



OIL INDIA LIMITED
(A Govt. of India Enterprise)
P.O. DULIAJAN, DIST - DIBRUGARH
ASSAM, INDIA, PIN-786602

CONTRACTS DEPARTMENT
TEL: (91) 374-2800548
E-mail: contracts@oilindia.in
Website: www.oil-india.com
FAX: (91) 374-2803549

FORWARDING LETTER

Sub: IFB No. CDO2173P20 – Hiring of services for Construction of 02 (Two) nos. of 500 KL, 04 (Four) nos. of 160 KL, 03 (Three) nos. of 40 KL and 02 (Two) nos. of 795 KL capacity Formation Water Storage Tanks, under Framework Agreement.

Dear Sir(s),

1.0 OIL INDIA LIMITED (OIL), a “Navaratna” Category, Government of India Enterprise, is a premier Oil Company engaged in exploration, production and transportation of crude oil & natural gas with its Headquarters at Duliajan, Assam. Duliajan is well connected by Air with nearest Airport being at Dibrugarh, 45 km away.

2.0 In connection with its operations, OIL invites Local Competitive Bids (LCB) from competent and experienced/approved Contractors/Firms for the mentioned work/service under **OPEN E-TENDER SINGLE STAGE TWO BID SYSTEM** through OIL’s E-Procurement Portal: “<https://etender.srm.oilindia.in/irj/portal>” for **Hiring of services for Construction of 02 (Two) nos. of 500 KL, 04 (Four) nos. of 160 KL, 03 (Three) nos. of 40 KL and 02 (Two) nos. of 795 KL capacity Formation Water Storage Tanks, under Framework Agreement.** One complete set of Bid Document covering OIL's IFB for hiring of above services is uploaded in OIL’s E-Procurement Portal. You are invited to submit your most competitive bid on or before the scheduled bid closing date and time through OIL’s E-Procurement Portal. For your ready reference, few salient points of the IFB (covered in detail in the Bid Document) are highlighted below:

(i)	IFB No./E-Tender No.	:	CDO2173P20
(ii)	Type of Bid	:	Open Indigenous E-Tender, Single Stage Two Bid System.
(iii)	Bid Closing Date & Time	:	As mentioned in the E-procurement portal.
(iv)	Technical Bid Opening Date & Time	:	As mentioned in the E-procurement portal.
(v)	Price Bid Opening Date & Time	:	As mentioned in the E-procurement portal.
(vi)	Bid Submission Mode	:	Bids must be uploaded online in OIL’s E-Procurement Portal.
(vii)	Bid Opening Place	:	Office of CGM-Contracts Contracts Department, Oil India Limited, Duliajan-786602, Assam, India.
(viii)	Bid Validity	:	Minimum 120 (One Hundred Twenty) days from the Original Bid Closing Date.

			Note: In exceptional circumstances, OIL may solicit the Bidder's consent to an extension of the period of validity. The request and the response thereto shall be made in writing (or by Fax). A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request will neither be required nor permitted to modify their bid.
(ix)	Mobilization Period	:	45 (Forty Five) days from the date of issue of LOA
(x)	Bid Security/EMD Amount	:	<p>i. Rs. 3,08,200.00 (Rupees Three Lakh Seventy Eight Thousand Two Hundred only) for construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank.</p> <p>ii. Rs. 6,73,400.00 (Rupees Six Lakh Seventy Three Thousand Four Hundred only) for construction of 04 (Four) Nos. 160 KL Formation Water Storage Tank.</p> <p>iii. Rs. 2,84,100.00 (Rupees Two Lakh Eighty Four Thousand One Hundred only) for construction of 03 (Three) Nos. 40 KL Formation Water Storage Tank.</p> <p>iv. Rs. 4,67,800.00 (Rupees Four Lakh Sixty Seven Thousand Eight Hundred only) for construction of 02 (Two) Nos. 795 KL Formation Water Storage Tank.</p> <p>Bidders shall bid in conjunction with BEC Clause No. 1.1 and shall submit Bid Security accordingly. For example, if the bidder is quoting for construction of 02 (Two) nos. of 500 KL, 04 (Four) Nos. 160 KL and 03 (Three) Nos. 40 KL Formation Water Storage Tank, then they shall submit Bid Security amounting to Rs. 12,65,700.00 (Rs. 3,08,200.00 + Rs. 6,73,400.00 + Rs. 2,84,100.00) (Rupees Twelve Lakh Sixty Five Thousand Seven Hundred only)</p> <p>a. The Bid Security should be submitted only in the form of Bank Guarantee as per BG format enclosed herewith (Proforma-V) issued by Nationalized/Scheduled Bank in favour of M/s Oil India Limited and payable at DULIAJAN.</p> <p>b. Alternately, Bid Security can also be paid through the online payment gateway against this tender.</p>

			<p>c. In case of Bidder(s) submitting Bid Security in the form of Bank Guarantee, the original hard copy of Bid Security should reach the office of CGM-CONTRACTS on or before 12.45 PM (IST) on the bid closing/opening date otherwise bid will be rejected.</p> <p>d. A scanned copy of Bid Security document should also be uploaded along with the Un-priced Techno-Commercial Bid documents.</p> <p>e. This Bid Security Deposit shall be refunded to all unsuccessful bidders, but is liable to be forfeited in full or part, at Company's discretion, as per Clause No. 9.0 below. Bids without Bid Security Deposit in the manner specified above will be summarily rejected.</p> <p>No other mode of payment will be accepted by the Company. The Bid Security shall not earn any interest to the bidder from the Company.</p> <p>Notes:</p> <p>Bidders claiming waiver of Bid Security shall upload supporting documents as mentioned in Para. No. 4.0 below.</p> <p>Any offer not accompanied with the Bid Security shall be treated as invalid and summarily rejected. Any subsequent deposit of Bid Security after the bid closing date shall not be permitted. Also, adjustment of Bid Security due against the instant tender, against dues from the Company or on any account shall not be permitted.</p>
(xi)	Bid Security/EMD Validity	:	As mentioned in the E-procurement portal. (Minimum 150 days from original bid closing date).
(xii)	Original Bid Security to be submitted	:	Office of CGM-CONTRACTS, CONTRACTS DEPARTMENT, OIL INDIA LIMITED, DULIAJAN, ASSAM-786602, INDIA
(xiii)	Amount of Performance Security	:	<p>10% of Contract value.</p> <p>a. Bidders can submit Performance Security in the form of Bank Guarantee from any Scheduled Indian Bank as per BG format enclosed herewith (Proforma-VII) or in the form of Demand Draft.</p> <p>b. Performance Security Money shall not earn any interest.</p>

(xiv)	Validity of Performance Security	:	90 (Ninety) days beyond contract period/defect liability period (if any).
(xv)	Location of job	:	OIL's Assets
(xvi)	Duration of the Contract	:	<p>i. 06 (Six) months for Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank.</p> <p>ii. 01 (One) year for Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank.</p> <p>iii. 01 (One) year for Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank.</p> <p>iv. 06 (Six) months for Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank.</p> <p>Note: In case, contract is awarded to a single bidder for any combination of the above, then contract period shall be the highest contract duration of the respective conditions. For example, if contract for Construction of 02 (Two) nos. of 500 KL and 04 (Four) Nos. 160 KL Formation Water Storage Tank is awarded to a single bidder, then applicable contract period shall be highest of the respective conditions i.e. 01 (One) year.</p>
(xvii)	Quantum of Liquidated Damage for Default in Timely Mobilization/ Completion	:	Refer clause No. 28 of General Conditions of Contract.
(xviii)	Bids to be addressed to	:	CGM-Contracts, Contracts Department, Oil India Limited, Duliajan-786602, Assam, India.
(xix)	Pre-Bid conference	:	Not Applicable
(xx)	Last Date of receipt of Queries	:	Not Applicable

Note:

a. The Bank Guarantee issuing Bank branch shall ensure the following:

The Bank Guarantee issued by the Bank shall be routed through SFMS platform as per following details:

- (i) MT 760 / MT 760 COV for issuance of Bank Guarantee

- (ii) MT 760 / MT 767 COV for amendment of Bank Guarantee

The above message/intimation shall be sent through SFMS by the BG issuing Bank branch to HDFC Bank, Duliajan Branch, IFS Code-HDFC0002118; SWIFT Code-HDFCINBBCAL. Branch Address: HDFC Bank Limited, Duliajan Branch, Utopia Complex, BOC Gate, Jayanagar, Duliajan, Dibrugarh, PIN – 786602.

- b. Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank of India shall not be acceptable.

3.0 GUIDELINES FOR PARTICIPATING IN OIL'S E-PROCUREMENT

3.1 Bids are to be submitted online through OIL's E-Procurement Portal with digital signature. To participate in OIL's E-Procurement tender, bidders should have a legally valid digital certificate **of Class 3 with Organizations Name** and **Encryption Certificate** as per Indian IT Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India (<http://www.cca.gov.in>). Digital Signature Certificates not having **Bidder's Name** in the **"Organization Name"** field are not acceptable.

Encryption certificate is mandatorily required for submission of bid. In case bidder creates response with one certificate (using encryption key) and then the bidder changes his Digital Signature Certificate, then the old certificate (used for encryption) is required in order to decrypt his encrypted response for getting the edit mode of the response. Once decryption is done, bidder may use new DSC certificate for uploading and submission of their offer. It is the sole responsibility of the bidder to keep their DSC certificate properly. In case of loss of the certificate, OIL INDIA LTD. is not responsible.

The authenticity of above digital signature shall be verified through authorized CA after bid opening and in case the digital signature used for signing is not of **"Class 3 with Organizations Name** and **Encryption Certificate"**, the bid will be rejected.

Bidder is responsible for ensuring the validity of digital signature and its proper usage by their employee.

The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidding company.

The bid including all uploaded documents shall be digitally signed by duly authorized representative of the Bidder/Bidding company to bind the Bidder/Bidding company to the contract.

3.2 For participation, applicants already having User ID & Password for OIL's E-Procurement Portal need to register against the IFB. New vendors/existing vendors not having User ID & Password for OIL's E-Procurement Portal shall obtain User ID & password through online vendor registration system in E-Portal.

3.2.1 Bidders without having E-Tender Login ID and password should complete their online registration at least 07 (Seven) days prior to the scheduled Bid Closing Date and time of the tender. For online registration, bidder may visit OIL's E-Tender site <https://etender.srm.oilindia.in/irj/portal>.

3.2.2 Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User

ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.

3.3 Parties, who do not have a User ID, can click on **Guest** login button in the E-portal to view and download the tender. **The detailed guidelines are available in OIL's E-Procurement site (Help Documentation).** For any clarification in this regard, bidders may contact E-Tender Support Cell at Duliajan at erp_mm@oilindia.in, Ph.: 0374- 2807178/4903.

3.4 Details of process for submission of Bid Security (EMD) through the online payment gateway are available in Vendor User Manual under E-Procurement Portal. (**Note:** Important Points for on-line Payment can be viewed at Oil India's website at url: <http://oil-india.com/pdf/ETenderNotification.pdf>).

3.5 The link to OIL's E-Procurement Portal has been provided through OIL's web site (www.oil-india.com).

4.0 EXEMPTION FROM BID SECURITY PAYEMENT: In case any bidder is exempted from paying the Bid security, they should request OIL with supporting documents. The detailed guidelines for exemption of the Bid security are given below.

- a) MSEs Units (manufacturers/Service Providers only and not their dealers/ distributors) who are already registered with District Industry Centres or Khadi & Village Industries Commission or Khadi & Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts & Handloom or any other body specified by Ministry of MSME are exempted from payment of Bid Security (EMD) irrespective of monetary limit mentioned in their registration.
- b) Central Government Departments and Central Public Sector Undertakings (CPSUs) are also exempted from submitting bid security.
- c) In case bidding MSE is owned by Schedule Caste or Schedule Tribe entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur should also be enclosed.
- d) Bids without EMD shall be rejected, if the technical offer does not include a valid copy of relevant MSE Certificate issued by appropriate authority.

5.0 Bid should be submitted online in OIL's E-Procurement site up to **11.00 AM (IST) (Server Time)** on the date as mentioned and will be opened on the same day at **2.00 PM (IST)** at the office of the CGM-Contracts in presence of the authorized representatives of the bidders.

6.0 The rates shall be quoted per unit as specified in the **"PRICE BIDDING FORMAT"** attached under **"Notes and Attachments"** tab. Bidder should note that no pricing information is furnished in the **"Technical Attachment"** (Un-priced Techno-Commercial Bid) otherwise the bid will be rejected.

7.0 The tender is invited under **OPEN E-TENDER SINGLE STAGE TWO BID SYSTEM**. The bidder has to submit both the **"TECHNICAL"** and **"PRICED"** bid through electronic form in the OIL's E-Tender portal within the Bid Closing Date and Time stipulated in the E-Tender. For submission of Bids online at OIL's E-Tender Portal, detailed instructions are available in "User Manual" available in OIL's E-Tender Portal. The Technical Bid should be submitted as per Scope of Work & Technical Specifications along with all technical documents related to the tender and uploaded under **"Technical Attachment"** Tab only. **Bidders to note that no price details should be uploaded in "Technical Attachment"**

Tab Page. The Price Bid rates shall be quoted per unit as specified in the “**PRICE BIDDING FORMAT**” attached under “**Notes and Attachments**” tab in the main bidding engine of OIL’s E-Tender portal. The price quoted in the “PRICE BIDDING FORMAT” will only be considered for evaluation.

8.0 The Company reserves the right to reject any or all the tenders or accept any tender without assigning any reason.

9.0 (a) No Bidder can withdraw his bid within the validity or extended validity of the bid. Withdrawal of any bid within validity period will lead to forfeiture of his/her/their Bid Security Deposit in full and debar from participation in future tenders, at the sole discretion of the company.

(b) Once a withdrawal letter is received from any bidder, the offer will be treated as withdrawn and no further claim/correspondence will be entertained in this regard.

10.0 Conditional bids are liable to be rejected at the discretion of the Company.

11.0 The bidders are required to furnish the composition and status of ownership of the firm in whose name bid documents have been purchased/issued along with one or more of the following documentary evidences (which are applicable to the bidder) in support of the same and scanned copies of the same should be uploaded along with the Un-priced Techno-Commercial Bid documents.

11.1 In case of Sole Proprietorship Firm, Copies of Telephone/Electricity/Mobile Bill, PAN card, latest Income Tax Return form indicating therein the name, business and residential address, E-mail and telephone numbers of the owner and GSTIN number.

11.2 In case of HUF, Copies of Telephone/Electricity/Mobile Bill, PAN card, latest Income Tax Return form, Family Arrangement indicating therein the name, residential address, E-mail and telephone numbers of the owners in general and Karta in particular and GSTIN number.

11.3 In case of Partnership Firm, Copies of Telephone/Electricity/Mobile Bill, PAN card, latest Income Tax Return form indicating therein the name, residential address, E-mail and telephone numbers of all the partners (including the Managing Partner), registered partnership agreement/deed and GSTIN number.

11.4 In case of Co-Operative Societies, Copies of Telephone/Electricity/Mobile Bill, PAN card, latest Income Tax Return form indicating therein the name, residential address, E-mail and telephone numbers of all the Directors or persons who are at the helm of affairs, registration certificate from Registrar of Co-Operative Societies and GSTIN number.

11.5 In case of Societies registered under the Societies Registration Act, Copies of Telephone/Electricity/Mobile Bill, PAN card, latest Income Tax Return form indicating therein the name, residential address, E-mail and telephone numbers of all the Directors or persons who are at the helm of affairs, registration certificate from the Registrar of the state and GSTIN number.

11.6 In case of Joint Stock Companies registered under the Indian Companies Act, Copies of Telephone/Electricity/Mobile Bill, PAN card, latest Income Tax Return form indicating therein the name, residential address, E-mail and telephone numbers of all the Directors or persons who are at the helm of affairs, Certificate of Incorporation from the Registrar of Companies, Memorandum and Articles and GSTIN number.

11.7 In case of Trusts registered under the Indian Trust Act, Copies of Telephone/ Electricity/Mobile Bill, PAN card, latest Income Tax Return form indicating therein the name, residential address, E-mail and telephone numbers of all the Trustee or persons who are at the helm of affairs, registration certificate from the Registrar of the state, Trust Deed and GSTIN number.

12.0 BIDDING DOCUMENTS:

12.1 The services required, bidding procedures and contract terms are prescribed in the Bidding Documents. This Bidding Document includes the following:

- a) A forwarding letter highlighting the following points:
 - (i) Company's IFB No.
 - (ii) Description of Service
 - (iii) Bid closing date and time
 - (iv) Bid opening date, time and place
 - (v) Bid submission place
 - (vi) The amount of Bid Security
 - (vii) The amount of Performance Guarantee
- b) BEC/BRC
- c) General Conditions of Contract (GCC): **Part-I**
- d) Schedule of Work, Unit, Quantities (SOQ): **Part- II**
- e) Special Conditions of Contract (SCC): **Part-III**
- f) Schedule of Company's Plants, Materials and Equipments (SCPME): **Part-IV**
[Not applicable for this Tender]
- g) Safety Measures (SM): **Part-V**
- h) Integrity Pact (IP): **Part-VI**
- i) Price Bidding Format (Attached under "**Notes and Attachments**" tab in the main bidding engine of OIL's E-Tender portal)
- j) Proformas and Annexures
- k) Technical Evaluation Sheet for BEC-BRC & others

12.2 The bidder is expected to examine all instructions, forms, terms and specifications in the Bid document. Failure to furnish all information required in the Bidding Documents or submission of a bid not substantially responsive to the Bidding Documents in every respect will be at the Bidder's risk & responsibility and may result in the rejection of its bid without seeking any clarifications.

SPECIAL NOTE: Please note that all tender forms (Forwarding Letter, (BEC-BRC) Bid Evaluation Criteria & Bid Rejection Criteria, Part-I: (GCC) General Conditions of Contract, Part-II: (SOQ) Schedule of Work, Unit and Quantity, Part-III: (SCC) Special Conditions of Contract, Part-V: (SM) Safety Measures, Part-VI: (IP) Integrity Pact, Price Bidding Format, Technical Evaluation Sheet for BEC-BRC & others) and supporting documents are to be submitted through OIL's E-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with Tender No. and due date to The CGM-Contracts, Contracts Department, Oil India Limited, Duliajan-786602.

a) ORIGINAL BID SECURITY (Only in case of Bidder(s) submitting Bid Security in the form of BANK GUARANTEE):

A scanned copy of Bid Security should also be uploaded along with the Un-priced Techno-Commercial Bid documents.

b) ANY OTHER DOCUMENT REQUIRED TO BE SUBMITTED IN ORIGINAL AS PER TENDER REQUIREMENT:

Scanned copy(s) of the same should also be uploaded along with the Un-priced Techno-Commercial Bid documents.

The above documents including the Original Bid Security (in case of bidders submitting Bid Security in the form of Bank Guarantee) must be received at OIL's CGM-Contract's office at Duliajan **on or before 12.45 PM (IST) on the bid closing date** failing which the bid shall be rejected.

Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in the rejection of its offer without seeking any clarifications. Offers sent without the requisite value of prescribed bid security (if called for in the bid) in original will be ignored straightway.

13.0 The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide "Part-VI/Integrity Pact" of the tender document. This Integrity Pact Proforma has been duly signed digitally by OIL's competent signatory. The Proforma has to be returned by the bidder (along with the Un-priced Techno-Commercial Bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid.

Note: OIL has appointed Shri Rajiv Mathur, IPS (Retd.), Shri Satyananda Mishra, IAS (Retd.) and Shri Jagmohan Garg, Ex-Vigilance Commissioner as Independent External Monitors (IEM) for a period of 03 (Three) years to oversee implementation of Integrity Pact in OIL. Bidders may contact the Independent External Monitors for any matter relating to the Integrity Pact at the following addresses:

- a. Shri Rajiv Mathur, IPS(Retd.), Former Director, IB, Govt. of India;
E-mail id: rajivmathur23@gmail.com
- b. Shri Jagmohan Garg, Ex-Vigilance Commissioner, CVC
E-Mail id: jagmohan.garg@gmail.com

14.0 PREPARATION OF BIDS:

14.1 LANGUAGE OF BIDS: The bid as well as all correspondence and documents relating to the bid exchanged between the Bidder and the Company shall be in English language, except that any printed literature may be in another language provided it is accompanied by an official and notarized English translated version, which shall govern for the purpose of bid interpretation.

14.2 DOCUMENTS COMPRISING THE BID:**(I) UN-PRICED TECHNO-COMMERCIAL BID:**

- (i) Bid Documents duly filled up as indicated.
- (ii) Complete technical details/specifications of the equipment with catalogue, etc. as per tender requirement.
- (iii) Documentary evidence established in accordance with BEC/BRC part.
- (iv) Statement of Non-Compliance (if any).

- (v) Bid Security (scanned copy). Hard copy of original Bid Security (Only in case of bidder(s) submitting bid security in the form of Bank Guarantee) should be sent separately to reach **on or before 12.45 p.m. (IST) on the bid closing date failing which the bid shall be rejected.**
- (vi) Any other document as per tender requirement (scanned copy). Hard copy(s) of the same, if called for in the tender, should be sent separately to reach on or before **12.45 p.m. (IST) on the bid closing date failing which the bid shall be rejected.**

Note: Please note that no price details should be uploaded in UN-PRICED TECHNO-COMMERCIAL BID under “Technical Attachment” Tab.

(II) PRICED BID:

The Priced Bid shall contain the rates/prices along with the currency and any other commercial information pertaining to the rates/prices. Bidder shall quote their rates/prices in the “**PRICE BIDDING FORMAT**” attached under “**Notes and Attachments**” tab in the main bidding engine of OIL’s E-Tender portal. The price quoted in the “**PRICE BIDDING FORMAT**” will only be considered for evaluation.

15.0 Bidder shall bear all costs associated with the preparation and submission of bid. Oil India Limited, hereinafter referred to as 'Company', will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

16.0 TRANSFERABILITY OF BID DOCUMENTS:

16.1 Bid Documents are non-transferable. Bid can be submitted only in the name of the bidder in whose name the Bid Document has been issued.

16.2 Unsolicited offers will not be considered and will be rejected straightway.

17.0 FORMAT AND SIGNING OF BID:

The original and all copies of the bid shall be typed or written in indelible inks and shall be signed digitally by the Bidder to bind the Bidder to the contract.

18.0 AMENDMENT OF BIDDING DOCUMENTS:

18.1 At any time prior to the deadline for submission of bids, the company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by issuance of an Addendum.

18.2 The Addendum will be uploaded in OIL’s E-Tender Portal in the Tab “Technical RFx” and External Area – “Amendments” folder. The company may, at its discretion, extend the deadline for bid submission. Bidders are expected to take the Addendum into account in preparation and submission of their bid. **Bidders are to check from time to time the E-Tender Portal [“Technical RFx” Tab and under the folder “Amendments”] for any amendments to the bid documents before submission of their bids. No separate intimation shall be sent to the Bidders.**

19.0 SUBMISSION OF BIDS:

19.1 The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidder to bind the Bidder to the contract.

19.2 Any person signing the Bid or any other document in respect of this Bid Document or other relevant documents on behalf of the Bidder without disclosing his authority to do so shall be deemed to have the authority to bind the Bidder. If it is discovered at any time that the person so signing has no authority to do so, the Company (OIL) may, without prejudice to any other right or remedy, cancel his Bid or Contract and hold the Bidder liable to the Company (OIL) for all costs and damages arising from the cancellation of the Bid or Contract including any loss which the Company (OIL) may sustain on account thereof.

19.3 Timely submission of the bids is the responsibility of the Bidder and Bids should be submitted before the bid closing date and time. Company shall not be responsible for any delay.

19.4 Bidder shall submit the Bid, duly completed in terms of the Bid Document.

19.5 Before submission of Bids, Bidders are requested to make themselves fully conversant with all Conditions of the Bid Document and other relevant information related to the works to be executed under this contract.

20.0 SCREEN SHOTS

On **“EDIT”** Mode, bidders are advised to upload **“Technical Bid”** and **“Priced Bid”** in the respective places as indicated above:

Note:

- * The **“Technical Bid”** shall contain all techno-commercial details **except the prices**.
- ** The **“Priced bid”** must contain the price schedule and the bidder’s commercial terms and conditions, if any. For uploading Priced Bid, first click on Add Attachment, a browser window will open, select the file from the PC and name the file under Description, Assigned to General Data and click on OK to digitally sign and upload the File. Please click on Save Button of the Response to Save the uploaded files.

21.0 Maintenance of Total bid value in the Response: For convenience of the Bidders and to improve transparency, the rates/costs quoted by bidders against the E-tender shall be

available for online viewing after price bid opening to those bidders whose price bids have been opened in the system. For tenders where **Detailed Price Information under RFx Information Tab is “No price”**, the Price Bid is invited through attachment form under “Notes & Attachment”. As per the existing process, Bidders must upload their pricing as per the “Price Bidding Format” under **“Notes & Attachment”**. Additionally the bidders must fill up the **on-line field “Total Bid Value”** under Tab Page **“RFx Information”** with the Total Cost (Including the GST component) as per the amount of the Price Bid in attachment form.

The screenshot shows the 'Create RFx Response' form. At the top, there are tabs: **Submit**, **Read Only**, **Print Preview**, **Check**, **Technical RFx Response**, and **Close**. Below these, the form displays: **RFx Response Number** 60038748, **RFx Number** 1, **RFx Owner** BHARALI, and **Total Value** 0.00 INR. The main section has tabs for **RFx Information**, **Items**, and **Notes and Attachments**. Under **RFx Information**, there are sub-tabs: **Basic Data**, **Questions**, and **Technical Attachments**. The **Event Parameters** section includes: **Currency:** Indian Rupee (dropdown), **Detailed Price Information:** No Price (dropdown), **Terms of Payment:** (checkbox), and **Total Bid Value:** (text field). Three callouts provide instructions: 1. 'Bidder to select the currency of the Response' points to the Currency dropdown. 2. '“Total Bid Value” is mandatory in “No Price” RFx only' points to the Detailed Price Information dropdown. 3. '“Total Bid Value” considering all the taxes & duties.' points to the Total Bid Value text field.

The “Total Bid Value” as entered by the Bidder in the on-line response shall be displayed in the e-tender portal amongst the Techno-Commercially qualified bidders and Company will not take any responsibility whatsoever towards incorrect information furnished by the bidders in the “Total Bid Value” field.

It is to be noted that Amount mentioned in the “Total Bid Value” field will not be considered for bid evaluation and evaluation will be purely based on the “Price bidding Format”.

22.0 **DEADLINE FOR SUBMISSION OF BIDS:**

22.1 Bids should be submitted on-line up to **11.00 a.m. (IST) (Server Time) on the Bid Closing date** mentioned in the Forwarding Letter. Bidders will be permitted by System to make any changes in their bid after the bid has been uploaded by the bidder prior to the Bid Closing date and time as mentioned in the bid except in condition mentioned in clause 25.0 below. But no changes would be allowed by the system once the due date and time for submission of bids has been reached and bids are opened.

22.2 No bid can be submitted after the submission deadline is reached. The system time displayed on the e-procurement web page shall decide the submission deadline.

22.3 The documents in physical form must be received by Company at the address specified in the “Forwarding Letter” on or before **12:45 p.m. (IST) on the bid closing date**. Timely delivery of the same at the address mentioned in the Forwarding Letter is the responsibility of the Bidders.

23.0 LATE BIDS: Bidders are advised in their own interest to ensure that their bids are uploaded in system before the closing date and time of the bid. Any Bid received by the Company after the Bid Closing Date & Time stipulated by the Company shall be rejected.

24.0 MODIFICATION AND WITHDRAWAL OF BIDS:

24.1 Bidders will be permitted by System to withdraw their bid or make any changes in their bid after the bid has been uploaded by the bidder prior to the Bid Closing date and time as mentioned in the bid. But no changes or withdrawal would be allowed by the system once the due date and time for submission of bids has been reached and bids are opened.

24.2 No bid can be modified/withdrawn subsequent to the deadline for submission of bids.

24.3 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiry of the period of bid validity. Withdrawal of any bid within validity period will lead to forfeiture of his/her/their Bid Security Deposit in full and debar from participation in future tenders, at the sole discretion of the company.

25.0 EXTENSION OF BID SUBMISSION DATE: Normally no request for extension of Bid Closing Date & Time will be entertained. However, OIL at its discretion, may extend the Bid Closing Date and/or Time due to any reasons.

26.0 BID OPENING AND EVALUATION:

26.1.1 The bid will be opened on scheduled Bid opening date & time in the presence of any attending Bidder(s) or their Authorized Representative, if any. However, an authorized letter (format given in Proforma Section) from the Bidder must be produced by Bidder's representative at the time of opening of Tender, without which such representative won't be allowed to attend the opening of Tenders. Only one representative against each Bid will be allowed to attend the bid opening. Attending Bidder(s) & Authorized Representative(s) will have to sign a register evidencing their presence.

26.1.2 In case of two bid system, after the evaluation of the Technical Bids, the Price Bids of only the techno-commercially acceptable Bidders will be opened. The opening Date and Time will be intimated to the techno-commercially qualified Bidders in due course. Price bids will be opened in the same procedure as mentioned in Para 26.1.1 above.

26.2 In case it happens to be a bandh/holiday, the tender will be opened on the next working day (except Saturday). Accordingly, Bid Closing Date/time will get extended up to the next working day and time (except Saturday).

26.3 Bids which have been withdrawn pursuant to Clause 24.0 will not be allowed to be opened by the system. OIL shall examine bids to determine whether they are complete, whether requisite Bid Securities have been furnished, whether documents have been properly signed and whether the bids are generally in order.

26.4 OIL shall prepare, for its own records, minutes of bid opening including the information disclosed to those present in accordance with the sub-clause 26.3.

26.5 To assist in the examination, evaluation and comparison of bids, normally no clarifications shall be sought from the Bidders. However, for assisting in the evaluation of the bids especially on the issues where the Bidder confirms compliance in the evaluation and contradiction exists on the same issues due to lack of required supporting documents in the Bid (i.e. document is deficient or missing), or due to some statement at other place of the Bid (i.e. reconfirmation of confirmation) or vice versa, clarifications may be sought by OIL at its

discretion. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

26.6 Prior to the detailed evaluation, OIL will determine the substantial responsiveness of each bid to the requirement of the Bidding Documents. For purpose of these paragraphs, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Document without material deviations or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, or performance of work, or which limits in any substantial way, in-consistent way with the bidding documents, the Company's right or the bidder's obligations under the contract, and the rectification of which deviation or reservation would affect unfairly the competitive position of other bidders presenting substantial responsive bids. OIL's determination of bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.

26.7 A Bid determined as not substantially responsive will be rejected by the Company and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

26.8 The Company may waive minor informality or nonconformity or irregularity in a bid, which does not constitute a material deviation, provided such waiver, does not prejudice or affect the relative ranking of any Bidder.

27.0 EVALUATION AND COMPARISON OF BIDS:

27.1 OIL will evaluate and compare the bids as per Bid Evaluation Criteria (BEC) of the bidding documents.

27.2 To ascertain the inter-se-ranking, the comparison of the responsive bids will be made on the basis of total amount quoted inclusive of all liabilities and GST for the items of part-II (i.e. schedule of works, units, quantity, rates) of the tender.

27.3 DISCOUNTS/REBATES: Unconditional discounts/rebates, if any, given in the bid or along with the bid will be considered for evaluation.

27.4 Post bid or conditional discounts/rebates offered by any bidder shall not be considered for evaluation of bids. However, if the lowest bidder happens to be the final acceptable bidder for award of contract, and if they have offered any discounts/rebates, the contract shall be awarded after taking into account such discounts/rebates.

28.0 BACKING OUT BY BIDDER: In case any bidder withdraws their bid within the bid validity period, Bid Security will be forfeited and the party will be put on Holiday as per the Banning Policy (available in OIL's website) of Company.

29.0 CONTACTING THE COMPANY:

29.1 Except as otherwise provided in Clause 27.0 above, no Bidder shall contact OIL on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded except as required by OIL vide sub-clause 26.5.

29.2 An effort by a Bidder to influence OIL in the bid evaluation, bid comparison or Contract award decisions may result in the rejection of their bid.

30.0 AWARD CRITERIA: OIL will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

31.0 OIL'S RIGHT TO ACCEPT OR REJECT ANY BID: OIL reserves the right to accept or reject any or all bids and to annul the bidding process and reject all bids, at any time prior to award of contract, without thereby incurring any liability to the affected bidder, or bidders or any obligation to inform the affected bidder of the grounds for OIL's action.

32.0 NOTIFICATION OF AWARD: Prior to the expiry of the period of bid validity or extended validity, OIL will notify the successful Bidder in writing by registered letter or by cable or telex or fax or e-mail (to be confirmed in writing by registered/couriered letter) that its bid has been accepted.

33.0 The selected bidder will be required to enter into a formal contract, which will be based on their bid and OIL's Standard Form of Contract.

34.0 The successful bidder shall furnish a Performance Security Deposit in the form of Bank Guarantee as specified above before signing the formal contract. The Performance Security Deposit will be refunded to the Contractor after satisfactory completion of the work, but a part or whole of which shall be used by the Company in realization of liquidated damages or claims, if any or for adjustment of compensation or loss due to the Company for any reason. This Security Money shall not earn any interest.

35.0 BACKING OUT BY L1 BIDDER AFTER ISSUE OF LOA: In case LOA issued is not accepted by the L1 bidder or the Performance Security is not submitted as per the terms of the contract within the time specified in the Bid Document, the Bid Security shall be forfeited and the bidder shall be dealt as per the Banning Policy (available in OIL's website) of Company.

36.0 FURNISHING FRAUDULENT INFORMATION/DOCUMENT: The information and documents furnish by the bidder/contractor in respect of the subject tender/contract are accepted to be true and genuine. However, if it is detected during technical scrutiny or after award of the contract or after expiry of the contract, that the bidder had submitted any fake/fraudulent document or furnished false statement, the offer/contract shall be rejected/cancelled, as the case may be and the bidder (if fake document/false statement pertains to such bidder) shall be dealt as per the Banning Policy (available in OIL's website) of Company. The bidder has to submit an undertaking in this regard as per attached **Proforma-IX**.

37.0 MOBILISATION ADVANCE PAYMENT:

37.1 Request for advance payment shall not be normally considered. However, depending on the merit and at the discretion of the Company, advance against mobilization charge may be given at an interest rate of 1% above the prevailing Bank rate (CC rate) of SBI, CAG Branch, Kolkata from the date of payment of the advance till recovery/refund.

37.2 Advance payment agreed to by the Company shall be paid only against submission of an acceptable bank guarantee whose value should be equivalent to the amount of advance plus the amount of interest covering the period of advance. Bank guarantee shall be valid for 02 months beyond completion of mobilization and the same may be invoked in the event of Contractor's failure to mobilize as per agreement.

37.3 In the event of any extension to the mobilization period, Contractor shall have to enhance the value of the bank guarantee to cover the interest for the extended period and also to extend the validity of bank guarantee accordingly.

38.0 PROVISION FOR ACTION IN CASE OF ERRING/DEFAULTING AGENCIES: Erring and defaulting agencies like bidder, contractor, supplier, vendor, service provider will be dealt

as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website: www.oil-india.com.

39.0 SIGNING OF CONTRACT:

39.1 The successful bidders(s) shall be notified by the Company of its intention to enter into an Agreement with him/her/them on the basis of his/her/their acceptance of the offer. Such notification shall be treated as a "Letter of Award (LOA)".

39.2 Within 02 Weeks from the date of issue of Letter of Award (LOA), the successful Bidder(s) will be required to pay an interest free Performance Security by way of Bank Guarantee (in specified format) or in the form of Demand Draft favouring "OIL INDIA LIMITED" payable at "DULIAJAN" from any Nationalized Bank. Upon furnishing of the Performance Security, the successful Bidder(s) will be required to enter into a formal Service Agreement based on the instant tender on the OIL Standard forms of agreement.

39.3 This Performance Security must be valid for 90 (Ninety) days after the date of expiry of the defect liability period (if any). In the event of contract being extended within the provisions of the contract agreement, the contractor will have to extend suitably the validity of the "Security Deposit" for the extended period.

39.4 The "Performance Security" will be refunded to the contractor after 90 (Ninety) days of satisfactory completion of works/defect liability period (if any) under the contract (including extension, if any), but part or whole of which shall be used by the Company in realization of liquidated damages or claims, if any or for adjustment of compensation or loss due to the Company for any reason.

40.0 Time will be regarded as the essence of the Contract and the failure on the part of the Contractor to complete the work within the stipulated time shall entitle the Company to recover liquidated damages and/or penalty from the Contractor as per terms of the tender/contract.

41.0 The contractor will be required to allow OIL officials to inspect the work site and documents in respect of the workers' payment.

42.0 Failure of the successful bidders to comply with the conditions as specified in Para 39.2 above would render him liable for rejection and in turn forfeiture of Bid Security apart from any other actions the Company may take against him at its sole discretion. The bidder shall be dealt as per the Banning Policy (available in OIL's website) of Company.

43.0 OIL now looks forward to your active participation in the IFB.

Thanking you,

Yours faithfully,

OIL INDIA LIMITED
(KAUSHIK DAS)

SENIOR CONTRACTS OFFICER (OPERATIONS)

For **CGM (CONTRACTS)**

Date: 09.08.2019

For **RESIDENT CHIEF EXECUTIVE**

BID EVALUATION CRITERIA (BEC)/BID REJECTION CRITERIA (BRC)

This tender is floated to cater the specific requirement of Hiring of services for Construction of 02 (Two) nos. of 500 KL, 04 (Four) nos. of 160 KL, 03 (Three) nos. of 40 KL and 02 (Two) nos. of 795 KL capacity Formation Water Storage Tanks, with a provision to enter into **Framework Agreement** with all technically qualified bidders for the whole scope of work. This Framework Agreement with the technically qualified bidders will be for a duration of 02 (two) years from the commencement of contract awarded against the tender for the specific requirement at the same scope of work and terms and conditions. Based on the future requirement of OIL, within these terms and conditions and scope of work of the tender, Price Bid for the service will be sought from all the technically qualified bidder(s) for the forthcoming requirements. Bidders will be techno-commercially evaluated based on criteria as mentioned below:

1.0 BID EVALUATION CRITERIA (BEC)

The bid shall conform generally to the specifications and terms and conditions given in the Tender Documents. Bids will be rejected in case services offered do not conform to the required parameters stipulated in the technical specifications. Notwithstanding the general conformity of the bid to the stipulated specifications, the following mandatory requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected. All the documents related to BEC must be submitted along with the Technical Bid.

1.1 Bidders shall bid as per any one or any combination of the undernoted conditions:

- a. Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank.
- b. Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank.
- c. Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank.
- d. Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank.

Note: Bidders along with their technical bid shall categorically confirm the condition(s) under which they are bidding.

1.2 FINANCIAL CRITERIA

1.2.1 Annual Financial Turnover of the bidder during any of preceding **03 (Three)** financial/accounting years from the original bid closing date shall be as per following:

- a. For Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank, Annual Financial Turnover of the bidders shall be at least **Rs. 77,02,900.00 (Rupees Seventy Seven Lakh Two Thousand Nine Hundred only)**.
- b. For Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank, Annual Financial Turnover of the bidders shall be at least **Rs. 1,68,34,300.00 (Rupees One Crore Sixty Eight Lakh Thirty Four Thousand Three Hundred only)**.

- c. For Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank, Annual Financial Turnover of the bidders shall be at least **Rs. 71,02,400.00 (Rupees Seventy One Lakh Two Thousand Four Hundred only)**.
- d. For Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank, Annual Financial Turnover of the bidders shall be at least **Rs. 1,16,93,500.00 (Rupees One Crore Sixteen Lakh Ninety Three Thousand Five Hundred only)**

The above should be read in conjunction with **Clause No. 1.1** above and the Annual Financial Turnover of the bidder shall at least meet the corresponding minimum value. For Example – if the bidder is quoting for construction of 02 (Two) nos. of 500 KL, 04 (Four) Nos. of 160 KL and 03 (Three) Nos. of 40 KL Formation Water Storage Tank, minimum Financial Turnover shall be Rs. 3,16,39,600.00 (Rs. 77,02,900.00 + Rs. 1,68,34,300.00 + Rs. 71,02,400.00) (Rupees Three Crore Sixteen Lakh Thirty Nine Thousand Six Hundred only).

1.2.2 Net worth of the bidder must be Positive for the preceding financial/accounting year.

Note: The Net worth to be considered against Clause 1.2.2 above, should be read in conjunction with the definition of Net worth as mentioned in Section 2 (57) of the Companies Act, 2013.

Notes to BEC Clause 1.2 above:

- a. For proof of Annual Turnover & Net worth, any one of the following documents/photocopies must be submitted along with the bid:
 - (i) Audited Balance Sheet along with Profit & Loss account.
OR
 - (ii) A certificate issued by a practicing Chartered/Cost Accountant (with Membership Number and Firm Registration Number), as per format prescribed in **Annexure-X**.
- b. Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial/accounting years excluding the preceding financial/accounting year will be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/accounting year will be considered. However, the bidder has to submit an undertaking in support of the same along with their technical bid as per **Proforma-X**.
- c. In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.

- d. In case the bidder is a Government Department, they are exempted from submission of document mentioned under para **a.** and **b.** above.
- e. Bid will be rejected if not accompanied with adequate documentary proof in support of Annual turnover & Net worth, as mentioned in Para 1.2.1 & 1.2.2.

