of 3 (three) nos. of medium beam - ISMB 200 mm x 100 mm hot rolled 'I' section. At the end portion of the 'I' section structure on both the sides, Steel Pipe of size 142 mm NB X 9.5 mm W/Thickness should be inserted & welded properly. The 'I' section beam should</p>			

	be placed at equal distance and connected with same size beam at 2000mm apart. Base frame and skid should be made in such a way that no foundation is needed for placement of cabin.			
1.4	<p><u>Flooring:</u></p> <p>a)Operator Room and Crew/Security Room- The entire flooring of the cabin should be of 6 mm thick MS chequered plate, welded lengthwise and breadth wise properly with the base frame of the Skid. The top floor should be covered with PVC sheet of Bhor / Royal Touch / Premier Vinyl.</p> <p>b)Store Room area flooring should be of 6 mm thick chequered plate.</p> <p>c)Verandah/Corridor area flooring should be of 6 mm thick chequered plate.</p>			
1.5	<p><u>Side End Walls:</u></p> <p>The exterior cladding of the shell should be of Vertical corrugated pressed steel as per IS. The Corrugated steel sheet should be of 3 mm thick and should be welded to the bottom MS channel frame, corner posts, top frame and roof frame. The corrugated version acts as stiffeners and increase strength to weight ratio and eliminates the use of any other vertical supports. All gaps should be sealed at edges and at seams, bottom sills to prevent ingress of insects, moisture etc.</p>			
1.6	<p><u>Roof:</u></p> <p>The roof should be of sloping type from the centre towards the walls for efficient drain of rainwater. The roof should be made of 3 mm thick plain MS steel sheets as per IS and is provided with adequately pressed reinforced sections from inside for additional strength and this should be able to comfortably resist loads up to 20 lbs/sq feet. All the structural steel used should be of standard quality as per IS specifications and all steel component / section, machine pressed for rigidity to optimize strength to weight ratio.</p>			
1.7	<p><u>Weather Shed:</u></p> <p>a)Foldable Weather Sheds of 1000 mm or suitable width should be provided throughout the cabin length to cover cabin front verandah/ corridor, which will also act as Weather Shed for cabin front doors and windows.</p> <p>b)All windows on the back of the cabin should be provided with weather shed of suitable size.</p> <p>c)All Weather sheds should have hook and tie/stay rod as indicated in the drawing. The weather shed should be made out of 2 mm thick MS sheets as per IS.</p>			
1.8	<p><u>Insulation:</u></p> <p>75 MM thick resin bonded mineral glass wool of 2 LBS / CFT density confirming to IS 8183 should be filled in voids within the external wall and inner walls, end walls, roof with special weather proof adhesives.</p>			