1.3 TECHNICAL CRITERIA

The bidder shall have experience in successfully executing/completing at least one 'SIMILAR WORK' under single contract during the last 07 (seven) years reckoned from the original bid closing date in Central Govt./State Govt./Public Sector Undertaking/State Govt. Enterprise/any E&P Company as per the following in conjunction with **Clause No. 1.1** above:

- a. For Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank, bidders shall have experience of at least **Rs. 77,02,900.00 (Rupees Seventy Seven Lakh Two Thousand Nine Hundred only)**.
- b. For Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank, bidders shall have experience of at least **Rs. 1,68,34,300.00 (Rupees One Crore Sixty Eight Lakh Thirty Four Thousand Three Hundred only)**.
- c. For Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank, bidders shall have experience of at least **Rs. 71,02,400.00 (Rupees Seventy One Lakh Two Thousand Four Hundred only)**.
- d. For Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank, bidders shall have experience of at least **Rs. 1,16,93,500.00 (Rupees One Crore Sixteen Lakh Ninety Three Thousand Five Hundred only)**

For Example – if the bidder is quoting for construction of 02 (Two) nos. of 500 KL, 04 (Four) Nos. of 160 KL and 03 (Three) Nos. of 40 KL Formation Water Storage Tank, they shall have experience of executing at least one Similar Work of minimum Rs. 3,16,39,600.00 (Rs. 77,02,900.00 + Rs. 1,68,34,300.00 + Rs. 71,02,400.00) (Rupees Three Crore Sixteen Lakh Thirty Nine Thousand Six Hundred only).

Notes to BEC Clause 1.3 above:

- a. "Similar work" mentioned in Para 1.3 above means:
 - i. Experience of supply of materials, fabrication, erection, painting and commissioning of petroleum storage tank(s)/formation water storage tank(s)/Chemical storage tank(s) (with associated piping fabrication job) of minimum capacity 160 KLs as per API 650.
 - AND
 - ii. Experience in related civil and mechanical works, viz construction of foundations/Oil water traps/drainage/walkways etc.
- b. For proof of requisite Experience (refer Clause No. 1.3), the following documents/ photocopy (self-attested/attested) must be submitted along with the bid:

- I. **In case work experience is against OIL's Contract:** Bidder must submit Job Completion Certificate issued by the company indicating the following:
- A. Work order no./Contract no.
 - B. Gross value/quantity of job done
 - C. Period of Service
 - D. Nature of Service
- II. **In case work experience is not against OIL's Contract:** Bidder must submit the following:
- A. Contract document showing details of work,
AND
 - B. Job Completion Certificate showing:
 - i. Gross value/quantity of job done
 - ii. Nature of job done and Work order no./Contract no.
 - iii. Contract period and date of completionOR
 - C. SES (Service Entry Sheet)/Certificate of Payment (COP) issued by the company indicating the following:
 - i. Work order no./Contract no.
 - ii. Gross value/quantity of jobs done
 - iii. Period of Service
 - iv. Nature of Service
- c. Only Letter of Intent (LOI)/Letter of Award (LOA) or Work Order(s) are not acceptable as evidence.
- d. Mere award of contract(s) will not be counted towards experience. Successful completion of the awarded contract(s) to the extent of volume & value, as stipulated respectively under Clause Nos. 1.3 will only be treated as acceptable experience.
- e. Following work experience will also be taken into consideration:
- i. If the prospective bidder has executed contract in which similar work is also a component of the contract.
 - ii. In case the start date of the requisite experience is beyond the prescribed 07(seven) years reckoned from the original bid closing date but completion is within the prescribed 07(seven) years reckoned from the original bid closing date.
 - iii. If the prospective bidder is executing similar work which is still running and the contract value/quantity executed prior to original bid closing date is equal to or more than the minimum prescribed value in the BEC.

Proof of work experience against Para e. (i) and (ii) above, to satisfy a) similar work b) minimum prescribed value/qty c) prescribed period of 07 years, to be submitted as below:

- i. **In case requisite experience is against OIL's Contract:** Bidder must submit the breakup of similar work and its value/quantity mentioning SES No. and copies of all relevant SES.
- ii. **In case requisite experience is not against OIL's Contract:** Bidder must submit the breakup of similar work and its value/quantity executed within the prescribed period of 07 (seven) years reckoned from the original bid closing date. The breakup must be certified by the end user or a certificate issued by a practicing Chartered/Cost Accountant Firm (with Membership Number & Firm Registration Number).

Proof of work experience against Para **e. (iii)** above, to satisfy a) similar work b) minimum prescribed value/qty/period c) prescribed period of 07 years, to be submitted as below:

- I. **In case requisite experience is against OIL's Contract:** Bidder must submit the following:
 - A. Breakup of similar work
 - B. SES (Service Entry Sheet)/Certificate of Payment (COP) issued by the company indicating the following:
 - i. Work order no./Contract no.
 - ii. Gross value/quantity of job done
 - iii. Period of Service
 - iv. Nature of Service
 - II. **In case requisite experience is not against OIL's Contract:** Bidder must submit the following:
 - A. Breakup of similar work
 - B. Contract document showing details of work.
 - C. LOA/LOI/Work order showing:
 - i. Gross value/quantity of job awarded
 - ii. Nature of job awarded
 - iii. Contract no./Work order no.
 - iv. Contract period
 - D. Certificate of Payment (COP)/SES (Service Entry Sheet) up to the previous month of the original bid closing date of this tender issued by the company indicating the following:
 - i. Work order no./Contract no.
 - ii. Gross value/quantity of job done
 - iii. Period of Work done
 - iv. Nature of Service
- f. SIMILAR work executed by a bidder for its own organization/subsidiary cannot be considered as experience for the purpose of meeting BEC.**

- g.** Bids submitted for part of the work will be rejected. Bid will be rejected if not accompanied with adequate documentary proof in support of Work experience as mentioned in Para 1.3.

1.4 Bidders shall quote their price for all the line items as per following, in conjunction with **Clause No. 1.1** above:

- a.** Bidders quoting as per 1.1 (a) shall fill-up Price Bid Format given as Annexure-I.
- b.** Bidders quoting as per 1.1 (b) shall fill-up Price Bid Format given as Annexure-II.
- c.** Bidders quoting as per 1.1 (c) shall fill-up Price Bid Formats given as Annexure-III.
- d.** Bidders quoting as per 1.1 (d) shall fill-up Price Bid Formats given as Annexure-IV.

For example, if the bidder is quoting for construction of 02 (Two) nos. of 500 KL, 04 (Four) Nos. of 160 KL and 03 (Three) Nos. of 40 KL Formation Water Storage Tank, then they shall fill-up Price Bid Formats Annexure-I, Annexure-II & Annexure-III.

1.5 Price bid shall be opened in respect of only the techno-commercially acceptable bidders whose bids have been found to be substantially responsive. A substantially responsive bid is one that meets the terms and conditions of the Tender and/or the acceptance of which bid will not result in indeterminate liability on OIL.

1.6 Bidders are required to quote for all the items as per Price Bid Format; otherwise the offer of the bidder will be straightway rejected.

1.7 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.

1.8 The quantities shown against each item in the "Price Bidding Format" shall be considered for the purpose of Bid Evaluation. It is, however, to be clearly understood that the assumptions made in respect of the quantities for various operations are only for the purpose of evaluation of the bid and the Contractor will be paid on the basis of the actual number of days/parameter, as the case may be.

1.9 The bidders are advised not to offer any discount/rebate separately and to offer their prices in the Price Bid Format after considering discount/rebate, if any.

1.10 Conditional and unsolicited discount will not be considered in evaluation. However, if such bidder happens to be the lowest recommended bidder, unsolicited discount without any condition will be considered for computing the contract price.

1.11 In case of identical overall lowest offered rate by more than 1 (one) bidder, the selection will be made by draw of lot between the parties offering the same overall lowest price.

1.12 Purchase Preferences allowed as per Government Guidelines in Vogue and PPP [Public Procurement policy] for Micro and Small Enterprises is not applicable for this tender (being works contract tender).

1.13 Price Bids shall be evaluated as per following:

- a. Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank:**
Price Bids shall be evaluated as per Annexure-I. Contract for the construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank shall be awarded at overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST) as per Annexure-I.
- b. Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank:**
Price Bids shall be evaluated as per Annexure-II. Contract for the construction of 04 (Four) Nos. 160 KL Formation Water Storage Tank shall be awarded at overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST) as per Annexure-II.
- c. Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank:**
Price Bids shall be evaluated as per Annexure-III. Contract for the construction of 03 (Three) Nos. 40 KL Formation Water Storage Tank shall be awarded at overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST) as per Annexure-III.
- d. Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank:**
Price Bids shall be evaluated as per Annexure-IV. Contract for the construction of 02 (Two) Nos. 795 KL Formation Water Storage Tank shall be awarded at overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST) as per Annexure-IV.

1.14 OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet.

However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

1.15 Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST.

When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/Contracts will be binding on the bidder.

1.16 Input Tax Credit on GST (Goods & Service Tax) for this service is NOT available to OIL & the bids will be evaluated based on total price including GST.

1.17 Based on the evaluation of techno-commercially qualified bidders, the job will be awarded to L-1 bidder(s) in line with Clause No. 1.13 above.

2.0 BID REJECTION CRITERIA (BRC):

2.1 The bids are to be submitted in Single Stage under Two Bid system i.e. Un-priced Techno-Commercial Bid and Price Bid together. Only the Price Bid should contain the quoted price.

2.2 The price quoted by the successful bidder must be firm during the performance of the contract and not subject to variation on any account except as mentioned in the bid document. Any bid submitted with adjustable price quotation other than the above will be treated as non-responsive and rejected.

2.3 Bid security shall be furnished as a part of the Techno Commercial Un-priced Bid. The amount of bid security should be as specified in the forwarding letter. Any bid not accompanied by a proper bid security will be rejected.

2.4 Bid Documents/User Id & Password for OIL's E-Tender portal are not transferable.

2.5 Any bid received in the form of Physical document/Telex/Cable/Fax/E-mail will not be accepted.

2.6 Bids shall be typed or written in indelible ink. The bidder or his authorized representative shall sign the bid digitally, failing which the bid will be rejected.

2.7 Bids shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by bidder, in which case such corrections shall be initiated by the persons(s) signing (digitally) the bid. However, white fluid should not be used for making corrections. Any bid not meeting this requirement shall be rejected.

2.8 Any bid containing false statement will be rejected and action will be taken by Company as per Bid Document.

2.9 Bidders must quote clearly and strictly in accordance with the price schedule outlined in Price Bidding Format attached under "Notes and Attachments" tab in the main bidding engine of OIL's E-Tender portal; otherwise the bid will be rejected. All other techno-commercial documents other than price details to be submitted with Un-priced Techno-Commercial Bid as per tender requirement under "Technical Attachment" Tab Page only.

2.10 Bidder must accept and comply with the following provisions as given in the Tender Document in toto, failing which offer will be rejected:

- (i)** Firm price
- (ii)** EMD/Bid Bond
- (iii)** Period of validity of Bid

- (iv) Price Schedule
- (v) Performance Bank Guarantee/Security deposit
- (vi) Delivery/Completion Schedule
- (vii) Scope of work
- (viii) Guarantee of material/work
- (ix) Liquidated Damages clause
- (x) Tax liabilities
- (xi) Arbitration/Resolution of Dispute Clause
- (xii) Force Majeure
- (xiii) Applicable Laws
- (xiv) Specifications
- (xv) Integrity Pact

2.11 There should not be any indication of price in the Un-priced Techno-Commercial Bid. A bid will be straightway rejected if this is given in the Un-priced Techno-Commercial Bid.

2.12 Bid received with validity of offer less than 120 (One Hundred Twenty) days from the original date of Technical Bid opening will be rejected.

2.13 The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide “Part-VI/Integrity Pact” of the tender document. This Integrity Pact Proforma has been duly signed digitally by OIL's competent signatory. The Proforma has to be returned by the bidder (along with the Un-priced Techno-Commercial Bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid.

3.0 GENERAL:

3.1 In case bidder takes exception to any clause of bidding document not covered under BEC/BRC, then the Company has the discretion to load or reject the offer on account of such exception if the bidder does not withdraw/modify the deviation when/as advised by company. The loading so done by the company will be final and binding on the bidders. No deviation will however be accepted in the clauses covered under BEC/BRC.

3.2 To ascertain the substantial responsiveness of the bid the Company reserves the right to ask the bidder for clarification in respect of clauses covered under BEC/BRC also and such clarifications fulfilling the BEC/BRC clauses in to must be received on or before the deadline given by the company, failing which the offer will be will be evaluated based on the submission. However, mere submission of such clarification shall not make the offer responsive, unless company is satisfied with the substantial responsiveness of the offer.

3.3 If any of the clauses in the BEC/BRC contradict with other clauses of bidding document elsewhere, the clauses in the BEC/BRC shall prevail.

3.4 Bidder(s) must note that requisite information(s)/financial values etc. as required in the BEC/BRC & Tender are clearly understandable from the supporting documents submitted by the Bidder(s); otherwise Bids shall be rejected.

3.5 OIL will not be responsible for delay, loss or non-receipt of applications for participating in the bid sent by mail and will not entertain any correspondence in this regard.

3.6 The originals of such documents [furnished by bidder(s)] shall have to be produced by bidder(s) to OIL as and when asked for.

GENERAL CONDITIONS OF CONTRACT (GCC)

DESCRIPTION OF WORK/SERVICES: Hiring of services for Construction of 02 (Two) nos. of 500 KL, 04 (Four) nos. of 160 KL, 03 (Three) nos. of 40 KL and 02 (Two) nos. of 795 KL capacity Formation Water Storage Tanks, under Framework Agreement.

A. DEFINITIONS:

In the contract, the following terms shall be interpreted as indicated:

- (a) **"The Contract"** means agreement entered into between Company and Contractor, as recorded in the contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein;
- (b) **"The Contract Price"** means the price payable to Contractor under the contract for the full and proper performance of its contractual obligations;
- (c) **"The Work"** means each and every activity required for the successful performance of the services described in Section II, the Terms of Reference.
- (d) **"Company"** or **"OIL"** means Oil India Limited;
- (e) **"Contractor"** means the Contractor performing the work under this Contract.
- (f) **"Contractor's Personnel"** means the personnel to be provided by the Contractor to provide services as per the contract.
- (g) **"Company's Personnel"** means the personnel to be provided by OIL or OIL's Contractor (other than the Contractor executing the Contract). The Company representatives of OIL are also included in the Company's personnel.
- (h) **"Gross Negligence"** means any act or failure to act (whether sole, joint or concurrent) by a person or entity which was intended to cause, or which was in reckless disregard of or wanton indifference to, avoidable and harmful consequences such person or entity knew, or should have known, would result from such act or failure to act. Notwithstanding the foregoing, Gross negligence shall not include any action taken in good faith for the safeguard of life or property.
- (i) **"Willful Misconduct"** means intentional disregard of good and prudent standards of performance or proper conduct under the Contract with knowledge that it is likely to result in any injury to any person or persons or loss or damage of property.

WITNESSETH:

1.0 a) The contractor hereby agrees to carry out the work set down in the Schedule of work which forms part-II of this Contract in accordance with the 1968 General Conditions of Contract of Oil India Limited and General Specifications read in conjunction with any drawings and Particular Specifications & instructions which forms Part-III of the contract

utilizing any materials/services as offered by the Company as per Part-IV of the contract in **OIL's Assets.**

b) In this Contract all words and expressions shall have the same meaning as are respectively assigned to them in the 1968 General Conditions of Contract of Oil India Limited which the Contractor has perused and is fully conversant with before entering into this Contract.

c) The clauses of this contract and of the specifications set out hereunder shall be paramount and in the event of anything herein contained being inconsistent with any term or terms of the 1968 General Conditions of Contract of Oil India Limited, the said term or terms of the 1968 General conditions of Contract to the extent of such inconsistency, and no further, shall not be binding on the parties hereto.

2.0 The contractor shall provide all labour, supervision and transport and such specified materials described in part-II of the Contract including tools and plants as necessary for the work and shall be responsible for all royalties and other levies and his rates shall include for these. The work executed and materials supplied shall be to the satisfaction of the Company's Engineer and Contractor's rates shall include for all incidental and contingent work which although not specifically mentioned in this contract are necessary for its completion in a sound and workman like manner.

3.0 The Company's Engineer shall have power to:

a) Reduce the rates at which payments shall be made if the quality of work although acceptable is not up to the required standard set forth in the OIL Standard Specifications which have been perused and fully understood by the Contractor.

b) Order the Contractor to remove any inferior material from the site and to demolish or rectify any work of inferior workmanship, failing which the Company's Engineer may arrange for any such work to be demolished or rectified by any other means at the Contractor's expenses.

c) Order the Contractor to remove or replace any workman who he (The Engineer) considers incompetent or unsuitable; the Engineer's opinion as to the competence and suitability of any workman engaged by the Contractor shall be final and binding on the Contractor.

d) Issue to the Contractor from time to time during the progress of the work such further drawings and instructions as shall be necessary for the purpose of proper and adequate execution and maintenance of the works and the Contractor shall carry out and be bound by the same.

e) Order deviations in Part II and III of this Contract. All such deviation orders shall be in writing and shall show the financial effect, if any, of such deviation and whether any extra time is to be allowed.

4.0 The Contractor shall have no claim against the company in respect of any work which may be withdrawn but only for work actually completed under this contract. The contractor shall have no objection to carry out work in excess of the quantities stipulated in Part-II if so ordered by the company at the same rates, terms and conditions.

5.0 The Company reserves the right to cancel this Contract at any time upon full payment of work done and the value of the materials collected by the contractor for permanent incorporation in the work under this contract particularly for execution of this contract up to the date of cancellation of the Contract. The valuation of the work done and

the materials collected shall be estimated by the company's Engineer in presence of the contractor. The Contractor shall have no claim to any further payment whatsoever. The valuation would be carried out exparte if Contractor fails to turn up despite reasonable notice which will be binding on the Contractor.

6.0 The Contractor hereby undertakes to indemnify the Company against all claims which may arise under the under noted Acts:

- i) The Mines Act.
- ii) The Minimum Wages Act, 1948.
- iii) The Workman's Compensation Act, 1923.
- iv) The Payment of wages Act, 1936.
- v) The Payment of Bonus Act, 1965.
- vi) The Contract Labour (Regulation & Abolition) Act, 1970 and the rules framed there under.
- vii) Employees' Pension Scheme, 1995.
- viii) Inter-State Migrant (Regulation of Employment and Condition of Service) Act. 1979.
- ix) The Employees Provident Fund and Miscellaneous Provisions Act, 1952.
- x) GST Act.

or any other Acts or Statute not here in above specifically mentioned having bearing over engagement of workers directly or indirectly for execution of work. The Contractor shall not make the Company liable to reimburse the Contractor for the statutory increase in the wage rates of the Contract Labour appointed by the Contractor. Such Statutory increase in the wage rates of Contract Labour shall be borne by the contractor.

7.0 The Contractor shall clear away all rubbish and surplus material from the site on completion of work and shall leave the site clean and tidy.

8.0 The duration of the contract shall be initially for a period as per the following from the commencement of the same i.e. after completion of mobilization:

- i. 06 (Six) months for Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank.
- ii. 01 (One) year for Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank.
- iii. 01 (One) year for Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank.
- iv. 06 (Six) months for Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank.

Note: In case, contract is awarded to a single bidder for any combination of the above, then contract period shall be the highest contract duration of the respective conditions. For example, if contract for Construction of 02 (Two) nos. of 500 KL and 04 (Four) Nos. 160 KL Formation Water Storage Tank is awarded to a single bidder, then applicable contract period shall be highest of the respective conditions i.e. 01 (One) year.

The Contractor must complete the work as mentioned in PART – III (SPECIAL CONDITIONS OF CONTRACT: SCC) within the contract period. In the event of there being undue delay in execution of the Contract, the Company reserves the right to cancel the Contract and/or levy such additional damages as it deems fit based on the actual loss

suffered by the company attributable to such delay. The company's decision in this regard shall be final.

9.0 In order to promote, safeguard and facilitate the general operational economic in the interest of the Company during the continuance of this contract the Contractor hereby agrees and undertakes not to take any direct or indirect interest and or support, assist, maintain or help any person or persons engaged in antisocial activities, demonstration, riots, or in any agitation prejudicial to the Company's interest and any such even taking shape or form at any place of the Company's works or and its neighborhood.

10.0 The tendered price inclusive of all liabilities and GST (i.e. the Contract price) is Rs. _____ ***(Not to be filled up by bidder while submitting the offer in Technical Attachments Folder. This figure will be filled up by OIL at the time of award of the contract to the successful bidder)*** (_____ only) but the Company shall pay the Contract or only for actual work done at the all-inclusive rates set down in the Schedule of work Part II of this Contract.

On account payment may be made, not often than monthly, up to the amount of **100%** of the value of work done. Final payment will be made only after satisfactory completion of the work. Such final payment shall be based on the work actually done allowing for deviations and any deductions and the measurement shall be checked and certified correct by the Company's Engineer before any such final payment is made.

Note: All Invoices are to be sent to the following address:

Chief General Manager - PSS
Oil India Limited,
P.O. Duliajan-786602
Dist. Dibrugarh, Assam.

11.0 The contractor employing **20 (twenty)** or more workmen on any day preceding 12 months shall be required to obtain requisite license at his cost from the appropriate Licensing Officer before undertaking any Contract work. The Contractor shall also observe the rules & regulations framed under the Contract Labour (Regulation & Abolition) Act.

12.0 The Contractor will not be allowed to construct any structure (for storage/housing purpose) with thatch, bamboo or any other inflammable materials within any company's fenced area.

13.0 The Contractor shall ensure that all men engaged by him/her are provided with appropriate protective clothing and safety wear in accordance with regulation 89(a) and 89(b) in the Oil Mines Regulations 1984. The Company's representative shall not allow/accept those men who are not provided with the same.

14.0 The Contractor shall deploy local persons in all works.

15.0 The Contractor shall not engage minor labour below 18 (eighteen) years of age under any circumstances.

16.0 The Contractor and his/her workmen shall strictly observe the rules and regulations as per Mines Act (Latest editions).

17.0 GENERAL OBLIGATIONS OF COMPANY:

COMPANY shall, in accordance with and subject to the terms and conditions of this contract:

- i) Pay the Contractors in accordance with terms and conditions of the contract.
- ii) Allow access to Contractors and their personnel, subject to normal security and safety procedures, to all areas as required for orderly performance of the work.

18.0 SPECIAL CONDITIONS:

- a) ~~The amount of retention money shall be released after 6 (six) months from the date of issue of completion certificate from concerned department.~~
- b) The contractor will be required to allow OIL Officials to inspect the work site and documents in respect of the workers' payment.
- c) Contractor(s) whosoever is liable to be covered under the P.F. Act and contract cost is inclusive of P.F., must ensure strict compliance of provisions of Provident Fund and Miscellaneous Provisions Act, 1952 in addition to the various Acts mentioned elsewhere in this contract. Any contractor found violating these provisions will render themselves disqualified from any future tendering. As per terms of the contract, if applicable, the Contractor must deposit Provident Fund Contribution (covering Employee's & Employer's share) with the competent authority monthly under their direct code. The Contractor shall be required to submit documentary evidence of deposit of P.F. Contribution to the Company. In case of failure to provide such documentary evidence, the Company reserves the right to withhold the amount equivalent to applicable P.F. Contribution.

19.0 ARBITRATION:**19.1 ARBITRATION (APPLICABLE FOR SUPPLIERS/CONTRACTORS OTHER THAN PSU)**

Except as otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the contract or breach thereof which parties are unable to settle mutually, the same shall be referred to Arbitration as provided hereunder:

- a) A party wishing to commence arbitration proceeding shall invoke Arbitration Clause by giving 30 days' notice to the other party. The notice invoking arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter. If the claim is in foreign currency, the claimant shall indicate its value in Indian Rupee for the purpose of constitution of the arbitral tribunal.
- b) The number of arbitrators and the appointing authority will be as under:

Claim amount (excluding claim for interest and counter claim, if any)	Number of Arbitrator	Appointing Authority
Up to Rs. 5 Crore	Sole Arbitrator	OIL

Above Rs. 5 Crore	3 Arbitrators	One Arbitrator by each party and the 3 rd Arbitrator, who shall be the presiding Arbitrator, by the two Arbitrators.
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- c) The parties agree that they shall appoint only those persons as arbitrators who accept the conditions of the arbitration clause. No person shall be appointed as Arbitrator or Presiding Arbitrator who does not accept the conditions of the arbitration clause.
- d) Parties agree that there will be no objection if the Arbitrator appointed holds equity shares of OIL and/or is a retired officer of OIL/any PSU. However, neither party shall appoint its serving employees as arbitrator.
- e) If any of the Arbitrators so appointed dies, resigns, becomes incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/arbitrators to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall proceed de novo.
- f) Parties agree that neither shall be entitled for any pre-reference or pendente-lite interest on its claims. Parties agree that any claim for such interest made by any party shall be void.
- g) The arbitral tribunal shall make and publish the award within time stipulated as under:

Amount of Claims and counter claims(excluding interest)	Period for making and publishing of the award (counted from the date of first meeting of the Arbitrators)
Up to Rs. 5 Crore	Within 8 months
Above Rs. 5 Crore	Within 12 months

The above time limit can be extended by Arbitrator, for reasons to be recorded in writing, with the consent of the other parties.

- h) If after commencement of the arbitration proceedings, the parties agree to settle the dispute mutually or refer the dispute to conciliation, the arbitrators shall put the proceedings in abeyance until such period as requested by the parties.
- i) Each party shall be responsible to make arrangements for the travel and stay etc. of the arbitrator pointed by it. Claimant shall also be responsible for making arrangements for travel/stay arrangements of the Presiding Arbitrator and the expenses incurred shall be shared equally by the parties.

In case of sole arbitrator, OIL shall make all necessary arrangements for his travel, stay and the expenses incurred shall be shared equally by the parties.

- j) The Arbitration shall be held at **Duliajan, Assam**. However, parties to the contract can agree for a different place for the convenience of all concerned.

- k)** The Arbitrator(s) shall give reasoned and speaking award and it shall be final and binding on the parties.
- l)** Subject to aforesaid, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof shall apply to the arbitration proceedings under this clause.

19.2 ARBITRATION (APPLICABLE IN CASE OF CONTRACT AWARDED ON PUBLIC SECTOR ENTERPRISE):

In the event of any dispute or difference relating to, arising from or connected with the Contract, such dispute or difference shall be referred by either party to the arbitration of one of the Arbitrators in the Department of Public Enterprises, to be nominated by the Secretary to the Government of India, In-Charge of the Bureau of Public Enterprises. The Arbitration and Conciliation Act 1996 shall not be applicable to the Arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Deptt. of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference, the dispute shall be decided by the Law Secretary or the Special Secretary/Additional Secretary, whose decision shall bind the parties finally and conclusively. The parties in the dispute will share equally the cost of the arbitration as intimated by the Arbitrator.

The venue of all arbitrations under both 19.1 & 19.2 will be **Duliajan, Assam**. The award made in pursuance thereof shall be binding on the parties.

20.0 FORCE MAJEURE:

20.1 In the event of either party being rendered unable by 'Force majeure' to perform any obligations required to be performed by them under the contract the relative obligations of the party affected by such 'Force Majeure' shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by the either party shall be borne by the respective parties.

The term 'Force Majeure' as employed herein shall mean acts of God, earthquake, war (declared/undeclared) revolts, riots, fires, floods, rebellions, explosions, hurricane, sabotage, civil commotions, and acts and regulations of respective Govt. of the two parties, namely the Company and the contractor.

20.2 Upon the occurrence of such cause(s) and upon its termination, the party alleging that it has been rendered unable as aforesaid thereby, shall notify the other party in writing immediately but not later than 72 (Seventy-two) hours of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of its claim.

Time for performance of the relative obligations suspended by the force majeure shall then extended by the period for which such cause lasts.

20.3 Should 'force majeure' condition as stated above occurs and should the same be notified within Seventy-Two (72) hours after its occurrence the 'force majeure' rate shall apply for the first fifteen days. Parties will have the right to terminate the Contract if such 'force majeure' conditions continue beyond fifteen (15) days with prior written notice. Should either party decide not to terminate the Contract even under such condition, no

payment would apply after expiry of fifteen (15) days force majeure period unless otherwise agreed to.

21.0 TERMINATION:

21.1 TERMINATION ON EXPIRY OF THE TERMS (DURATION): The contract shall be deemed to have been automatically terminated on the expiry of duration of the Contract or the extension period, if exercised by Company under the provision of the Contract.

21.2 TERMINATION ON ACCOUNT OF FORCE MAJEURE: Either party shall have the right to terminate this Contract on account of Force Majeure as set forth in Article 20.0 above.

21.3 TERMINATION ON ACCOUNT OF INSOLVENCY: In the event that the Contractor or its collaborator at any time during the term of the Contract, becomes insolvent or makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt, then the Company shall, by a notice in writing have the right to terminate the Contract and all the Contractor's rights and privileges hereunder, shall stand terminated forthwith.

21.4 TERMINATION FOR UNSATISFACTORY PERFORMANCE: If the Company considers that, the performance of the Contractor is unsatisfactory, or not up to the expected standard, the Company shall notify the Contractor in writing and specify in details the cause of the dissatisfaction. The Company shall have the option to terminate the Contract by giving 15 days' notice in writing to the Contractor, if Contractor fails to comply with the requisitions contained in the said written notice issued by the Company.

21.5 TERMINATION DUE TO CHANGE OF OWNERSHIP & ASSIGNMENT: In case the Contractor's rights and/or obligations under this Contract and/or the Contractor's rights, title and interest to the equipment/material, are transferred or assigned without the Company's consent, the Company may at its absolute discretion, terminate this Contract.

21.6 If at any time during the term of this Contract, breakdown of Contractor's equipment results in Contractors being unable to perform their obligations hereunder for a period of 15 successive days, Company at its option, may terminate this Contract in its entirety without any further right or obligation on the part of the Company, except for the payment of money then due. No notice shall be served by the Company under the condition stated above.

21.7 Notwithstanding any provisions herein to the contrary, the Contract may be terminated at any time by the Company on giving 30 (thirty) days written notice to the Contractor due to any other reason not covered under the above clause from 21.1 to 21.6 and in the event of such termination the Company shall not be liable to pay any cost or damage to the Contractor except for payment for services as per the Contract upto the date of termination including the De-mob cost, if any.

22.0 CONSEQUENCES OF TERMINATION: In all cases of termination herein set forth, the relative obligations of the parties to the Contract shall be limited to the period up to the date of termination. Notwithstanding the termination of this Contract, the parties shall continue to be bound by the provisions of this Contract that reasonably require some action or forbearance after such termination.

22.1 Upon termination of this Contract, Contractor shall return to Company all of Company's items, which are at the time in Contractor's possession.

22.2 In the event of termination of contract, Company will issue Notice of termination of the contract with date or event after which the contract will be terminated. The contract shall then stand terminated and the Contractor shall demobilize their personnel & materials.

23.0 I.B. VERIFICATION REPORT AND SECURITY REVIEW: Contractor will be required to submit the verification report to ascertain character and antecedents from the Civil Administration towards the persons engaged under this contract to the Head of the user Department before engagement.

24.0 In case of any doubt or dispute as to the interpretation of any clause herein contained, the decision of the Company's Engineer shall be final and binding on the contractor.

25.0 SET OFF CLAUSE: "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)."

26.0 FURNISHING FRAUDULENT INFORMATION/DOCUMENT: The information and documents furnished by the bidder/contractor in respect of the subject tender/contract are expected to be true and genuine. However, if it is detected during technical scrutiny or after award of the contract or after expiry of the contract, that the bidder had submitted any fake/fraudulent document or furnished false statement, the offer/contract shall be rejected/cancelled, as the case may be and the bidder (if fake document/false statement pertains to such bidder) shall be dealt as per the Banning Policy (available in OIL's website) of Company.

27.0 PROVISION FOR ACTION IN CASE OF ERRING/DEFAULTING AGENCIES: Action against erring and defaulting agencies like bidder, contractor, supplier, vendor, service provider will be as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website www.oil-india.com.

28.0 LIQUIDATED DAMAGES FOR DELAY IN MOBILIZATION/COMPLETION OF WORKS AND SERVICES: In the event of the Contractor's default in timely mobilization/completion within the stipulated period, the Contractor shall be liable to pay liquidated damages @ 0.5% of contract value, per week or part thereof of delay subject to maximum ceiling of 7.5% of contract value.

29.0 SUBCONTRACTING: Contractor shall not subcontract, transfer or assign the contract, in full or any part under this contract, to any third party. Except for the main services under this contract, Contractor may sub-contract the petty support services subject to Company's prior approval. However, Contractor shall be fully responsible for complete execution and performance of the services under the Contract.

30.0 MISCELLANEOUS PROVISIONS: Contractors shall conform in all respects with the provisions of any Statute, Ordinance of Law and the regulations or bye-law of any local or other duly constituted authority which may be applicable to the services and with such rules and regulation public bodies and Companies as aforesaid and shall keep OIL indemnified against all penalties and liability of every kind for breach of any such Statute, Ordinance or Law, regulation or byelaw.

31.0 LIABILITY:

31.1 Except as otherwise expressly provided, neither Company nor its servants, agents, nominees, Contractors, or sub-contractors shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss of or damage to the property of the Contractor and/or their Contractors or sub-contractors, irrespective of how such loss or damage is caused and even if caused by the negligence of Company and/or its servants, agent, nominees, assignees, contractors and sub-contractors. The Contractor shall protect, defend, indemnify and hold harmless Company from and against such loss or damage and any suit, claim or expense resulting there from.

31.2 Neither Company nor its servants, agents, nominees, assignees, Contractors, sub-contractors shall have any liability or responsibility whatsoever for injury to, illness, or death of any employee of the Contractor and/or of its contractors or sub-contractor irrespective of how such injury, illness or death is caused and even if caused by the negligence of Company and/or its servants, agents nominees, assignees, Contractors and sub-contractors. Contractor shall protect, defend, indemnify and hold harmless Company from and against such liabilities and any suit, claim or expense resulting there from.

31.3 The Contractor hereby agrees to waive its right to recourse and further agrees to cause their underwriters to waive their right of subrogation against Company and/or its underwrites, servants, agents, nominees, assignees, Contractors and sub-contractors for loss or damage to the equipment of the Contractor and/or its sub-contractors when such loss or damage or liabilities arises out of or in connection with the performance of the contract.

31.4 The Contractor hereby further agrees to waive its right of recourse and agrees to cause its underwriters to waive their right of subrogation against Company and/or its underwriters, servants, agents, nominees, assignees, Contractors and sub-contractors for injury to, illness or death of any employee of the Contractor and of its contractors, sub-contractors and/or their employees when such injury, illness or death arises out of or in connection with the performance of the contract.

31.5 Except as otherwise expressly provided, neither Contractor nor its servants, agents, nominees, Contractors or sub-contractors shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss or damage to the property of the Company and/or their Contractors or sub-contractors, irrespective of how such loss or damage is caused and even if caused by the negligence of Contractor and/or its servants, agents, nominees, assignees, Contractors and sub-contractors. The Company shall protect, defend, indemnify and hold harmless Contractor from and against such loss or damage and any suit, claim or expense resulting therefrom.

31.6 Neither Contractor nor its servants, agents, nominees, assignees, Contractors, sub-contractors shall have any liability or responsibility whatsoever to whomsoever or injury or illness, or death of any employee of the Company and/or of its contractors or sub-

contractors irrespective of how such injury, illness or death is caused and even if caused by the negligence of Contractor and/or its servants, agents, nominees, assignees, contractors and sub-contractors. Company shall protect, defend indemnify and hold harmless Contractor from and against such liabilities and any suit, claim or expense resulting there from.

31.7 The Company agrees to waive its right of recourse and further agrees to cause its underwriters to waive their right of subrogation against Contractor and/or its underwriters, servants, agents, nominees, assignees, Contractors and sub-contractors for loss or damage to the equipment of Company and/or its contractors or sub-contractors when such loss or damage or liabilities arises out of or in connection with the performance of the contract.

31.8 The Company hereby further agrees to waive its right of recourse and agrees to cause it underwriters to waive their right of subrogation against Contractor and/or its underwriters, servants, agents, nominees, assignees, Contractors and sub-contractors for injury to, illness or death of any employee of the Company and of its Contractors, sub-contractors and/or their employees when such injury, illness or death arises out of or in connection with the performance of the Contract.

31.9 LIMITATION OF LIABILITY: Notwithstanding any other provisions except only in cases of willful misconduct and/or criminal acts,

(a) Neither the Contractor nor the Company (OIL) shall be liable to the other, whether in Contract, tort, or otherwise, for any consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs.

(b) Notwithstanding any other provisions incorporated elsewhere in the contract, the aggregate liability of the Contractor in respect of this contract, whether under Contract, in toto or otherwise, shall not exceed 100% of the Contract price, provided however that this limitation shall not apply to the cost of repairing or replacing defective equipment by the Contractor, or to any obligation of the Contractor to indemnify the Company with respect to Intellectual Property Rights.

Company shall indemnify and keep indemnified Contractor harmless from and against any and all claims, costs, losses and liabilities in excess of the aggregate liability amount in terms of clause (b) above.

32.0 CONSEQUENTIAL DAMAGE: Except as otherwise expressly provided, neither party shall be liable to the other for special, indirect or consequential damages resulting from or arising out of the contract, including but without limitation, to loss or profit or business interruptions, howsoever caused and regardless of whether such loss or damage was caused by the negligence (either sole or concurrent) of either party, its employees, agents or sub-contractors.

33.0 INDEMNITY AGREEMENT:

33.1 Except as provided hereof Contractor agrees to protect, defend, indemnify and hold Company harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of Contractor's employees, agents, Contractors and subcontractors or their employees on account of bodily injury or death, or damage to

personnel/property as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

33.2 Except as provided hereof Company agrees to protect, defend, indemnify and hold Contractor harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of Company's employees, agents, Contractor and subcontractors or their employees on account of bodily injury or death, or damage to personnel/property as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

34.0 APPLICABLE LAW:

34.1 This Contract shall be deemed to be a Contract made under, governed by and construed in accordance with the laws of India for the time being in force and shall be subject to the exclusive jurisdiction of Courts situated at Dibrugarh in Assam.

34.2 The Bidders shall ensure full compliance of various Indian Laws and Statutory Regulations, to the extent applicable for performing under this Contract.

35.0 TAXES: Tax levied as per the provisions of Indian Income Tax Act and any other enactment/rules on income derived/payments received under the contract will be on Contractor's account.

36.0 SUBSEQUENTLY ENACTED LAWS:

36.1 In the event of introduction of any new legislation or any change or amendment or enforcement of any Act or Law, rules or regulations of Government of India or State Government(s) or Public Body which becomes effective after the date of submission of Price Bid or revised price bid, if any, for this CONTRACT and which results in increased/decreased cost of the works under the CONTRACT through increased/decreased liability of taxes, (other than personnel and Corporate taxes), duties, the Parties shall agree to a revision in pricing to reflect such change subject to the production of documentary proof to the satisfaction of the COMPANY/CONTRACTOR as applicable to the extent which directly is attributable to such introduction of new legislation or change or amendment as mentioned above and adjudication by the competent authority (applicable when disputed by COMPANY) & the courts wherever levy of such taxes/duties are disputed by COMPANY/CONTRACTOR.

36.2 Any increase in net amount of the duties and taxes (i.e. the amount of taxes/duties payable minus eligible credit of taxes/duties paid on input services/inputs) after the contractual completion/mobilization date during the extended period will be to the contractor's account, where delay in completion/mobilization period is attributable to the CONTRACTOR. However, any decrease in net amount of the duties and taxes (i.e. the amount of taxes/duties payable minus eligible credit of taxes/duties paid on input services/inputs) after the contractual completion/mobilization date will be to COMPANY's account.

36.3 The Contract Price and other prices given in the Schedule of Prices are based on the applicable tariff as indicated by the CONTRACTOR in the Schedule of Prices. In case this information subsequently proves to be wrong, incorrect or misleading, COMPANY will have no liability to reimburse/pay to the CONTRACTOR the excess duties, taxes, fees, if any finally levied/imposed by the concerned authorities. However, in such an event, COMPANY will have the right to recover the difference in case the rate of duty/tax finally assessed is on the lower side.

36.4 Notwithstanding the provision contained in clause 36.1 to 36.2 above, the COMPANY shall not bear any liability in respect of:

- i. Personal taxes on the personnel deployed by CONTRACTOR, his sub-contractor/sub-sub-contractors and Agents etc.
- ii. Corporate taxes and Fringe benefit tax in respect of contractor and all of their sub-contractors, agents etc.
- iii. Other taxes & duties including Customs Duty, Excise Duty and Service Tax in addition to new taxes etc. in respect of sub-contractors, vendors, agents etc. of the CONTRACTOR.

36.5 In order to ascertain the net impact of the revisions/enactment of various provisions of taxes/duties, the CONTRACTOR is liable to provide following disclosure to COMPANY:

- i. Details of each of the input services used in relation to providing service to COMPANY including estimated monthly value of input service and service tax amount.
- ii. Details of Inputs (material/consumable) used/required for providing service to Company including estimated monthly value of input and excise duty/CVD paid/payable on purchase of inputs.

37.0 GOODS AND SERVICES TAX:

37.1 GENERAL REMARKS ON TAXES & DUTIES:

In view of **GST** Implementation from 1st July 2017, all taxes and duties including Excise Duty, CST/VAT, Service tax, Entry Tax and other indirect taxes and duties have been submerged in **GST**. Accordingly reference of Excise Duty, Service Tax, VAT, Sales Tax, Entry Tax or any other form of indirect tax except of **GST** mentioned in the bidding document shall be ignored.

37.2 Bidders are required to submit copy of the GST Registration Certificate while submitting the bids wherever **GST** (CGST & SGST/UTGST or IGST) is applicable.

37.3 “**GST**” shall mean Goods and Services Tax charged on the supply of material(s) and services. The term “**GST**” shall be construed to include the Integrated Goods and Services Tax (hereinafter referred to as “IGST”) or Central Goods and Services Tax (hereinafter referred to as “CGST”) or State Goods and Services Tax (hereinafter referred to as “SGST”) or Union Territory Goods and Services Tax (hereinafter referred to as “UTGST”) depending upon the import/interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable.

37.4 Quoted price/rate(s) should be inclusive of all taxes and duties, except **GST (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and cess on GST if applicable) on the final service**. However, GST rate (including cess) to be provided in the respective places in the Price Bid. Please note that the responsibility of payment of GST (CGST & SGST or IGST or UTGST) lies with the Supplier of Goods/Services (Service Provider) only. Supplier of Goods/Services (Service Provider) providing taxable service shall issue an Invoice/Bill, as the case may be as per rules/regulation of **GST**. Further, returns and details required to be filled under GST laws & rules should be timely filed by Supplier of Goods/Services (Service Provider) with requisite details.

37.4.1 Bidder should also mention the **Harmonized System of Nomenclature (HSN)** and **Service Accounting Codes (SAC)** at the designated place in SOR.

37.5 Where the OIL is entitled to avail the input tax credit of GST:

37.5.1 OIL will reimburse the **GST** to the Supplier of Goods/Services (Service Provider) at actuals against submission of Invoices as per format specified in rules/regulation of GST to enable OIL to claim input tax credit of **GST** paid. In case of any variation in the executed quantities, the amount on which the **GST** is applicable shall be modified in same proportion. Returns and details required to be filled under GST laws & rules should be timely filed by supplier with requisite details.

37.5.2 The input tax credit of **GST** quoted shall be considered for evaluation of bids, as per evaluation criteria of tender document.

37.6 Where the OIL is not entitled to avail/take the full Input Tax Credit of GST:

37.6.1 OIL will reimburse **GST** to the Supplier of Goods/Services (Service Provider) at actuals against submission of Invoices as per format specified in rules/regulation of **GST** subject to the ceiling amount of **GST** as quoted by the bidder. In case of any variation in the executed quantities (If directed and/or certified by the In-Charge) the ceiling amount on which **GST** is applicable will be modified on pro-rata basis.

37.6.2 The bids will be evaluated based on total price including **GST**.

37.7 Payments to Service Provider for claiming **GST** amount will be made provided the above formalities are fulfilled. Further, OIL may seek copies of challan and certificate from Chartered Accountant for deposit of **GST** collected from OIL.

37.8 Contractor/vendor shall be required to issue tax invoice in accordance with GST Act and/or Rules so that input credit can be availed by OIL. In the event that the contractor/vendor fails to provide the invoice in the form and manner prescribed under the GST Act read with GST Invoicing Rules thereunder, OIL shall not be liable to make any payment on account of **GST** against such invoice.

37.9 **GST** shall be paid against receipt of tax invoice and proof of payment of **GST** to government. In case of non-receipt of tax invoice or non-payment of **GST** by the contractor/vendor, OIL shall withhold the payment of **GST**.

37.10 GST payable under reverse charge mechanism for specified services or goods under GST act or rules, if any, shall not be paid to the contractor/vendor but will be directly deposited to the government by OIL.

37.11 Where OIL has the obligation to discharge **GST** liability under reverse charge mechanism and OIL has paid or is/liable to pay **GST** to the Government on which interest or penalties becomes payable as per GST laws for any reason which is not attributable to OIL or ITC with respect to such payments is not available to OIL for any reason which is not attributable to OIL, then OIL shall be entitled to deduct/setoff/recover such amounts against any amounts paid or payable by OIL to Contractor/Supplier.

37.12 Notwithstanding anything contained anywhere in the Agreement, in the event that the input tax credit of the **GST** charged by the Contractor/Vendor is denied by the tax authorities to OIL for reasons attributable to Contractor/Vendor, OIL shall be entitled to recover such amount from the Contractor/Vendor by way of adjustment from the next invoice. In addition to the amount of **GST**, OIL shall also be entitled to recover interest at the rate prescribed under GST Act and penalty, in case any penalty is imposed by the tax authorities on OIL.

37.13 TDS under GST, if applicable, shall be deducted from contractor's/vendor's bill at applicable rate and a certificate as per rules for tax so deducted shall be provided to the contractor/vendor.

37.14 The Contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the Contractor shall avail and pass on benefits of all exemptions/concessions available under tax laws. Any error of interpretation of applicability of taxes/duties by the contractor shall be to contractor's account.

37.15 It is the responsibility of the bidder to quote the correct GST rate. The classification of goods/services as per GST (Goods & Service Tax) Act should be correctly done by the contractor to ensure that input tax credit on GST (Goods & Service Tax) is not lost to the OIL on account of any error on the part of the contractor.

37.16 In case, the quoted information related to various taxes, duties & levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/tax, if the finally assessed amount is on the higher side and OIL will have to right to recover the difference ~~and~~ in case the rate of duty/taxes finally assessed is on the lower side.

37.17 Notwithstanding anything mentioned elsewhere in the Bidding Document the aggregate liability of OIL towards Payment of GST shall be limited to the volume of GST declared by the bidder in its bid & nothing shall be payable extra except for the statutory variation in GST.

37.18 Further, it is the responsibility of the bidders to make all possible efforts to make their accounting/IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.

37.19 GST liability, if any on account of supply of free samples against any tender shall be to bidder's account.

37.20 In case of statutory variation in **GST**, other than due to change in turnover, payable on the contract value during contract period, the Supplier of Goods/Services (Service Provider) shall submit a copy of the 'Government Notification' to substantiate the rate as applicable on the Bid due date and on the date of revision.

Beyond the contract period, in case OIL is not entitled for input tax credit of **GST**, then any increase in the rate of **GST** beyond the contractual delivery period shall be to Service provider's account whereas any decrease in the rate **GST** shall be passed on to the OIL.

Beyond the contract period, in case OIL is entitled for input tax credit of **GST**, then statutory variation in applicable **GST** on supply and on incidental services, shall be to OIL's account.

Claim for payment of **GST**/Statutory variation, should be raised within two [02] months from the date of issue of 'Government Notification' for payment of differential (in %) **GST**, otherwise claim in respect of above shall not be entertained for payment of arrears. The base date for the purpose of applying statutory variation shall be the Bid Opening Date.

37.21 The contractor will be liable to ensure to have registered with the respective tax authorities, wherever applicable and to submit self-attested copy of such registration certificate(s) and the Contractor will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/E-way Bill, if applicable etc.

37.22 In case the bidder is covered under Composition Scheme under GST laws, then bidder should quote the price inclusive of the GST (CGST & SGST/UTGST or IGST). Further, such bidder should mention "Cover under composition system" in column for GST (CGST & SGST/UTGST or IGST) of price schedule.

37.23 OIL will prefer to deal with registered supplier of goods/services under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

37.24 Procurement of Specific Goods: Earlier, there is no tax incidence in case of import of specified goods (i.e. the goods covered under List-34 of Customs Notification no. 12/2012-Cus dated. 17.03.2012 as amended). Customs duty is not payable as per the policy. However, under GST regime, IGST Plus GST compensation cess (if applicable) would be liveable on such imports. Bidders should quote GST as inclusive considering IGST component for the imported Materials portion while quoting their prices on destination basis. However, GST rate to be specified in the price bid format.

37.25 Documentation requirement for GST:

The vendor will be under the obligation for invoicing correct tax rate of tax/duties as prescribed under the GST law to OIL, and pass on the benefits, if any, after availing input tax credit.

Any invoice issued shall contain the following particulars:

- a) Name, address and GSTIN of the supplier;
- b) Serial number of the invoice;
- c) Date of issue;
- d) Name, address and GSTIN or UIN, if registered of the recipient;

Note: OIL GSTIN numbers are as follows:

Assam :18AAACO2352C1ZW

Arunachal Pradesh :12AAACO2352C1Z8

- e) Name and address of the recipient and the address of the delivery, along with the State and its code,
 - f) HSN code of goods or Accounting Code of services[SAC];
 - g) Description of goods or services;
 - h) Quantity in case of goods and unit or Unique Quantity Code thereof;
 - i) Total value of supply of goods or services or both;
 - j) Taxable value of supply of goods or services or both taking into discount or abatement if any;
 - k) Rate of tax (IGST, CGST, SGST/UTGST, cess);
 - l) Amount of tax charged in respect of taxable goods or services (IGST, CGST, SGST/UTGST, cess);
 - m) Place of supply along with the name of State, in case of supply in the course of interstate trade or commerce;
 - n) Address of the delivery where the same is different from the place of supply and
 - o) Signature or digital signature of the supplier or his authorized representative.
- GST invoice shall be prepared in triplicate, in case of supply of goods, in the following manner
- a) The original copy being marked as ORIGINAL FOR RECIPIENT;
 - b) The duplicate copy being marked as DUPLICATE FOR TRANSPORTER and
 - c) The triplicate copy being marked as TRIPLICATE FOR SUPPLIER.

In case of any advance given against any supplies contract, the supplier of the goods shall issue Receipt Voucher containing the details of details of advance taken along with particulars as mentioned in clause no. (a), (b), (c), (d), (g), (k), (l), (m) & (o) above.

37.26 ANTI-PROFITEERING CLAUSE:

As per Clause 171 of GST Act it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices. The Supplier of Goods/Services may note the above and quote their prices accordingly.

37.26.1 In case the GST rating of vendor on the GST portal/Govt. official website is negative/black listed, then the bids may be rejected by OIL. Further, in case rating of bidder is negative/black listed after award of work for supply of goods/services, then OIL shall not be obligated or liable to pay or reimburse GST to such vendor and shall also be entitled to deduct/recover such GST along with all penalties/interest, if any, incurred by OIL.

38.0 WITHHOLDING:

Company may withhold or nullify the whole or any part of the amount due to Contractor, after informing the Contractor of the reasons in writing, on account of subsequently discovered evidence in order to protect Company from loss on account of:

- a) For non-completion of jobs.
- b) Contractor's indebtedness arising out of execution of this Contract.
- c) Defective work not remedied by Contractor.
- d) Claims by sub-Contractor of Contractor or others filed or on the basis of reasonable evidence indicating probable filing of such claims against Contractor.
- e) Failure of Contractor to pay or provide for the payment of salaries/wages, contributions, unemployment compensation, taxes or enforced savings with-held from wages etc.
- f) Failure of Contractor to pay the cost of removal of unnecessary debris, materials, tools, or machinery.
- g) Damage to another Contractor of Company.
- h) All claims against Contractor for damages and injuries, and/or for non-payment of bills etc.
- i) Any failure by Contractor to fully reimburse Company under any of the indemnification provisions of this Contract. If, during the progress of the work Contractor shall allow any indebtedness to accrue for which Company, under any circumstances in the opinion of Company may be primarily or contingently liable or ultimately responsible and Contractor shall, within five days after demand is made by Company, fail to pay and discharge such indebtedness, then Company may during the period for which such indebtedness shall remain unpaid, with-hold from the amounts due to Contractor, a sum equal to the amount of such unpaid indebtedness.

Withholding will also be effected on account of the following:

- i) Order issued by a Court of Law in India.
 - ii) Income-tax deductible at source according to law prevalent from time to time in the country.
 - iii) Any obligation of Contractor which by any law prevalent from time to time to be discharged by Company in the event of Contractor's failure to adhere to such laws.
 - iv) Any payment due from Contractor in respect of unauthorized imports.
- When all the above grounds for withholding payments shall be removed, payment shall thereafter be made for amounts so with-hold.

Notwithstanding the foregoing, the right of Company to withhold shall be limited to damages, claims and failure on the part of Contractor, which is directly/indirectly related to some negligent act or omission on the part of Contractor.

39.0 In case any part of the work is sub-contracted to a Micro or Small Enterprise as per contract conditions than the contractor shall provide complete details (i.e. name of the subcontractor, value of sub-contacted work, copy of valid registration certificate etc.) of the sub-contractor to OIL.

40.0 PERFORMANCE SECURITY: The Contractor has furnished to Company a Demand Draft/Bank Guarantee No. _____ dated _____ issued by _____ for _____ (being 10% of contract value) with validity of 90 (Ninety) days beyond the defect liability period. The performance security shall be payable to Company as compensation for any loss resulting from Contractor's failure to fulfill their obligations under the Contract. If the performance security is submitted in the form of bank guarantee then in the event of extension of the Contract period, the validity of the

bank guarantee shall be suitably extended by the Contractor. The bank guarantee will be discharged by Company not later than 30 days following its expiry.

41.0 NOTICE:

41.1 Any notice given by one party to other, pursuant to this Contract shall be sent in writing or by telex or Fax and confirmed in writing to the applicable address specified below:

Company**a) For contractual matters**

CGM-Contracts
OIL INDIA LIMITED
PO DULIAJAN - 786602
ASSAM, INDIA
Phone No. 91-374-2808650
Email: contracts@oilindia.in

b) For technical matters

CGM (PSS)
OIL INDIA LIMITED
PO DULIAJAN - 786602,
ASSAM, INDIA
Phone No. 91-374-2806440
Email: agadhmedhi@oilindia.in

Contractor

Phone No.:

41.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

SCHEDULE OF WORK, UNIT AND QUANTITY: (SOQ)

DESCRIPTION OF WORK/SERVICE: Hiring of services for Construction of 02 nos. of 500 KL, 04 nos. of 160 KL, 03 nos. of 40 KL and 02 nos. of 795 KL capacity Formation Water Storage Tanks, under Framework concept.

Item No.	Description of Services	UOM	Estimated Quantity
For Construction 02 nos. of 500 KL capacity Formation water storage tanks			
10	<p>Erection and dismantling of barrier wall</p> <p>Erection of barrier wall with CGI sheet to a height of minimum 10 metre to isolate the working area from the existing installation on three sides as per the instruction of the site engineer. The wall should be strong enough with proper structural supports and drawings should be submitted to site engineer for approval prior to erection job. No hot job (welding/ cutting/ grinding etc.) would be allowed at site during the installation of the barrier wall and also in the working place till the wall is completed and the area is made completely gas-free which is to be confirmed by gas testing. The site shall also have to be free from any hazardous / inflammable substances/ materials etc. and necessary work permit / clearance from concerned Installation Manager (IM)/ Site engineer/ in charge must be taken prior to start of the job on daily basis. The required pipes for the posts to be used for erection of barrier wall shall be arranged by company which shall have to be transported by the contractor to the work site from the place of handing over for job execution. The contractor shall have to dismantle the so erected barrier walls upon completion of the tank construction job. The Contractor will have to arrange all necessary infrastructure (scaffolding/ working platform etc.) to facilitate erection and dismantling of the barrier walls in a safe manner which is to be to the satisfaction of the Site engineer.</p>	M (Meter)	160

20	<p>Design of 500 KL tank with Foundation</p> <p>Complete design of 500 KL tank as per API 650 specification, detailed engineering, preparation of all drawings and third party approval of all the tanks of 500 KL safe holding capacity fixed cone roof formation water storage tanks including its Concrete Ring Wall Foundation. All designs, detailed engineering documents and drawings will have to be vetted/certified by Engineers India Limited (EIL)/Projects Development India Limited (PDIL)/ Indian Institute of Technology (IIT) or a third party of repute. The job also includes soil survey of the site for which the Contractor shall have to submit report to the company.</p>	NO (Number)	2
30	<p>Isolation of Process pipelines</p> <p>Isolation of all process pipelines (e.g., oil / water/ gas/ fire fighting/bleed-off system etc.) from old tank earmarked to be dismantled, to make the tank completely safe for dismantling/ erection & fabrication job. The job involves opening up/ removal of existing flanged / screwed joints etc. and installation of blind flange(s)/ plug(s) in the pipings leading to the tanks/ process in operation. Isolation of such pipelines must be displayed by putting appropriate signage/ playcard at places clearly visible from all directions/ corners.</p>	NO (Number)	8
40	<p>Dismantling of 795 KL foundation of tank</p> <p>The job involves breaking of existing old/damaged tank foundation including RCC column/ beam/structure, removal of compacted sand/ cement, excavation of earth etc. The scrap/debris material recovered in the process shall have to be suitably transported/carried and dumped to the site to be shown by the Installation manager.</p>	NO (Number)	1
50	<p>Dismantling of old (damaged) 795 KL tank</p> <p>All the shell plates and other items recovered in the process of dismantling the old/ damaged tank must be shifted to a designated place as per direction of Site-engineer/ Installation Manager (IM) or his/ her representative.</p>	NO (Number)	1

	<p>The job includes:</p> <p>i) Internal cleaning of the tanks to make it completely free from oil/ gas, sludge etc. and make it ready for dismantling.</p> <p>ii) Dismantling of the existing pipings/ units/ connections/ fittings etc. from the tanks/ tank farm areas and storing of the dismantled components/ parts in a nearby location/ yard as directed by the site engineer/ Installation Manager (IM) or his/ her representative. The job involves dismantling of all types of inlet/ outlet lines including valves, walkways, pipe-supports, CC supports etc. inside the tank/tank farm/ working area.</p> <p>iii) Dismantling of 795 KL capacity old (damaged) tanks by unfastening the bolts/ cutting down with oxy/ acetylene flame, cutting at about 2 mts height from the ground level; or any other approved safe techniques/ methods keeping the rest of the tank on the jack supports. In no case the contractor would be allowed to work any hot work beyond 3.75 metres of height above the ground level. Necessary work permit / clearance from concerned Installation Manager (IM)/ Site engineer/ in charge must be taken prior to start of the job on daily basis.</p> <p>iv) Cleaning and clearing of the area inside the tank, tank dyke/bundh and collection and removal/ disposal of tank bottom sand/earth/sludge by any approved suitable means and transportation of the same in a safe manner to a 'sludge pit' of the company as directed by the Site-engineer/ Installation Manager (IM) or his/ her representative prior to dismantling of the old (damaged)/earmarked tank. The tank, tank dyke/bundh area should be cleaned to the satisfaction of the site engineer/ Installation Manager (IM). The Contractor will have to arrange all necessary infrastructure including scaffolding/working platform etc. for cleaning job to the satisfaction of site engineer. During and after cleaning the tank, necessary gas testing would be carried out in these tanks and only after satisfactory test results, the tank(s) would be allowed to be dismantled by site engineer. The job also involves cleaning of the outer surfaces and the area inside the tank dyke as and when required to scrap off the whole lot</p>		
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	of oil content.		
60	<p>Construction of new RCC foundation for 500 KL tank</p> <p>Construction of RCC foundation for 2 nos. of 500 KL tank as per the approved drawing (OIL/4113 should be referred in this case) and soil survey report/recommendations as mentioned in line no. 20 and painting the external surface with weather proof paint. This job also includes construction of circular drain around the foundation. For low lying/ submerged area/pit/ unconsolidated or marshy land, the contractor shall have to develop the area required for the job at his own cost. All materials for construction will be supplied by the contractor. Contractor will have to employ all the resources required for such construction activity at his own cost.</p> <p>Note: Depending on the soil survey report based on design of the tank as per line item no. 20 either line item 60 or 70 will be used for construction of RCC foundation.</p>	NO (Number)	2
70	<p>Construction of RCC foundation with boulder packing for 500 KL tank</p> <p>Construction of RCC foundation for 500 KL tank with boulder packing as per the approved drawing (OIL/4113 should be referred in this case) and soil survey report/recommendations as mentioned in line no. 20 and painting the external surface with weather proof paint. This job also includes construction of circular drain (DIMENSIONS..)around the foundation. For low lying/ submerged area/pit/ unconsolidated or marshy land, the contractor shall have to develop the area required for the job at his own cost. All materials for construction will be supplied by the contractor. Contractor will have to employ all the resources required for such construction activity at his own cost.</p> <p>Note: Depending on the soil survey report based on design of the tank as per line item no. 20 either line item 60 or 70 will be used for construction of RCC foundation with boulder packing.</p>	NO (Number)	2

80	<p>Fabrication and Erection of 500 KL Tank</p> <p>Supply of materials fabrication and erection of 500 KL capacity fixed roof tank using jack-up method as per OIL Drawing (as detailed in SCC) and API 650 standard along with anti-corrosive coating.</p> <p>The anti-corrosive coating is to be applied for the entire internal surfaces inclusive of tank bottom plate roof and other structural members. Anti-corrosive coating on all the internal surfaces of the tanks including top and bottom plates shall be applied with High temperature resistant and chemical resistant anti-corrosive solvent free ceramic reinforced composite/ amine cured phenolic epoxy resin coating. The coating shall have 100% solid by Volume and Mixed Density/specific gravity 1.25 gm/cc Minimum. The Dry Film Thickness (DFT) 300 to 600 microns two coat system with minimum 150 micron per coat. Dry film thickness shall be measured after each coat using thickness gauge e.g. Mikrotest Ecometer or any other suitable instruments. Holiday or spark testing shall be done after application of last coat to find nicks scrapes and pin holes in the coating. The coating shall have tensile shear/Pull off adhesion of Minimum 200 kg/sq cm (2840 psi) as per ASTM D 1002/ASTM D 4541/ISO 4624. The coating shall be chemical resistant to mixture of crude oil & water in continuous emersion as per ASTM D543/ISO 2812-2. Service temperature shall be Minimum 80 Deg C in Wet (Immersion) service condition and Minimum 100 Deg C in Dry service condition as per ASTM D 648. The Surface preparation shall be achieved by abrasive/shot blasting to near white metallic as per NACE No. 2/SSPC-SP10 ISO 8501-1 Sa 2 ½ with blast surface profile depth of 75-125 micron. Profile measurement for abrasive blast cleaned surface shall be made with Testex Press-O-Film or other suitable method. Prior to blasting all weld spatters shall be removed & sharp or rough welds rounded & contoured. Any change in the surface preparation recommended by the OEM of the coating system shall be forwarded in the technical bid for approval by OIL. The application shall be airless spray method. The anti corrosive coating to be applied on internal surfaces of the tank shall be of make</p>	NO (Number)	2
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	<p>Hempel/ Belzona/Chesterton/ Akzonobel or equivalent meeting the afore-stated specifications and Performance Guarantee of minimum 10 years shall be provided by the OEM to OIL for product as well as the application procedure. Third party inspection report with special mention of meeting the afore-stated specifications in this regard shall have to be submitted by the contractor upon completion of the job.</p> <p>The contractor has to fabricate and erect the syphon system for the tank(s) as per the site Engineer/ Installation Manager (IM)/ his or her representative. All materials such as pipes, valves, nozzle etc. required for the job will be supplied and fitted by the contractor. In this regard drawing nos. OIL/PO/10 or, PSS-SIP-01 or, PSS-SIP-02 (whichever applicable) shall be referred by contractor.</p>		
90	<p>External Painting</p> <p>Thorough cleaning and painting of external surfaces of the tank including shell, roof, soil side bottom plate (before installation) and all fittings/accessories etc. connected to the tank body as per direction of company engineer/ Installation Manager/ his or her representative. After putting two coats of Epoxy Zinc Chromate Primer (30 micron DFT in each coat), two coats of aluminium/enamel paint will have to be applied (colour to be approved by Company engineer). For the soil side bottom plate, one coat of Zinc Silicate primer (65 micron DFT) followed by two coats of high build Epoxy black paint (100 micron DFT in each coat) will have to be applied. The plate surfaces shall be adequately cleaned and there shall be no rust/scale left on the plates. Painting jobs shall only be done after completion of cleaning jobs and physical inspection by the company's engineer at site. The Contractor will have to arrange all necessary infrastructures including scaffolding/ working platform etc. to facilitate painting jobs. All paints, primers, painting materials etc. will have to be supplied by the contractor and should be duly approved by the company's engineer prior to application of paint. Third party inspection report with special mention of meeting the afore-stated specifications in this regard shall have to</p>	<p>M2 (Square Meter)</p>	<p>1,209</p>

	be submitted by the contractor upon completion of the job.		
100	<p>Hydraulic testing of 500 KL tank</p> <p>Hydraulic testing of 500 KL tank as per specification and direction of Site Engineer/ Installation Manager/ his or her representative.</p> <p>Source Water for Hydraulic testing will be provided by the Company wherever available. In case source water is not available from Company's side, contractor shall have to arrange the same at his own cost. However, Temporary pipeline connection etc. should be arranged/made by the contractor for lifting/filling water in the tank. For hydraulic testing of the newly fabricated/constructed tanks, all works such as arrangement of suitable pumps for filling of water to the tank, operation/running of the pump including all necessary connections to and from the water source will be arranged/executed by the contractor. After filling the tank with water, a minimum period of 24 hours duration shall be maintained to observe any possible leakage/settlement of foundation etc. Necessary hydraulic test report including the pressure chart record certified by the Installation Manager shall have to be submitted by the contractor.</p>	JOB	2
110	<p>Calibration of the 500 KL tank</p> <p>Calibration of the 500 KL tank including all necessary arrangement. Contractor will have to make all necessary arrangements for Calibration of the tanks which are already fabricated and tested. The calibration job is to be done by a Govt. approved agency and relevant documents issued by Govt. authority will have to be submitted to OIL.</p> <p>Note: Contractor will have to make all necessary arrangements for Calibration of the tanks which are already fabricated and tested.</p>	JOB	2
120	<p>Transportation of various diameter pipes</p> <p>Transportation of various diameter pipes (Bevel end/ Screwed) up to 250 mm NB diameter (provided by OIL) from OIL's Materials Dept.</p>	TKM (Ton-Kilometre)	103

	<p>godown/pipe yards at the new/old industrial areas/well-head setup/site/OCS/EPS/ Department/field location including loading and unloading with the help of pipe Trailers/Crane without causing any damage to the pipes/pipe ends. Defective pipes shall be rejected prior to loading/ receiving by the Company Engineer/Installation Manager/ his or her representative. The contractor will have to bear all the cost required for the job.</p> <p>Maximum distance - 60 km.</p> <p>Average length of pipe - 11.90 m.</p>		
130	<p>Transportation of various types of materials</p> <p>Transportation of various types of materials (provided by OIL) including valves such as gate/plug/ ball/check/control valves etc., pipe fittings of various sizes ranging up to 250 mm NB diameter such as elbow, bend, flange, tee, swage etc. M.S plates, gratings, angle iron, flat bar, rod etc. as per the requirement of the job from OIL's Materials Dept. godown/pipe yards near OCS 3/South Bank office/Industrial area etc. including loading & unloading to the work site in truck/trailer without causing any damage to the materials. Defective materials shall be rejected prior to loading/ receiving by the Company Engineer/Installation Manager/ his or her representative. The contractor will have to bear all the cost required for the job.(maximum load per trip - 10 tonnes).</p>	TRP (Trip)	1
140	<p>Handling of 250mm NB Pipes and Fittings</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel/ screwed ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working Complex. This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality etc. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall</p>	JT (Joint)	20

	have to be removed by appropriate method after completion of each run of welding job.		
150	<p>Handling of 200mm NB Pipes and Fittings</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working Complex. This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality etc. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	JT (Joint)	20
160	<p>Handling of 150mm NB Pipes and Fittings</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working Complex. This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality etc. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	JT (Joint)	50
170	<p>Handling of 100mm NB Pipes and Fittings</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working Complex. This job also includes bending of pipes through appropriate method/ repair of pipe ends</p>	JT (Joint)	50

	etc., if necessary, with cutting torch, grinding, removing ovality etc. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.		
180	<p>Handling,aligning,installn-250 NB valves</p> <p>Handling, aligning and installation of 250 mm NB size Flanged type Valves such as control/gate/check/ball/plug valves, etc. with flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets and nuts & bolts etc. (to be supplied by Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site engineer/ Installation Manager (IM) or his/ her representative. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	NO (Number)	2
190	<p>Handling,aligning,installn-200 NB valves</p> <p>Handling, aligning and installation of 200 mm NB size Flanged type Valves such as control/gate/check/ball/plug valves, etc. with already existing flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets and nuts & bolts etc. (to be supplied by Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by</p>	NO (Number)	4

	the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site engineer/ Installation Manager (IM) or his/ her representative. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.		
200	<p>Handling,aligning,installn-150 NB valves</p> <p>Handling, aligning and installation of 150 mm NB size Flanged type Valves such as control/gate/check/ball/plug valves, etc. with already existing flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets and nuts & bolts etc. (to be supplied by Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site engineer/ Installation Manager (IM) or his/ her representative. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	NO (Number)	4
210	<p>Handling,aligning,installn-100 NB valves</p> <p>Handling, aligning and installation of 100 mm NB size Flanged type Valves such as control/gate/check/ball/plug valves, etc. with already existing flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets and nuts & bolts etc. (to be supplied by Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or</p>	NO (Number)	8

	<p>his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company.. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site engineer/ Installation Manager (IM) or his/ her representative. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>		
220	<p>Handling of 250 mm NB Companion Flange</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as required, complete with jointing materials/nut-bolts etc. (to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	<p>PAA (Pair)</p>	<p>2</p>
230	<p>Handling of 200 mm NB Companion Flange</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as required, complete with jointing materials/nut-bolts etc. (to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange</p>	<p>PAA (Pair)</p>	<p>4</p>

	the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.		
240	<p>Handling of 150 mm NB Companion Flange</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as required, complete with jointing materials/nut-bolts etc. (to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	PAA (Pair)	4
250	<p>Handling of 100 mm NB Companion Flange</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as required, complete with jointing materials/nut-bolts etc. (to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have</p>	PAA (Pair)	8

	to be removed by appropriate method after completion of each run of welding job.		
260	<p>Fabrication of various pipe fittings</p> <p>Fabrication of various pipe fittings like Bend, Tee, Reducer etc. by welding including handling, cutting, end preparation etc. The job will be quantified as per unit length of welding measured in centimeter. All materials to be supplied by Contractor. Welding should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	CM (Centimeter)	2,000
270	<p>Supply, fabrication, welding & erection of Single Leg Pipe Supports</p> <p>Supply, fabrication, welding & erection of Single Leg Pipe Supports, with 100 mm NB. M.S pipes, including clamping of pipes up to 1.5 mtr. height, generally as per the sketch no OIL/PO/04. All materials like pipes clamps, base plates, bolts & nuts etc. will be arranged and supplied by the contractor. The job also includes construction of Pillar Foundations for the pipe supports fabricated of size 0.25 m (L)x 0.25 (B) x0.40m (Depth) made out of CC of 1:1.5:3 ratio, including grouting.</p>	NO (Number)	20
280	<p>Supply, fabrication, welding & erection of Double Leg Pipe Supports:</p> <p>Supply, fabrication, welding & erection of Double Leg Pipe Supports with 100 mm NB. M.S pipes, including clamping of pipes up to 1.5 mtr height, generally as per the sketch no. OIL/PO/05. All materials like pipes, clamps, base plates, bolts & nuts etc. will be arranged and supplied by the contractor. The job also includes Pillar Foundations for the pipe supports fabricated of size 0.25 m (L) x 0.25 (B) x 0.40m (Depth) made out of CC of 1:1.5:3 ratio, including grouting.</p>	NO (Number)	10
290	<p>Supply, fabrication, welding & Erection of Concrete Pipe Supports:</p> <p>Supply of all materials, erection, installation, plastering, curing of RCC Pipe Supports (1:1.5:3 mixture) including clamping System/</p>	M3 (Cubic Meter)	50

	arrangement as per OIL drawing no. OIL/PSS/01. Provision of clamping with the help of U clamps with nuts to clamp different diameter pipes with nuts and washers including all civil construction materials will have to be supplied by the contractor. All the supplied materials must be approved by OIL prior to erection including material test certificates and other documents.		
300	<p>Supply, Fabrication and erection of walkway and walkway platform</p> <p>Supply, Fabrication and erection of walkway and walkway platform of 750 mm width with railings over the pipe/bunch of pipes, bundh, dyke wall, drains etc. as per sketch no. OIL/PP/17 supplied herewith (which is a representative drawing of walkways and which may be adjusted as per requirement depending on availability of space). The contractor will supply all necessary materials like M S Grating (500 mm width), support pipes, Angle iron frame, railing etc. and prior approval for all materials will have to be obtained from the company representative. After fabrication/erection, the posts are to be grouted out of CC composition 1:1.5:3 as per directive of site engineer/ Installation Manager (IM) or his/ her representative. All grouting materials will be supplied by the contractor. Size of the grouting 0.2 m (L) x 0.2 m (W) x 0.4 m (H).</p>	M (Meter)	60
310	<p>Radiographic inspections-Pipe/welded joints</p> <p>Radiographic inspection of pipe/welded joints by a third party inspection agency (approved by BARC) as directed by the site engineer/ Installation Manager (IM) or his/ her representative. All necessary equipment including the inspection agency to be arranged by the contractor at his/her own cost (no reimbursement shall be entertained by company) with the approval of the company engineer/ Installation Manager (IM) or his/ her representative. Certification from the third party inspection agency to the effect shall have to be deposited to OIL. Size: 150 mm NB to 250 mm NB. (for pipe joints).</p>	NO (Number)	40
320	Radiographic inspections -Pipe/welded joints	NO	80.5

	Radiographic inspection of pipe/welded joints by a third party inspection agency (approved by BARC) as directed by the site engineer/ Installation Manager (IM) or his/ her representative. All necessary equipment including the inspection agency to be arranged by the contractor at his/her own cost (no reimbursement shall be entertained by company) with the approval of the company engineer/ Installation Manager (IM) or his/ her representative. Certification from the third party inspection agency to the effect shall have to be deposited to OIL. Size: 50 mm NB to 100 mm NB. (for pipe joints).	(Number)	
330	<p>Letter writing (300 mm to 450 mm)</p> <p>Arrow marking on piping and letter writing on vessels, tanks, signboards, piping, shed, pumps etc. Writing will be in English, Assamese and Hindi as per the instruction of the site engineer with approved paints. All materials including paint, paint brush etc. for the job will be arranged by the contractor.</p> <p>Letter size - From 300mm to 450 mm.</p>	NO (Number)	300
340	<p>Letter writing (150 mm to 299 mm)</p> <p>Arrow marking on piping and letter writing on vessels, tanks, signboards, piping, shed, pumps etc. Writing will be in English, Assamese and Hindi as per the instruction of the site engineer with approved paints. All materials including paint, paint brush etc. for the job will be arranged by the contractor.</p> <p>Letter size - From 150 mm to 299 mm</p>	NO (Number)	100
350	<p>Erection of brick/ dyke wall around the Tanks</p> <p>Erection of brick/ dyke wall around the Tanks as per OIL drawing no. OIL/2488 including steps on both side and painting the all exposed surfaces with exterior weather proof paint. All materials will be supplied by the contractor.</p>	M (Meter)	150
360	<p>Additional increase in height of dyke wall</p> <p>Additional increase in height of brick/ dyke wall</p>	M (Meter)	8

	around the Tanks over the Line item no. 410 to match the design of OIL drawing no. OIL/2488 including steps on both side and painting the all exposed surfaces with exterior weather proof paint. All materials will be supplied by the contractor.		
370	<p>Casting of PCC for the Tank Farm Floor</p> <p>Casting of PCC (1:1.5:3) for the tank farm floor, including broken floor in the adjoining areas, supports, drains etc. The job is to be carried out with one layer of brick soling followed by 75 mm cc and as per the directive of the company engineer/ Installation Manager (IM) or his/ her representative. The job involved chipping/breaking/cleaning the existing floor and reconstruction of the same including drainage system. All the material for the job is to be supplied by the contractor. For low lying/ submerged area/pit/ unconsolidated or marshy land, the contractor shall have to develop the area employing all his resources required for the job at his own cost.</p>	M2 (Square Meter)	560
380	<p>Earthing System of Tanks</p> <p>Earthing connection of the storage tanks including supply of all materials. Providing complete earthing system to the constructed tanks, consisting of G. I earthing Bus, Earth Electrodes, connected firmly to the shell, as per drawing/specifications provided in Drawing No. OIL/EPS/ELECT-007, including all the associated jobs. This item includes supply of all materials, fabrication and erection as needed. This item also includes construction of brick/RCC enclosure as per sketch no OIL/EPS/ELECT-002 for earth electrode pits with concrete cover at various locations. There shall be two earth pits constructed for each tank diametrically opposite to each other.</p>	JOB	2
390	<p>Supply of API 600 GATE VALVE with Companion flange, 10"X150 Class RF FLANGED END</p> <p>Supply of API 600 GATE VALVE with Companion flange, 10"X150 Class RF FLANGED END. Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem,</p>	NO (Number)	2

	bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.		
400	Supply of API 600 GATE VALVE with Companion flange, 8"X150 Class RF FLANGED END Supply of API 600 GATE VALVE with Companion flange, 8"X150 Class RF FLANGED END. Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	4
410	Supply of API 600 GATE VALVE with Companion flange, 6"X150 Class RF FLANGED END Supply of API 600 GATE VALVE with Companion flange, 6"X150 Class RF FLANGED END. Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	4
420	Supply of API 600 GATE VALVE with Companion flange, 4"X 150 class RF FLANGED END Supply of API 600 GATE VALVE with Companion flange, 4"X 150 class RF FLANGED END .Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	8
For Construction of 04 nos. of 160 KL capacity Formation water storage tanks			

430	<p>Erection and dismantling of barrier wall</p> <p>Supply, fabrication & erection of barrier wall with CGI sheet to a height of minimum 10metre to isolate the working area from the existing installation on three sides as per the instruction of the site engineer. The wall should be strong enough with proper structural supports and drawings should be submitted to site engineer for approval prior to erection job. No hot job (welding/cutting/grinding etc.) would be allowed at site during the installation of the barrier wall and also in the working place till the wall is completed and the area is made completely gas-free which is to be confirmed by gas testing. The site shall also have to be free from any hazardous/inflammable substances/materials etc. and necessary work permit/clearance from concerned Installation Manager (IM)/Site engineer /in charge must be taken prior to start of the job on daily basis. The required pipes for the posts to be used for erection of barrier wall shall be arranged by company which shall have to be transported by the contractor to the work site for job execution. The contractor shall have to dismantle the so erected barrier walls upon completion of the tank construction job. The Contractor will have to arrange all necessary infrastructure (scaffolding/working platform etc.) to facilitate erection and dismantling of the barrier walls in a safe manner which is to be to the satisfaction of the Site engineer.</p>	M (Meter)	320
440	<p>Dismantling of old (damaged) 160KL tank</p> <p>All the plates and other items must be shifted to a designated place as per direction of Site-engineer/Installation Manager (IM) or his/her representative.</p> <p>The job includes:</p> <p>i) Isolation of Process pipelines: Isolation of all process pipelines (oil / water/ gas/ fire hydrant lines) at the outside of the working area to make the tank completely safe for tank dismantling and fabrication job. The job involves opening up of existing flanged joints/ screwed joints etc. and installation of blind flange / plug in the existing piping leading to the tank farm. Isolation of such pipelines must be displayed by putting signage</p>	NO (Number)	3

	<p>at places clearly visible from all angles/ corners.</p> <p>ii) Internal cleaning of the tanks to make it completely free from oil/gas, sludge etc. and make it ready for dismantling.</p> <p>iii) Dismantling of the existing pipings/ units/connections/fittings etc. from the tanks/tank farm areas and storing of the dismantled components/parts in a nearby location/yard (within 50 metre distance) as directed by the site engineer/Installation Manager (IM) or his/her representative. The job involves dismantling of all types of inlet/outlet lines including valves, walkways, pipe-supports, CC supports etc. inside the tank farm/working area.</p> <p>iv) Dismantling of 160KL capacity old (damaged) tanks by unfastening the bolts/cutting down with oxy/acetylene flame cutting at about 2 mts height from the ground level; or any other approved safe techniques/methods keeping the rest of the tank on the jack supports. In no case the contractor would be allowed to work any hot work beyond 3.75 metres of height above the ground level. In no case the contractor would be allowed to work any hot work beyond the height of the barrier wall during the dismantling. Necessary work permit/clearance from concerned Installation Manager (IM)/Site engineer/in charge must be taken prior to start of the job on daily basis.</p> <p>v) Cleaning and clearing of the area inside the tank dyke/bundh and collection and removal/ disposal of tank bottom sand/earth/sludge by any approved suitable means and transportation to a 'sludge pit' of the company as directed by the Site-engineer/Installation Manager (IM) or his/her representative prior to dismantling of the old (damaged)/earmarked tank. The tank dyke area should be cleaned to the satisfaction of the site engineer/Installation Manager (IM) or his/her representative. The Contractor will have to arrange all necessary infrastructures (scaffolding/working platform etc.) for cleaning job to the satisfaction of site engineer. After cleaning, necessary gas testing would be carried out in these tanks and only after satisfactory test results, these tanks would be allowed to be dismantled by site engineer. The job also</p>		
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	involves cleaning of the outer surfaces and the area inside the tank dyke as and where required to scrap off the oil content.		
450	Dismantling of foundation of 160 KL Tank The job involves breaking of existing damaged tank foundation including RCC column/beam, removal of compacted sand/cement, excavation of earth etc.	NO (Number)	3
460	Design of 160 KL tank Foundation Complete design of 160 KL tank foundation as per API 650 specification, detail engineering, preparation of all drawings and third party approval of all the tanks of 160 KL safe holding capacity, fixed cone roof formation water storage tanks, including its Concrete Ring Wall Foundation. All designs, detail engineering documents and drawings will have to be vetted/certified by Engineers India Limited (EIL)/Projects Development India Limited (PDIL)/ Indian Institute of Technology (IIT) or a third party of repute. The job also includes soil survey of the site for which the Contractor shall have to submit report to the company.	NO (Number)	4
470	160KL RCC foundation without boulder Construction of new RCC foundation without boulder packing for 160 KL tanks: Construction of RCC foundation for the 160 KL tanks as per the approved drawings (Sketch no. OIL/ 4114) should be referred in this case and soil survey report/recommendations as mentioned in item no 460 and painting the external surface with weather proof paint. This job also includes construction of circular drain around the foundation. All materials for construction will be supplied by the contractor. Note: Depending on the soil survey report based on design of the tank as per item no. 460, either item 470 or 480 will be used for construction of RCC foundation.	NO (Number)	4
480	160KL RCC foundation with boulder Construction of RCC foundation with boulder packing for 160 KL tanks: Construction of RCC	NO (Number)	4