	<p>This glass wool slab should help in reduction in heat transmission up to 64% and should be 100% inorganic asbestos free, non-toxic and non-flammable, non-hygroscopic & vermin proof.</p> <p>The Side walls / end walls insulation is required only for the Operator and Crew/Security Rest Rooms and not required for the store Room. However, the roof insulation is required in the Store Rooms also.</p>			
1.9	<p><u>Inner Paneling:</u> 12 mm ply wood boards as per IS 5509 manufactured by reputed manufacturer namely Kitply, Greenply, ITC etc. plus 1 mm decorative laminate (Pre laminated boards) should be screwed on the side wall on the internal 'Z' sections / square tubes. All vertical & horizontal corners should be neatly finished with aluminum anodized heavy gauge aluminum angles & flats and the vertical joints of the panels should be fixed with decorative PVC bidding patties / aluminum patties to match with the colour of panels for better aesthetic appearance. The internal paneling of the roof should be of 6 mm pre laminated boards with aluminum anodized bidding patties. The ceiling of the roof should be suspended from inside on suitable 'Z' section / angle framework.</p> <p>The inner paneling is required only for the Operator and Crew / Security Rest Rooms and not required for the Store Room.</p>			
1.10	<u>Doors, Windows and Verandah/Corridor:</u>			
1.10.1	<p><u>DOORS:</u> 1 no. Door each in Operator room, Crew / Security rest room & store room of size 2.0 mtr (H) x 0.9 mtr (W). The door should be open from outside. The vertical door-frame should be made of 75 mm sq. box channel welded between the base frame and the roof structure. The main door panel should be made from 40 mm MS angle & 40 mm flat bar as cross members.</p> <p>The external side should be cladded with 2 mm MS sheet for all the doors. However for the Operator & Crew/Security Rest Rooms the internal side should be cladded with 40 mm plywood, hot pressed and phenol bonded with decorative laminated sheets similar to interior finish.</p> <p>Doors should have the provision of locking arrangement externally and hooking system internally.</p> <p>1 no. door of suitable size with locking arrangement should be provided in between crew cabin and attached store room as shown in the drawing. Total nos. of doors will be 4 (four) in the cabin.</p> <p>Pelmets/Curtain Brackets and rods should be provided in all the doors.</p> <p>Foldable Weather Sheds of 1000 mm or suitable width should be provided throughout the cabin length to cover cabin front</p>			

	verandah/ corridor, which will also act as Weather Shed for cabin front doors and windows.			
1.10.2	<p>WINDOWS :</p> <p>7 nos. 2 panel Windows, double leaf with Acrylic Panes of 1.2 mtr (H) X 1.0 mtr (W) as per drawing with frame made out of 25 mm MS angle and 2 mm MS sheet, folding type rain Shed (width suitable for each window on the back of cabin). Anti-pilferage MS decorative grills should be provided in all the windows. Pellets/Curtain Brackets and rods should be provided in all the Windows.</p>			
1.10.3	<p>Verandah/Corridor:</p> <p>Cabin front should have 950 mm wide Foldable Verandah / Corridor throughout the cabin length. Verandah /Corridor area flooring should be of 6 mm thick chequered plate. Suitable locking arrangement should be provide in the cabin to fold and lock the verandah/corridor during transportation.</p>			
1.11	<p>Specifications of Steel:</p> <p>(i) Carbon Steel Sheets and Strips: Load bearing members: IS 1079 (SAIL/TATA/ESSAR)</p> <p>(ii)Structural Steel: I Beams / Rolled sections IS 2062 (SAIL/TATA/ESSAR)</p> <p>(iii) Side, End walls & Roof panels (Weather & Corrosion Resistant Steel): COR-TEN A / JIS G3125 SPA-H / SAILCOR / IRSM 41</p> <p>(iv) Steel Tubes for Structural Purpose: IS 1161 (SAIL/TATA/ESSAR)</p> <p>(v) Hollow steel sections for structural use: IS 4923</p> <p>(vi)Skid pipes should be of not less than Schedule 80.</p> <p>Documentary evidence regarding the purchase of the above material is to be provided to OIL during the time of inspection failing which the order is liable for rejection.</p>			
1.12	<p><u>Pretreatment & Painting:</u></p> <p>The surface preparation for all steel surfaces should be pre-treated by sand or shot blasting the surface for degreasing and de-rusting followed by painting as detailed below:</p> <p>The under frame should be painted with Zinc rich epoxy primer 25-30 microns DFT bituminous paint of reputed make as per IS.</p> <p>Interior :- Zinc rich epoxy primer 25-30 microns followed by High build epoxy polyamide 50 microns DFT</p> <p><u>Exterior:</u> Zinc rich epoxy primer 25-30 microns DFT followed by High build epoxy polyamide 50 microns DFT followed by Acrylic aliphatic polyurethane 50 microns DFT .</p> <p>The colour shades and grade shall be decided at the time of inspection.</p> <p>The necessary marking / logo should be provided as per requirement.</p>			