	<p>foundation for the 160 KL tanks with boulder packing as per the approved drawings and soil survey report/recommendations as mentioned in item no. 460 and painting the external surface with weather proof paint. This job also includes construction of circular drain around the foundation. All materials for construction will be supplied by the contractor.</p> <p>Note: Depending on the soil survey report based on design of the tank as per item no. 460, either line item 470 or 480 will be used for construction of RCC foundation with boulder packing.</p>		
490	<p>Fabrication and Erection of 160 KL Tank</p> <p>Supply of materials, fabrication and erection of 160 KL capacity fixed roof tank as per OIL Drawings (OIL/3885 and OIL/3886) and API 650 standard along with anti-corrosive coating. The anti-corrosive coating is to be applied for the entire internal surfaces inclusive of tank bottom plate, roof and other structural members. Anti-corrosive coating on all the internal surfaces of the tanks including top and bottom plates shall be applied with High temperature resistant and chemical resistant anti-corrosive solvent free ceramic reinforced composite/ amine cured phenolic epoxy resin coating.</p> <p>The coating shall have 100% solid by Volume, and Mixed Density/specific gravity 1.25 gm/cc Minimum. The Dry Film Thickness (DFT) 300 to 600 microns, two coat system with minimum 150 micron per coat. Dry film thickness shall be measured after each coat using thickness gauge e.g. Mikrotest, Ecometer or any other suitable instruments. Holiday or spark testing shall be done after application of last coat to find nicks, scrapes and pin holes in the coating. The coating shall have tensile shear/Pull off adhesion of Minimum 200 kg/sq cm (2840 psi) as per ASTM D 1002/ASTM D 4541/ISO 4624. The coating shall be chemical resistant to mixture of crude oil & water in continuous emersion as per ASTM D543/ISO 2812-2. Service temperature shall be Minimum 80 Deg C in Wet (Immersion) service condition and Minimum 100 Deg C in Dry service condition as per ASTM D 648. The Surface preparation shall be achieved by</p>	NO (Number)	4

	<p>abrasive/shot blasting to near white metallic as per NACE No. 2/SSPC-SP10, ISO 8501-1, Sa 2 ½, with blast surface profile depth of 75-125 micron. Profile measurement for abrasive blast cleaned surface shall be made with Testex Press-O-Film or other suitable method. Prior to blasting, all weld spatters shall be removed & sharp or rough welds rounded & contoured. Any change in the surface preparation recommended by the OEM of the coating system shall be forwarded in the technical bid for approval by OIL. The application shall be airless spray method. The anti corrosive coating to be applied on internal surfaces of the tank shall be of make Hempel/ Belzona/Chesterton or equivalent and Performance Guarantee of minimum 10 years shall be provided by the OEM to OIL for product as well as application procedure.</p>		
500	<p>Siphon System for 160KL FW tank</p> <p>The contractor has to fabricate and erect the syphon system for the tank(s) as per the site Engineer/ Installation Manager (IM)/ his or her representative. All materials such as pipe, valves, nozzle etc. required for the job will be supplied and fitted by the contractor.</p>	<p>NO (Number)</p>	4
510	<p>External Painting of 160KLs tank</p> <p>Thorough cleaning and painting of external surfaces of the tank including shell, roof, soil side bottom plate and all fittings/accessories etc. connected to the tank body as per direction of company engineer/ Installation Manager/ his or her representative. After putting two coats of Epoxy Zinc Chromate Primer (30 micron DFT in each coat), two coats of aluminium/enamel paint will have to be applied (colour to be approved by Company engineer). For the soil side bottom plate, one coat of Zinc Silicate primer (65 micron DFT) followed by two coats of high build Epoxy black paint (100 micron DFT in each coat) will have to be applied. The plate surfaces shall be adequately cleaned and there shall be no rust/scale left over the plates. Painting jobs shall only be done after completion of cleaning jobs and physical inspection by the company's engineer at site. The Contractor will have to arrange all necessary infrastructure (scaffolding/ working platform etc.) to facilitate painting jobs.</p>	<p>NO (Number)</p>	4

	All paints, primers, painting materials etc. will have to be supplied by the contractor and should be duly approved by the company's engineer prior to application of paint.		
520	<p>Hydraulic testing of 160 KL tank</p> <p>Hydraulic testing of 160 KL tank as per specification and direction of Site Engineer/ Installation Manager/ his or her representative.</p> <p>Note: Source Water for Hydraulic testing will be provided by the Company. However, Temporary pipeline connection etc should be arranged/made by the contractor for lifting/filling water in the tank. For hydraulic testing of the newly fabricated/constructed tanks, all work such as arrangement of suitable pumps for filling of water to the tanks, running of the pump including all necessary connections to the water source will be arranged/executed by the contractor. After filling the tank with water a minimum period of 24 hours duration shall be maintained to observe any possible leakage/settlement of foundation etc.</p>	NO (Number)	4
530	<p>Calibration of the 160 KL tanks</p> <p>Calibration of the 160 kl tanks including all necessary arrangement.</p> <p>Note: Contractor will have to make all necessary arrangements for Calibration of the tanks which are already fabricated and tested. The calibration job is to be done by a Govt. approved agency and relevant documents issued by Govt. authority will have to be submitted to OIL.</p>	NO (Number)	4
540	<p>Transportation of various diameter pipes</p> <p>Transportation of various diameter pipes Bevel/ Screwed up to 250 mm NB diameter to the tank construction sites, from pipe yards at the new/old industrial areas/well-head setup/site/OCS/EPS/Department/ field location including loading and unloading with the help of pipe Trailers/Crane without causing any damage to the pipes/pipe ends. Defective pipes shall be rejected prior to loading/ receiving by the Company Engineer/Installation Manager/ his or her representative. Payment will be made on</p>	LSM (Lumpsum)	4

	<p>Lumpsum basis per tank.</p> <p>Maximum distance - 60 km.</p> <p>Average length of pipe - 12 m.</p>		
550	<p>Transportation of various types of materials</p> <p>Transportation of various types of materials including valves such as gate/plug/ball/check/control valves etc., pipe fittings such as elbow, bend, flange, tee, swage etc. of various sizes ranging up to 250 mm NB diameter, M.S plates, gratings, angle iron, flat bar, rod etc. as per the requirement of the job from OIL godowns near OCS 3/South Bank office/Industrial area etc to the work site in truck/trailer including loading & unloading of such materials. (maximum load per trip - 10 tonnes). Payment will be made on Lumpsum basis per tank.</p>	<p>LSM (Lumpsum)</p>	4
560	<p>Handling of 150mm NB Pipes and Fittings</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working Complex. .This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality through jacks etc. Welding should be as per API 1104 with requisite number of runs.</p>	<p>JT (Joint)</p>	104
570	<p>Handling of 100 mm NB Pipes and Fittings</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working complex. This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality through jacks etc. Welding should be as per API 1104 with requisite</p>	<p>JT (Joint)</p>	104

	number of runs.		
580	<p>Handling, aligning, installatn150mm Fvalve</p> <p>Handling, aligning and installation of 150 mm NB size Flanged type Valves such as control/gate/check/ball/plug valves, etc. with flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets, nuts & bolts (All materials to be supplied by Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site engineer/ Installation Manager (IM) or his/ her representative.</p>	NO (Number)	12
590	<p>Handling, aligning, installatn100mm Fvalve</p> <p>Handling, aligning and installation of For 100 mm NB size Flanged type Valves such as control/gate/check/ball/plug valves, etc. with already existing flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets, nuts & bolts (All materials to be supplied by Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company.. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site engineer/ Installation Manager (IM) or his/ her representative.</p>	NO (Number)	15

600	<p>Handling of 150 mm NB Companion Flange</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as required, complete with jointing materials/nut-bolts (All materials to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company.</p>	PAA (Pair)	12
610	<p>Handling of 100 mm NB Companion Flange</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as required, complete with jointing materials/nut-bolts (All materials to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company.</p>	PAA (Pair)	15
620	<p>Fabrication of various pipe fittings</p> <p>Fabrication of various pipe fittings like Bend, Tee, Reducer etc. by welding including handling, cutting, end preparation etc. The job will be quantified as per unit length of welding measured in centimeter. All materials to be supplied by Contractor. All welding joints shall be as per API 1104 specification.</p>	CM (Centimeter)	3,600
630	<p>Single leg Pipe support</p> <p>Supply, fabrication, welding & erection of Single Leg Pipe Supports, with 100 mm NB. M.S pipes,</p>	NO (Number)	32

	including clamping of pipes up to 1.5 mtr. height, generally as per the sketch no OIL/PO/04. All materials like pipes clamps, base plates, bolts & nuts etc. will be arranged and supplied by the contractor. The job also includes construction of Pillar Foundations for the pipe supports fabricated of size 0.25 m (L)x 0.25 (B) x0.40m (Depth) made out of CC of 1:1.5:3 ratio, including grouting.		
640	<p>Double leg Pipe support</p> <p>Supply, fabrication, welding & erection of Double Leg Pipe Supports: Supply, fabrication, welding & erection of Double Leg Pipe Supports with 100 mm NB. M.S pipes, including clamping of pipes up to 1.5 mtr height, generally as per the sketch no. OIL/PO/05. All materials like pipes, clamps, base plates, bolts & nuts etc. will be arranged and supplied by the contractor. The job also includes Pillar Foundations for the pipe supports fabricated of size 0.25 m (L) x 0.25 (B) x 0.40m (Depth) made out of CC of 1:1.5:3 ratio, including grouting.</p>	NO (Number)	20
650	<p>Concrete Pipe Supports</p> <p>Supply, fabrication, welding & Erection of Concrete Pipe Supports: Supply of all materials, erection, installation, plastering, curing of RCC Pipe Supports (1:1.5:3 mixture) including clamping System/arrangement as per OIL drawing no. OIL/PSS/01. Provision of clamping with the help of U clamps with nuts to clamp different diameter pipes with nuts and washers including all civil construction materials will have to be supplied by the contractor. All the supplied materials must be approved by OIL prior to erection including material test certificates and other documents.</p>	M3 (Cubic Meter)	120
660	<p>Walkway and walkway platform</p> <p>Supply, Fabrication and erection of walkway and walkway platform of 750 mm width with railings over the pipe/bunch of pipes, bundh, dyke wall, drains etc. as per sketch no. OIL/PP/17 supplied herewith (which is a representative drawing of walkways and which may be adjusted as per requirement depending on availability of space). The contractor will supply all necessary</p>	M (Meter)	162

	materials like M S Grating (500 mm width), support pipes, Angle iron frame, railing etc. and prior approval for all materials will have to be obtained from the company representative. After fabrication/erection, the posts are to be grouted out of CC composition 1:1.5:3 as per directive of site engineer/ Installation Manager (IM) or his/ her representative. All grouting materials will be supplied by the contractor. Size of the grouting 0.2 m (L) x 0.2 m (W) x 0.4 m (H).		
670	<p>Radiographic inspections Pipe/welded Joints</p> <p>Radiographic inspection of pipe/welded joints by a third party inspection agency (approved by BARC) as directed by the site engineer/ Installation Manager (IM) or his/ her representative. All necessary equipment including the inspection agency to be arranged by the contractor at his/her own cost (no reimbursement shall be entertained by company) with the approval of the company engineer/ Installation Manager (IM) or his/ her representative. Certification from the third party inspection agency to the effect shall have to be deposited to OIL.</p> <p>Size: 150mm NB/100mm NB. (for pipe joints)</p>	NO (Number)	162
680	<p>Letter writing (300 mm to 450 mm)</p> <p>Arrow marking on piping and letter writing on vessels, tanks, signboards, piping, shed, pumps etc. Writing will be in English, Assamese and Hindi as per the instruction of the site engineer with approved paints. All materials including paint, paint brush etc. for the job will be arranged by the contractor.</p> <p>Letter size - From 300mm to 450 mm</p>	NO (Number)	160
690	<p>Letter writing (150 mm to 299 mm)</p> <p>Arrow marking on piping and letter writing on vessels, tanks, signboards, piping, shed, pumps etc. Writing will be in English, Assamese and Hindi as per the instruction of the site engineer with approved paints. All materials including paint, paint brush etc. for the job will be arranged by the contractor.</p>	NO (Number)	160

	Letter size - From 150 mm to 299 mm		
700	Erection of brick wall around the Tanks Erection of brick wall around the Tanks as per OIL drawing no. OIL/2488 including steps on both side and painting the all exposed surfaces with exterior weather proof paint. All materials will be supplied by the contractor.	M (Meter)	240
710	Casting of PCC for the Tank Farm Floor Casting of PCC (1:1.5:3) for the tank farm floor, including broken floor in the adjoining areas, supports, drains etc. The job is to be carried out with one layer of brick soling followed by 75 mm cc and as per the directive of the company engineer/ Installation Manager (IM) or his/ her representative. The job involved chipping/breaking/cleaning the existing floor and reconstruction of the same including drainage system. All the material for the job is to be supplied by the contractor.	M2 (Square Meter)	880
720	Earthing System of Tanks Earthing connection of the storage tanks including supply of all materials. Providing complete earthing system to the constructed tanks, consisting of G. I earthing Bus, Earth Electrodes, connected firmly to the shell, as per drawing/specifications provided in Drawing No. OIL/EPS/ELECT-007, including all the associated jobs. This item includes supply of all materials, fabrication and erection as needed. This item also includes construction of brick/RCC enclosure as per sketch no OIL/EPS/ELECT-002 for earth electrode pits with concrete cover at various locations.	JOB	4
730	Supply of API600 6"x150 F-end GATE VALVE Supply of API 600 GATE VALVE with Companion flange, 6"X150 Class RF FLANGED END. Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-	NO (Number)	8

	16.10 & tested as per API 598 specification.		
740	Supply of API600 4"x150 F-end GATE VALVE Supply of API 600 GATE VALVE with Companion flange, 4"X 150 class RF FLANGED END . Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	12
750	Supply of API600 2"x150 F-end GATE VALVE Supply of API 600 GATE VALVE & Companion flange 2"X150 Class RF FLANGED END with companion flange stud & nuts: Cast Carbon Steel Gate valve as per API 600 specification regular bore type rising stem bolted bonnet outside screw and yoke integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	4
For Construction 03 nos. of 40 KL capacity Formation water storage tanks			
760	Erection and dismantling of barrier wall Supply, fabrication & erection of barrier wall with CGI sheet to a height of minimum 10metre to isolate the working area from the existing installation on three sides as per the instruction of the site engineer. The wall should be strong enough with proper structural supports and drawings should be submitted to site engineer for approval prior to erection job. No hot job (welding/cutting/grinding etc.) would be allowed at site during the installation of the barrier wall and also in the working place till the wall is completed and the area is made completely gas-free which is to be confirmed by gas testing. The site shall also have to be free from any hazardous/inflammable substances/materials etc. and necessary work permit/clearance from concerned Installation Manager (IM)/Site engineer /in charge must be taken prior to start of the job on daily basis. The required pipes for	M (Meter)	240

	<p>the posts to be used for erection of barrier wall shall be arranged by company which shall have to be transported by the contractor to the work site for job execution. The contractor shall have to dismantle the so erected barrier walls upon completion of the tank construction job. The Contractor will have to arrange all necessary infrastructure (scaffolding/working platform etc.) to facilitate erection and dismantling of the barrier walls in a safe manner which is to be to the satisfaction of the Site engineer.</p>		
770	<p>Dismantling of old (damaged) 40KL tank</p> <p>All the plates and other items must be shifted to a designated place as per direction of Site-engineer/Installation Manager (IM) or his/her representative.</p> <p>The job includes:</p> <p>i) Isolation of Process pipelines: Isolation of all process pipelines (oil / water/ gas/ fire hydrant lines) at the outside of the working area to make the tank completely safe for tank dismantling and fabrication job. The job involves opening up of existing flanged joints/ screwed joints etc. and installation of blind flange / plug in the existing piping leading to the tank farm. Isolation of such pipelines must be displayed by putting signage at places clearly visible from all angles/ corners.</p> <p>ii) Internal cleaning of the tanks to make it completely free from oil/gas, sludge etc. and make it ready for dismantling.</p> <p>iii) Dismantling of the existing pipings/ units/connections/fittings etc. from the tanks/tank farm areas and storing of the dismantled components/parts in a nearby location/yard (within 50 metre distance) as directed by the site engineer/Installation Manager (IM) or his/her representative. The job involves dismantling of all types of inlet/outlet lines including valves, walkways, pipe-supports, CC supports etc. inside the tank farm/working area.</p> <p>iv) Dismantling of 40KL capacity old (damaged) tanks by unfastening the bolts/cutting down with oxy/acetylene flame cutting at about 2 mts height from the ground level; or any other</p>	NO (Number)	3

	<p>approved safe techniques/methods keeping the rest of the tank on the jack supports. In no case the contractor would be allowed to work any hot work beyond 3.75 metres of height above the ground level. In no case the contractor would be allowed to work any hot work beyond the height of the barrier wall during the dismantling. Necessary work permit/clearance from concerned Installation Manager (IM)/Site engineer/in charge must be taken prior to start of the job on daily basis.</p> <p>v) Cleaning and clearing of the area inside the tank dyke/bundh and collection and removal/disposal of tank bottom sand/earth/sludge by any approved suitable means and transportation to a 'sludge pit' of the company as directed by the Site-engineer/Installation Manager (IM) or his/her representative prior to dismantling of the old (damaged)/earmarked tank. The tank dyke area should be cleaned to the satisfaction of the site engineer/Installation Manager (IM) or his/her representative. The Contractor will have to arrange all necessary infrastructures (scaffolding/working platform etc.) for cleaning job to the satisfaction of site engineer. After cleaning, necessary gas testing would be carried out in these tanks and only after satisfactory test results, these tanks would be allowed to be dismantled by site engineer. The job also involves cleaning of the outer surfaces and the area inside the tank dyke as and where required to scrap off the oil content.</p>		
780	<p>Dismantling of foundation of 40 KL Tank:</p> <p>The job involves breaking of existing damaged tank foundation including RCC column/beam, removal of compacted sand/cement, excavation of earth etc.</p>	NO (Number)	3
790	<p>Design of 40 KL tank Foundation</p> <p>Complete design of 40 KL tank foundation as per API 650 specification, detail engineering preparation of all drawings and third party approval of all the tanks of 40 KL safe holding capacity fixed cone roof formation water storage tanks including its Concrete Ring Wall Foundation. All designs detail engineering documents and drawings will have to be</p>	NO (Number)	3

	vetted/certified by Engineers India Limited (EIL)/Projects Development India Limited (PDIL)/ Indian Institute of Technology (IIT) or a third party of repute. The job also includes soil survey of the site for which the Contractor shall have to submit report to the company.		
800	<p>40KL RCC foundation without boulder</p> <p>Construction of new RCC foundation without boulder packing for 40 KL tank: Construction of RCC foundation for 40 KL tank as per the approved drawings and soil survey report/recommendations as mentioned in line no 790 and painting the external surface with weather proof paint. This job also includes construction of circular drain around the foundation. All materials for construction will be supplied by the contractor.</p> <p>Note: Depending on the soil survey report based on design of the tank as per line item no. 790 either line item 800 or 810 will be used for construction of RCC foundation.</p>	NO (Number)	3
810	<p>40KL RCC foundation with boulder</p> <p>Construction of RCC foundation with boulder packing for 40 KL tank: Construction of RCC foundation for 40 KL tanks with boulder packing as per the approved drawings and soil survey report/recommendations as mentioned in item no 790 and painting the external surface with weather proof paint. This job also includes construction of circular drain around the foundation. All materials for construction will be supplied by the contractor.</p> <p>Note: Depending on the soil survey report based on design of the tank as per line item no. 790 either line item 800 or 810 will be used for construction of RCC foundation with boulder packing.</p>	NO (Number)	3
820	<p>Fabrication and Erection of 40 KL Tank</p> <p>Supply of materials fabrication and erection of 40 KL capacity fixed roof tank as per OIL Drawings (OIL/2402) and API 650 standard along with anti-corrosive coating.</p> <p>i) The anti-corrosive coating is to be applied for</p>	NO (Number)	3

	<p>the entire internal surfaces inclusive of tank bottom plate roof and other structural members. Anti-corrosive coating on all the internal surfaces of the tanks including top and bottom plates shall be applied with High temperature resistant and chemical resistant anti-corrosive solvent free ceramic reinforced composite/ amine cured phenolic epoxy resin coating.</p> <p>ii) The coating shall have 100% solid by Volume and Mixed Density/specific gravity 1.25 gm/cc Minimum. The Dry Film Thickness (DFT) 300 to 600 microns two coat system with minimum 150 micron per coat. Dry film thickness shall be measured after each coat using thickness gauge e.g. Mikrotest Ecometer or any other suitable instruments. Holiday or spark testing shall be done after application of last coat to find nicks scrapes and pin holes in the coating.</p> <p>iii) The coating shall have tensile shear/Pull off adhesion of Minimum 200 kg/sq cm (2840 psi) as per ASTM D 1002/ASTM D 4541/ISO 4624. The coating shall be chemical resistant to mixture of crude oil & water in continuous emersion as per ASTM D543/ISO 2812-2. Service temperature shall be Minimum 80 Deg C in Wet (Immersion) service condition and Minimum 100 Deg C in Dry service condition as per ASTM D 648. The Surface preparation shall be achieved by abrasive/shot blasting to near white metallic as per NACE No. 2/SSPC-SP10 ISO 8501-1 Sa 2 ½ with blast surface profile depth of 75-125 micron. Profile measurement for abrasive blast cleaned surface shall be made with Testex Press-O-Film or other suitable method. Prior to blasting all weld spatters shall be removed & sharp or rough welds rounded & contoured. Any change in the surface preparation recommended by the OEM of the coating system shall be forwarded in the technical bid for approval by OIL. The application shall be airless spray method.</p> <p>iv) The anti corrosive coating to be applied on internal surfaces of the tank shall be of make Hempel/ Belzona/Chesterton or equivalent and Performance Guarantee of minimum 10 years shall be provided by the OEM to OIL for product as well as application procedure.</p> <p>The contractor has to fabricate and erect the</p>		
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	syphon system for the tank(s) as per the site Engineer/ Installation Manager (IM)/ his or her representative. All materials such as pipe valves nozzle etc. required for the job will be supplied and fitted by the contractor.		
830	<p>External Painting of 40KLs tank</p> <p>Thorough cleaning and painting of external surfaces of the tank including shell, roof, soil side bottom plate and all fittings/accessories etc. connected to the tank body as per direction of company engineer/ Installation Manager/ his or her representative. After putting two coats of Epoxy Zinc Chromate Primer (30 micron DFT in each coat), two coats of aluminium/enamel paint will have to be applied (colour to be approved by Company engineer). For the soil side bottom plate, one coat of Zinc Silicate primer (65 micron DFT) followed by two coats of high build Epoxy black paint (100 micron DFT in each coat) will have to be applied. The plate surfaces shall be adequately cleaned and there shall be no rust/scale left over the plates. Painting jobs shall only be done after completion of cleaning jobs and physical inspection by the company's engineer at site. The Contractor will have to arrange all necessary infrastructure (scaffolding/ working platform etc.) to facilitate painting jobs. All paints, primers, painting materials etc. will have to be supplied by the contractor and should be duly approved by the company's engineer prior to application of paint.</p>	NO (Number)	3
840	<p>Hydraulic testing of 40 KL tank</p> <p>Hydraulic testing of 40 KL tank as per specification and direction of Site Engineer/ Installation Manager/ his or her representative.</p> <p>Note: Source Water for Hydraulic testing will be provided by the Company. However Temporary pipeline connection etc should be arranged/made by the contractor for lifting/filling water in the tank. For hydraulic testing of the newly fabricated/constructed tanks all work such as arrangement of suitable pumps for filling of water to the tanks running of the pump including the water source will be arranged/executed by the contractor. After filling the tank with water a minimum period of 24</p>	NO (Number)	3

	hours duration shall be maintained to observe any possible leakage/settlement of foundation etc.		
850	<p>Calibration of the 40 KL tanks</p> <p>Calibration of the 40 KL tanks including all necessary arrangement.</p> <p>Note: Contractor will have to make all necessary arrangements for Calibration of the tanks which are already fabricated and tested. The calibration job is to be done by a Govt. approved agency and relevant documents issued by Govt. authority will have to be submitted to OIL.</p>	NO (Number)	3
860	<p>Transportation of various diameter pipes</p> <p>Transportation of various diameter pipes Bevel/ Screwed up to 250 mm NB diameter to the tank construction sites, from pipe yards at the new/old industrial areas/well-head setup/site/OCS/EPS/Department/field location including loading and unloading with the help of pipe Trailers/Crane without causing any damage to the pipes/pipe ends. Defective pipes shall be rejected prior to loading/ receiving by the Company Engineer/Installation Manager/ his or her representative. Payment will be made on Lumpsum basis per tank.</p> <p>Maximum distance - 60 km.</p> <p>Average length of pipe - 12 m.</p>	LSM (Lumpsum)	3
870	<p>Transportation of various types of materials</p> <p>Transportation of various types of materials including valves such as gate/plug/ ball/check/control valves etc., pipe fittings such as elbow, bend, flange, tee, swage etc. of various sizes ranging up to 250 mm NB diameter, M.S plates, gratings, angle iron, flat bar, rod etc. as per the requirement of the job from OIL godowns near OCS 3/South Bank office/Industrial area etc to the work site in truck/trailer including loading & unloading of such materials. (maximum load per trip - 10 tonnes). Payment will be made on Lumpsum basis per tank.</p>	LSM (Lumpsum)	3
880	Handling of 150mm NB Pipes and Fittings	JT	32

	Handling, laying, aligning, swabbing, purging and Welding of bevel ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working Complex. .This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality through jacks etc. Welding should be as per API 1104 with requisite number of runs.	(Joint)	
890	<p>Handling of 100 mm NB Pipes and Fittings</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working complex. This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality through jacks etc. Welding should be as per API 1104 with requisite number of runs.</p>	JT (Joint)	52
900	<p>Handling,aligning,installatn100mm Fvalve</p> <p>Handling, aligning and installation of For 100 mm NB size Flanged type Valves such as control/gate/check/ball/plug valves, etc. with already existing flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets, nuts & bolts (All materials to be supplied by Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company.. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site</p>	NO (Number)	6

	engineer/ Installation Manager (IM) or his/ her representative.		
910	<p>Handling of 100 mm NB Companion Flange</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as required, complete with jointing materials/nut-bolts (All materials to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company.</p>	PAA (Pair)	6
920	<p>Fabrication of various pipe fittings</p> <p>Fabrication of various pipe fittings like Bend, Tee, Reducer etc. by welding including handling, cutting, end preparation etc. The job will be quantified as per unit length of welding measured in centimeter. All materials to be supplied by Contractor. All welding joints shall be as per API 1104 specification.</p>	CM (Centimeter)	1800
930	<p>Single leg Pipe support</p> <p>Supply, fabrication, welding & erection of Single Leg Pipe Supports, with 100 mm NB. M.S pipes, including clamping of pipes up to 1.5 mtr. height, generally as per the sketch no OIL/PO/04. All materials like pipes clamps, base plates, bolts & nuts etc. will be arranged and supplied by the contractor. The job also includes construction of Pillar Foundations for the pipe supports fabricated of size 0.25 m (L)x 0.25 (B) x0.40m (Depth) made out of CC of 1:1.5:3 ratio, including grouting.</p>	NO (Number)	16
940	<p>Concrete Pipe Supports</p> <p>Supply, fabrication, welding & Erection of Concrete Pipe Supports: Supply of all materials, erection, installation, plastering, curing of RCC Pipe Supports (1:1.5:3 mixture) including</p>	M3 (Cubic Meter)	60

	clamping System/arrangement as per OIL drawing no. OIL/PSS/01. Provision of clamping with the help of U clamps with nuts to clamp different diameter pipes with nuts and washers including all civil construction materials will have to be supplied by the contractor. All the supplied materials must be approved by OIL prior to erection including material test certificates and other documents.		
950	<p>Walkway and walkway platform</p> <p>Supply, Fabrication and erection of walkway and walkway platform of 750 mm width with railings over the pipe/bunch of pipes, bundh, dyke wall, drains etc. as per sketch no. OIL/PP/17 supplied herewith (which is a representative drawing of walkways and which may be adjusted as per requirement depending on availability of space). The contractor will supply all necessary materials like M S Grating (500 mm width), support pipes, Angle iron frame, railing etc. and prior approval for all materials will have to be obtained from the company representative. After fabrication/erection, the posts are to be grouted out of CC composition 1:1.5:3 as per directive of site engineer/ Installation Manager (IM) or his/ her representative. All grouting materials will be supplied by the contractor. Size of the grouting 0.2 m (L) x 0.2 m (W) x 0.4 m (H).</p>	M (Meter)	36
960	<p>Radiographic inspections Pipe/welded Joints</p> <p>Radiographic inspection of pipe/welded joints by a third party inspection agency (approved by BARC) as directed by the site engineer/ Installation Manager (IM) or his/ her representative. All necessary equipment including the inspection agency to be arranged by the contractor at his/her own cost (no reimbursement shall be entertained by company) with the approval of the company engineer/ Installation Manager (IM) or his/ her representative. Certification from the third party inspection agency to the effect shall have to be deposited to OIL.</p> <p>Size: 150mm NB/ 100mm NB. (for pipe joints)</p>	NO (Number)	96
970	Letter writing (300 mm to 450 mm)	NO	80

	<p>Arrow marking on piping and letter writing on vessels, tanks, signboards, piping, shed, pumps etc. Writing will be in English, Assamese and Hindi as per the instruction of the site engineer with approved paints. All materials including paint, paint brush etc. for the job will be arranged by the contractor.</p> <p>Letter size - From 300mm to 450 mm</p>	(Number)	
980	<p>Letter writing (150 mm to 299 mm)</p> <p>Arrow marking on piping and letter writing on vessels, tanks, signboards, piping, shed, pumps etc. Writing will be in English, Assamese and Hindi as per the instruction of the site engineer with approved paints. All materials including paint, paint brush etc. for the job will be arranged by the contractor.</p> <p>Letter size - From 150 mm to 299 mm</p>	<p>NO (Number)</p>	180
990	<p>Erection of brick wall around the Tanks</p> <p>Erection of brick wall around the Tanks as per OIL drawing no. OIL/2488 including steps on both side and painting the all exposed surfaces with exterior weather proof paint. All materials will be supplied by the contractor.</p>	<p>M (Meter)</p>	120
1000	<p>Casting of PCC for the Tank Farm Floor</p> <p>Casting of PCC for the Tank Farm Floor: Casting of PCC (1:1.5:3) for the tank farm floor, including broken floor in the adjoining areas, supports, drains etc. The job is to be carried out with one layer of brick soling followed by 75 mm cc and as per the directive of the company engineer/ Installation Manager (IM) or his/ her representative. The job involved chipping/breaking/cleaning the existing floor and reconstruction of the same including drainage system. All the material for the job is to be supplied by the contractor.</p>	<p>M2 (Square Meter)</p>	540
1010	<p>Earthing System of Tanks</p> <p>Earthing connection of the storage tanks including supply of all materials. Providing complete earthing system to the constructed tanks, consisting of G. I earthing Bus, Earth</p>	JOB	3

	Electrodes, connected firmly to the shell, as per drawing/specifications provided in Drawing No. OIL/EPS/ELECT-007, including all the associated jobs. This item includes supply of all materials, fabrication and erection as needed. This item also includes construction of brick/RCC enclosure as per sketch no OIL/EPS/ELECT-002 for earth electrode pits with concrete cover at various locations.		
1020	Supply of API600 6"x150 F-end GATE VALVE Supply of API 600 GATE VALVE with Companion flange, 6"X150 Class RF FLANGED END. Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	6
1030	Supply of API600 4"x150 F-end GATE VALVE Supply of API 600 GATE VALVE with Companion flange, 4"X 150 class RF FLANGED END . Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	9
1040	Supply of API600 2"x150 F-end GATE VALVE Supply of API 600 GATE VALVE & Companion flange 2"X150 Class RF FLANGED END with companion flange stud & nuts: Cast Carbon Steel Gate valve as per API 600 specification regular bore type rising stem bolted bonnet outside screw and yoke integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	3
For Construction 02 nos. of 500 KL capacity Formation water storage tanks			

1050	<p>Erection and dismantling of barrier wall</p> <p>Erection of barrier wall with CGI sheet to a height of minimum 10 metre to isolate the working area from the existing installation on three sides as per the instruction of the site engineer. The wall should be strong enough with proper structural supports and drawings should be submitted to site engineer for approval prior to erection job. No hot job (welding/ cutting/ grinding etc.) would be allowed at site during the installation of the barrier wall and also in the working place till the wall is completed and the area is made completely gas-free which is to be confirmed by gas testing. The site shall also have to be free from any hazardous / inflammable substances/ materials etc. and necessary work permit / clearance from concerned Installation Manager (IM)/ Site engineer/ in charge must be taken prior to start of the job on daily basis. The required pipes for the posts to be used for erection of barrier wall shall be arranged by company which shall have to be transported by the contractor to the work site from the place of handing over for job execution. The contractor shall have to dismantle the so erected barrier walls upon completion of the tank construction job. The Contractor will have to arrange all necessary infrastructure (scaffolding/ working platform etc.) to facilitate erection and dismantling of the barrier walls in a safe manner which is to be to the satisfaction of the Site engineer.</p>	M (Meter)	200
1060	<p>Design of 795 KL tank with Foundation:</p> <p>Complete design of 795 KL tank as per API 650 specification, detailed engineering, preparation of all drawings and third party approval of all the tanks of 795 KL safe holding capacity, fixed cone roof crude oil storage tanks, including its Concrete Ring Wall Foundation. All designs, detailed engineering documents and drawings will have to be vetted/certified by Engineers India Limited (EIL)/Projects Development India Limited (PDIL)/ Indian Institute of Technology (IIT) or a third party of repute. The job also includes soil survey of the site for which the Contractor shall have to submit report to the company.</p>	NO (Number)	2

1070	<p>Isolation of Process pipelines:</p> <p>Isolation of all process pipelines (e.g., oil / water/ gas/ fire fighting/bleed-off system etc.) from old tank earmarked to be dismantled, to make the tank completely safe for dismantling/ erection & fabrication job. The job involves opening up/ removal of existing flanged / screwed joints etc. and installation of blind flange(s)/ plug(s) in the pipings leading to the tanks/ process in operation. Isolation of such pipelines must be displayed by putting appropriate signage/ playcard at places clearly visible from all directions/ corners.</p>	NO (Number)	8
1080	<p>Construction of new RCC foundation for 795 KL tank</p> <p>Construction of new RCC foundation for 795 KL tank as per the approved OIL drawing (OIL/4113 should be referred in this case). and soil survey report/recommendations as mentioned in line no. 1060 and painting the external surface with weather proof paint. This job also includes construction of circular drain around the foundation. For low lying/ submerged area/pit/ unconsolidated or marshy land, the contractor shall have to develop the area required for the job at his own cost. All materials for construction will be supplied by the contractor. Contractor will have to employ all the resources required for such construction activity at his own cost.</p> <p>Note: Depending on the soil survey report based on design of the tank as per line item no. 1060, either line item 1080 or 1090 will be used for construction of RCC foundation.</p>	NO (Number)	2
1090	<p>Construction of RCC foundation with boulder packing for 795 KL tank:</p> <p>Construction of RCC foundation for the 795 KL tank with boulder packing as per the approved drawing (OIL/4113 should be referred in this case) and soil survey report/recommendations as mentioned in line no 1060 and painting the external surface with weather proof paint. This job also includes construction of circular drain around the foundation. For low lying/ submerged area/pit/ unconsolidated or marshy land, the contractor shall have to develop the</p>	NO (Number)	2

	<p>area required for the job at his own cost. All materials for construction will be supplied by the contractor. Contractor will have to employ all the resources required for such construction activity at his own cost.</p> <p>Note: Depending on the soil survey report based on design of the tank as per line item no. 20, either line item 1080 or 1090 will be used for construction of RCC foundation with boulder packing.</p>		
1100	<p>Fabrication and Erection of 795 KL Tank:</p> <p>Supply of materials, fabrication and erection of 795 KL capacity fixed roof tank using jack-up method as per OIL Drawings (OIL/3077, OIL/0559 and OIL/4240) and API 650 standard along with anti-corrosive coating. The anti-corrosive coating is to be applied for the entire internal surfaces inclusive of tank bottom plate, roof and other structural members. Anti-corrosive coating on all the internal surfaces of the tanks including top and bottom plates shall be applied with High temperature resistant and chemical resistant anti-corrosive solvent free ceramic reinforced composite/ amine cured phenolic epoxy resin coating. The coating shall have 100% solid by Volume, and Mixed Density/specific gravity 1.25 gm/cc Minimum. The Dry Film Thickness (DFT) 300 to 600 microns, two coat system with minimum 150 micron per coat. Dry film thickness shall be measured after each coat using thickness gauge e.g. Mikrotest, Ecometer or any other suitable instruments. Holiday or spark testing shall be done after application of last coat to find nicks, scrapes and pin holes in the coating. The coating shall have tensile shear/Pull off adhesion of Minimum 200 kg/sq cm (2840 psi) as per ASTM D 1002/ASTM D 4541/ISO 4624. The coating shall be chemical resistant to mixture of crude oil & water in continuous emersion as per ASTM D543/ISO 2812-2. Service temperature shall be Minimum 80 Deg C in Wet (Immersion) service condition and Minimum 100 Deg C in Dry service condition as per ASTM D 648. The Surface preparation shall be achieved by abrasive/shot blasting to near white metallic as per NACE No. 2/SSPC-SP10, ISO 8501-1, Sa 2 ½, with blast surface profile depth of 75-125</p>	NO (Number)	2

	<p>micron. Profile measurement for abrasive blast cleaned surface shall be made with Testex Press-O-Film or other suitable method. Prior to blasting, all weld spatters shall be removed & sharp or rough welds rounded & contoured. Any change in the surface preparation recommended by the OEM of the coating system shall be forwarded in the technical bid for approval by OIL. The application shall be airless spray method. The anti corrosive coating to be applied on internal surfaces of the tank shall be of make Hempel/ Belzona/Chesterton/AkzoNobel or equivalent meeting the afore-stated specifications and Performance Guarantee of minimum 10 years shall be provided by the OEM to OIL for product as well as the application procedure. Third party inspection report with special mention of meeting the afore-stated specifications in this regard shall have to be submitted by the contractor upon completion of the job. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job. He contractor has to fabricate and erect the syphon system for the tank(s) as per the site Engineer/ Installation Manager (IM)/ his or her representative. All materials such as pipes, valves, nozzle etc. required for the job will be supplied and fitted by the contractor. In this regard drawing nos. OIL/PO/10 or, PSS-SIP-01 or, PSS-SIP-02 (whichever applicable) shall be referred by contractor.</p>		
1110	<p>External Painting:</p> <p>Thorough cleaning and painting of external surfaces of the tank including shell, roof, soil side bottom plate (before installation) and all fittings/accessories etc. connected to the tank body as per direction of company engineer/ Installation Manager/ his or her representative. After putting two coats of Epoxy Zinc Chromate Primer (30 micron DFT in each coat), two coats of aluminium/enamel paint will have to be applied (colour to be approved by Company engineer). For the soil side bottom plate, one coat of Zinc Silicate primer (65 micron DFT) followed by two coats of high build Epoxy black paint (100 micron DFT in each coat) will have to be applied. The plate surfaces shall be adequately cleaned and there shall be no rust/scale left on</p>	<p>M2 (Square Meter)</p>	1,716

	<p>the plates. Painting jobs shall only be done after completion of cleaning jobs and physical inspection by the company's engineer at site. The Contractor will have to arrange all necessary infrastructures including scaffolding/ working platform etc. to facilitate painting jobs. All paints, primers, painting materials etc. will have to be supplied by the contractor and should be duly approved by the company's engineer prior to application of paint. Third party inspection report with special mention of meeting the afore-stated specifications in this regard shall have to be submitted by the contractor upon completion of the job.</p>		
1120	<p>Hydraulic testing of 795 KL tank</p> <p>Hydraulic testing of 795 KL tank as per specification and direction of Site Engineer/ Installation Manager/ his or her representative. Source Water for Hydraulic testing will be provided by the Company wherever available. In case source water is not available from Company's side, contractor shall have to arrange the same at his own cost. However, Temporary pipeline connection etc. should be arranged/made by the contractor for lifting/filling water in the tank. For hydraulic testing of the newly fabricated/constructed tanks, all works such as arrangement of suitable pumps for filling of water to the tank, operation/running of the pump including all necessary connections to and from the water source will be arranged/executed by the contractor. After filling the tank with water, a minimum period of 24 hours duration shall be maintained to observe any possible leakage/settlement of foundation etc. Necessary hydraulic test report including the pressure test chart record certified by the Installation Manager shall have to be submitted by the contractor.</p>	JOB	2
1130	<p>Calibration of the 795 KL tank</p> <p>Calibration of the 795 KL tank including all necessary arrangement.</p> <p>Contractor will have to make all necessary arrangements for Calibration of the tanks which are already fabricated and tested. The calibration job is to be done by a Govt. approved agency and</p>	JOB	2

	relevant documents issued by Govt. authority will have to be submitted to OIL.		
1140	<p>Transportation of various diameter pipes</p> <p>Transportation of various diameter pipes (Bevel end/ Screwed) up to 250 mm NB diameter (provided by OIL) from OIL's Materials Dept. godown/pipe yards at the new/old industrial areas / well-head setup / site / OCS / EPS / Department/field location including loading and unloading with the help of pipe Trailers/Crane without causing any damage to the pipes/pipe ends. Defective pipes shall be rejected prior to loading/ receiving by the Company Engineer/Installation Manager/ his or her representative. The contractor will have to bear all the cost required for the job. Maximum distance - 60 km. Average length of pipe - 11.90 m.</p>	TKM (Ton-Kilometre)	536
1150	<p>Transportation of various types of materials</p> <p>Transportation of various types of materials (provided by OIL) including valves such as gate/plug/ ball/check/control valves etc., pipe fittings of various sizes ranging up to 250 mm NB diameter such as elbow, bend, flange, tee, swage etc. M.S plates, gratings, angle iron, flat bar, rod etc. as per the requirement of the job from OIL's Materials Dept. godown/pipe yards near OCS 3/South Bank office/Industrial area etc. including loading & unloading to the work site in truck/trailer without causing any damage to the materials. Defective materials shall be rejected prior to loading/ receiving by the Company Engineer/Installation Manager/ his or her representative. The contractor will have to bear all the cost required for the job.(maximum load per trip - 10 tonnes).</p>	TRP (Trip)	2
1160	<p>Handling of 250mm NB Pipes and Fittings:</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel/ screwed ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working</p>	JT (Joint)	20

	Complex. This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality etc. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.		
1170	<p>Handling of 200mm NB Pipes and Fittings:</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working Complex. .This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality etc. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	JT (Joint)	20
1180	<p>Handling of 150mm NB Pipes and Fittings:</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel ended pipes and various fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working Complex. This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality etc. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	JT (Joint)	50
1190	<p>Handling of 100mm NB Pipes and Fittings:</p> <p>Handling, laying, aligning, swabbing, purging and Welding of bevel ended pipes and various</p>	JT (Joint)	50

	<p>fittings such as flange, bend, reducer, elbow tee etc. (All materials to be supplied by Contractor) on ground/above ground/underground/elevated position for making connection to various equipment/vessel/tank within the working complex. This job also includes bending of pipes through appropriate method/ repair of pipe ends etc., if necessary, with cutting torch, grinding, removing ovality etc. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>		
1200	<p>Handling, aligning, installation of 250 valves</p> <p>Handling, aligning and installation of 250 mm NB size Flanged type Valves such as control/gate/check/ball/plug valves, etc. with flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets and nuts & bolts etc. (to be supplied by Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site engineer/ Installation Manager (IM) or his/ her representative. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	<p>NO (Number)</p>	2
1210	<p>Handling, aligning, installation of 200 valves</p> <p>Handling, aligning and installation of 200 mm NB size Flanged type Valves such as control/gate/check/ball/plug valves, etc. with already existing flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets and nuts & bolts etc. (to be supplied by</p>	<p>NO (Number)</p>	4

	<p>Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site engineer/ Installation Manager (IM) or his/ her representative. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>		
1220	<p>Handling, aligning, installation of 150 valves</p> <p>Handling, aligning and installation of 150 mm NB size Flanged type Valves such as control/gate/check/ball/plug valves, etc. with already existing flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets and nuts & bolts etc. (to be supplied by Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site engineer/ Installation Manager (IM) or his/ her representative. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	<p>NO (Number)</p>	4
1230	<p>Handling, aligning, installation of 100 valves</p> <p>Handling, aligning and installation of 100 mm NB size Flanged type Valves such as</p>	<p>NO (Number)</p>	8

	control/gate/check/ball/plug valves, etc. with already existing flanges on pipeline laid over ground/ underground/ overhead or at all elevation wherever required with proper gaskets and nuts & bolts etc. (to be supplied by Contractor) in both sides as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of valves the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company.. Before installation, the valves to be tested hydraulically to the requisite pressure as per the instruction of the site engineer/ Installation Manager (IM) or his/ her representative. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.		
1240	<p>Handling of 250 mm NB Companion Flange:</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as required, complete with jointing materials/nut-bolts etc. (to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	PAA (Pair)	4
1250	<p>Handling of 200 mm NB Companion Flange:</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as</p>	PAA (Pair)	8

	required, complete with jointing materials/nut-bolts etc. (to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.		
1260	<p>Handling of 150 mm NB Companion Flange:</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as required, complete with jointing materials/nut-bolts etc. (to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	PAA (Pair)	4
1270	<p>Handling of 100 mm NB Companion Flange:</p> <p>Handling, aligning and hooking up of Companion Flanges on pipe lines over ground/ underground/ overhead or at all elevation as required, complete with jointing materials/nut-bolts etc. (to be supplied by Contractor) wherever required as per the instruction of site engineer/ Installation Manager (IM) or his/ her representative. In case of generation of shear/deformations on the pipelines or its fittings after the activity on either side of Flange</p>	PAA (Pair)	8

	the same will have to be repaired/rectified to bring back the same to the original condition by the Contractor at his/her own cost and no compensation to the effect shall be entertained by the company. Welding, if any, should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.		
1280	<p>Fabrication of fittings-Bend, Tee, Reducers</p> <p>Fabrication of various pipe fittings like Bend, Tee, Reducer etc. by welding including handling, cutting, end preparation etc. The job will be quantified as per unit length of welding measured in centimeter. All materials to be supplied by Contractor. Welding should be as per API 1104 with requisite number of runs. The welding slag deposited during welding shall have to be removed by appropriate method after completion of each run of welding job.</p>	CM (Centimeter)	2,000
1290	<p>Supply, fabrication, welding & erection of Single Leg Pipe Supports</p> <p>Supply, fabrication, welding & erection of Single Leg Pipe Supports, with 100 mm NB. M.S pipes, including clamping of pipes up to 1.5 mtr. height, generally as per the sketch no OIL/PO/04. All materials like pipes clamps, base plates, bolts & nuts etc. will be arranged and supplied by the contractor. The job also includes construction of Pillar Foundations for the pipe supports fabricated of size 0.25 m (L)x 0.25 (B) x0.40m (Depth) made out of CC of 1:1.5:3 ratio, including grouting.</p>	NO (Number)	20
1300	<p>Supply, fabrication, welding & erection of Double Leg Pipe Supports:</p> <p>Supply, fabrication, welding & erection of Double Leg Pipe Supports with 100 mm NB. M.S pipes, including clamping of pipes up to 1.5 mtr height, generally as per the sketch no. OIL/PO/05. All materials like pipes, clamps, base plates, bolts & nuts etc. will be arranged and supplied by the contractor. The job also includes Pillar Foundations for the pipe supports fabricated of size 0.25 m (L) x 0.25 (B) x 0.40m (Depth) made</p>	NO (Number)	10

	out of CC of 1:1.5:3 ratio, including grouting.		
1310	<p>Supply, fabrication, welding & Erection of Concrete Pipe Supports:</p> <p>Supply of all materials, erection, installation, plastering, curing of RCC Pipe Supports (1:1.5:3 mixture) including clamping System/arrangement as per OIL drawing no. OIL/PSS/01. Provision of clamping with the help of U clamps with nuts to clamp different diameter pipes with nuts and washers including all civil construction materials will have to be supplied by the contractor. All the supplied materials must be approved by OIL prior to erection including material test certificates and other documents.</p>	M3 (Cubic Meter)	50
1320	<p>Supply, fabrication, welding, erection of walkway and walkway platform</p> <p>Supply, Fabrication and erection of walkway and walkway platform of 750 mm width with railings over the pipe/bunch of pipes, bundh, dyke wall, drains etc. as per sketch no. OIL/PP/17 supplied herewith (which is a representative drawing of walkways and which may be adjusted as per requirement depending on availability of space). The contractor will supply all necessary materials like M S Grating (500 mm width), support pipes, Angle iron frame, railing etc. and prior approval for all materials will have to be obtained from the company representative. After fabrication/erection, the posts are to be grouted out of CC composition 1:1.5:3 as per directive of site engineer/ Installation Manager (IM) or his/ her representative. All grouting materials will be supplied by the contractor. Size of the grouting 0.2 m (L) x 0.2 m (W) x 0.4 m (H).</p>	M (Meter)	60
1330	<p>Radiographic inspections-150 mm NB to 250 mm NB pipes</p> <p>Radiographic inspections of Pipe/welded Joints: Radiographic inspection of pipe/welded joints by a third party inspection agency (approved by BARC) as directed by the site engineer/ Installation Manager (IM) or his/ her representative. All necessary equipment including the inspection agency to be arranged by the contractor at his/her own cost (no</p>	NO (Number)	40

	<p>reimbursement shall be entertained by company) with the approval of the company engineer/ Installation Manager (IM) or his/ her representative. Certification from the third party inspection agency to the effect shall have to be deposited to OIL.</p> <p>Size: 150 mm NB to 250 mm NB. (for pipe joints)</p>		
1340	<p>Radiographic inspections-50 mm NB to 100 mm NB, pipe</p> <p>Radiographic inspection of pipe/welded joints by a third party inspection agency (approved by BARC) as directed by the site engineer/ Installation Manager (IM) or his/ her representative. All necessary equipment including the inspection agency to be arranged by the contractor at his/her own cost (no reimbursement shall be entertained by company) with the approval of the company engineer/ Installation Manager (IM) or his/ her representative. Certification from the third party inspection agency to the effect shall have to be deposited to OIL.</p> <p>Size: 50 mm NB to 100 mm NB. (for pipe joints)</p>	<p>NO (Number)</p>	81
1350	<p>Letter writing (300 mm to 450 mm):</p> <p>Arrow marking on piping and letter writing on vessels, tanks, signboards, piping, shed, pumps etc. Writing will be in English, Assamese and Hindi as per the instruction of the site engineer with approved paints. All materials including paint, paint brush etc. for the job will be arranged by the contractor.</p> <p>Letter size - From 300mm to 450 mm</p>	<p>NO (Number)</p>	300
1360	<p>Letter writing (150 mm to 299 mm):</p> <p>Arrow marking on piping and letter writing on vessels, tanks, signboards, piping, shed, pumps etc. Writing will be in English, Assamese and Hindi as per the instruction of the site engineer with approved paints. All materials including paint, paint brush etc. for the job will be arranged by the contractor.</p> <p>Letter size - From 150 mm to 299 mm</p>	<p>NO (Number)</p>	100

1370	Erection of brick/ dyke wall around tank Erection of brick/ dyke wall around the Tanks as per OIL drawing no. OIL/2488 including steps on both side and painting the all exposed surfaces with exterior weather proof paint. All materials will be supplied by the contractor.	M (Meter)	190
1380	Additional increase in height of dyke wall Additional increase in height of brick/ dyke wall around the Tanks over the Line item no. 410 to match the design of OIL drawing no. OIL/2488 including steps on both side and painting the all exposed surfaces with exterior weather proof paint. All materials will be supplied by the contractor.	M (Meter)	8
1390	Casting of PCC for the Tank Farm Floor: Casting of PCC (1:1.5:3) for the tank farm floor, including broken floor in the adjoining areas, supports, drains etc. The job is to be carried out with one layer of brick soling followed by 75 mm cc and as per the directive of the company engineer/ Installation Manager (IM) or his/ her representative. The job involved chipping/breaking/cleaning the existing floor and reconstruction of the same including drainage system. All the material for the job is to be supplied by the contractor. For low lying/ submerged area/pit/ unconsolidated or marshy land, the contractor shall have to develop the area employing all his resources required for the job at his own cost.	M2 (Square Meter)	938
1400	Earthing System of Tanks: Earthing connection of the storage tanks including supply of all materials. Providing complete earthing system to the constructed tanks, consisting of G. I earthing Bus, Earth Electrodes, connected firmly to the shell, as per drawing/specifications provided in Drawing No. OIL/EPS/ELECT-007, including all the associated jobs. This item includes supply of all materials, fabrication and erection as needed. This item also includes construction of brick/RCC enclosure as per sketch no OIL/EPS/ELECT-002 for earth electrode pits	JOB	2

	with concrete cover at various locations. There shall be two earth pits constructed for each tank diametrically opposite to each other.		
1410	Supply of API 600 10"gatevalv with flange Supply of API 600 GATE VALVE with Companion flange, 10"X150 Class RF FLANGED END. Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	2
1420	Supply of API 600 8"gatevalv with flange Supply of API 600 GATE VALVE with Companion flange, 8"X150 Class RF FLANGED END. Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	4
1430	Supply of API 600 6"gatevalv with flange Supply of API 600 GATE VALVE with Companion flange, 6"X150 Class RF FLANGED END. Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-16.10 & tested as per API 598 specification.	NO (Number)	4
1440	Supply of API 600 4"gatevalv with flange Supply of API 600 GATE VALVE with Companion flange, 4"X 150 class RF FLANGED END . Cast Carbon Steel Gate valve as per API 600 specification, regular bore type, rising stem, bolted bonnet, outside screw and yoke, integrally cast flexible wedge gate. End flanges having serrated RF face drilled in accordance with ANSI B-16.5 face to face dimension as per ANSI B-	NO (Number)	8

	16.10 & tested as per API 598 specification.		
<p>1. Tenure of Agreement:</p> <p>i. 06 (Six) months for construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank.</p> <p>ii. 01 (One) year for construction of 04 (Four) Nos. 160 KL Formation Water Storage Tank.</p> <p>iii. 01 (One) year for construction of 03 (Three) Nos. 40 KL Formation Water Storage Tank</p> <p>iv. 06 (Six) months for construction of 02 (Two) Nos. 795 KL Formation Water Storage Tank.</p> <p>Note: In case, contract is awarded to a bidder for any combination of the above, then contract period shall be the highest contract duration of the respective conditions. For example, if contract for Construction of 02 (Two) nos. of 500 KL and 04 (Four) Nos. 160 KL Formation Water Storage Tank is awarded to a single bidder, then applicable contract period shall be highest of the respective conditions i.e. 01 (One) year.</p>			
<p>2. Mobilisation Period: 45 (Forty Five) days from the date of issue of LOA</p>			

SPECIAL CONDITIONS OF CONTRACT (SCC)**1.0 WORK ORDER:**

i) Soon after this contract is signed by both the parties i.e. the Contractor and the Company, the contractor will apply for labour clearance to the concern authority and on receipt of the same the Company shall issue Work Order/ Purchase Order, specifying the actual date of commencement of the works/ service and the date of its completion based on the contract provisions. Before issuance of workorder the contractor shall have to submit the proof of health check-up records/reports, insurance of his personnel and list of competent and skilled personnel to be deployed during the period of contract, copies of experience and qualification certificate, welder test certificate from a third party of repute for the welders to be deployed to company before mobilization.

ii) During the execution of the works, the Contractor must maintain a uniform rate of progress to complete the works within the stipulated scheduled time. Hindrance register (format to be collected from Installation Manager /PSS Dept.) affecting the progress of the job shall also be maintained by the contractor at the site of construction. The same will be approved by the concerned Installation Manager /Site Engineer/Company Representative. However, the records maintained in the Hindrance Register may not credit any merit for the delay of job execution by the contractor.

2.0 PLAN OF WORKS TO BE APPROVED BY THE INSTALLATION MANAGER/ENGINEER:

i) Immediately after receipt of the work order, the Contractor shall plan/prepare bar chart for the jobs allocated under the contract.

ii) While the works are in progress, the Contractor can submit a revised plan of works, if any, when any unforeseen condition occurs at site, provided the Installation Manager /Site Engineer/his or her representative is fully satisfied about the changed circumstances necessitate for revised plan. Such approved Revised Plan shall then replace the earlier plan.

iii) The Installation Manager /Site Engineer/his or her representative shall have the authority to call the Contractor at any time while the works are in progress for a detailed plan of works in respect of any particular phase of works, if in the opinion of the Installation Manager /Site Engineer/his or her representative such a phase is considered as too complex requiring further break-up into sub-phases. In such an event the Contractor shall furnish such information so as to enable the Installation Manager to assess any revised plan, the Contractor shall be bound by such sub-phase of the plan.

3.0 COMMENCEMENT OF WORK: The Contractor shall commence the works within the required number of days as mentioned in the work order or of an instruction in writing to this effect by the Installation Manager / Engineer.

4.0 SEQUENCE OF WORKS: The work shall commence at allocated locations/ installations of the Company and shall proceed in an orderly manner so as to complete within the contractual period.

In case of any change in sequence of work shall require approval of the Company Engineer. No change in sequence of works shall be made without written permission of the Company.

5.0 SETTING OUT OF WORKS: The Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position levels, dimensions and alignment of all parts of the works and for the provision of all necessary instruments, appliances and labour etc. in connection therewith. If at any time during the progress of the works any error appear or arise in the position levels, dimensions or alignment of any part of the works, the contractor will have to modify the same at his own expense and rectify such error to the satisfaction of the Installation Manager /Site Engineer/his or her representative unless, such error is based on incorrect data supplied in writing by the Installation Manager /Site Engineer/his or her representative in which case the expense of rectifying the same shall be borne by the Company.

6.0 EXECUTION OF WORKS:

i) Before submitting bid documents and in case of any doubt, the Contractor may seek clarifications regarding the clauses/specifications of the contract. Afterwards, decision of the Company's Installation Manager /Site Engineer/his or her representative will be final and binding.

ii) The Contractor may carry out the job at more than one installation simultaneously, if required at a time to complete the job within the stipulated time. No job will be allowed to carry out in the installation after daylight hours.

iii) The Contractor shall execute and complete the works in accordance with the conditions of the contract and shall be entirely responsible for the execution of the works in all respect notwithstanding any approval which the Installation Manager / Engineer/ Company representative may have given in respect of the method, materials or workmanship of any part or the whole of the works or of any tests carried out either by the Contractor or by the Company. The Contractor shall be at liberty at his own risk to employ his own method subject to the approval of the Installation Manager /Site Engineer/his or her representative, for the execution of the works. If in the opinion of the Installation Manager /Site Engineer/his or her representative, the works or any item thereof is found not in accordance with the specifications, the Contractor shall remove the defect and re-execute the works or the item at his own expense, whether such defect be discovered during execution of job or subsequently. Any delay caused in remedying the defect (s) shall not absolve the Contractor from adhering to the time schedule as provided in the contract, and no time extension shall be granted for such delay in any circumstances.

iv) The Contractor shall give reasonable time notice to the Installation Manager /Site Engineer/his or her representative of the readiness of each part of the works for examination or test and if the examination or test is by an authority other than the Company, the date fixed for the examination or test shall also be intimated. If

the work(s) requiring approval or testing is covered up/completed without such approval or test(s), then the Contractor shall at his own expense uncover such works to the extent necessary for appropriate examination or test and shall at his own expense cover/complete the same upon completion of such examination or test. If such works are found to be in accordance with the specifications, the work involved in re-examination and replacement shall be treated as an addition and shall be paid by the Company. If such works be found not in accordance with the specifications, all costs involved in re-examination, correction of the defect(s) and replacement shall be borne by the Contractor.

v) Company official will initially brief the work persons engaged for the job about the rules and regulations to be followed. Company's Safe Operating Procedure shall be referred by the contractor which shall be applicable during execution of all works.

7.0 WORKS TO THE SATISFACTION OF THE COMPANY: The Contractor shall execute the works entirely in accordance with the accepted practices, laid out standards as per the contract to the satisfaction of the Installation Manager /Site Engineer/his or her representative and shall adhere to the instructions and directions of Installation Manager / Engineer.

8.0 ACCEPTANCE OF WORKS: The Contractor shall be responsible for the care and maintenance of the works until the works are accepted by the Company; such acceptance is to be made without unreasonable delay. The Contractor shall give the Company notice of completion. Failure on the part of the Installation Manager /Site Engineer/his or her representative to condemn or reject inferior work or materials shall not imply acceptance of such works or materials. It may further be noted that acceptance of the works shall not be deemed a waiver by the Company of any claim in respect of latent or hidden defect in the materials or workmanship and the Contractor agrees to repair, replace forthwith at his own expense any part of the works found within one year from such acceptance, unless such defects are in materials originally supplied by the Company provided that the Contractor's treatment/ handling of such materials did not cause or contribute to the defect.

9.0 MEASUREMENT OF WORKS AND PAYMENT TERMS:

a) Measurement of works:

i) The quantities detailed in this contract represent only the estimated quantities of works and they are not to be taken as the exact quantity of the works to be executed by the Contractor in fulfilment of his obligations under this contract. The quantities of works to be considered for purpose of payment shall be those actually executed either in accordance with detailed drawings or with the written instruction of the Installation Manager /Site Engineer/his or her representative.

ii) In respect of completed works accepted by the Installation Manager /Site Engineer/his or her representative either in part or in full at his discretion, the Installation Manager /Site Engineer/his or her representative call upon the Contractor by a written notice or verbal communication to report at work site on specific date for the purpose of making measurements and recording the same. The Contractor or its authorized representative shall be present at site and shall furnish

to the Installation Manager /Site Engineer/his or her representative all particulars required for a proper measurement. In case the Contractor or his representative fail to report at site, then the measurement made by the Installation Manager /Site Engineer/his or her representative or approved by him will be the conclusive measurement of the works and the Contractor shall have to accept such measurement.

iii) In respect of works in progress, the measurement of works shall be on the basis of either a percentage of actual progress made in relation to the contract quantity of the works as assessed by the Installation Manager /Site Engineer/his or her representative or by measurements of detailed items as deemed necessary and at the discretion of the Installation Manager /Site Engineer/his or her representative wherever applicable.

iv) All measurements shall be duly certified by the Installation Manager /Site Engineer/his or her representative in the measurement sheet and the Contractor shall agree to such measurement by signing the same. Measurement so recorded shall be treated as legally binding on both parties.

v) Schedule of quantities (SOQ) shall be deemed to have been prepared and measurements shall be made in accordance with the procedures described in the SOQ/Schedule of Rates (SOR) of the contract or if no procedure is specified then the method of measurements shall be as per the the Schedule of Works (SOW) for the corresponding items of work.

vi) All materials to be supplied/ used by the Contractor in accordance with this contract shall be inspected by any third party of repute and the relevant test/ inspection certificate(s) must be furnished to the Installation Manager /Site Engineer/his or her representative.

The Installation Manager /Site Engineer/his or her representative shall be free to reject any materials/ equipment supplied by the Contractor at site for purpose of measurement if such materials/equipment is not up to the required specifications.

vii) Notwithstanding the fact that certain works and materials have been already measured by the Installation Manager /Site Engineer/his or her representative, the Contractor shall be fully responsible for all such works and materials till the final expiry of the defect liability period.

b) Payment terms: The contractor would be paid percentage of payment for the items completed as progressive payment during the progress of the job not oftener than once in a month per job.

10.0 RIGHT OF INSPECTION: The Company shall have the right but not the obligation to inspect the works during its progress. The Contractor shall provide proper access for such inspection.

11.0 DELAYS IN WORK BY THE CONTRACTOR: If the Contractor is responsible for a delay in progress of the works, the Contractor shall, without additional cost to the company, work overtime and/ or mobilize/ utilize such additional equipment and personnel at any time to improve the progress of the work as may be necessary

to eliminate delay in final completion of the works within the stipulated time of completion. However, the job is to be carried out in the day light hours only and in no circumstances the Contractor will be allowed to work in the installation during the night hours. However, Installation Manager/ site Engineer shall have the power to decide/review on working at night hours.

12.0 MATERIALS, TOOLS AND EQUIPMENT TO BE FURNISHED BY THE COMPANY:

i) The Company shall provide the materials listed in the contract to the contractor. All materials shall be checked, agreed and recorded by both the Company and the Contractor at the time when the Contractor takes delivery. This record shall specify the quantity and description of materials delivered to the Contractor by the Company. The Contractor shall not be relieved of responsibility to participate jointly with the Installation Manager /Site Engineer/his or her representative in making or signing materials receiving or transfer records. Upon receipt of materials from the Company, the Contractor shall visually inspect to ensure that the same are free of defects. Any defect apparent on visual inspection must be notified to the Installation Manager /Site Engineer/his or her representative immediately for necessary replacement/ repairs/ remedies etc.

ii) No responsibility for security of equipment/ loose materials/ fittings etc. will be borne by OIL. Security of the Company's materials once supplied to the Contractor will be his/her responsibility.

13.0 MATERIALS, LABOUR, TOOLS AND EQUIPMENT TO BE FURNISHED BY THE CONTRACTOR:

i) The Contractor shall supply/furnish all materials consumables, labours, tools, supervision and equipment necessary to complete the works within the time schedule and in accordance with the specifications. All material supplied by the Contractor unless otherwise specified shall be of a suitable grade and type and where such materials are to form part of the permanent works shall be new. No substitution of any materials shall be made without the written approval of the Company and any materials, which do not conform to the specifications or is otherwise rejected, shall be removed immediately from the site and replaced with suitable materials.

ii) Electricity, water, accommodation, security etc. for Contractor's personnel will not be provided by the Company. These are to be arranged by the Contractor themselves. Further electrical power/ illumination facilities etc. required for construction works shall also be arranged by the contractor.

iii) No transport/ conveyance for transfer of Contractor's personnel and material will be provided by the Company.

14.0 THE CONTRACTOR'S EMPLOYEES:

i) The Contractor shall perform the works with qualified and competent personnel(s) in conformity with the provisions of the contract. The Installation Manager /Site Engineer/his or her representative shall have the right for removal of

the Contractor's employee if in his/her opinion the employee(s) is/are found to be incompetent to perform the works assigned to him.

ii) Before starting the job, the Contractor will have to submit the list of competent skilled persons with valid certificate wherever necessary who will carry out the job. If Company desires, the competent persons of the Contractor will have to pass necessary tests conducted by the Company.

iii) The contractor shall engage a supervisor under whose supervision the job will be executed.

iv) The contractor shall not engage minor workers below 18 years of age under any circumstances.

v) The contractor must obtain "Entry Permit" from CISF of OIL for all his/ her workers to enable them to work inside the installation.

vi) All employees of the Contractor must obey the security rules of the Company when working inside an installation. Any individual found to be objectionable from the security considerations must be suitably replaced by the Contractor.

vii) The contractor will be responsible for the camp site required for his/ her employees for execution of the job.

viii) COMPREHENSIVE GENERAL LIABILITY INSURANCE: The contractor shall submit the copy of Insurance policy for his personnel to be engaged for jobs under the contract at the time of mobilization of contract.

a) This insurance shall protect the Contractor against all claims arising from injuries, disabilities, disease or death of member of public or damage to property of others due to any act or omission on the part of the Contractor, his agents, his employees, his representatives and Sub-Contractor's or from riots, strikes and civil commotion.

b) Contractor shall take suitable Group Personal Accident Insurance Cover for taking care of injury, damage or any other risks in respect of his worker.

c) The policy shall cover third party liability. The third party (liability shall cover the loss / disablement of human life (person not belonging to the Contractor) and also cover the risk of damage to other materials / equipment / properties during construction, erection and commissioning at site. The value of third party liability for compensation for loss of human life or partial / full disablement shall be of required statutory value but not less than Rs. 2 lakhs per death, Rs. 1.5 lakhs per full disablement and Rs. 1 lakh per partial disablement and shall nevertheless cover such compensation as may be awarded by Court by Law in India and cover for damage to others equipment / property as approved by the Purchaser. However, third party risk shall be maximum to Rs. 10 (ten) lakhs to death.

d) The Contractor shall also arrange suitable insurance to cover damage, loss, accidents, risks etc., in respect of all his plant, equipments and machinery,

erection tools & tackles and all other temporary attachments brought by him at site to execute the work.

- e) The Contractor shall take out insurance policy from one or more nationalized insurance company from any branch office near Project site.
- f) Any such insurance requirements as are hereby established as the minimum policies and coverages which Contractor must secure and keep in force must be complied with, Contractor shall at all times be ready to obtain additional or increased coverages at Contractor's sole expenses.
- g) ANY OTHER INSURANCE REQUIRED UNDER LAW OR REGULATIONS: CONTRACTOR shall also carry and maintain any and all other insurance(s) which he / she may be required under any law or regulation from time to time without any extra cost to the Company. He shall also carry and maintain any other insurance which may be required by the Company.
- h) The premium / levies of insurance for his/her personnel for any kind of insurance scheme shall be borne by the Contractor only and at no cost to the Company.
- i) The contractor is also responsible for renewal of such insurance policies (as applicable) at the end of the validity at no cost to the company.

15.0 SERVICES/ EQUIPMENT PROVIDED BY THE COMPANY: If by reason of any event occurring to, in or in connection with the works, either during execution of the work or during defect liability period, any remedial or other works, which in the opinion of the Installation Manager /Site Engineer/his or her representative be necessary and the contractor is unable or unwilling to do such works/ provide services or equipment as the case may be, than the company may, by its own or other, do such works/ provide services or equipment as the Installation Manager /Site Engineer/his or her representative may consider necessary. If in the opinion of the Installation Manager /Site Engineer/his or her representative the contractor is liable to do so at his own expenses under this contract, all costs and charges including overheads incurred by the company in doing so shall be paid by the contractor to the company or may be deducted by the company from any money due or which may become due to the contractor. The costs incurred by the company shall be assessed independently by the company as per the company's standard and prevalent practices and no dispute on this account shall be entertained in any circumstances whatsoever.

16.0 DEFECT LIABILITY PERIOD: Workmanship and quality of materials supplied by the Contractor are to be guaranteed for a minimum period of twelve (12) months from the date of completion of contract which shall be treated as defect liability period. The Contractor shall repair and replace any defects occurred by way of bad workmanship or mishandling or defective / substandard materials supplied during the guarantee / defect liability period of twelve (12) months from the date of completion of contract.

17.0 REPORTING OF PROGRESS: The Contractor shall furnish to the Company Progress Reports along with applicable drawings indicating all details of the construction.

18.0 SAFETY MEASURES: The jobs will have to be carried out in an operating installation and as such the following safety guide lines/ measures will be strictly followed by the contractor.

18.1 Necessary "Hot Work / Confined space entry Permit" are to be obtained from authorized personnel before starting of the jobs. The Contractor should deploy a competent person throughout the Contract under whose constant supervision only, the jobs will be carried out. Further competent representative of the contractor with the approval of M/S OIL will have to be present at the work site throughout the working time to ensure compliance of safety measures while executing the job at site.

18.2 On site welding/ cutting/ grinding operations of the interconnection pipelines shall be avoided as far as possible taking into consideration of minimum safety distance for such an operation. If necessary and if advised by the company Installation Manager /Site Engineer/his or her representative, it will be done at a safe distance within the installation and will be transported to the site for boxing up.

18.3 Tools and Tackles used will be of non-sparking type.

18.4 Any other safety measures that might require to be adopted during the work will be intimated and shall be strictly followed by the contractor.

18.5 Stand by fire fighting equipment will be deployed at the work site by OIL. However, at least two of the contractor's personnel deployed for the work must be capable of handling the fire fighting equipment at the time of emergency and the persons will have to be present at the work site throughout the working time. If required the contractor's nominated persons will be imparted training on handling such equipment by OIL's Fire Service department.

18.6 It will be solely the Contractor's responsibility to fulfil all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job (namely; the person employed by him, the equipment, the environment, etc.) under the jurisdiction of the district of that state where it is operating. Ensure that all sub-contractors hired by him comply with the same requirement as the contractor himself and shall be liable for ensuring compliance of all HSE laws by the sub or sub-sub contractors.

18.7 Every person deployed by the contractor in a mine must wear safety gadgets to be provided by the contractor. The Contractor shall provide proper Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company PPE schedule. Safety appliances like protective footwear, Safety Helmet, Full Body harness and Breathing apparatus. Necessary supportive document shall have to be submitted as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may apply to the Company (OIL) for providing the same.

OIL will provide the safety items, if available. But in turn, OIL will recover the actual cost of the items by deducting from Contractor's Bill. However, it will be the Contractor's sole responsibility to ensure that the persons engaged by him in the mines use the proper PPE while at work.

18.8 All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.

18.9 The Contractor shall prepare written Safe Operating Procedure (SOP) for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with it/ them. The SOP should clearly state the risk arising to men, machineries & material from the operations to be done by the contractor and how it is to be managed. However, whenever there is a contradiction the Company's Safe Operating Procedure shall be referred by the contractor which shall be applicable during execution of all works.

18.10 The contractor shall provide a copy of the SOP to the person designated by the mine owner who shall be supervising the contractor's work.

18.11 Keep an up to date SOP and provide a copy of changes to a person designated by the Mine Owner/ Agent/ Manager.

18.12 Contractor has to ensure that all work is carried out in accordance with the Statute and SOP and for the purpose he may deploy adequate qualified and competent personnel for the purpose of carrying out the job in a safe manner. For work of a specified scope/ nature, he should develop and provide to the mine owner a site specific code of practice in line.

18.13 All persons deployed by the contractor for working in a mine must undergo Mines Vocational Training, initial medical examination, PME. They should be issued cards stating the name of the contractor and the work and its validity period, indicating status of MVT, IME/PME.

18.14 The contractor shall submit to DGMS returns indicating - Name of his firm, Registration number, Name and address of person heading the firm, Nature of work, type of deployment of work persons, Number of work persons deployed, how many work persons hold VT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons

18.15 The return shall be submitted quarterly (by 10th of April, July, October & January) for contracts of more than one year. However, for contracts of less than one year, returns shall be submitted monthly.

18.16 It will be entirely the responsibility of the Contractor/ his Supervisor/ representative to ensure strict adherence to all HSE measures and statutory rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by company's Installation Manager/ Safety Officer/ Installation Manager / Engineer/ Official/ Supervisor/ Junior Installation Manager /Site Engineer/his or her representative for safe operation.

18.17 Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the contractor only.

18.18 Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the contractor.

18.19 The contractor shall have to report all incidents including near miss to Installation Manager /Site Engineer/his or her representative of the concerned department of OIL.

18.20 The contractor has to keep a register of the persons employed by him/ her. The contractor's supervisor shall take and maintain attendance of his men every day for the work, punctually.

18.21 If the company arranges any safety class/ training for the working personnel at site (company employee, contractor worker, etc.) the contractor will not have any objection to any such training.

18.22 The health check up of contractor's personnel is to be done by the contractor in authorized Health Centres as per OIL's requirement & proof of such test(s) is to be submitted to OIL. The frequency of periodic medical examinations should be every five years for the employees below 45 years of age and every three years for employees of 45 years of age and above.

18.23 To arrange daily tool box meeting and regular site safety meetings and maintain records.

18.24 Records of daily attendance, accident report etc. are to be maintained in Form B, E, J (as per Mines Rules 1955) by the contractor.

18.25 A contractor employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's act or omissions at work.

18.26 A contractor employee must, while at work, cooperate with his or her employer or other persons as far as is necessary to enable compliance with any requirement under the act or the regulations that is imposed in the interest of health, safety and welfare of the employee or any other person.

18.27 Contractor's arrangements for health and safety management shall be consistent with those for the mine owner.

18.28 In case Contractor is found non-compliant of HSE laws as required company will have the right for directing the contractor to take action to comply with the requirements, and for further non-compliance, the contractor will be penalized prevailing relevant Acts/ Rules/ Regulations.

18.29 When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures Company will have the right to direct the contractor to cease work until the non-compliance is corrected.

18.30 The contractor should prevent the frequent change of his contractual employees as far as practicable.

18.31 The contractor should frame a mutually agreed bridging document between OIL & the contractor with roles and responsibilities clearly defined. However, the contract agreement may be treated as such bridging document in absence of a bridging document .

18.32 For any HSE matters not specified in the contract document, the contractor will abide the relevant and prevailing Acts/ rules/ regulations/ pertaining to Health, Safety and Environment.

19.0 TIME OF COMPLETION:

Time of completion for the job along with all other associated jobs is as follow:

- i. 06 (Six) months for Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank.
- ii. 01 (One) year for Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank.
- iii. 01 (One) year for Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank.
- iv. 06 (Six) months for Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank.

Note: In case, contract is awarded to a single bidder for any combination of the above, then contract period shall be the highest contract duration of the respective conditions. For example, if contract for Construction of 02 (Two) nos. of 500 KL and 04 (Four) Nos. 160 KL Formation Water Storage Tank is awarded to a single bidder, then applicable contract period shall be highest of the respective conditions i.e. 01 (One) year.

Hence, the contractor will have to deploy/ employ sufficient manpower along with sufficient tools, machineries and resources for completing the job within the stipulated time frame.

20.0 TIME FOR MOBILISATION & COMPLETION OF ALL CONTRACTUAL FORMALITIES BY THE CONTRACTOR: The contractor must complete all contractual formalities within 15 (fifteen) days after issue of letter of award (LOA). Further, all mobilization activities shall be completed by the contractor within 45 (Forty five) days from the issue of LOA by the company.

21.0 TECHNICAL TERMS AND CONDITIONS:

21.1 FOR CONSTRUCTION OF 02 (TWO) NOS. OF 500 KL FORMATION WATER STORAGE TANKS

A. SCOPE OF WORK (SOW): Works under this contract are Construction of 02 (Two) nos. of 500 KL Formation Water storage tanks including all piping and related civil Engineering jobs at OIL's production installation.

The scope of works is as under:

- i) Isolation of the area.
- ii) Complete design, detailed Engineering, preparation of drawings for Construction of 1 (One) no. of 795 KL capacity Crude Oil storage tank and 2 (Two) nos. of 500 KL Formation Water storage tanks and repairing of 1 no. 795 KL Crude Oil tank.
- iii) Supply of materials, cleaning, repairing, testing, painting, and calibration of the tanks .
- iv) Handling, transportation, fabrication, laying of pipelines, pipe fittings, valves etc. as specified in the S.O.W. of the contract.
- v) Testing of assembled pipelines, valves, flanges, pipe fittings etc. to recommended hydrostatic test pressure before handing over of the tank for commissioning. Cleaning/ Air blowing of piping system. Hydrostatic test pressure record shall be provided by Company if available.
- vi) Painting of piping system & pipe supports.
- vii) Insulation of pipes wherever necessary.
- viii) Electrical Earthing of the tanks.
- ix) Execution of various civil jobs if any including supply of all materials.
- x) Construction and Commissioning of tanks.
- xi) On the top of the roof the contractor shall fabricate walkways and railings around the top periphery of the tank.
- xii) All other works covered under SOQ & SCC of the Contract.

B. GENERAL GUIDELINES FOR FABRICATION AND ERECTION JOB:

i) GENERAL: Since the proposed job would be carried out in the running installation, proper arrangement is to be made to isolate the entire working area from the existing processed/ operational area of the installation. In this regard, work permit issued by the concerned Installation Manager / Site Engineer or his/ her representative shall be treated as Company's approval for jobs to be undertaken. The following jobs are planned for the purpose:

a) FIRE BARRIER WALL: Supply, fabrication & erection of temporary barrier wall with CGI sheet to a height of minimum 10metre to isolate the working area from the existing installation on three sides as per the instruction of the Installation Manager/ Site engineer/ his or her representative. The wall should be strong enough with proper structural supports and drawings should be submitted to Installation Manager/ Site engineer/ his or her representative for approval prior to erection job. No hot job (welding/cutting/grinding etc.) would be allowed at site during the installation of the barrier wall and also in the working place till the wall is completed and the area is made completely gas-free which is to be confirmed by gas testing. The site shall also have to be free from any hazardous/inflammable substances/materials etc. and necessary work permit/clearance from concerned Installation Manager / Site Engineer or his/ her representative must be taken prior to start of the job on daily basis. The required pipes for the posts to be used for erection of barrier wall shall be arranged by company which shall have to be transported by the contractor to the work site for job execution. The contractor shall have to dismantle the so erected barrier walls upon completion of the tank construction job. The Contractor will have to arrange all necessary infrastructure (scaffolding/working platform etc.) and resources required to facilitate erection and

dismantling of the barrier walls in a safe manner which is to be to the satisfaction of the Installation Manager/ Site engineer/ his or her representative.

b) Isolation of the entire working area from the process system: Isolation of all process pipelines (oil / water/ gas/ fire hydrant lines etc.) at the outside of the working area to make the tank completely safe for tank dismantling and fabrication job. The job involves opening up of existing flanged joints/ screwed joints etc. and installation of blind flange / plug in the existing piping leading to the tank farm. Isolation of such pipelines must be displayed by putting signage at places clearly visible from all angles/ corners. The job may involve installation of plugs, blind flanges, valves etc on the existing lines and also digging/excavation of these lines and restoration of the same, wherever required.

ii) FABRICATION OF TANKS:

a) Internal Cleaning of the tank: Internal cleaning of the tank through some approved practices to make it completely free from oil / gas / hydrocarbon sludge and make it ready for dismantling / hot work job. The Contractor will have to arrange/employ all necessary infrastructures (scaffolding / working platform etc.) and other resources for cleaning job to the satisfaction of the Installation Manager / Site Engineer or his/ her representative. After cleaning, necessary Gas testing would be carried out in these tanks and only after satisfactory test results, the tanks would be allowed to repair by the Installation Manager / Site Engineer or his/ her representative in writing/ issuance of necessary permit. The job also involves cleaning of the outer surfaces as and where required to scrap off oil content. The sludge recovered from the tank during cleaning will have to be transported and disposed off to a location shown by the Installation Manager / Site Engineer or his/ her representative. The tank should be continuously vented throughout the cleaning process. The contractor should ensure use of proper PPE and adopt all safety measures during cleaning process.

b) All works for construction/ repairing/fabrication/ erection, inspection and test shall be done in accordance with API 12B / API-650 as applicable. In no case the contractor would be allowed to carry out any hot job (welding/ cutting/ drilling) at a height above 3.75 m of the barrier wall from the existing ground level.

c) Fabrications also include supply of M.S. plates/structures, M.S. bars, angles and other tank materials required for construction/ repairing/fabrication as per the guidelines given by the company Installation Manager / Site Engineer or his/ her representative.

d) The contractor has to supply all the steel plates of tested quality conforming to IS:2062 including labour, machines, equipment, consumables etc. required for complete construction/ repairing/fabrication of the tanks. The quality test certificate of steel plates from third party inspection agency of repute shall be submitted by contractor.

e) The welders engaged for the job must have sufficient experience in similar jobs to ensure proper quality of welding. Contractor shall submit welder test certificate for the welder's engaged from a third party of repute.

f) Tanks plates and other materials supplied by the contractor will also be inspected by the company Installation Manager / Site Engineer or his/ her representative and only the approved materials will be allowed to use. Rejected materials will be replaced at contractor's cost. Similarly, cost of repairing/replacement of any plate/ material will be borne by the contractor.

g) The electrodes used shall be of suitable gauge and specification. Contractor shall furnish declaration/proof that electrodes used for construction of tank conforms to API-1104/ AWS/ ISO/ ASME standards or equivalent. All necessary alignment and end preparation of the plates shall be done prior to welding.

h) The entire job shall be carried out under constant supervision of contractor's experienced and qualified personnel. Contractor shall declare the name of competent and skilled personnel at the time of mobilization.

i) Welding shall be of radiographic quality conforming to API-1104 specification. The welding joints will be subjected to random radiographic test in accordance with ASME/ API or equivalent guidelines. Radiographic test certificate issued by a third party of repute of such randomly selected welded joints shall be furnished by the contractor.

j) The plate sizes of the tanks as shown in the drawing OIL/0559/A, OIL/10581, & OIL/10582 are only indicative. If all the required plate sizes are not available in the market at the time of repairing and if the company is satisfied that required plates are not really available in the market (Documentary proof to be submitted by the contractor to the company from appropriate authority), then the nearest higher size of plate will be accepted by the company. In such an event, payment will be made for difference between the plates as per drawing and the plates actually used. Always a thicker plate will be used in case of non-availability of the plates indicated in the drawing. However no other payment including for increase in length of welding joints due to use of alternative size of plates in length, width & thickness will be made.

k) General specification of some of the items have been indicated in the referred drawing(s) and the contractor to ensure that the brought out items conform to the same. Further, the contractor shall specify the detail specifications of all other brought out items along with the vendor's/ manufacturer's name and furnish the same to OIL as and when required.