1.13	<p><u>Electrical System:</u> The following electrical items shall be provided in the Operator room, Crew / Security rest room and Store room:</p> <p>a) One 32 Amp SPN Main Switch, metallic enclosure with side handle shall be mounted outside the cabin, provided with suitable shed for protection against rain. Make: Havells / GE / BCH</p> <p>b) One no. 8 way MCB DB with 63 Amp Double Pole, 100 mA ELCB as incomer, 6 nos. 10 Amps MCB and 2 nos. 20 Amps MCB as outgoing shall be provided inside the cabin (operator room). All MCBs shall be 10 kA, C curve. DB shall be complete with 63 Amps bus bars and shall be as per IP-21. All circuits shall be marked on DB with paint or metallic marker. MCB DB Make: Legrand / Merlin Gerin / Siemens.</p> <p>c) Decorative fluorescent fitting (1 x 36 W), totally enclosed, surface mounted, 3 (three) nos. for the operator room, 2 (two) nos. for the operator room & (1 x 20W) 2 (two) nos. for the store room shall be provided (total 36 W-5 nos and 20 W - 2 nos.). Light fittings shall be ceiling mounted and arranged to provide optimal illumination. Make: Philips / Compton Greaves / GE (Fluorescent fitting), Model: TCS 097 136 O (Philips) / GE T K 1x36 E W or equivalent.</p> <p>d) 2 (two) nos. 10 Amps metal-clad socket and 1 (one) 20 Amps metal-clad socket in the operator room, 2 (two) no. 10 Amps metal-clad sockets in the crew / security rest room and 1 (one) no. 10 Amps metal-clad socket in the store room shall be provided. The sockets shall be mounted in metallic enclosures and have suitably rated MCBs as switches. Matching plugs for the sockets should also be provided. Make: Legrand / Merlin Gerin / Siemens.</p> <p>e) Fans: 3 (three) nos. of wall mounted fans in the operator room, 3 (three) nos. of wall mounted fans in the crew / security rest room and 3 (three) nos. exhaust fans (one each in operator room, crew /security rest room and store room) will be provided. Exhaust fan openings shall be provided with rain protection shed. Total Wall mounted fans - 6 nos., Total Exhaust fans - 3 nos.).</p> <p>Wall mounted fans shall have 300 mm sweep and be equipped with in-built speed regulator with OFF position. Make: Usha / Compton Greaves / Bajaj / Orient. Model: Mist Air Ultra / Mist Air ZX (Usha) / Bajaj Midea BW-01-12.</p> <p>Exhaust fans shall be silent, heavy duty and have 300 mm sweep and 900 RPM. Make: Turbo Heavy duty (USHA).</p> <p>f) Two cabin earth points (on the skid or body, outside) shall be provided for final termination of earth wires.</p>			
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1.13.1	<u>Specifications of Materials</u> <u>(Electrical):</u> All wiring from MCB DB to switchboards/ points/ sockets etc. shall be concealed type inside the paneling, running through PVC conduit.			
	a) Medium grade, ISI approved, FR PVC conduits shall be used for wiring. Conduit size and no. of wires in conduit shall be as per IS. Corners shall be rounded elbow type for ease of insertion of wires. Make: PLAZA / Finolex/ HAVELLS.			
	b) The wiring cable shall be PVC insulated, 1100 V grade, fire-retardant, multi-stranded flexible copper conductor and approved by ISI, Fire Insurance Authority & Tariff Advisory Committee.			
	c) All wires shall be colour coded as Red for Phase, Black for neutral and Green for earth. All wire ends in DB, Main Switch and Socket outlets shall have copper lugs of Dowell's. Make: Finolex / Havells.			
	d) All points shall have individual switches and independent neutral wire. Separate switchboards shall be provided for crew room, store room & workshop / battery room. All light and fan points shall be suitably distributed in the switchboards with individual switches. In addition, each switchboard shall be provided with one no. 6 Amps switch-socket. For ease of operation, two or more switchboard shall be provided in the crew room. Switchboards shall be made of 1.6 mm thick MS boxes having 3.0 mm thick white coloured, ISI approved Hylam sheet. All switches and switch-sockets shall be flush type, of Anchor make, Deluxe model.			
1. 13.2	<u>Cable Sizes:</u>			
	i) 1.5 sq mm copper cable with earth wire of 1.5 sq mm for point wiring.			
	ii) 2.5 sq mm copper cable with 2.5 sq mm earth wire for circuit wiring from DB to switchboard and 5 Amp sockets.			
	iii) 4.0 sq mm copper cable with 4.0 sq mm diameter bare copper earth wire for power sockets.			
	iv) The main switch outgoing shall be wired to the DB with 10 sq mm (for phase, neutral and earth) PVC insulated, 1100 V grade, fire-retardant, multi-stranded flexible copper conductor and approved by ISI, Fire Insurance Authority & Tariff Advisory Committee.			
1.13.3	Following shall comprise the electrical scope of work:			
	a) Bidder shall submit electrical schematic with indicative bill of materials along with quotation.			