C. FABRICATION & CONSTRUCTION SPECIFICATIONS:

a. **MATERIALS:** All materials required for construction/repairing/fabrication & commissioning, related to the activities for execution of the Contract shall be supplied by the Contractor except otherwise specified in SOQ, SCC of the Contract.

i) Materials supplied by the contractor shall conform to the specifications and shall be suitable for the purpose for which they are required. Composition of materials procured by the contractor shall have to be submitted to the company. Relevant quality test certificates from a third party of repute shall be submitted to OIL by the contractor at free of cost.

ii) Unless otherwise specified by the Company, all materials supplied by the contractor shall bear the BIS stamp and/ or shall be procured from the reputed manufacturers or suppliers. If in respect of any materials, including but not limited to sand, stone, aggregate, bricks, earth and steel etc., neither BIS Marking/ approved nor reputed suppliers are available, such materials shall be obtained from sources/ suppliers/ manufactures approved by the Company.

iii) Deliveries of materials supplied by the Company shall be either from Company stores or other suitable point of collection. It shall be the responsibility of the contractor at his own risks and costs to take delivery of the company materials and to arrange for its loading, transportation to job site and unloading at the job site or other place of storage approved by the Company. In this regard, SCC clause no. 12.0 (ii) shall also be applicable.

iv) The materials supplied by the Company shall be utilized by the contractor only for incorporation in the permanent works and shall not be used for any other purpose.

v) The contractor shall inspect the materials supplied to him at the time of taking delivery thereof and satisfy himself of the quality, quantity and condition thereof prior to taking delivery and the company shall not be liable for any claims or complaints whatsoever in respect of quality, quantity or conditions of said materials once the contractor has taken delivery thereof.

D. TANK CONSTRUCTION/REPAIRING/FABRICATION:

i) All works of construction/repairing/fabrication, inspection and test shall be done in accordance with API-650 as applicable.

ii) Straightening of materials shall be done by pressing before being laid out or worked on in any way or by methods that will not damage the materials. Heating or hammering is not permissible unless the material is heated to forging temperature.

iii) Finish of plate edges: Plate edge preparation for finishing is to be done by any one of the following methods:

- a. Planning
- b. Flame cutting by machine
- c. Flame cutting by hand followed by removal of slag and irregularities by machining, grinding, chipping or filing.
- d. Shearing, but shearing shall be limited to maximum up to 10 mm thickness of plates for butt welded joints.

iv) Shaping of shell plates: Shell plates shall be shaped to suit the curvature of the tank, if required.

v) General procedure for fabrication and erection of tank:

- a. Fabrication and erection of tanks shall be as per drawings/ sketches provided by the Company.

- b. The plates shall be held in position with metal clips/ clamps/ lugs etc. and holes in plate work to assist in erection shall be completely avoided. Method of holding shall be approved by the Installation Manager /Site Engineer/his or her representative.
- c. Lugs attached by welding for erection shall be removed and any noticeable projections of weld metal shall be chipped, grinded off from the plate.
- d. Final welding to the plates shall start only after the alignment; weld preparation and positioning of the plates. To avoid damage to plates by storm/ wind during erection necessary guy rope are to be installed to hold the erected plates in position as advised by Installation Manager /Site Engineer/his or her representative.

vi) Bottom:

- a. Tank Bottom will have a slope.
- b. After being laid out and marked, the bottom plates shall be joined by welding and joints in sequence that will produce minimum inequalities in the bottom plate surface when the tank is completed. Overlap of welding & sequence of welding of the bottom plates, should be such that it eliminate distortion of the bottom surface.

vii) Shell:

- a. Shell plates shall be aligned by metal clips attached to the bottom plates and the shell may be tack welded to the bottom before continuous welding is started between the bottom edge of the shell plates and the bottom plates.
- b. Tank shells shall be safeguarded from damage due to wind by provision of steel wire or cables or other convenient methods until completion of the wind girder

viii) Roof: Slope shown in the drawing shall be maintained. The Gap between the shell and the periphery of the roof during erection of the roof shall be within the permitted gap.

ix) Settling markers: Markers on the shell shall be provided ½ meter from the bottom, four in number to check tank settlement during hydrostatic testing. These shall be fitted at 90 degree equally placed, size be 50mm x 50mm x 5mm angle (or nearest size) and approximately 100mm long.

x) Earthing of tanks: Tanks shall be electrically earthed as per drawings and specifications as stated in the contract. Refer the description of line items (Part-II: SOQ).

E. PIPING FABRICATION AND INSTALLATION:

i) The scope of piping covers the jobs as specified in the Scope of the contract and includes transportation from OIL yard to site, unloading at site, safe-storage, site transportation, fabrication and erection of the complete over ground and

underground piping as well as pipe fittings/ valves etc. Pipes of diameter 4" and above will be supplied by OIL.

- ii) Process piping fabrication shall be as per API 1104 standard latest edition.
- iii) The ends of line pipe shall be bevelled as per ANSI B 16.25.
- iv) All welding & welding joints carried out shall conform to API 1104 specifications, must be of radiographic quality & 10% of the welding joints at random will be radiographed by competent agency engaged by the contractor as per direction of Installation Manager /Site Engineer/his or her representative. All arrangements for radiography test including testing agency, source, films etc. are to be done by the contractor with prior intimation to Installation Manager /Site Engineer/his or her representative. After radiography, the processed films shall be submitted by the contractor along with the copy of inspection certificate issued by OIL's approved Third Party Inspection agency (viz., M/s Lloyds or M/s Bureau Veritus or M/s Rites or M/s DNV or M/s Tuboscope Vecto).

F. CIVIL ENGINEERING JOBS: All civil engineering jobs as specified in the Schedule of Works of the contract shall conform to relevant code/ standard as well as per specifications provided in the Schedule of Works of the contract. Contractor shall submit tank-wise certificate of conformity of the relevant codes/ standards/ specifications for the major Civil engineering jobs from a third party of repute. For construction of 04 (Four) Nos. of 160 KL Formation Water storage tanks

21.2 FOR CONSTRUCTION OF 04 NOS. 160KL FORMATION WATER STORAGE TANKS:

A. SCOPE OF WORK (SOW): Works under this contract are for construction of 04 nos. 160KL Formation water storage tanks including all piping and related civil Engineering jobs at OIL's production installation. The scope of works is as under:

- i) Isolation of the area.
- ii) Complete design, detailed Engineering, preparation of drawings for 04 nos. 160KL Formation water storage tanks and 03 nos. of 40KL capacity Formation water storage tanks.
- iii) Supply of materials, cleaning, repairing, testing, painting, and calibration of the tanks.
- iv) Handling, transportation, fabrication, laying of pipelines, pipe fittings, valves etc. as specified in the S.O.W. of the contract.
- v) Testing of assembled pipelines, valves, flanges, pipe fittings etc. to recommended hydrostatic test pressure before handing over of the tank for commissioning. Cleaning/ Air blowing of piping system. Hydrostatic test pressure record shall be submitted by contractor.
- vi) Painting of piping system & pipe supports.
- vii) Insulation of pipes wherever necessary.
- viii) Electrical Earthing of the tanks.
- ix) Execution of various civil jobs if any including supply of all materials.
- x) Construction and Commissioning of tanks.

- xi) On the top of the roof the contractor shall fabricate walkways to the breather valve, dip hole and railings around the top periphery of the tank.
- xii) All other works covered under SOQ & SCC of the Contract.

B. GENERAL GUIDELINES FOR FABRICATION AND ERECTION JOB:

i) GENERAL: Since the proposed job would be carried out in the running installation, proper arrangement is to be made to isolate the entire working area from the existing processed/ operational area of the installation. In this regard, work permit issued by the concerned Installation Manager / Site Engineer or his/ her representative shall be treated as Company's approval for jobs to be undertaken. The following jobs are planned for the purpose:

a) Fire barrier wall: Supply, fabrication & erection of temporary barrier wall with CGI sheet to a height of minimum 10metre to isolate the working area from the existing installation on three sides as per the instruction of the site engineer. The wall should be strong enough with proper structural supports and drawings should be submitted to site engineer for approval prior to erection job. No hot job (welding/cutting/grinding etc.) would be allowed at site during the installation of the barrier wall and also in the working place till the wall is completed and the area is made completely gas-free which is to be confirmed by gas testing. The site shall also have to be free from any hazardous/inflammable substances/materials etc. and necessary work permit/clearance from concerned Installation Manager / Site Engineer or his/ her representative must be taken prior to start of the job on daily basis. The required pipes for the posts to be used for erection of barrier wall shall be arranged by company which shall have to be transported by the contractor to the work site for job execution. The contractor shall have to dismantle the so erected barrier walls upon completion of the tank construction job. The Contractor will have to arrange all necessary infrastructure (scaffolding/working platform etc.) and resources required to facilitate erection and dismantling of the barrier walls in a safe manner which is to be to the satisfaction of the Site engineer.

b) Isolation of the entire working area from the process system: Isolation of all process pipelines (oil / water/ gas/ fire hydrant lines etc.) at the outside of the working area to make the tank completely safe for tank dismantling and fabrication job. The job involves opening up of existing flanged joints/ screwed joints etc. and installation of blind flange / plug in the existing piping leading to the tank farm. Isolation of such pipelines must be displayed by putting signage at places clearly visible from all angles/ corners. The job may involve installation of plugs, blind flanges, valves etc on the existing lines and also digging/excavation of these lines and restoration of the same, wherever required.

ii) FABRICATION OF TANKS:

a) Internal Cleaning of the tank: Internal cleaning of the tank through some approved practices to make it completely free from oil / gas / hydrocarbon sludge and make it ready for dismantling / hot work job. The Contractor will have to arrange/employ all necessary infrastructures (scaffolding / working platform etc.) and other resources for cleaning job to the satisfaction of the Installation Manager / Site Engineer or his/ her representative. After cleaning, necessary Gas testing would be carried out in these tanks and only after satisfactory test results, the

tanks would be allowed to repair by the Installation Manager / Site Engineer or his/ her representative in writing/ issuance of necessary permit. The job also involves cleaning of the outer surfaces as and where required to scrap off oil content. The sludge recovered from the tank during cleaning will have to be transported and disposed off to a location shown by the Installation Manager / Site Engineer or his/ her representative. The tank should be continuously vented throughout the cleaning process. The contractor should ensure use of proper PPE and adopt all safety measures during cleaning process.

b) All works for construction/ repairing/fabrication/ erection, inspection and test shall be done in accordance with API 12B / API-650. In no case the contractor would be allowed to carry out any hot job (welding/ cutting/ drilling) at a height above 3.75 m of the barrier wall from the existing ground level.

c) Fabrications also include supply of M.S. plates/structures, M.S. bars, angles and other tank materials required for construction/ repairing/fabrication as per the guidelines given by the company Installation Manager / Site Engineer or his/ her representative.

d) The contractor has to supply all the steel plates of tested quality conforming to IS:2062 including labour, machines, equipment, consumables etc. required for complete construction/ repairing/fabrication of the tanks. The quality test certificate of steel plates from third party inspection agency of repute shall be submitted by contractor.

e) The welders engaged for the job must have sufficient experience in similar jobs to ensure proper quality of welding. Contractor shall submit welder test certificate for the welder's engaged from a third party of repute.

f) Tanks plates and other materials supplied by the contractor will also be inspected by the company Installation Manager / Site Engineer or his/ her representative and only the approved materials will be allowed to use. Rejected materials will be replaced at contractor's cost. Similarly, cost of repairing/replacement of any plate/ material will be borne by the contractor.

g) The electrodes used shall be of suitable gauge and specification. Contractor shall furnish declaration that electrodes used for construction of tank conform to API-1104 / AWS/ ASME or equivalent. All necessary alignment and end preparation of the plates shall be done prior to welding.

h) The entire job shall be carried out under constant supervision of contractor's experienced and qualified personnel. Contractor shall declare the name of competent and skilled personnel at the time of mobilization.

i) Welding shall be of radiographic quality conforming to API-1104 specification. The welding joints will be subjected to random radiographic test in accordance with STD, API-650. Radiographic test certificate issued by a third party of repute/API approved welder of such randomly selected welded joints shall be furnished by the contractor.

j) The plate sizes of the tanks as shown in the drawing OIL/2402, OIL/3885 and OIL/3886 (excluding steam heating coil), are only indicative. If all the required plate sizes are not available in the market at the time of repairing and if the company is satisfied that required plates are not really available in the market (Documentary proof to be submitted by the contractor to the company from appropriate authority), then the nearest higher size of plate will be accepted by the company. In such an event, payment will be made for difference between the plates as per drawing and the plates actually used. Always a thicker plate will be used in case of non-availability of the plates indicated in the drawing. However no other payment including for increase in length of welding joints due to use of alternative size of plates in length, width & thickness will be made.

k) General specification of some of the items has been indicated in the referred drawing(s) and the contractor to ensure that the brought out items conform to the same. Further, the contractor shall specify the detail specifications of all other brought out items along with the vendor's/ manufacturer's name and furnish the same to OIL as and when required.

C. FABRICATION & CONSTRUCTION SPECIFICATIONS:

MATERIALS: All materials required for construction/ repairing/ fabrication and commissioning, related to the activities for execution of the Contract shall be supplied by the Contractor except otherwise specified in SOQ, SCC of the Contract.

i) Materials supplied by the contractor shall conform to the specifications and shall be suitable for the purpose for which they are required. Composition of materials procured by the contractor shall have to be submitted to the company. Relevant quality test certificates from a third party of repute shall be submitted to OIL by the contractor at free of cost.

ii) Unless otherwise specified by the Company, all materials supplied by the contractor shall bear the BIS stamp and/ or shall be procured from the reputed manufacturers or suppliers. If in respect of any materials, including but not limited to sand, stone, aggregate, bricks, earth and steel etc., neither BIS Marking/ approved nor reputed suppliers are available, such materials shall be obtained from sources/ suppliers/ manufactures/ vendors approved by the Company.

iii) Deliveries of materials supplied by the Company shall be either from Company stores or other suitable point of collection. It shall be the responsibility of the contractor at his own risks and costs to take delivery of the company materials and to arrange for its loading, transportation to job site and unloading at the job site or other place of storage approved by the Company. . In this regard, SCC clause no. 12.0(ii) shall also be applicable.

iv) The materials supplied by the Company shall be utilized by the contractor only for incorporation in the permanent works and shall not be used for any other purpose.

v) The contractor shall inspect the materials supplied to him at the time of taking delivery thereof and satisfy himself of the quality, quantity and condition thereof prior to taking delivery and the company shall not be liable for any claims or

complaints whatsoever in respect of quality, quantity or conditions of said materials once the contractor has taken delivery thereof.

D. TANK CONSTRUCTION/REPAIRING/FABRICATION:

- i) All works of construction/repairing/fabrication, inspection and test shall be done in accordance with API-650 wherever applicable.
- ii) Straightening of materials shall be done by pressing before being laid out or worked on in any way or by methods that will not damage the materials. Heating or hammering is not permissible unless the material is heated to forging temperature.
- iii) Finish of plate edges: Plate edge preparation for finishing is to be done by any one of the following methods:
 - a. Planning
 - b. Flame cutting by machine
 - c. Flame cutting by hand followed by removal of slag and irregularities by machining, grinding, chipping or filing.
 - d. Shearing, but shearing shall be limited to maximum up to 10 mm thickness of plates for butt welded joints.
- iv) Shaping of shell plates: Shell plates shall be shaped to suit the curvature of the tank, if required.
- v) General procedure for fabrication and erection of tank:
 - a. Fabrication and erection of tanks shall be as per drawings/ sketches provided by the Company.
 - b. The plates shall be held in position with metal clips/ clamps/ lugs etc. and holes in plate work to assist in erection shall be completely avoided. Method of holding shall be approved by the Installation Manager / Site Engineer.
 - c. Lugs attached by welding for erection shall be removed and any noticeable projections of weld metal shall be chipped, grinded off from the plate.
 - d. Final welding to the plates shall start only after the alignment; weld preparation and positioning of the plates. To avoid damage to plates by storm/ wind during erection necessary guy rope are to be installed to hold the erected plates in position as advised by Installation Manager / site Engineer.
- vi) Bottom:
 - a. Tank Bottom shall have a slope.
 - b. After being laid out and marked, the bottom plates shall be joined by welding and joints in sequence that will produce minimum inequalities in the bottom plate surface when the tank is completed. Overlap of welding & sequence of welding of the bottom plates, should be such that it eliminate distortion of the bottom surface.
- vii) Shell:

- a. Shell plates shall be aligned by metal clips attached to the bottom plates and the shell may be tack welded to the bottom before continuous welding is started between the bottom edge of the shell plates and the bottom plates.
- b. Tank shells shall be safeguarded from damage due to wind by provision of steel wire or cables or other convenient methods until completion of the wind girder
- viii) Roof: Slope shown in the drawing shall be maintained. The Gap between the shell and the periphery of the roof during erection of the roof shall be within the permitted gap.
- ix) Settling markers: Markers on the shell shall be provided ½ meter from the bottom, four in number to check tank settlement during hydrostatic testing. These shall be fitted at 90 degree equally placed, size be 50mm x 50mm x 5mm angle (or nearest size) and approximately 100mm long.
- x) Earthing of tanks: Tanks shall be electrically earthed as per drawings and specifications as stated in the contract.

E. PIPING FABRICATION AND INSTALLATION:

- i) The scope of piping covers the jobs as specified in the Scope of the contract and includes transportation from OIL yard to site, unloading at site, safe-storage, site transportation, fabrication and erection of the complete over ground and underground piping as well as pipe fittings/ valves etc. Pipes of diameter 4" and above will be supplied by OIL.
- ii) Process piping fabrication shall be as per API 1104 standard latest edition.
- iii) The ends of line pipe shall be bevelled as per ANSI B 16.25, if required.
- iv) All welding & welding joints carried out shall conform to API 1104 specifications, must be of radiographic quality & 10% of the welding joints at random will be radiographed by competent agency engaged by the contractor as per direction of Installation Manager / site engineer/ Engineer in charge. All arrangements for radiography test including testing agency, source, films etc. are to be done by the contractor with prior intimation to Installation Manager / site engineer/ Engineer in charge. After radiography, the processed films shall be submitted by the contractor along with the copy of inspection certificate issued by OIL's approved Third Party Inspection agency (viz., M/s Lloyds or M/s Bureau Veritus or M/s Rites or M/s DNV or M/s Tuboscope Vecto).

F. CIVIL ENGINEERING JOBS: All civil engineering jobs as specified in the Schedule of Works of the contract shall conform to relevant code/ standard as well as per specifications provided in the Schedule of Works of the contract. Contractor shall submit tank-wise certificate of conformity of the relevant codes/ standards/ specifications for the major Civil engineering jobs from a third party of repute.

21.3 FOR CONSTRUCTION OF 03 (THREE) NOS. OF 40 KL FORMATION WATER STORAGE TANKS:

A. SCOPE OF WORK (SOW): Works under this contract are for construction of **03 nos. of 40KL capacity Formation water storage tanks** including all piping and related civil Engineering jobs at OIL's production installation. The scope of works is as under:

- i) Isolation of the area.
- ii) Complete design, detailed Engineering, preparation of drawings 03 nos. of 40KL capacity Formation water storage tanks.
- iii) Supply of materials, cleaning, repairing, testing, painting, and calibration of the tanks.
- iv) Handling, transportation, fabrication, laying of pipelines, pipe fittings, valves etc. as specified in the S.O.W. of the contract.
- v) Testing of assembled pipelines, valves, flanges, pipe fittings etc. to recommended hydrostatic test pressure before handing over of the tank for commissioning. Cleaning/ Air blowing of piping system. Hydrostatic test pressure record shall be submitted by contractor.
- vi) Painting of piping system & pipe supports.
- vii) Insulation of pipes wherever necessary.
- viii) Electrical Earthing of the tanks.
- ix) Execution of various civil jobs if any including supply of all materials.
- x) Construction and Commissioning of tanks.
- xi) On the top of the roof the contractor shall fabricate walkways to the breather valve, dip hole and railings around the top periphery of the tank.
- xii) All other works covered under SOQ & SCC of the Contract.

B. GENERAL GUIDELINES FOR FABRICATION AND ERECTION JOB:

i) GENERAL: Since the proposed job would be carried out in the running installation, proper arrangement is to be made to isolate the entire working area from the existing processed/ operational area of the installation. In this regard, work permit issued by the concerned Installation Manager / Site Engineer or his/ her representative shall be treated as Company's approval for jobs to be undertaken. The following jobs are planned for the purpose:

a) Fire barrier wall: Supply, fabrication & erection of temporary barrier wall with CGI sheet to a height of minimum 10metre to isolate the working area from the existing installation on three sides as per the instruction of the site engineer. The wall should be strong enough with proper structural supports and drawings should be submitted to site engineer for approval prior to erection job. No hot job (welding/cutting/grinding etc.) would be allowed at site during the installation of the barrier wall and also in the working place till the wall is completed and the area is made completely gas-free which is to be confirmed by gas testing. The site shall also have to be free from any hazardous/inflammable substances/materials etc. and necessary work permit/clearance from concerned Installation Manager / Site Engineer or his/ her representative must be taken prior to start of the job on daily basis. The required pipes for the posts to be used for erection of barrier wall shall be arranged by company which shall have to be transported by the contractor to the work site for job execution. The contractor shall have to dismantle the so erected

barrier walls upon completion of the tank construction job. The Contractor will have to arrange all necessary infrastructure (scaffolding/working platform etc.) and resources required to facilitate erection and dismantling of the barrier walls in a safe manner which is to be to the satisfaction of the Site engineer.

b) Isolation of the entire working area from the process system: Isolation of all process pipelines (oil / water/ gas/ fire hydrant lines etc.) at the outside of the working area to make the tank completely safe for tank dismantling and fabrication job. The job involves opening up of existing flanged joints/ screwed joints etc. and installation of blind flange / plug in the existing piping leading to the tank farm. Isolation of such pipelines must be displayed by putting signage at places clearly visible from all angles/ corners. The job may involve installation of plugs, blind flanges, valves etc on the existing lines and also digging/excavation of these lines and restoration of the same, wherever required.

ii) FABRICATION OF TANKS:

a) Internal Cleaning of the tank: Internal cleaning of the tank through some approved practices to make it completely free from oil / gas / hydrocarbon sludge and make it ready for dismantling / hot work job. The Contractor will have to arrange/employ all necessary infrastructures (scaffolding / working platform etc.) and other resources for cleaning job to the satisfaction of the Installation Manager / Site Engineer or his/ her representative. After cleaning, necessary Gas testing would be carried out in these tanks and only after satisfactory test results, the tanks would be allowed to repair by the Installation Manager / Site Engineer or his/ her representative in writing/ issuance of necessary permit. The job also involves cleaning of the outer surfaces as and where required to scrap off oil content. The sludge recovered from the tank during cleaning will have to be transported and disposed off to a location shown by the Installation Manager / Site Engineer or his/ her representative. The tank should be continuously vented throughout the cleaning process. The contractor should ensure use of proper PPE and adopt all safety measures during cleaning process.

b) All works for construction/ repairing/fabrication/ erection, inspection and test shall be done in accordance with API 12B / API-650. In no case the contractor would be allowed to carry out any hot job (welding/ cutting/ drilling) at a height above 3.75 m of the barrier wall from the existing ground level.

c) Fabrications also include supply of M.S. plates/structures, M.S. bars, angles and other tank materials required for construction/ repairing/fabrication as per the guidelines given by the company Installation Manager / Site Engineer or his/ her representative.

d) The contractor has to supply all the steel plates of tested quality conforming to IS:2062 including labour, machines, equipment, consumables etc. required for complete construction/ repairing/fabrication of the tanks. The quality test certificate of steel plates from third party inspection agency of repute shall be submitted by contractor.

- e) The welders engaged for the job must have sufficient experience in similar jobs to ensure proper quality of welding. Contractor shall submit welder test certificate for the welder's engaged from a third party of repute.
- f) Tanks plates and other materials supplied by the contractor will also be inspected by the company Installation Manager / Site Engineer or his/ her representative and only the approved materials will be allowed to use. Rejected materials will be replaced at contractor's cost. Similarly, cost of repairing/replacement of any plate/ material will be borne by the contractor.
- g) The electrodes used shall be of suitable gauge and specification. Contractor shall furnish declaration that electrodes used for construction of tank conform to API-1104 / AWS/ ASME or equivalent. All necessary alignment and end preparation of the plates shall be done prior to welding.
- h) The entire job shall be carried out under constant supervision of contractor's experienced and qualified personnel. Contractor shall declare the name of competent and skilled personnel at the time of mobilization.
- i) Welding shall be of radiographic quality conforming to API-1104 specification. The welding joints will be subjected to random radiographic test in accordance with STD, API-650. Radiographic test certificate issued by a third party of repute/API approved welder of such randomly selected welded joints shall be furnished by the contractor.
- j) The plate sizes of the tanks as shown in the drawing OIL/2402, OIL/3885 and OIL/3886 (excluding steam heating coil), are only indicative. If all the required plate sizes are not available in the market at the time of repairing and if the company is satisfied that required plates are not really available in the market (Documentary proof to be submitted by the contractor to the company from appropriate authority), then the nearest higher size of plate will be accepted by the company. In such an event, payment will be made for difference between the plates as per drawing and the plates actually used. Always a thicker plate will be used in case of non-availability of the plates indicated in the drawing. However no other payment including for increase in length of welding joints due to use of alternative size of plates in length, width & thickness will be made.
- k) General specification of some of the items have been indicated in the referred drawing(s) and the contractor to ensure that the brought out items conform to the same. Further, the contractor shall specify the detail specifications of all other brought out items along with the vendor's/ manufacturer's name and furnish the same to OIL as and when required.

C. FABRICATION & CONSTRUCTION SPECIFICATIONS:

MATERIALS: All materials required for construction/ repairing/ fabrication and commissioning, related to the activities for execution of the Contract shall be supplied by the Contractor except otherwise specified in SOQ, SCC of the Contract.

- i) Materials supplied by the contractor shall conform to the specifications and shall be suitable for the purpose for which they are required. Composition of

materials procured by the contractor shall have to be submitted to the company. Relevant quality test certificates from a third party of repute shall be submitted to OIL by the contractor at free of cost.

ii) Unless otherwise specified by the Company, all materials supplied by the contractor shall bear the BIS stamp and/ or shall be procured from the reputed manufacturers or suppliers. If in respect of any materials, including but not limited to sand, stone, aggregate, bricks, earth and steel etc., neither BIS Marking/ approved nor reputed suppliers are available, such materials shall be obtained from sources/ suppliers/ manufactures/ vendors approved by the Company.

iii) Deliveries of materials supplied by the Company shall be either from Company stores or other suitable point of collection. It shall be the responsibility of the contractor at his own risks and costs to take delivery of the company materials and to arrange for its loading, transportation to job site and unloading at the job site or other place of storage approved by the Company. . In this regard, SCC clause no. 12.0(ii) shall also be applicable.

iv) The materials supplied by the Company shall be utilized by the contractor only for incorporation in the permanent works and shall not be used for any other purpose.

v) The contractor shall inspect the materials supplied to him at the time of taking delivery thereof and satisfy himself of the quality, quantity and condition thereof prior to taking delivery and the company shall not be liable for any claims or complaints whatsoever in respect of quality, quantity or conditions of said materials once the contractor has taken delivery thereof.

D. TANK CONSTRUCTION/REPAIRING/FABRICATION:

i) All works of construction/repairing/fabrication, inspection and test shall be done in accordance with API-650 wherever applicable.

ii) Straightening of materials shall be done by pressing before being laid out or worked on in any way or by methods that will not damage the materials. Heating or hammering is not permissible unless the material is heated to forging temperature.

iii) Finish of plate edges: Plate edge preparation for finishing is to be done by any one of the following methods:

- a. Planning
- b. Flame cutting by machine
- c. Flame cutting by hand followed by removal of slag and irregularities by machining, grinding, chipping or filing.
- d. Shearing, but shearing shall be limited to maximum up to 10 mm thickness of plates for butt welded joints.

iv) Shaping of shell plates: Shell plates shall be shaped to suit the curvature of the tank, if required.

v) General procedure for fabrication and erection of tank:

- a. Fabrication and erection of tanks shall be as per drawings/ sketches provided by the Company.
- b. The plates shall be held in position with metal clips/ clamps/ lugs etc. and holes in plate work to assist in erection shall be completely avoided. Method of holding shall be approved by the Installation Manager / Site Engineer.
- c. Lugs attached by welding for erection shall be removed and any noticeable projections of weld metal shall be chipped, grinded off from the plate.
- d. Final welding to the plates shall start only after the alignment; weld preparation and positioning of the plates. To avoid damage to plates by storm/ wind during erection necessary guy rope are to be installed to hold the erected plates in position as advised by Installation Manager / site Engineer.

vi) Bottom:

- a. Tank Bottom shall have a slope.
- b. After being laid out and marked, the bottom plates shall be joined by welding and joints in sequence that will produce minimum inequalities in the bottom plate surface when the tank is completed. Overlap of welding & sequence of welding of the bottom plates, should be such that it eliminate distortion of the bottom surface.

vii) Shell:

- a. Shell plates shall be aligned by metal clips attached to the bottom plates and the shell may be tack welded to the bottom before continuous welding is started between the bottom edge of the shell plates and the bottom plates.
- b. Tank shells shall be safeguarded from damage due to wind by provision of steel wire or cables or other convenient methods until completion of the wind girder

viii) Roof: Slope shown in the drawing shall be maintained. The Gap between the shell and the periphery of the roof during erection of the roof shall be within the permitted gap.

ix) Settling markers: Markers on the shell shall be provided $\frac{1}{2}$ meter from the bottom, four in number to check tank settlement during hydrostatic testing. These shall be fitted at 90 degree equally placed, size be 50mm x 50mm x 5mm angle (or nearest size) and approximately 100mm long.

x) Earthing of tanks: Tanks shall be electrically earthed as per drawings and specifications as stated in the contract.

E. PIPING FABRICATION AND INSTALLATION:

i) The scope of piping covers the jobs as specified in the Scope of the contract and includes transportation from OIL yard to site, unloading at site, safe-storage, site transportation, fabrication and erection of the complete over ground and

underground piping as well as pipe fittings/ valves etc. Pipes of diameter 4" and above will be supplied by OIL.

Process piping fabrication shall be as per API 1104 standard latest edition.

- ii. The ends of line pipe shall be bevelled as per ANSI B 16.25, if required.
- iii) All welding & welding joints carried out shall conform to API 1104 specifications, must be of radiographic quality & 10% of the welding joints at random will be radiographed by competent agency engaged by the contractor as per direction of Installation Manager / site engineer/ Engineer in charge. All arrangements for radiography test including testing agency, source, films etc. are to be done by the contractor with prior intimation to Installation Manager / site engineer/ Engineer in charge. After radiography, the processed films shall be submitted by the contractor along with the copy of inspection certificate issued by OIL's approved Third Party Inspection agency (viz., M/s Lloyds or M/s Bureau Veritus or M/s Rites or M/s DNV or M/s Tuboscope Vecto).

F. CIVIL ENGINEERING JOBS: All civil engineering jobs as specified in the Schedule of Works of the contract shall conform to relevant code/ standard as well as per specifications provided in the Schedule of Works of the contract. Contractor shall submit tank-wise certificate of conformity of the relevant codes/ standards/ specifications for the major Civil engineering jobs from a third party of repute.

21.4 FOR CONSTRUCTION OF 02 (TWO) NOS. OF 795 KL FORMATION WATER STORAGE TANKS

A. SCOPE OF WORK (SOW): Works under this contract are Construction of 2 (Two) nos. 795KL Formation Water storage tanks at Makum OCS including all piping and related civil Engineering jobs at the OIL's production installation. The scope of works is as under:

- i) Isolation of the area.
- ii) Complete design, detailed Engineering, preparation of drawings for Construction of 2(Two) nos. 795KL Formation Water storage tanks at Makum OCS.
- iii) Supply of materials, cleaning, repairing, testing, painting, and calibration of the tanks.
- iv) Handling, transportation, fabrication, laying of pipelines, pipe fittings, valves etc. as specified in the S.O.W. of the contract.
- v) Testing of assembled pipelines, valves, flanges, pipe fittings etc. to recommended hydrostatic test pressure before handing over of the tank for commissioning. Cleaning/ Air blowing of piping system. Hydrostatic test pressure record shall be submitted by contractor.
- vi) Painting of piping system & pipe supports.
- vii) Insulation of pipes wherever necessary.
- viii) Electrical Earthing of the tanks.
- ix) Execution of various civil jobs if any including supply of all materials.
- x) Construction and Commissioning of tanks.
- xi) On the top of the roof the contractor shall fabricate walkways and railings around the top periphery of the tank.

xii) All other works covered under SOQ & SCC of the Contract.

B. GENERAL GUIDELINES FOR FABRICATION AND ERECTION JOB:

i) GENERAL: Since the proposed job would be carried out in the running installation, proper arrangement is to be made to isolate the entire working area from the existing processed/ operational area of the installation. In this regard, work permit issued by the concerned Installation Manager / Site Engineer or his/ her representative shall be treated as Company's approval for jobs to be undertaken. The following jobs are planned for the purpose:

a) Fire barrier wall: Supply, fabrication & erection of temporary barrier wall with CGI sheet to a height of minimum 10metre to isolate the working area from the existing installation on three sides as per the instruction of the site engineer. The wall should be strong enough with proper structural supports and drawings should be submitted to site engineer for approval prior to erection job. No hot job (welding/cutting/grinding etc.) would be allowed at site during the installation of the barrier wall and also in the working place till the wall is completed and the area is made completely gas-free which is to be confirmed by gas testing. The site shall also have to be free from any hazardous/inflammable substances/materials etc. and necessary work permit/clearance from concerned Installation Manager / Site Engineer or his/ her representative must be taken prior to start of the job on daily basis. The required pipes for the posts to be used for erection of barrier wall shall be arranged by company which shall have to be transported by the contractor to the work site for job execution. The contractor shall have to dismantle the so erected barrier walls upon completion of the tank construction job. The Contractor will have to arrange all necessary infrastructure (scaffolding/working platform etc.) and resources required to facilitate erection and dismantling of the barrier walls in a safe manner which is to be to the satisfaction of the Site engineer.

b) Isolation of the entire working area from the process system: Isolation of all process pipelines (oil / water/ gas/ fire hydrant lines etc.) at the outside of the working area to make the tank completely safe for tank dismantling and fabrication job. The job involves opening up of existing flanged joints/ screwed joints etc. and installation of blind flange / plug in the existing piping leading to the tank farm. Isolation of such pipelines must be displayed by putting signage at places clearly visible from all angles/ corners. The job may involve installation of plugs, blind flanges, valves etc on the existing lines and also digging/excavation of these lines and restoration of the same, wherever required.

ii) FABRICATION OF TANKS:

a) Internal Cleaning of the tank: Internal cleaning of the tank through some approved practices to make it completely free from oil / gas / hydrocarbon sludge and make it ready for dismantling / hot work job. The Contractor will have to arrange/employ all necessary infrastructures (scaffolding / working platform etc.) and other resources for cleaning job to the satisfaction of the Installation Manager / Site Engineer or his/ her representative. After cleaning, necessary Gas testing would be carried out in these tanks and only after satisfactory test results, the tanks would be allowed to repair by the Installation Manager / Site Engineer or his/ her representative in writing/ issuance of necessary permit. The job also

involves cleaning of the outer surfaces as and where required to scrap off oil content. The sludge recovered from the tank during cleaning will have to be transported and disposed off to a location shown by the Installation Manager / Site Engineer or his/ her representative. The tank should be continuously vented throughout the cleaning process. The contractor should ensure use of proper PPE and adopt all safety measures during cleaning process.

b) All works for construction/ repairing/fabrication/ erection, inspection and test shall be done in accordance with API 12B / API-650 as applicable. In no case the contractor would be allowed to carry out any hot job (welding/ cutting/ drilling) at a height above 3.75 m of the barrier wall from the existing ground level.

c) Fabrications also include supply of M.S. plates/structures, M.S. bars, angles and other tank materials required for construction/ repairing/fabrication as per the guidelines given by the company Installation Manager / Site Engineer or his/ her representative.

d) The contractor has to supply all the steel plates of tested quality conforming to IS:2062 including labour, machines, equipment, consumables etc. required for complete construction/ repairing/fabrication of the tanks. The quality test certificate of steel plates from third party inspection agency of repute shall be submitted by contractor.

e) The welders engaged for the job must have sufficient experience in similar jobs to ensure proper quality of welding. Contractor shall submit welder test certificate for the welder's engaged from a third party of repute.

f) Tanks plates and other materials supplied by the contractor will also be inspected by the company Installation Manager / Site Engineer or his/ her representative and only the approved materials will be allowed to use. Rejected materials will be replaced at contractor's cost. Similarly, cost of repairing/replacement of any plate/ material will be borne by the contractor.

g) The electrodes used shall be of suitable gauge and specification. Contractor shall furnish declaration/proof that electrodes used for construction of tank conform to API/ AWS/ ISO/ ASME standards or equivalent. All necessary alignment and end preparation of the plates shall be done prior to welding.

h) The entire job shall be carried out under constant supervision of contractor's experienced and qualified personnel. Contractor shall declare the name of competent and skilled personnel at the time of mobilization.

i) Welding shall be of radiographic quality conforming to API-1104 specification. The welding joints will be subjected to random radiographic test in accordance with ASME/ API or equivalent guidelines. Radiographic test certificate issued by a third party of repute of such randomly selected welded joints shall be furnished by the contractor.

j) The plate sizes of the tanks as shown in the drawing OIL/0559/A are only indicative. If all the required plate sizes are not available in the market at the time of repairing and if the company is satisfied that required plates are not really

available in the market (Documentary proof to be submitted by the contractor to the company from appropriate authority), then the nearest higher size of plate will be accepted by the company. In such an event, payment will be made for difference between the plates as per drawing and the plates actually used. Always a thicker plate will be used in case of non-availability of the plates indicated in the drawing. However no other payment including for increase in length of welding joints due to use of alternative size of plates in length, width & thickness will be made.

k) General specification of some of the items has been indicated in the referred drawing(s) and the contractor to ensure that the brought out items conform to the same. Further, the contractor shall specify the detail specifications of all other brought out items along with the vendor's/ manufacturer's name and furnish the same to OIL as and when required.

C. **FABRICATION & CONSTRUCTION SPECIFICATIONS:**

MATERIALS: All materials required for construction/repairing/fabrication & commissioning, related to the activities for execution of the Contract shall be supplied by the Contractor except otherwise specified in SOQ, SCC of the Contract.

i) Materials supplied by the contractor shall conform to the specifications and shall be suitable for the purpose for which they are required. Composition of materials procured by the contractor shall have to be submitted to the company. Relevant quality test certificates from a third party of repute shall be submitted to OIL by the contractor at free of cost.

ii) Unless otherwise specified by the Company, all materials supplied by the contractor shall bear the BIS stamp and/ or shall be procured from the reputed manufacturers or suppliers. If in respect of any materials, including but not limited to sand, stone, aggregate, bricks, earth and steel etc., neither BIS Marking/ approved nor reputed suppliers are available, such materials shall be obtained from sources/ suppliers/ manufactures approved by the Company.

iii) Deliveries of materials supplied by the Company shall be either from Company stores or other suitable point of collection. It shall be the responsibility of the contractor at his own risks and costs to take delivery of the company materials and to arrange for its loading, transportation to job site and unloading at the job site or other place of storage approved by the Company. . In this regard, SCC clause no. 12.0(ii) shall also be applicable.

iv) The materials supplied by the Company shall be utilized by the contractor only for incorporation in the permanent works and shall not be used for any other purpose.

v) The contractor shall inspect the materials supplied to him at the time of taking delivery thereof and satisfy himself of the quality, quantity and condition thereof prior to taking delivery and the company shall not be liable for any claims or complaints whatsoever in respect of quality, quantity or conditions of said materials once the contractor has taken delivery thereof.

D. **TANK CONSTRUCTION/REPAIRING/FABRICATION:**

- i) All works of construction/repairing/fabrication, inspection and test shall be done in accordance with API-650 as applicable.
- ii) Straightening of materials shall be done by pressing before being laid out or worked on in any way or by methods that will not damage the materials. Heating or hammering is not permissible unless the material is heated to forging temperature.
- iii) Finish of plate edges: Plate edge preparation for finishing is to be done by any one of the following methods:
 - a. Planning
 - b. Flame cutting by machine
 - c. Flame cutting by hand followed by removal of slag and irregularities by machining, grinding, chipping or filing.
 - d. Shearing, but shearing shall be limited to maximum up to 10 mm thickness of plates for butt welded joints.
- iv) Shaping of shell plates: Shell plates shall be shaped to suit the curvature of the tank, if required.
- v) General procedure for fabrication and erection of tank:
 - a. Fabrication and erection of tanks shall be as per drawings/ sketches provided by the Company.
 - b. The plates shall be held in position with metal clips/ clamps/ lugs etc. and holes in plate work to assist in erection shall be completely avoided. Method of holding shall be approved by the Installation Manager /Site Engineer/his or her representative.
 - c. Lugs attached by welding for erection shall be removed and any noticeable projections of weld metal shall be chipped, grinded off from the plate.
 - d. Final welding to the plates shall start only after the alignment; weld preparation and positioning of the plates. To avoid damage to plates by storm/ wind during erection necessary guy rope are to be installed to hold the erected plates in position as advised by Installation Manager /Site Engineer/his or her representative.
- vi) Bottom:
 - a. Tank Bottom will have a slope.
 - b. After being laid out and marked, the bottom plates shall be joined by welding and joints in sequence that will produce minimum inequalities in the bottom plate surface when the tank is completed. Overlap of welding & sequence of welding of the bottom plates, should be such that it eliminate distortion of the bottom surface.
- vii) Shell:
 - a. Shell plates shall be aligned by metal clips attached to the bottom plates and the shell may be tack welded to the bottom before continuous welding is started between the bottom edge of the shell plates and the bottom plates.

- b. Tank shells shall be safeguarded from damage due to wind by provision of steel wire or cables or other convenient methods until completion of the wind girder
- viii) Roof: Slope shown in the drawing shall be maintained. The Gap between the shell and the periphery of the roof during erection of the roof shall be within the permitted gap.
- ix) Settling markers: Markers on the shell shall be provided ½ meter from the bottom, four in number to check tank settlement during hydrostatic testing. These shall be fitted at 90 degree equally placed, size be 50mm x 50mm x 5mm angle (or nearest size) and approximately 100mm long.
- x) Earthing of tanks: Tanks shall be electrically earthed as per drawings and specifications as stated in the contract. Refer the description of line items (Part-II: SOQ).

E. PIPING FABRICATION AND INSTALLATION:

- i) The scope of piping covers the jobs as specified in the Scope of the contract and includes transportation from OIL yard to site, unloading at site, safe-storage, site transportation, fabrication and erection of the complete over ground and underground piping as well as pipe fittings/ valves etc. Pipes of diameter 4" and above will be supplied by OIL.
- ii) Process piping fabrication shall be as per API 1104 standard latest edition.
- iii) The ends of line pipe shall be bevelled as per ANSI B 16.25.
- iv) All welding & welding joints carried out shall conform to API 1104 specifications, must be of radiographic quality & 10% of the welding joints at random will be radiographed by competent agency engaged by the contractor as per direction of Installation Manager /Site Engineer/his or her representative. All arrangements for radiography test including testing agency, source, films etc. are to be done by the contractor with prior intimation to Installation Manager /Site Engineer/his or her representative. After radiography, the processed films shall be submitted by the contractor along with the copy of inspection certificate issued by OIL's approved Third Party Inspection agency (viz., M/s Lloyds or M/s Bureau Veritus or M/s Rites or M/s DNV or M/s Tuboscope Vecto).

F. CIVIL ENGINEERING JOBS: All civil engineering jobs as specified in the Schedule of Works of the contract shall conform to relevant code/ standard as well as per specifications provided in the Schedule of Works of the contract. Contractor shall submit tank-wise certificate of conformity of the relevant codes/ standards/ specifications for the major Civil engineering jobs from a third party of repute.

22.0 INSPECTION AND TESTING:

- A) Inspection & Testing of materials:

i) The Company shall have the power to inspect and/ or test by itself including radiographic test or through an independent person or agency(ies) appointed by the company and/ or to direct the contractor to inspect and/ or test all whatsoever supplied including materials, items and components proposed for supply (if any) for incorporation in the works, during the course of construction or fabrication or repair by the contractor. The inspection and/ or test shall be conducted at the expense of the contractor. The contractor may be directed by the company to conduct such test/inspection by any agency (ies)/ vendor(s) approved by the company which shall be done by the contractor at no cost to OIL. Report to the effect shall be submitted to OIL for record, if any.

ii) The Installation Manager / Site Engineer/ his or her representative shall have the power to reject any defective material, item or component (including specially manufactured or fabricated items or components) supplied by the contractor for incorporation in the works at any time notwithstanding previous inspection and/ or testing thereof by or on behalf of the Company. The decision of the Company / Site Engineer/ his or her representative as to reject any defective material, item or component shall be final and binding upon the contractor and upon such rejection the contractor shall perform such work as shall be necessary to bring the material/ item/ component to the requisite standard. The Contractor shall have to replace such defective/ rejected item or materials at his own cost and expenses. No claims to the effect shall be entertained.

B) Inspection & Testing of works:

i) The contractor shall at all times ensure high standard of workmanship, related to the work to the satisfaction of the Installation Manager / Site Engineer/ his or her representative. The Installation Manager / Site Engineer/ his or her representative shall have the power to inspect the work in all respects at any point of time up to the completion of the work and also to instruct the contractor to test the works or any structure, material(s) or component(s) thereof at the risk and cost of the contractor.

ii) The contractor shall provide all facilities, instruments, materials, labours and other resources required for testing of the works and shall provide the Installation Manager / Site Engineer/ his or her representative all assistance necessary to inspect the tests carried out by the contractor.

iii) The contractor at all times shall also provide and keep at all times during the progress of the work, proper means of access to the work and every part thereof by means of ladders, gangways etc. for inspection and measurement of the work.

iv) Should the Installation Manager / Site Engineer/ his or her representative on inspection or test be not satisfied with the quality of workmanship, of any work, material or component (the decision of the Installation Manager / Site Engineer/ his or her representative being final in this behalf) the contractor shall re-perform, replace, re-install and/ or re-erect (as the case may be) such work, structure material or component and no such rejected work, structure, materials or item or component shall be re-used with reference to the work except with the prior permission of the Installation Manager / Site Engineer/ his or her representative.

C) Final test and possession of works:

i) As soon as the works have been completed in all respects to the satisfaction of the Installation Manager / Site Engineer/ his or her representative, final tests of the works shall be undertaken by the contractor at the risk and costs of the contractor in the presence of the Installation Manager / Site Engineer/ his or her representative or the Company representative. The company may at its discretion permit final tests in piecemeal in respect of particular part(s) or sections(s) or group(s) of the works or in respect of particular job site(s) involved. Upon completion of the final test the contractor shall submit the handover documents to the Installation Manager / Site Engineer/ his or her representative along with all copies of inspection/ test certificates/ documents for record.

ii) Upon satisfactory completion of the final test(s), the Installation Manager / Site Engineer/ his or her representative shall prepare a final test certificate/ take over document which shall certify the date of final test(s)/ commissioning in respect of the work(s) that have been successfully completed and where the final test(s) have been conducted in piecemeal in respect of the related part(s)/ sections(s)/ group(s)/ job site(s) which shall be certified by the concerned Installation Manager / site Engineer / Engineer in charge.

iii) As and from the date of successful completion of final tests/ commissioning as mentioned in the final test certificate the Company shall be deemed to have taken over the work(s)/ part (s/ section(s)/ group(s), in respect of which final test certificate have been issued.

iv) If during the Final Tests or prior thereto any defect(s) in any work performed or structure or component installed/ erected or material or other items incorporated in the works is/ are noticed, the contractor shall forthwith remove and/ or demolish the same and re-perform, replace, reinstall or re-erect the same and otherwise do and provide whatever is necessary to be done to correct, repair and/ or rectify the defect(s) to the satisfaction of the Installation Manager / Site Engineer/ his or her representative.

D) Inspection and testing of tanks and pipeline:**a) Visual inspection-**

i) Inspection of all welds shall be carried out as per API 1104. Finish weld, shall be visually inspected for parallel and axial misalignment of the work, cracks, inadequate penetration, un-repaired burn through, dimension and other surface defects and it must present a neat appearance.

b) Radiographic examination-

ii) The radiography of the welding joints would be carried out by OIL's approved Third Party Inspection agency (viz., M/s Lloyds or M/s Bureau Veritus or M/s Rites or M/s DNV or M/s Tuboscope Vecto) and the copy(ies) of inspection certificate issued by the agency shall be submitted to OIL.

iii) The procedure of radiographic examination, limits of acceptability, removal and repair of defects shall be as per API 1104. Cracks and lack of root fusion/

penetration are considered as injurious defects and shall not be permitted. Contractor shall be responsible for carrying out radiographic examinations of defects and re-radiography of the welds rectified. He/ she shall make necessary arrangements for the equipment as well as radiographic films at his own cost for the repairing of the defective welding joints.

iv) Contractor shall fulfil all the statutory safety requirements in handling the X-Ray/ Gamma rays equipment as applicable.

v) Joints to be radiographed shall be identified and marked by contractor in presence of Installation Manager / Site Engineer/ company representative and radiography shall be carried out accordingly. The contractor shall submit all the radiographs along with radiographic reports/ Third party inspection/test reports/certificate of the identified joints to the Installation Manager / Site Engineer/ his or her representative.

E) Pressure testing of piping, valves, flanges:

i) Soundness of the weld shall be tested by the contractor in the presence of Installation Manager / Site Engineer/ his or her representative by hydrostatic/ pneumatic means. The contractor shall obtain clearance for such tests from the Installation Manager / Site Engineer/ his or her representative. The Contractor shall have to arrange all necessary arrangement for such tests at his own cost.

ii) Valves and flanges shall be pressure tested before commissioning of the tank(s) by the contractor at his own cost and pressure test record shall be submitted to Installation Manager / Site Engineer/ his or her representative. Contractor shall supply the valves, flanges of required specifications purchased from the OIL approved vendors and documents complying the specifications shall be furnished to the company. Necessary pump, tools, water & all other accessories for hydraulic testing shall be arranged by the contractor. Only pressure recorder & chart will be provided by the company if available. If the pressure does not hold good due to contractor's defect workmanships, the same shall be rectified & hydraulic testing shall be redone free of cost to company.

iii) All piping and pipe fittings shall be tested hydraulically to the recommended pressure before commissioning of the tank(s) by the contractor at his own cost and pressure test record shall be submitted to Installation Manager / Site Engineer/ his or her representative. Necessary pump, tools, water & all other accessories for hydraulic testing shall be arranged by the contractor. Only pressure recorder & chart will be provided by the company if available. If the pressure does not hold good due to contractor's defect workmanships, the same shall be rectified & hydraulic testing shall be redone free of cost to company.

F) Pressure testing of tanks: Bottom plate test-

i) Tightness of the bottom plate shall be checked by air pressure test at 75 mm water column or by vacuum box. The gauge in case of bottom plate test/ vacuum test should register a partial vacuum of at least 2 PSI. Record of vacuum test jointly certified by Installation Manager shall be submitted by contractor.

ii) The entire weld length shall be tested in presence of Installation Manager / Site Engineer/ his or her representative.

iii) After completion of construction/fabrication/repair, the tank shall be cleaned properly. All weld lugs and brackets used for erection purpose shall be carefully removed from inside and outside surface of the tanks to the entire satisfaction of the site Installation Manager / Site Engineer/ his or her representative.

iv) All equipment and other arrangements required for testing shall be supplied by the contractor at no cost to company.

G) Third party inspection: The tanks shall be inspected by any of OIL's approved third party inspection agency (viz. M/S Lloyds or M/S Bureau Veritas or M/S Rites or M/S DNV or M/S IRS or M/S Tuboscope Vecto only) covering the following aspects:

- Metallurgy
- Welding
- Painting
- ND testing
- Dimensions
- Hydro test

Necessary test certificates for raw materials from manufacturer shall be submitted to the third party inspector for verification, and the verified test certificates shall be supplied to OIL in original.

23.0 REPAIRS OR REMOVAL OF DEFECTS:

i) Defects that are not within the acceptable limits shall be removed from the joint completely by chipping or grinding.

ii) No repairs shall be carried out without prior intimation to Installation Manager / Site Engineer/ his or her representative.

iii) All leaks detected during testing shall be repaired to the satisfaction of Installation Manager / Site Engineer/ his or her representative and on completion; the entire tank shall be tight and free from leaks.

iv) When the tank is filled with water for testing, defects detected in the shell joints or elsewhere shall be repaired by the Contractor and the same shall have to pass the applicable test.

v) After completion of all repairs the tanks shall be retested in accordance with the procedure mentioned earlier.

24.0 CLEANING:

i) All equipment in the system shall be cleaned and flushed free of all dirt, debris and loose foreign material.

- ii) Orifice plates and other similar restrictions shall not be installed in the piping system until flushing has been completed.
- iii) Proper temporary drainage for flushing water shall be provided so that no damage is done to permanent facilities.

25.0 PICKLING OF WELDS:

- i) All welded joints shall be cleaned properly. The joints shall be thoroughly swabbed with emery paper so as to have a bright metallic surface.
- ii) Pickling paste of a suitable composition shall be applied in a thin but continuous layer. The paste shall be left on the weld for 5 to 10 minutes. It shall then be brushed using a stainless steel brush.
- iii) The welded joint shall be thoroughly rinsed with water using a rag if necessary. To remove the last traces of pickling paste, the joints shall be once again rinsed with water containing caustic soda.
- iv) Contractor shall employ all resources for the job at his own cost.

26.0 ANTICORROSIVE COATING & PAINTING:**26.1 FOR CONSTRUCTION OF 02 (TWO) NOS. OF 500 KL FORMATION WATER STORAGE TANKS:**

- a. Application of anticorrosive coating in the internal surface of the tanks including top and bottom plate:

The tank internal including the top and bottom plate shall be coated with High temperature resistant & chemical resistant anticorrosive solvent free ceramic reinforced composite / amine cured phenolic epoxy resin (novolac) coating.

The coating shall have 100% solid by Volume, and Mixed Density / specific gravity 1.25 gm/cc Minimum. The Dry Film Thickness (DFT) 300 to 600 microns, two coat system with minimum 150 micron per coat. Dry film thickness shall be measured after each coat using thickness gauge e.g. Mikrotest, Elcometer or any other suitable instruments. Holiday or spark testing shall be done after application of last coat to find nicks, scrapes and pin holes in the coating. The contractor shall submit holiday or spark test report to OIL.

The coating shall have tensile shear / Pull off adhesion of Minimum 200 kg/sq cm (2840 psi) as per ASTM D 1002 / ASTM D 4541 / ISO 4624. The coating shall be chemical resistant to mixture of crude oil & water in continuous emersion as per ASTM D543 / ISO 2812-2. Service temperature shall be Minimum 80 Deg C in Wet (Immersion) service condition and Minimum 100 Deg C in Dry service condition as per ASTM D 648.

The Surface preparation shall be achieved by abrasive/shot blasting to near white metallic as per NACE No. 2/SSPC-SP10, ISO 8501-1, Sa 2 ½ , with blast surface profile depth of 75 -125 micron. Profile measurement for abrasive blast cleaned

surface shall be made with Testex Press-O-Film or other suitable method. Prior to blasting, all weld spatters shall be removed & sharp or rough welds rounded & contoured. Any change in the surface preparation recommended by the OEM of the coating system shall be forwarded in the technical bid for approval by OIL. The application shall be airless spray method.

The Internal anti corrosive coating shall be of make Hempel/ Belzona/Chesterton or equivalent and Performance Guarantee of minimum 10 years shall be provided by the OEM to OIL for product as well as application procedure. A third party (of repute) inspection certificate for the internal coatings with mentions of DFTs and pull of adhesion as per application shall be submitted by the contractor against the performance guarantee of 10 years.

b. Synthetic enamel/ aluminium finish for outer surface: Synthetic enamel paint shall be high gloss alkyd enamel with excellent flow and quick drying properties offering outstanding exterior durability under varying weather conditions. The paint shall be suitable for all types of surfaces over respective primers and shall conform to IS:2932.

The aluminium paint used for atmospheric services (temperature up to and including 70oC) shall conform to IS:2339.

26.2 FOR CONSTRUCTION OF 04 NOS. 160KL FORMATION WATER STORAGE TANKS:

a. Application of anticorrosive coating in the internal surface of the tanks including top and bottom plate:

The tank internal including the top and bottom plate shall be coated with High temperature resistant & chemical resistant anticorrosive solvent free ceramic reinforced composite / amine cured phenolic epoxy resin (novolac) coating.

The coating shall have 100% solid by Volume, and Mixed Density / specific gravity 1.25 gm/cc Minimum. The Dry Film Thickness (DFT) 300 to 600 microns, two coat system with minimum 150 micron per coat. Dry film thickness shall be measured after each coat using thickness gauge e.g. Mikrotest, Elcometer or any other suitable instruments. Holiday or spark testing shall be done after application of last coat to find nicks, scrapes and pin holes in the coating.

The coating shall have tensile shear / Pull off adhesion of Minimum 200 kg/sq cm (2840 psi) as per ASTM D 1002 / ASTM D 4541 / ISO 4624. The coating shall be chemical resistant to mixture of crude oil & water in continuous emersion as per ASTM D543 / ISO 2812-2. Service temperature shall be Minimum 80 Deg C in Wet (Immersion) service condition and Minimum 100 Deg C in Dry service condition as per ASTM D 648.

The Surface preparation shall be achieved by abrasive/shot blasting to near white metallic as per NACE No. 2/SSPC-SP10, ISO 8501-1, Sa 2 ½ , with blast surface profile depth of 75 -125 micron. Profile measurement for abrasive blast cleaned surface shall be made with Testex Press-O-Film or other suitable method. Prior to blasting, all weld spatters shall be removed & sharp or rough welds rounded &

contoured. Any change in the surface preparation recommended by the OEM of the coating system shall be forwarded in the technical bid for approval by OIL. The application shall be airless spray method.

The Internal anti corrosive coating shall be of make Hempel/ Belzona/Chesterton or equivalent and Performance Guarantee of minimum 10 years shall be provided by the OEM to OIL for product as well as application procedure. A third party (of repute) inspection certificate for the internal coatings with mentions of DFTs and pull of adhesion as per application shall be submitted by the contractor against the performance guarantee of 10 years.

b. Synthetic enamel/ aluminium finish for outer surface:

Synthetic enamel paint shall be high gloss alkyd enamel with excellent flow and quick drying properties offering outstanding exterior durability under varying weather conditions. The paint shall be suitable for all types of surfaces over respective primers and shall conform to IS:2932.

The aluminium paint used for atmospheric services (temperature up to and including 70°C) shall conform to IS:2339.

26.3 FOR CONSTRUCTION OF 03 (THREE) NOS. OF 40 KL FORMATION WATER STORAGE TANKS:

a. Application of anticorrosive coating in the internal surface of the tanks including top and bottom plate:

The tank internal including the top and bottom plate shall be coated with High temperature resistant & chemical resistant anticorrosive solvent free ceramic reinforced composite / amine cured phenolic epoxy resin (novolac) coating.

The coating shall have 100% solid by Volume, and Mixed Density / specific gravity 1.25 gm/cc Minimum. The Dry Film Thickness (DFT) 300 to 600 microns, two coat system with minimum 150 micron per coat. Dry film thickness shall be measured after each coat using thickness gauge e.g. Mikrotest, Elcometer or any other suitable instruments. Holiday or spark testing shall be done after application of last coat to find nicks, scrapes and pin holes in the coating.

The coating shall have tensile shear / Pull off adhesion of Minimum 200 kg/sq cm (2840 psi) as per ASTM D 1002 / ASTM D 4541 / ISO 4624. The coating shall be chemical resistant to mixture of crude oil & water in continuous emersion as per ASTM D543 / ISO 2812-2. Service temperature shall be Minimum 80 Deg C in Wet (Immersion) service condition and Minimum 100 Deg C in Dry service condition as per ASTM D 648.

The Surface preparation shall be achieved by abrasive/shot blasting to near white metallic as per NACE No. 2/SSPC-SP10, ISO 8501-1, Sa 2 ½ , with blast surface profile depth of 75 -125 micron. Profile measurement for abrasive blast cleaned surface shall be made with Testex Press-O-Film or other suitable method. Prior to blasting, all weld spatters shall be removed & sharp or rough welds rounded & contoured. Any change in the surface preparation recommended by the OEM of the coating system shall be forwarded in the technical bid for approval by OIL. The application shall be airless spray method.

The Internal anti corrosive coating shall be of make Hempel/ Belzona/Chesterton or equivalent and Performance Guarantee of minimum 10 years shall be provided by the OEM to OIL for product as well as application procedure. A third party (of repute) inspection certificate for the internal coatings with mentions of DFTs and pull of adhesion as per application shall be submitted by the contractor against the performance guarantee of 10 years.

b. Synthetic enamel/ aluminium finish for outer surface:

Synthetic enamel paint shall be high gloss alkyd enamel with excellent flow and quick drying properties offering outstanding exterior durability under varying weather conditions. The paint shall be suitable for all types of surfaces over respective primers and shall conform to IS:2932.

The aluminium paint used for atmospheric services (temperature up to and including 70°C) shall conform to IS:2339.

26.4 FOR CONSTRUCTION OF 02 (TWO) NOS. OF 795 KL FORMATION WATER STORAGE TANKS

a. Application of anticorrosive coating in the internal surface of the tanks including top and bottom plate:

The tank internal including the top and bottom plate shall be coated with High temperature resistant & chemical resistant anticorrosive solvent free ceramic reinforced composite / amine cured phenolic epoxy resin (novolac) coating.

The coating shall have 100% solid by Volume, and Mixed Density / specific gravity 1.25 gm/cc Minimum. The Dry Film Thickness (DFT) 300 to 600 microns, two coat system with minimum 150 micron per coat. Dry film thickness shall be measured after each coat using thickness gauge e.g. Mikrotest, Elcometer or any other suitable instruments. Holiday or spark testing shall be done after application of last coat to find nicks, scrapes and pin holes in the coating.

The coating shall have tensile shear / Pull off adhesion of Minimum 200 kg/sq cm (2840 psi) as per ASTM D 1002 / ASTM D 4541 / ISO 4624. The coating shall be chemical resistant to mixture of crude oil & water in continuous emersion as per ASTM D543 / ISO 2812-2. Service temperature shall be Minimum 80 Deg C in Wet (Immersion) service condition and Minimum 100 Deg C in Dry service condition as per ASTM D 648.

The Surface preparation shall be achieved by abrasive/shot blasting to near white metallic as per NACE No. 2/SSPC-SP10, ISO 8501-1, Sa 2 ½ , with blast surface profile depth of 75 -125 micron. Profile measurement for abrasive blast cleaned surface shall be made with Testex Press-O-Film or other suitable method. Prior to blasting, all weld spatters shall be removed & sharp or rough welds rounded & contoured. Any change in the surface preparation recommended by the OEM of the coating system shall be forwarded in the technical bid for approval by OIL. The application shall be airless spray method.

The Internal anti corrosive coating shall be of make Hempel/ Belzona/Chesterton/ AkzoNobel or equivalent and Performance Guarantee of minimum 10 years shall be

provided by the OEM to OIL for product as well as application procedure. A third party (of repute) inspection certificate for the internal coatings with mentions of DFTs and pull of adhesion as per application shall be submitted by the contractor against the performance guarantee of 10 years.

b. Synthetic enamel/ aluminium finish for outer surface:

Synthetic enamel paint shall be high gloss alkyd enamel with excellent flow and quick drying properties offering outstanding exterior durability under varying weather conditions. The paint shall be suitable for all types of surfaces over respective primers and shall conform to IS:2932.

The aluminium paint used for atmospheric services (temperature up to and including 70oC) shall conform to IS:2339.

27.0 SURFACE PREPARATION FOR PAINTING:

a. Any surface to be painted shall be quite clean. It shall be free from rust, scale, sharp points, weld spatter, flux dust, grease, oil and other foreign materials before paint is applied.

b. Solvent cleaning shall be adopted only in extreme cases with prior intimation to Installation Manager / Site Engineer/ his or her representative.

c. Surface treatment shall not be done under hurried conditions without prior intimation to Installation Manager / Site Engineer/ his or her representative.

d. All surfaces which show traces of oxidation after cleaning and before applying paint shall be cleaned again.

e. Non sparking tools shall be used in flammable areas.

28.0 COLOUR CODE: The colour coding shall be as per standard colour code and instructions of Installation Manager / Site Engineer/ his or her representative.

29.0 WELDERS TEST;THIRD PARTY INSPECTION AGENCY AND THEIR SCOPE OF WORK:

a) The Contractor shall arrange for welder's test for all the welders to be deployed for tank construction job by a third party Inspection Agency of repute at his cost before starting the works. Necessary welder's test report certified by the third party Inspection Agency of repute engaged by the contractor shall be submitted along with the scope of work (as detailed in clause no. 29.0 b.) to OIL.

b) Scope of works of the THIRD PARTY INSPECTION AGENCY shall be as follows.

i. Witness and approve Welding Procedure and Welders Qualification test as per relevant code and issue certificates of acceptability.

- ii. Carry out radiography of weld joints for Welder Qualification as per relevant code / standards and issue certificates of acceptability.
- iii. The Third Party Inspection Agency must have qualified radiographer having valid certificate along with Radiographic Camera and Radio isotopes approved by statutory agencies. Documentary evidence in support of the same is to be furnished to the Company.
- c) Destructive test of weld joints for welder qualification Test as per API 1104 if applicable shall be done in a Government approved test laboratory at the cost of the contractor.
- d) All welders engaged by the contractor for performance of the work shall be subjected to the above mentioned test as per relevant codes and they will be allowed to work only after satisfactory performance in the test and also to the satisfaction of the Installation Manager / Site Engineer/ his or her representative.

30.0 OTHER TERMS AND CONDITIONS: The bidder shall submit the following:

- A. PAN, GST Regd No.
- B. Bank Account number
- C. Provident Fund Code number (Direct Code)/ or a declaration by the applicant that provisions of Provident Fund Act is not applicable to them (with documentary evidence). In case the P.F. is required to be deposited later on, the same will be deposited by the bidder (applicant).

31.0 SPECIFIC NOTE: Bidder(s) are advised to note and consider the following while quoting

- a) ESI benefits as per "THE EMPLOYEES' STATE INSURANCE ACT, 1948", "THE EMPLOYEES' STATE INSURANCE (CENTRAL) RULES, 1950" & "THE EMPLOYEES' STATE INSURANCE (GENERAL) REGULATIONS, 1950".
- b) 12% Provident Fund (PF) on the wage component is to be included in the total quoted cost.
- c) The quoted rate should be capable enough to disburse the Minimum Wages (and any revision of minimum wages during the tenure of the contract), P.F., bonus to the deployed personnel along with PPE items, and materials/equipment.
- d) The Bidder/Contractor understands that minimum wages may increase from time to time as notified by statutory authority and undertakes that Contractor shall not make Company liable to reimburse Contractor for such statutory increase in wage rates of the labours/workers appointed by the Contractor during the entire period of the contract, including extension if any, Currently, such increase in the wage rates is twice in a year. Bidder shall bid after considering this increase in wage rates for the entire period of Contract including extension provision.

The Contractor shall submit undertaking along with the bid that he/she/they will pay his/her/their workers the increased wages as notified under the Minimum Wages Act from time to time and such statutory or any other increase in the wages rates of contract labour appointed by the Contractor shall be borne solely by the

Contractor during the entire period of the contract, including extension if any, without any cost implication whatsoever upon the Company.

**To,
CGM-CONTRACTS
OIL INDIA LIMITED
DULIAJAN-786602**

SUB: SAFETY MEASURES

Description of service: Hiring of services for Construction of 02 (Two) nos. of 500 KL, 04 (Four) nos. of 160 KL, 03 (Three) nos. of 40 KL and 02 (Two) nos. of 795 KL capacity Formation Water Storage Tanks, under Framework Agreement.

Sir,

We hereby confirm that we have fully understood the safety measures to be adopted during execution of the above contract and that the same have been explained to us by the concerned authorities. We also give the following assurances.

a) Only experienced and competent persons shall be engaged by us for carrying out work under the said contract.

b) The names of the authorized persons who would be supervising the jobs on day to day basis from our end are the following:

i) _____

ii) _____

iii) _____

The above personnel are fully familiar with the nature of jobs assigned and safety precautions required.

c) Due notice would be given for any change of personnel under item (b) above.

d) We hereby accept the responsibility for the safety of all the personnel engaged by us and for the safety of the Company's personnel and property involved during the course of our working under this contract. We would ensure that all the provisions under the Oil Mines Regulations, 1984 and other safety rules related to execution of our work would be strictly followed by our personnel. Any violation pointed out by the Company's Engineers would be rectified forthwith or the work suspended till such time the rectification is completed by us and all expenditure towards this would be on our account.

e) We confirm that all persons engaged by us would be provided with the necessary Safety Gears at our cost.

f) All losses caused due to inadequate safety measures or lack of supervision on our part would be fully compensated by us and the Company will not be responsible for any lapses on our part in this regard.

g) We shall abide by the following HSE (Health, Safety & Environmental) POINTS:

GENERAL HEALTH, SAFETY & ENVIRONMENT (HSE) POINTS:

1.0 Necessary "Hot Work / Confined space entry Permit" are to be obtained from authorized personnel before starting of the jobs. The Contractor should deploy a competent person throughout the Contract under whose constant supervision only, the

jobs will be carried out. Further competent representative of the contractor with the approval of M/S OIL will have to be present at the work site throughout the working time to ensure compliance of safety measures while executing the job at site.

2.0 On site welding/ cutting/ grinding operations of the interconnection pipelines shall be avoided as far as possible taking into consideration of minimum safety distance for such an operation. If necessary and if advised by the company Installation Manager /Site Engineer/his or her representative, it will be done at a safe distance within the installation and will be transported to the site for boxing up.

3.0 Tools and Tackles used will be of non-sparking type.

4.0 Any other safety measures that might require to be adopted during the work will be intimated and shall be strictly followed by the contractor.

5.0 Stand by fire fighting equipment will be deployed at the work site by OIL. However, at least two of the contractor's personnel deployed for the work must be capable of handling the fire fighting equipment at the time of emergency and the persons will have to be present at the work site throughout the working time. If required the contractor's nominated persons will be imparted training on handling such equipment by OIL's Fire Service department.

6.0 It will be solely the Contractor's responsibility to fulfill all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job (namely; the person employed by him, the equipment, the environment, etc.) under the jurisdiction of the district of that state where it is operating. Ensure that all sub-contractors hired by him comply with the same requirement as the contractor himself and shall be liable for ensuring compliance of all HSE laws by the sub or sub-sub contractors.

7.0 Every person deployed by the contractor in a mine must wear safety gadgets to be provided by the contractor. The Contractor shall provide proper Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company PPE schedule. Safety appliances like protective footwear, Safety Helmet, Full Body harness and Breathing apparatus. Necessary supportive document shall have to be submitted as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may apply to the Company (OIL) for providing the same. OIL will provide the safety items, if available. But in turn, OIL will recover the actual cost of the items by deducting from Contractor's Bill. However, it will be the Contractor's sole responsibility to ensure that the persons engaged by him in the mines use the proper PPE while at work.

8.0 All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.

9.0 The Contractor shall prepare written Safe Operating Procedure (SOP) for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with it/ them. The SOP should clearly state the risk arising to men, machineries & material from the operations to be done by the contractor and how it is to be managed. However, whenever there is a contradiction the Company's Safe Operating Procedure shall be referred by the contractor which shall be applicable during execution of all works.

10.0 The contractor shall provide a copy of the SOP to the person designated by the mine owner who shall be supervising the contractor's work.

11.0 Keep an up to date SOP and provide a copy of changes to a person designated by the Mine Owner/ Agent/ Manager.

12.0 Contractor has to ensure that all work is carried out in accordance with the Statute and SOP and for the purpose he may deploy adequate qualified and competent personnel for the purpose of carrying out the job in a safe manner. For work of a specified scope/ nature, he should develop and provide to the mine owner a site specific code of practice in line.

13.0 All persons deployed by the contractor for working in a mine must undergo Mines Vocational Training, initial medical examination, PME. They should be issued cards stating the name of the contractor and the work and its validity period, indicating status of MVT, IME/PME.

14.0 The contractor shall submit to DGMS returns indicating - Name of his firm, Registration number, Name and address of person heading the firm, Nature of work, type of deployment of work persons, Number of work persons deployed, how many work persons hold VT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons

15.0 The return shall be submitted quarterly (by 10th of April, July, October & January) for contracts of more than one year. However, for contracts of less than one year, returns shall be submitted monthly.

16.0 It will be entirely the responsibility of the Contractor/ his Supervisor/ representative to ensure strict adherence to all HSE measures and statutory rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by company's Installation Manager/ Safety Officer/ Installation Manager / Engineer/ Official/ Supervisor/ Junior Installation Manager /Site Engineer/his or her representative for safe operation.

17.0 Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the contractor only.

18.0 Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the contractor.

19.0 The contractor shall have to report all incidents including near miss to Installation Manager /Site Engineer/his or her representative of the concerned department of OIL.

20.0 The contractor has to keep a register of the persons employed by him/ her. The contractor's supervisor shall take and maintain attendance of his men every day for the work, punctually.

21.0 If the company arranges any safety class/ training for the working personnel at site (company employee, contractor worker, etc.) the contractor will not have any objection to any such training.

22.0 The health check up of contractor's personnel is to be done by the contractor in authorized Health Centres as per OIL's requirement & proof of such test(s) is to be

submitted to OIL. The frequency of periodic medical examinations should be every five years for the employees below 45 years of age and every three years for employees of 45 years of age and above.

23.0 To arrange daily tool box meeting and regular site safety meetings and maintain records.

24.0 Records of daily attendance, accident report etc. are to be maintained in Form B, E, J (as per Mines Rules 1955) by the contractor.

25. A contractor employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's act or omissions at work.

26.0 A contractor employee must, while at work, cooperate with his or her employer or other persons as far as is necessary to enable compliance with any requirement under the act or the regulations that is imposed in the interest of health, safety and welfare of the employee or any other person.

27.0 Contractor's arrangements for health and safety management shall be consistent with those for the mine owner.

28.0 In case Contractor is found non-compliant of HSE laws as required company will have the right for directing the contractor to take action to comply with the requirements, and for further non-compliance, the contractor will be penalized prevailing relevant Acts/ Rules/ Regulations.

29.0 When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures Company will have the right to direct the contractor to cease work until the non-compliance is corrected.

30.0 The contractor should prevent the frequent change of his contractual employees as far as practicable.

31.0 The contractor should frame a mutually agreed bridging document between OIL & the contractor with roles and responsibilities clearly defined. However, the contract agreement may be treated as such bridging document in absence of a bridging document.

32.0 For any HSE matters not specified in the contract document, the contractor will abide the relevant and prevailing Acts/ rules/ regulations/ pertaining to Health, Safety and Environment.

(Seal)

Yours Faithfully

Date_____

M/s_____

FOR & ON BEHALF OF CONTRACTOR

INTEGRITY PACT

Between

Oil India Limited (OIL) hereinafter referred to as "The Principal"

And

(Name of the bidder).....hereinafter referred to as "The Bidder/Contractor"

Preamble:

The Principal intends to award, under laid down organizational procedures, contract/s for **Hiring of services for Construction of 02 (Two) nos. of 500 KL, 04 (Four) nos. of 160 KL, 03 (Three) nos. of 40 KL and 02 (Two) nos. of 795 KL capacity Formation Water Storage Tanks, under Framework Agreement.** The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organization "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section: 1 - Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

1. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
2. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
3. The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a Page 2 of 6 substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section: 2 - Commitments of the Bidder/Contractor

(1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

1. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

2. The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

3. The Bidder/Contractor will not commit any offence under the relevant Anticorruption Laws of India; further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

4. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

(2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

(3) The Bidder/Contractor signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.

Section 3 - Disqualification from tender process and exclusion from future Contracts

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

1. If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

2. The Bidder accepts and undertakes to respect and uphold the Principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

3. If the Bidder/Contractor can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

4. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

5. Integrity Pact, in respect of a particular contract, shall be operative from the date Integrity Pact is signed by both the parties till the final completion of the contract **or as mentioned in Section 9 - Pact Duration whichever is later**. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings

Section 4 - Compensation for Damages

1. If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit/Bid Security.
2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to Security Deposit/Performance Bank Guarantee.
3. The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount or the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous transgression

1. The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section: 6 - Equal treatment of all Bidders/Contractor/Subcontractors

1. The Principal will enter into Pacts on identical terms with all bidders and contractors.

2. The Bidder/Contractor undertake(s) to procure from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the provisions laid down in this agreement/Pact by any of its sub-contractors/sub-vendors.

3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section: 7 - Criminal charges against violating Bidders/Contractors/Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section: 8 - External Independent Monitor/Monitors

1. The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.

3. The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.

4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Independent External Monitor shall give an opportunity to the bidder/contractor to present its case before making its recommendations to the Principal.

6. The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the

'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

7. If the Monitor has reported to the Chairperson of the Board a Substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8. The word 'Monitor' would include both singular and plural.

Section: 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairperson of the Principal.

Section: 10 - Other provisions

1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi. The Arbitration clause provided in the main tender document/contract shall not be applicable for any issue/dispute arising under Integrity Pact.

2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

3. If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.

4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

.....
For the Principal

.....
For the Bidder/Contractor

Witness 1:

Witness 2:

Place.

Date .

OIL INDIA LIMITED
(A Government of India Enterprise)
Duliajan, Assam

DESCRIPTION OF WORK/SERVICE: Hiring the Services for Construction of 02 (two) nos. of 500 KL capacity Formation Water Storage Tanks, under Framework concept..

ANNEXURE-I: PRICE BID FORMAT: E-TENDER No. CDO2173P20

<u>NAME OF BIDDER</u>								
<u>Bidder's GST No.</u>								
<u>SAC/HSN Code</u>								
<u>Select the benefit sought under the Policy</u>		Not Applicable						
Item No.	Description of Services (For detailed description of Services Refer Item No. 10 through 420 of SOQ)	UOM	Estimated Quantity	Rate (Rs.) to be quoted Excluding GST	Applicable GST Rate in %	Applicable GST (Select from drop down list)	Total Amount (Rs.) Excluding GST	Total Amount (Rs.) Including GST
			A	B	C		D = A * B	E = D + (D*C)
10	Erection and dismantling of barrier wall	M	160				0.00	0.00
20	Design of 500 kl tank with Foundation	NO	2				0.00	0.00
30	Isolation of Process pipelines	NO	8				0.00	0.00
40	Dismantling of 795 KL foundn of tank	NO	1				0.00	0.00
50	Dismantling of old (damaged) 795 KL tank	NO	1				0.00	0.00
60	Constn.of new RCC foundn for 500 kl tank	NO	2				0.00	0.00
70	Constn.of RCC foundn- 500 kl(with boulder)	NO	2				0.00	0.00
80	Fabrication and Erection of 500 KL Tank	NO	2				0.00	0.00
90	External Painting	M2	1,209				0.00	0.00
100	Hydraulic testing of 500 KL tank	JOB	2				0.00	0.00
110	Calibration of the 500 KL tank	JOB	2				0.00	0.00
120	Transportation of various diameter pipes	TKM	103				0.00	0.00
130	Transportation of various types of mater	TRP	1				0.00	0.00

140	Handling of 250mm NB Pipes and Fittings	JT	20				0.00	0.00
150	Handling of 200mm NB Pipes and Fittings	JT	20				0.00	0.00
160	Handling of 150mm NB Pipes and Fittings	JT	50				0.00	0.00
170	Handling of 100mm NB Pipes and Fittings	JT	50				0.00	0.00
180	Handling,aligning,installn-250 NB valves	NO	2				0.00	0.00
190	Handling,aligning,installn-200 NB valves	NO	4				0.00	0.00
200	Handling,aligning,installn-150 NB valves	NO	4				0.00	0.00
210	Handling,aligning,installn-100 NB valves	NO	8				0.00	0.00
220	Handling of 250 mm NB Companion Flange	PAA	2				0.00	0.00
230	Handling of 200 mm NB Companion Flange	PAA	4				0.00	0.00
240	Handling of 150 mm NB Companion Flange	PAA	4				0.00	0.00
250	Handling of 100 mm NB Companion Flange	PAA	8				0.00	0.00
260	Fabrication of various pipe fittings	CM	2,000				0.00	0.00
270	Supply,fabricn,erectn.-Single leg pipe s	NO	20				0.00	0.00
280	Supply,fabricn,erectn.-Doublr leg pipe s	NO	10				0.00	0.00
290	Supply,fabricn,erectn.-Concrete pipe s	M3	50				0.00	0.00
300	Supply, Fabricatn and erectn. of walkway	M	60				0.00	0.00
310	Radiographic inspectns-Pipe/welded jnts.	NO	40				0.00	0.00
320	Radiographic inspectns-Pipe/welded jnts.	NO	80.5				0.00	0.00
330	Letter writing (300 mm to 450 mm)	NO	300				0.00	0.00
340	Letter writing (150 mm to 299 mm)	NO	100				0.00	0.00
350	Erection of brick/ dyke wall around the	M	150				0.00	0.00
360	Addn. increase in height of dyke wall	M	8				0.00	0.00
370	Casting of PCC for the Tank Farm Floor	M2	560				0.00	0.00

380	Earthing System of Tanks	JOB	2				0.00	0.00
390	SupplyofAPI 600gate valve wit flange-10"	NO	2				0.00	0.00
400	SupplyofAPI 600gate valve wit flange-8"	NO	4				0.00	0.00
410	SupplyofAPI 600gate valve wit flange-6"	NO	4				0.00	0.00
420	SupplyofAPI 600gate valve wit flange-4"	NO	8				0.00	0.00
Total Cost (Rs)							0.00	0.00
								The above cost should be maintained under "Total Bid Value" in the E-Tender Portal
1. The bidder shall maintain the total cost (inclusive of GST) in conjunction with BEC Clasue No. 1.1, under "Total Bid Value" in the E-Tender Portal.								
2. The price/rate(s) quoted by the Bidders will be inclusive of all taxes except GST (i.e. IGST or CGST and SGST/UTGST as applicable in case of interstate supply or intra state supply respectively) on the final services. However, GST rate to be provided in the respective places in the Price Bid.								
3. Price Bids shall be evaluated on overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST(CGST & SGST/UTGST or IGST)								
4. OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.								
5. Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.								
6. Input Tax Credit on GST (Goods & Service Tax) for this service is NOT available to OIL & The bids will be evaluated based on total price including GST.								
7. Benefits under Public Procurement Policy for MSEs – Order 2012 is not applicable (being Works Contract).								
8. Refer to GCC for detail of GST								
9. Refer to SOQ & SCC for Item detail Description								
10. Mobilisation Period: 45 (Forty Five) days from the date of issue of LOA								

OIL INDIA LIMITED
(A Government of India Enterprise)
Duliajan, Assam

DESCRIPTION OF WORK/SERVICE: Hiring the Services for Construction of 04 (four) nos. of 160 KL capacity Formation Water Storage Tanks, under Framework concept.