	b) In case of order, the successful party has to submit detailed electrical drawings, bill of materials and specification of all materials, light fittings, fans etc. at least 30 (thirty) days before start of work. All modifications in the work plan and item description as required by OIL shall have to be agreed by the party.			
	c) The electrification job shall start only after approval of drawings and sample of material by Head-Electrical in writing.			
	d) Entire electrical installation work has to be done by licensed electrician as per IE Rules and NEC codes. Party will submit the copy of the valid licenses of their work persons to OIL before start of the work.			
	e) Party shall notify OIL for inspection of wiring work before fixing of panels, at least 15 (fifteen) days in advance.			
	f) Test report of the entire electrical work as per IE Rules will have to be submitted to OIL after completion of the job.			
	g) The electrical work shall be treated as complete once installation, testing & commissioning of electrical works are accepted by Head-Electrical and submission of test report for electrical works, as installed drawings & list of electrical items used, spares for lighting system by the party.			
	h) Guarantee Certificates of Cabin Fans and Exhaust Fans shall be provided along with supply of materials.			
1.14	Furniture: Should be supplied as per following.			
	a) 8 nos. of hooks should be provided in each room (operator room and crew / security rest room) for operator/crew members to hang their belongings.			
	b) 2 nos. (1 no. each for 2 rooms) MILTON make or equivalent water filter (candle type) water filter of capacity minimum 20 litres should be supplied along with a stand. Stand should be fixed on one side of sitting room and the location to be confirmed during the course of routine inspection.			
	c) 2 nos. of table and bench of standard height as per the drawing should be provided (1 no. each for 2 rooms). The table and bench frame should be made out of 25 mm MS angle. Table and bench top should be made out of 25 mm marine grade ply board plus 1 mm laminated board (pre-laminated board) suitable for extreme rough conditions. The legs of table and bench should be 1.5" inch M. S. Sq. bar fitted/bolted on the floor.			
	d) Individual type steel lockers (10 nos. in operator room and 8 nos. in crew/security rest room) along the periphery of the inside wall under the roof with locking arrangements along with pad locks (45 mm, Nayyar's make or equivalent locks). Approximate sizes of each locker 450mm (L) X 300mm(H)X350mm(D).			

	e) Store room should have 4 shelves rack, made of suitable MS angles and MS plates for storing heavy spares and tools.			
	f) 2 nos. Table Godrej make, model T-9 or equivalent, 6 nos. Office Chairs Godrej make, model CHR-6 be provided for Operator and Crew/Security Rest Rooms.			
	g) 1 no. Godrej Steel Plain Almirah with Gordian Lock and 4 shelves in Operator Room.			
	h) Crew Room should have a Work Table with 10 mm chequered plate top and strong supports. A heavy duty, 150 mm size, Fixed base bench vices as per IS 2586 should be supplied and fixed on the work table.			
	i) Locking arrangements of each external door along with pad locks (65 mm, Nayyar's make or equivalent locks).			
1.15	<u>LADDER:</u> A ladder should be placed outside cabin as shown in drawing for fixing up slings at top of the corner.			
1.16	<u>WELDING:</u> The containerized crew cabin should be of all welded steel construction using the latest method of MIG (Co2) argon shield gas.			
1.17	<u>HANDLING:</u> The cabin should have arrangement for handling without any strain or damage under the following condition: Lifting of the unit by lifting slings; separate lifting provisions should be kept on both bottom and top of the unit so that the same can be lifted by using wire ropes slings from any one of the above provisions. To avoid any out side surface damage cause by the wire rope slings while lifting, 50 mm angle should be welded all the four sides of the crew cabin 50 mm below the top.			

ANNEXURE- IV**TECHNICAL COMPLIANCE CHECK LIST FOR ANNEXURE-II**

Sl. No.	NIT Requirement	Compliance		Vendors' Deviation/ Remarks
		Yes	No	
1	Bidder must forward, along with the quotation, the detailed drawings & specifications of proven design including each and every part (main shell, base frame, skid, flooring, side & end wall, roof, weather shed/rain shed, insulation, inner paneling, doors, windows, personal lockers, shelves, table & bench, electrical fitting/items, details of wiring etc.), failing which the offer will be liable for rejection. Bidder must also forward make and model along with product catalogue for offered bought out furniture and water filter.			
2	The successful bidder shall make final drawings of the cabin with constructional details to meet OIL's specifications / requirements and shall submit the same for OIL's approval within 07 days time from the date of placement of firm order. OIL will communicate the approval along with any changes/ modification, if required and the Cabins shall be constructed as per approved drawing.			
3	Final drawings should indicate the approx. weight of each Cabin.			

TECHNICAL COMPLIANCE CHECK LIST FOR GENERAL NOTE

Sl. No.	NIT Requirement	Compliance		Vendors' Deviation/ Remarks
		Yes	No	
1.0	The Cabins to be constructed as per the final drawing submitted (based on drawing enclosed herewith) and approved by OIL.			
2.0	Each crew cabin should be offered for inspection (4-stage inspection) to representative of GM (Prodn Gas) at the following stages of fabrication:			
	a) At any time during fabrication.			
	b) On completion of fabrication job before applying primer coating.			
	c) Inspection of wiring work by Electrical dept. of OIL before fixing of panels, at least 15 (fifteen) days in advance.			
	d) On completion of the jobs before dispatching the complete bunk house.			
3.0	Purchased order no. & WBS no. should be weld written on each cabin.			
4.0	User Department's Name and OIL logo should be written on each bunk house which will be confirmed during inspection.			
5.0	Minor change in the specification may be done during the course of fabrication of bunk house.			
6.0	All the electrical fittings should be tested by competent persons holding valid electrical license. Necessary electrical test certificate duly signed by competent persons holding valid electrical license and schematic diagram of wiring should be submitted along with bunk house. Bidder to confirm the same while quoting.			
7.0	Bidder should forward catalogue, drawing (with specification) of all the items along with the quotation wherever necessary.			
8.0	WARRANTY/GUARANTEE: The bunk house, including all the bought out items, should have to minimum onsite warranty of one year from the date of installation. Warranty/ guarantee for the painting and quoting should be for two years against any failure, rusting etc. For bought out items Bidder may also provide warranty / guarantee certificate from Original Equipment. Bidder should confirm it along with quotation. The offer, taking exception to this will be rejected.			
9.0	Bidder must confirm/ clarify all the clauses of Annexure-I to Annexure-IV & other notes point by point and the offer should be forwarded along with price break up of each and every item. Offer without these will be treated as cancel.			
10.0	Bids must be submitted in triplicate.			