ANNEXURE-II: PRICE BID FORMAT: E-TENDER No. CDO2173P20

<u>NAME OF BIDDER</u>								
<u>Bidder's GST No.</u>								
<u>SAC/HSN Code</u>								
<u>Select the benefit sought under the Policy</u>		Not Applicable						
Item No.	Description of Services (For detailed description of Services Refer to Item No. 430 through 750 of SOQ)	UOM	Estimated Quantity	Rate (Rs.) to be quoted Excluding GST	Applicable GST Rate in %	Applicable GST (Select from drop down list)	Total Amount (Rs.) Excluding GST	Total Amount (Rs.) Including GST
			A	B	C		D = A * B	E = D + (D*C)
10	Erection and dismantling of barrier wall	M	320				0.00	0.00
20	Dismantling of old (damaged) 160KL tank	NO	3				0.00	0.00
30	Dismantling of foundation of 160 KL Tank	NO	3				0.00	0.00
40	Design of 160 kl tank Foundation	NO	4				0.00	0.00
50	160KL RCC foundation without boulder	NO	4				0.00	0.00
60	160KL RCC foundation with boulder	NO	4				0.00	0.00
70	Fabrication and Erection of 160 KL Tank	NO	4				0.00	0.00
80	Siphon System for 160KL FW tank	NO	4				0.00	0.00
90	External Painting of 160KLs tank	NO	4				0.00	0.00
100	Hydraulic testing of 160 KL tank	NO	4				0.00	0.00
110	Calibration of the 160 kl tanks	NO	4				0.00	0.00
120	Transportation of various diameter pipes	LSM	4				0.00	0.00
130	Transportation of various types of mater	LSM	4				0.00	0.00

140	Handling of 150mm NB Pipes and Fittings	JT	104				0.00	0.00
150	Handling of 100 mm NB Pipes and Fittings	JT	104				0.00	0.00
160	Handling,aligning,installatn150mm Fvalve	NO	12				0.00	0.00
170	Handling,aligning,installatn100mm Fvalve	NO	15				0.00	0.00
180	Handling of 150 mm NB Companion Flange	PAA	12				0.00	0.00
190	Handling of 100 mm NB Companion Flange	PAA	15				0.00	0.00
200	Fabrication of various pipe fittings	CM	3,600				0.00	0.00
210	Single leg Pipe support	NO	32				0.00	0.00
220	Double leg Pipe support	NO	20				0.00	0.00
230	Concrete Pipe Supports	M3	120				0.00	0.00
240	Walkway and walkway platform	M	162				0.00	0.00
250	Radiographic inspections Pipe/welded jts	NO	162				0.00	0.00
260	Letter writing (300 mm to 450 mm)	NO	160				0.00	0.00
270	Letter writing (150 mm to 299 mm)	NO	160				0.00	0.00
280	Erection of brick wall around the Tanks	M	240				0.00	0.00
290	Casting of PCC for the Tank Farm Floor	M2	880				0.00	0.00
300	Earthing System of Tanks	JOB	4				0.00	0.00
310	Supply of API600 6"x150 F-end GATE VALVE	NO	8				0.00	0.00
320	Supply of API600 4"x150 F-end GATE VALVE	NO	12				0.00	0.00
330	Supply of API600 2"x150 F-end GATE VALVE	NO	4				0.00	0.00
Total Cost (Rs)							0.00	0.00
								The above cost should be maintained under "Total Bid Value" in the E-Tender Portal

1. The bidder shall maintain the total cost (inclusive of GST) in conjunction with BEC Clause No. 1.1, under "Total Bid Value" in the E-Tender Portal.
2. The price/rate(s) quoted by the Bidders will be inclusive of all taxes except GST (i.e. IGST or CGST and SGST/UTGST as applicable in case of interstate supply or intra state supply respectively) on the final services. However, GST rate to be provided in the respective places in the Price Bid.
3. Price Bids shall be evaluated on overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST(CGST & SGST/UTGST or IGST)
4. OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.
5. Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.
6. Input Tax Credit on GST (Goods & Service Tax) for this service is NOT available to OIL & The bids will be evaluated based on total price including GST.
7. Benefits under Public Procurement Policy for MSEs – Order 2012 is not applicable (being Works Contract).
8. Refer to GCC for detail of GST
9. Refer to SOQ & SCC for Item detail Description
10. Mobilisation Period: 45 (Forty Five) days from the date of issue of LOA

OIL INDIA LIMITED
(A Government of India Enterprise)
Duliajan, Assam

DESCRIPTION OF WORK/SERVICE: Hiring the Services for Construction of 03 (three) nos. of 40 KL capacity Formation Water Storage Tanks, under Framework concept.

ANNEXURE-III: PRICE BID FORMAT: E-TENDER No. CDO2173P20

<u>NAME OF BIDDER</u>								
<u>Bidder's GST No.</u>								
<u>SAC/HSN Code</u>								
<u>Select the benefit sought under the Policy</u>		Not Applicable						
Item No.	Description of Services (For detailed description of Services Refer to Item No. 760 through 1040 of SOQ)	UOM	Estimated Quantity	Rate (Rs.) to be quoted Excluding GST	Applicable GST Rate in %	Applicable GST (Select from drop down list)	Total Amount (Rs.) Excluding GST	Total Amount (Rs.) Including GST
			A	B	C		D = A * B	E = D + (D*C)
10	Erection and dismantling of barrier wall	M	240				0.00	0.00
20	Dismantling of old (damaged) 40KL tank	NO	3				0.00	0.00
30	Dismantling of foundation of 40 KL Tank:	NO	3				0.00	0.00
40	Design of 40 kl tank Foundation	NO	3				0.00	0.00
50	40KL RCC foundation without boulder	NO	3				0.00	0.00
60	40KL RCC foundation with boulder	NO	3				0.00	0.00
70	Fabrication and Erection of 40 KL Tank	NO	3				0.00	0.00
80	External Painting of 40KLs tank	NO	3				0.00	0.00
90	Hydraulic testing of 40 KL tank	NO	3				0.00	0.00
100	Calibration of the 40 kl tanks	NO	3				0.00	0.00
110	Transportation of various diameter pipes	LSM	3				0.00	0.00
120	Transportation of various types of mater	LSM	3				0.00	0.00
130	Handling of 150mm NB Pipes and Fittings	JT	32				0.00	0.00

[illegible]

4. OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.
5. Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.
6. Input Tax Credit on GST (Goods & Service Tax) for this service is NOT available to OIL & The bids will be evaluated based on total price including GST.
7. Benefits under Public Procurement Policy for MSEs – Order 2012 is not applicable (being Works Contract).
8. Refer to GCC for detail of GST
9. Refer to SOQ & SCC for Item detail Description
10. Mobilisation Period: 45 (Forty Five) days from the date of issue of LOA

OIL INDIA LIMITED
(A Government of India Enterprise)
Duliajan, Assam

DESCRIPTION OF WORK/SERVICE: Hiring the Services for Construction of 02 (two) nos. of 795 KL Formation Water Storage Tanks, under Framework concept.

ANNEXURE-IV: PRICE BID FORMAT: E-TENDER No. CDO2173P20

<u>NAME OF BIDDER</u>								
<u>Bidder's GST No.</u>								
<u>SAC/HSN Code</u>								
<u>Select the benefit sought under the Policy</u>		Not Applicable						
Item No.	Description of Services (For detailed description of Services Refer to Item No. 1050 through 1440 of SOQ)	UOM	Estimated Quantity	Rate (Rs.) to be quoted Excluding GST	Applicable GST Rate in %	Applicable GST (Select from drop down list)	Total Amount (Rs.) Excluding GST	Total Amount (Rs.) Including GST
			A	B	C		D = A * B	E = D + (D*C)
10	Erection and dismantling of barrier wall	M	200				0.00	0.00
20	Design of 795 kl tank with Foundation:	NO	2				0.00	0.00
30	Isolation of Process pipelines:	NO	8				0.00	0.00
40	Constn. of new RCC foundation for 795 KL	NO	2				0.00	0.00
50	Constn. of new foundn. with boulder-795	NO	2				0.00	0.00
60	Fabrication and Erection of 795 KL Tank:	NO	2				0.00	0.00
70	External Painting:	M2	1,716				0.00	0.00
80	Hydraulic testing of 795 KL tank	JOB	2				0.00	0.00
90	Calibration of the 795 KL tank	JOB	2				0.00	0.00
100	Transportation of various diameter pipes	TKM	536				0.00	0.00
110	Transportation of various types of mater	TRP	2				0.00	0.00
120	Handling of 250mm NB Pipes and Fittings:	JT	20				0.00	0.00
130	Handling of 200mm NB Pipes and Fittings:	JT	20				0.00	0.00

140	Handling of 150mm NB Pipes and Fittings:	JT	50				0.00	0.00
150	Handling of 100mm NB Pipes and Fittings:	JT	50				0.00	0.00
160	Handling,aligning,installn of 250 valves	NO	2				0.00	0.00
170	Handling,aligning,installn of 200 valves	NO	4				0.00	0.00
180	Handling,aligning,installn of 150 valves	NO	4				0.00	0.00
190	Handling,aligning,installn of 100 valves	NO	8				0.00	0.00
200	Handling of 250 mm NB Companion Flange:	PAA	4				0.00	0.00
210	Handling of 200 mm NB Companion Flange:	PAA	8				0.00	0.00
220	Handling of 150 mm NB Companion Flange:	PAA	4				0.00	0.00
230	Handling of 100 mm NB Companion Flange:	PAA	8				0.00	0.00
240	Fabricatn. of fittings-Bend,Tee,Reducers	CM	2,000				0.00	0.00
250	Supply,fabricatn,weldn,erectn-Single leg	NO	20				0.00	0.00
260	Supply,fabricatn,weldn,erectn-Double leg	NO	10				0.00	0.00
270	Supply,fabricatn,weldn,erectn-Concrete p	M3	50				0.00	0.00
280	Supply,fabricatn,weldn,erectn-walkway	M	60				0.00	0.00
290	Radiographic insp.-150 mmNB to 250 pipes	NO	40				0.00	0.00
300	Radiographic insp.-50 mmNB to 100, pipe	NO	81				0.00	0.00
310	Letter writing (300 mm to 450 mm):	NO	300				0.00	0.00
320	Letter writing (150 mm to 299 mm):	NO	100				0.00	0.00
330	Erection of brick/ dyke wall around tank	M	190				0.00	0.00
340	Additional inc. in height of dyke wall	M	8				0.00	0.00
350	Casting of PCC for the Tank Farm Floor:	M2	938				0.00	0.00
360	Earthing System of Tanks:	JOB	2				0.00	0.00
370	Supply of API 600 10" gatevalv with flange	NO	2				0.00	0.00

380	Supply of API 600 8" gatevalv with flange	NO	4				0.00	0.00
390	Supply of API 600 6" gatevalv with flange	NO	4				0.00	0.00
400	Supply of API 600 4" gatevalv with flange	NO	8				0.00	0.00
Total Cost (Rs)							0.00	0.00
								The above cost should be maintained under "Total Bid Value" in the E-Tender Portal
1. The bidder shall maintain the total cost (inclusive of GST) in conjunction with BEC Clause No. 1.1, under "Total Bid Value" in the E-Tender Portal								
2. The price/rate(s) quoted by the Bidders will be inclusive of all taxes except GST (i.e. IGST or CGST and SGST/UTGST as applicable in case of interstate supply or intra state supply respectively) on the final services. However, GST rate to be provided in the respective places in the Price Bid.								
3. Price Bids shall be evaluated on overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST)								
4. OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.								
5. Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.								
6. Input Tax Credit on GST (Goods & Service Tax) for this service is NOT available to OIL & The bids will be evaluated based on total price including GST.								
7. Benefits under Public Procurement Policy for MSEs – Order 2012 is not applicable (being Works Contract).								
8. Refer to GCC for detail of GST								
9. Refer to SOQ & SCC for Item detail Description								
10. Mobilisation Period: 45 (Forty Five) days from the date of issue of LOA								

CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

TO BE ISSUED BY PRACTISING **CHARTERED ACCOUNTANTS' FIRM** ON THEIR LETTER HEAD

TO WHOM IT MAY CONCERN

This is to certify that the following financial positions extracted from the audited financial statements of M/s (Name of the Bidder) for the last 03(Three) completed accounting years upto.....**(as the case may be)** are correct.

YEAR	TURN OVER In INR	NET WORTH In INR

Place:

Date:

Seal:

Membership Number :

Signature

Registration No. :

BID FORM

To
M/s Oil India Limited,
P.O. Duliajan, Assam, India

Sub: IFB No. CDO2173P20

Gentlemen,

Having examined the General and Special Conditions of Contract and the Terms of Reference including all attachments thereto, the receipt of which is hereby duly acknowledged, we the undersigned offer to perform the work/services in conformity with the said conditions of Contract and Terms of Reference for the sum quoted in the Price Bid Format or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to commence the work as per the terms & conditions set out in the subject tender.

If our Bid is accepted, we will submit the Performance Security Deposit as specified in the tender document for the due performance of the Contract.

We agree to abide by this Bid for a period of 120 days from the original date of Bid closing and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof in your notification of award shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this _____ day of _____ 2019.

Authorised Person's Signature: _____

Name: _____

Designation: _____

Seal of the Bidder:

STATEMENT OF NON-COMPLIANCE (IF ANY)**(Only exceptions/deviations to be rendered)**

1.0 The Bidder shall furnish detailed statement of **exceptions/deviations**, if any, to the IFB stipulations, terms and conditions in respect of each Section of Bid Document in the following format:

Section No.	Clause No. (Page No.)	Non-Compliance	Remarks

Signature of Bidder: _____

Name: _____

NOTE: OIL INDIA LIMITED expects the bidders to fully accept the terms and conditions of the bid document. However, should the bidders still envisage some exceptions/deviations to the terms and conditions of the bid document, the same should be indicated as per above format and submit along with their bids. If the **“Statement of Non-Compliance”** in the above Proforma is left blank (or not submitted along with the Bid), then it would be constructed that the bidder has not taken any exception/deviation to the IFB requirements.

PROFORMA LETTER OF AUTHORISATION FOR ATTENDING BID OPENING

**TO
CGM (CONTRACTS)
OIL INDIA LIMITED
P.O. DULIAJAN-786602
Assam, India**

Sir,

SUB: OIL's IFB No. CDO2173P20

I/We _____ confirm that Mr. _____ (Name and address) as authorised to represent us during bid opening on our behalf with you against IFB No. **CDO2173P20** for **Hiring of services for Construction of 02 (Two) nos. of 500 KL, 04 (Four) nos. of 160 KL, 03 (Three) nos. of 40 KL and 02 (Two) nos. of 795 KL capacity Formation Water Storage Tanks, under Framework Agreement.**

Yours Faithfully,

Authorised Person's Signature: _____

Name: _____

Signature of Bidder: _____

Name: _____

Date: _____

PROFORMA LETTER OF AUTHORITY

TO
CGM-CONTRACTS
Contracts Department
P.O. DULIAJAN PIN-786602
Dist. Dibrugarh, Assam
India

Dear Sir,

SUB: OIL's IFB No. CDO2173P20

We _____ of _____
Confirm that Mr. _____
_____ (Name and Address) is authorised to represent us to Bid,
negotiate and conclude the agreement on our behalf with you against IFB No.
CDO2173P20 for **Hiring of services for Construction of 02 (Two) nos. of 500**
KL, 04 (Four) nos. of 160 KL, 03 (Three) nos. of 40 KL and 02 (Two) nos. of
795 KL capacity Formation Water Storage Tanks, under Framework
Agreement for any commercial/Legal purpose etc.

We confirm that we shall be bound by all and whatsoever our said
representative shall commit.

Authorised Person's Signature: _____

Name: _____

Yours faithfully,

Signature: _____

Name & Designation _____

For & on behalf of _____

NOTE: This letter of authority shall be on printed letter head of the bidder, and
shall be signed by a person competent and having the power of attorney (Power of
attorney shall be annexed) to bind such Bidder.

FORM OF BID SECURITY (BANK GUARANTEE FORMAT)

To
M/s OIL INDIA LIMITED,
CONTRACTS DEPARTMENT,
DULIAJAN, ASSAM, INDIA, PIN-786602

WHEREAS, (Name of Bidder) _____ (hereinafter called "the Bidder") has submitted their offer Dated _____ for the provision of certain services (hereinafter called "the Bid") against OIL INDIA LIMITED, Duliajan, Assam, India (hereinafter called the Company's) Tender No. _____ KNOW ALL MEN BY these presents that we (Name of Bank) _____ of (Name of Country) _____ having our registered office at _____ (hereinafter called "Bank") are bound unto the Company in the sum of (*_____) for which payment well and truly to be made to Company, the Bank binds itself, its successors and assignees by these presents.

SEALED with the said Bank this ____ day of _____ 20_____

THE CONDITIONS of these obligations are:

1. If the Bidder withdraws their Bid within its original/extended validity; or
2. The Bidder modifies/revises their bid suomoto; or
3. The Bidder does not accept the contract; or
4. The Bidder does not furnish Performance Security Deposit within the stipulated time as per tender/contract; or
5. If it is established that the Bidder has submitted fraudulent documents or has indulged into corrupt and fraudulent practice.

We undertake to pay to Company up to the above amount upon receipt of its first written demand (by way of letter/fax/cable), without Company having to substantiate its demand provided that in its demand Company will note that the amount claimed by it is due to it owing to the occurrence of any of the conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including the date (**--/--/--) and any demand in respect thereof should reach the Bank not later than the above date.

The details of the Issuing Bank and Controlling Bank are as under:

A. Issuing Bank:

BANK FAX NO:

BANK EMAIL ID:

BANK TELEPHONE NO.:

IFSC CODE OF THE BANK:

B. Controlling Office:

Address of the Controlling Office of the BG issuing Bank:

Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

SIGNATURE AND SEAL OF THE GUARANTORS _____

Name of Bank & Address _____

Witness _____

Address _____

(Signature, Name and Address)

Date: _____

Place: _____

* The Bidder should insert the amount of the guarantee in words and figures.

** Date of expiry of Bank Guarantee should be minimum 30 days after the end of the validity period of the Bid/as specified in the Tender.

Note:

The Bank Guarantee issuing bank branch shall ensure the following:

- a. The Bank Guarantee issued by the Bank shall be routed through SFMS platform as per following details:
 - (i) MT 760 / MT 760 COV for issuance of Bank Guarantee
 - (ii) MT 760 / MT 767 COV for amendment of Bank Guarantee

The above message / intimation shall be sent through SFMS (indicating the Tender Number) by the BG issuing Bank branch to HDFC Bank, Duliajan Branch, IFS Code – HDFC0002118; SWIFT Code - HDFCINBBCAL. Branch Address: HDFC Bank Limited, Duliajan Branch, Utopia Complex, BOC Gate, Jayanagar, Duliajan, Dibrugarh, PIN – 786602.

- b. Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank of India shall not be acceptable.

**[TO BE FILLED-UP/SUBMITTED BY THE VENDOR ON ITS LETTER HEAD FOR
E-REMITTANCE]**

Name:

FULL Address:

Phone Number:

Mobile Number:

E-mail address:

Fax Number:

Bank Account Number (in which the Bidder wants remittance against invoices):

Bank Name:

Branch:

Address of the Bank:

Bank Code:

IFSC/RTGS Code of the Bank:

NEFT Code of the Bank:

PAN Number:

GST Registration Number:

Signature of Bidder with Official Seal

FORM OF PERFORMANCE BANK GUARANTEE

(TO BE FURNISHED BY THE CONTRACTOR IN CASE OF SUBMITTING PERFORMANCE SECURITY IN THE FORM OF BANK GUARANTEE AFTER ISSUE OF LOA)

**To
M/s OIL INDIA LIMITED,
CONTRACTS DEPARTMENT
DULIAJAN, ASSAM, INDIA, PIN-786602**

WHEREAS _____ (Name and address of Contractor) (hereinafter called "Contractor") had undertaken, in pursuance of Contract No. _____ to execute _____ (Brief Description of the Work) (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee as security for compliance with Contractor's obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee; NOW THEREFORE we hereby affirm that we are Guarantors on behalf of the Contractor, up to a total of (Amount of Guarantee in figures) _____ (in words _____), such amount being payable in the types and proportions of currencies in which the Contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of guarantee sum as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or the work to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way cease us from any liability under this guarantee, and we hereby waive notice of such change, addition or modification.

This guarantee is valid until the _____ day of _____.

The details of the Issuing Bank and Controlling Bank are as under:

A. Issuing Bank:

BANK FAX NO:

BANK EMAIL ID:

BANK TELEPHONE NO:

IFSC CODE OF THE BANK:

B. Controlling Office:

Address of the Controlling Office of the BG issuing Bank:

Contd.... P/2

Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

SIGNATURE AND SEAL OF THE GUARANTORS _____

Designation _____

Name of Bank _____

Address _____

Witness _____

Address _____

Date: _____

Place: _____

Note:

The Bank Guarantee issuing bank branch shall ensure the following:

- a. The Bank Guarantee issued by the Bank shall be routed through SFMS platform as per following details:

- (i) MT 760 / MT 760 COV for issuance of Bank Guarantee
- (ii) MT 760 / MT 767 COV for amendment of Bank Guarantee

The above message / intimation shall be sent through SFMS (indicating the Contract Number) by the BG issuing Bank branch to HDFC Bank, Duliajan Branch, IFS Code – HDFC0002118; SWIFT Code - HDFCINBBCAL. Branch Address: HDFC Bank Limited, Duliajan Branch, Utopia Complex, BOC Gate, Jayanagar, Duliajan, Dibrugarh, PIN – 786602.

- b. Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank of India shall not be acceptable.

AGREEMENT FORM

This Agreement is made on ____ day of _____ between Oil India Limited, a Government of India Enterprise, incorporated under the Companies Act 1956, having its registered office at Duliajan in the State of Assam, hereinafter called the "Company" which expression unless repugnant to the context shall include executors, administrators and assignees on the one part, and M/s. _____ (Name and address of Contractor) hereinafter called the "Contractor" which expression unless repugnant to the context shall include executors, administrators and assignees on the other part,

WHEREAS the Company desires that Services _____ (brief description of services) should be provided by the Contractor as detailed hereinafter or as Company may requires;

WHEREAS, Contractor engaged themselves in the business of offering such services represents that they have adequate resources and equipment, material etc. in good working order and fully trained personnel capable of efficiently undertaking the operations and is ready, willing and able to carry out the said services for the Company as per Section-II attached herewith for this purpose and

WHEREAS, Company had issued a firm Letter of Award No. _____ dated _____ based on Offer No. _____ dated _____ submitted by the Contractor against Company's IFB No. _____ and the Contractor accepted the same vide Letter No. _____ dated _____.

WHEREAS, the Contractor has furnished to Company the performance security in the form of DD/BC/BG for Rs. _____ (being 10% of Contract value) with validity of 90 (Ninety) days beyond the defect liability period.

All these aforesaid documents shall be deemed to form and be read and construed as part of this agreement/contract. However, should there be any dispute arising out of interpretation of this contract in regard to the terms and conditions with those mentioned in Company's tender document and subsequent letters including the Letter of Intent and Contractor's offer and their subsequent letters, the terms and conditions attached hereto shall prevail. Changes, additions or deletions to the terms of the contract shall be authorized solely by an amendment to the contract executed in the same manner as this contract.

NOW WHEREAS, in consideration of the mutual covenants and agreements hereinafter contained, it is hereby agreed as follows –

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. In addition to documents herein above, the following Sections and Annexures attached herewith shall be deemed to form and be read and construed as part of this agreement viz.:

E-TENDER NO. CDO2173P20

- (a) PART-I indicating the General Conditions of this Contract;
- (b) PART-II indicating the Schedule of work, unit, quantities & rates;
- (c) PART-III indicating the Special Conditions of Contract;
- (d) PART-V indicating the Safety Measures.

3. In consideration of the payments to be made by the Company to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Company to provide the Services and to remedy defects therein in conformity in all respect with the provisions of this Contract.

4. The Company hereby covenants to pay the Contractor in consideration of the provision of the Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of this Contract at the times and in the manner prescribed by this Contract.

IN WITNESS thereof, each party has executed this contract at Duliajan, Assam as of the date shown above.

Signed, Sealed and Delivered,

For and on behalf of
Company (Oil India Limited)

for and on behalf of Contractor
(M/s. _____)

Name:

Name:

Status:

Status:

In presence of

In presence of

1.

1.

2.

2.

Format of undertaking by Bidders towards submission of authentic information/documents (To be typed on the letter head of the bidder)

Ref. No _____

Date _____

Sub: Undertaking of authenticity of information/documents submitted

Ref: Your Tender No. CDO2173P20

**To,
The CGM-Contracts
Contracts Department,
OIL, Duliajan**

Sir,

With reference to our quotation against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.

We take full responsibility for the submission of authentic information/documents against the above cited bid.

We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/fraudulent, OIL has right to reject our bid at any stage including forfeiture of our EMD and/or PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.

Yours faithfully,

For (type name of the firm here)

Signature of Authorized Signatory

Name :

Designation :

Phone No.

Place :

Date :

(Affix Seal of the Organization here, if applicable)

**(TO BE EXECUTED BY THE AUTHORIZED SIGNATORY OF THE BIDDER ON THE
OFFICIAL LETTER HEAD OF THE BIDDER)**

CERTIFICATE OF COMPLIANCE TO FINANCIAL CRITERIA

**Ref : Note 'b.' under Clause 1.2 Financial Criteria of BEC/BRC of
Tender No. CDO2173P20**

I _____ the authorized signatory(s) of _____
(Company or firm name with address) do hereby solemnly affirm and declare/
undertake as under:

**The balance sheet/Financial Statements for the financial year _____
have actually not been audited as on the Original Bid Closing Date.**

Yours faithfully,

For (type name of the firm here)

Signature of Authorized Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

Note: Please note that any declaration bearing date after the Original Bid Closing Date will not be considered and will be rejected. This certificate is to be issued only considering the time required for preparation of Financial Statements i.e. if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the Original Bid Closing Date.

TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

Bidder's Name: _____

Sl. No.	Clause No. of BEC/BRC	Description	Compliance		Bidder to indicate Relevant Page No. of their Bid to support the remarks/ compliance
			Yes	No	
1		This tender is floated to cater the specific requirement of Hiring of services for Construction of 02 (Two) nos. of 500 KL, 04 (Four) nos. of 160 KL, 03 (Three) nos. of 40 KL and 02 (Two) nos. of 795 KL capacity Formation Water Storage Tanks, with a provision to enter into Framework Agreement with all technically qualified bidders for the whole scope of work. This Framework Agreement with the technically qualified bidders will be for a duration of 02 (two) years from the commencement of contract awarded against the tender for the specific requirement at the same scope of work and terms and conditions. Based on the future requirement of OIL, within these terms and conditions and scope of work of the tender, Price Bid for the service will be sought from all the technically qualified bidder(s) for the forthcoming requirements. Bidders will be techno-commercially evaluated based on criteria as mentioned below:			

TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

2	1.0	<p><u>BID EVALUATION CRITERIA (BEC)</u></p> <p>The bid shall conform generally to the specifications and terms and conditions given in the Tender Documents. Bids will be rejected in case services offered do not conform to the required parameters stipulated in the technical specifications. Notwithstanding the general conformity of the bid to the stipulated specifications, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and will not be considered for evaluation. All the documents related to BEC must be submitted along with the Technical Bid.</p>			
3	1.1	<p>Bidders shall bid as per any one or any combination of the undernoted conditions:</p> <ul style="list-style-type: none"> a. Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank. b. Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank. c. Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank. d. Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank. <p>Note: Bidders along with their technical bid shall categorically confirm the condition(s) under which they are bidding.</p>			
<u>1.1 FINANCIAL CRITERIA</u>					
4	1.2.1	<p>1.2.1 Annual Financial Turnover of the bidder during any of preceding 03 (Three) financial/accounting years from the original bid closing date shall be as per following:</p> <ul style="list-style-type: none"> a. For Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank, Annual Financial Turnover of the bidders shall be at least Rs. 77,02,900.00 (Rupees Seventy Seven Lakh Two Thousand Nine Hundred only). 			

TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

		<p>b. For Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank, Annual Financial Turnover of the bidders shall be at least Rs. 1,68,34,300.00 (Rupees One Crore Sixty Eight Lakh Thirty Four Thousand Three Hundred only).</p> <p>c. For Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank, Annual Financial Turnover of the bidders shall be at least Rs. 71,02,400.00 (Rupees Seventy One Lakh Two Thousand Four Hundred only).</p> <p>d. For Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank, Annual Financial Turnover of the bidders shall be at least Rs. 1,16,93,500.00 (Rupees One Crore Sixteen Lakh Ninety Three Thousand Five Hundred only)</p> <p>The above should be read in conjunction with Clause No. 1.1 above and the Annual Financial Turnover of the bidder shall at least meet the corresponding minimum value. For Example – if the bidder is quoting for construction of 02 (Two) nos. of 500 KL, 04 (Four) Nos. of 160 KL and 03 (Three) Nos. of 40 KL Formation Water Storage Tank, minimum Financial Turnover shall be Rs. 3,16,39,600.00 (Rs. 77,02,900.00 + Rs. 1,68,34,300.00 + Rs. 71,02,400.00) (Rupees Three Crore Sixteen Lakh Thirty Nine Thousand Six Hundred only).</p>			
5	1.2.2	<p>Net worth of the bidder must be Positive for the preceding financial/accounting year.</p> <p>Note: The Net worth to be considered against Clause 1.2.2 above, should be read in conjunction with the definition of Net worth as mentioned in Section 2 (57) of The Companies Act, 2013.</p>			
6	Note to BEC Clause 1.2 above	<p>a. For proof of Annual Turnover & Net worth (refer clauses 1.2.1 & 1.2.2 above), any one of the following documents/photocopies must be submitted along with the bid:</p> <p>(i) Audited Balance Sheet along with Profit & Loss account.</p>			

TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

		<p style="text-align: center;">OR</p> <p>(ii) A certificate issued by a practicing Chartered or Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in Annexure-X.</p> <p>b. Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial/accounting years excluding the preceding financial/accounting year will be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/accounting year will be considered. However, the bidder has to submit an undertaking as per Proforma-X.</p> <p>c. In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.</p> <p>d. In case the bidder is a Government Department, they are exempted from submission of documents mentioned under para a. and b. above.</p> <p>e. Bid will be rejected if not accompanied with adequate documentary proof in support of Annual turnover & Net worth as mentioned in Para 1.2.1 & 1.2.2.</p>			
<u>1.3 TECHNICAL CRITERIA</u>					
7	1.3	The bidder shall have experience in successfully executing/completing at least one 'SIMILAR WORK' under single contract during the last 07 (seven) years reckoned from the original bid closing date in Central			

TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

		<p>Govt./State Govt./Public Sector Undertaking/State Govt. Enterprise/any E&P Company as per the following in conjunction with Clause No. 1.1 above:</p> <p>a. For Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank, bidders shall have experience of at least Rs. 77,02,900.00 (Rupees Seventy Seven Lakh Two Thousand Nine Hundred only).</p> <p>b. For Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank, bidders shall have experience of at least Rs. 1,68,34,300.00 (Rupees One Crore Sixty Eight Lakh Thirty Four Thousand Three Hundred only).</p> <p>c. For Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank, bidders shall have experience of at least Rs. 71,02,400.00 (Rupees Seventy One Lakh Two Thousand Four Hundred only).</p> <p>d. For Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank, bidders shall have experience of at least Rs. 1,16,93,500.00 (Rupees One Crore Sixteen Lakh Ninety Three Thousand Five Hundred only)</p> <p>For Example – if the bidder is quoting for construction of 02 (Two) nos. of 500 KL, 04 (Four) Nos. of 160 KL and 03 (Three) Nos. of 40 KL Formation Water Storage Tank, they shall have experience of executing at least one Similar Work of minimum Rs. 3,16,39,600.00 (Rs. 77,02,900.00 + Rs. 1,68,34,300.00 + Rs. 71,02,400.00) (Rupees Three Crore Sixteen Lakh Thirty Nine Thousand Six Hundred only).</p>			
8	Note to BEC	a. "Similar Work" mentioned in Para 1.3 above means.			

TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

	<p>clause 1.3 above</p>	<p>i. Experience of supply of materials, fabrication, erection, painting and commissioning of petroleum storage tank(s)/ formation water storage tank(s) / Chemical storage tank(s) (with associated piping fabrication job) of minimum capacity 160 KLs as per API 650.</p> <p style="text-align: center;">AND</p> <p>ii. Experience in related civil and mechanical works, viz construction of foundation(s)/ Oil water trap(s)/ drainage, walkway(s) etc.</p> <p>b. For proof of requisite Experience (refer Clause No. 1.2), the following documents/ photocopy (self-attested/attested) must be submitted along with the bid:</p> <p>I. <u>In case work experience is against OIL's Contract:</u> Bidder must submit Job Completion Certificate issued by the company indicating the following:</p> <p style="margin-left: 40px;">A. Work order no./Contract no. B. Gross value of job done C. Period of Service D. Nature of Service</p> <p>II. <u>In case work experience is not against OIL's Contract:</u> Bidder must submit the following:</p> <p style="margin-left: 40px;">A. Contract document showing details of work, AND B. Job Completion Certificate showing: i. Gross value of job done ii. Nature of job done and Work order no./Contract no. iii. Contract period and date of completion OR C. SES (Service Entry Sheet)/Certificate of Payment (COP) issued by the company indicating the following: i. Work order no./Contract no.</p>			
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TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

		<p>ii. Gross value of jobs done iii. Period of Service iv. Nature of Service</p> <p>c. Only Letter of Intent (LOI)/Letter of Award (LOA) or Work Order(s) are not acceptable as evidence.</p> <p>d. Mere award of contract(s) will not be counted towards experience. Successful completion of the awarded contract(s) to the extent of volume & value, as stipulated respectively under Clause Nos. 1.2 will only be treated as acceptable experience.</p> <p>e. Following work experience will also be taken into consideration:</p> <p>i. If the prospective bidder has executed contract in which similar work is also a component of the contract.</p> <p>ii. In case the start date of the requisite experience is beyond the prescribed 07(seven) years reckoned from the original bid closing date but completion is within the prescribed 07(seven) years reckoned from the original bid closing date.</p> <p>iii. If the prospective bidder is executing similar work which is still running and the contract value/quantity executed prior to original bid closing date is equal to or more than the minimum prescribed value in the BEC.</p> <p>Proof of work experience against Para e. (i) and (ii) above, to satisfy a) similar work b) minimum prescribed value/qty c) prescribed period of 07 years, to be submitted as below:</p> <p>I. <u>In case requisite experience is against OIL's Contract:</u> Bidder must submit the breakup of similar work and its value/quantity mentioning SES No. and copies of all relevant SES.</p> <p>II. <u>In case requisite experience is not against OIL's Contract:</u> Bidder must submit the breakup of similar work and its</p>			
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TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

value/quantity executed within the prescribed period of 07 (seven) years reckoned from the original bid closing date. The breakup must be certified by the end user or a certificate issued by a practicing Chartered/Cost Accountant Firm (with Membership Number & Firm Registration Number).

Proof of work experience against Para **e. (iii)** above, to satisfy a) similar work b) minimum prescribed value/qty c) prescribed period of 07 years, to be submitted as below:

I. **In case requisite experience is against OIL's Contract:**
Bidder must submit the following:

A. Breakup of similar work

B. SES (Service Entry Sheet)/Certificate of Payment (COP) issued by the company indicating the following:

- i. Work order no./Contract no.
- ii. Gross value of job done
- iii. Period of Service
- iv. Nature of Service

II. **In case requisite experience is not against OIL's Contract:** Bidder must submit the following:

A. Breakup of similar work

B. Contract document showing details of work.

C. LOA/LOI/Work order showing:

- i. Gross value of job awarded
- ii. Nature of job awarded
- iii. Contract no./Work order no.
- iv. Contract period

TECHNICAL EVALUATION SHEET FOR BEC
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		<p>D. Certificate of Payment (COP)/SES (Service Entry Sheet) up to the previous month of the original bid closing date of this tender issued by the company indicating the following:</p> <ul style="list-style-type: none"> i. Work order no./Contract no. ii. Gross value of job done iii. Period of Work Done iv. Nature of Service <p>f. SIMILAR work executed by a bidder for its own organization/subsidiary cannot be considered as experience for the purpose of meeting BEC.</p> <p>g. Bids submitted for part of the work will be rejected. Bid will be rejected if not accompanied with adequate documentary proof in support of Work experience as mentioned in Para 1.3.</p>			
9	1.4	<p>Bidders shall quote their price for all the line items as per following, in conjunction with Clause No. 1.1 above:</p> <ul style="list-style-type: none"> a. Bidders quoting as per 1.1 (a) shall fill-up Price Bid Format given as Annexure-I. b. Bidders quoting as per 1.1 (b) shall fill-up Price Bid Format given as Annexure-II. c. Bidders quoting as per 1.1 (c) shall fill-up Price Bid Formats given as Annexure-III. d. Bidders quoting as per 1.1 (d) shall fill-up Price Bid Formats given as Annexure-IV. <p>For example, if the bidder is quoting for construction of 02 (Two) nos. of 500 KL, 04 (Four) Nos. of 160 KL and 03 (Three) Nos. of 40 KL Formation Water Storage Tank, then they shall fill-up Price Bid Formats Annexure-I, Annexure-II & Annexure-III.</p>			
10	1.5	<p>Price bid shall be opened in respect of only the techno-commercially acceptable bidders whose bids have been found to be substantially responsive. A substantially responsive bid is one that meets the terms and conditions of the Tender and/or the acceptance of which bid will</p>			

TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

		not result in indeterminate liability on OIL.			
11	1.6	Bidders are required to quote for all the items as per Price Bid Format; otherwise the offer of the bidder will be straightway rejected.			
12	1.7	If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.			
13	1.8	The quantities shown against each item in the "Price Bid Format" shall be considered for the purpose of Bid Evaluation. It is, however, to be clearly understood that the assumptions made in respect of the quantities for various operations are only for the purpose of evaluation of the bid and the Contractor will be paid on the basis of the actual number of days/parameter, as the case may be.			
14	1.9	The bidders are advised not to offer any discount/rebate separately and to offer their prices in the Price Bid Format after considering discount/rebate, if any.			
15	1.10	Conditional and unsolicited discount will not be considered in evaluation. However, if such bidder happens to be the lowest recommended bidder, unsolicited discount without any condition will be considered for computing the contract price.			
16	1.11	In case of identical overall lowest offered rate by more than 1 (one) bidder, the selection will be made by draw of lot between the parties offering the same overall lowest price.			
17	1.12	<u>Purchase Preferences</u> allowed as per Government Guidelines in Vogue and PPP [Public Procurement policy] for Micro and Small Enterprises is not applicable for this tender (being works contract tender).			
18	1.13	Price Bids shall be evaluated as per following: a. <u>Construction of 02 (Two) nos. of 500 KL Formation Water Storage Tank:</u> Price Bids shall be evaluated as per Annexure-I. Contract for the construction of 02 (Two) nos. of 500 KL Formation			

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		<p>Water Storage Tank shall be awarded at overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST) as per Annexure-I.</p> <p><u>b. Construction of 04 (Four) Nos. of 160 KL Formation Water Storage Tank:</u> Price Bids shall be evaluated as per Annexure-II. Contract for the construction of 04 (Four) Nos. 160 KL Formation Water Storage Tank shall be awarded at overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST) as per Annexure-II.</p> <p><u>c. Construction of 03 (Three) Nos. of 40 KL Formation Water Storage Tank:</u> Price Bids shall be evaluated as per Annexure-III. Contract for the construction of 03 (Three) Nos. 40 KL Formation Water Storage Tank shall be awarded at overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST) as per Annexure-III.</p> <p><u>d. Construction of 02 (Two) Nos. of 795 KL Formation Water Storage Tank:</u> Price Bids shall be evaluated as per Annexure-IV. Contract for the construction of 02 (Two) Nos. 795 KL Formation Water Storage Tank shall be awarded at overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST) as per Annexure-IV.</p>			
19	1.14	<p>OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet.</p> <p>However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender</p>			

TECHNICAL EVALUATION SHEET FOR BEC
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		document.			
20	1.15	<p>Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST.</p> <p>When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/Contracts will be binding on the bidder.</p>			
21	1.16	Input Tax Credit on GST (Goods & Service Tax) for this service is NOT available to OIL & the bids will be evaluated based on total price including GST.			
22	1.17	Based on the evaluation of techno-commercially qualified bidder(s), the job will be awarded to L-1 bidder(s) in line with Clause No. 1.13 above.			
2.0 <u>BID REJECTION CRITERIA (BRC):</u>					
23	2.1	The bids are to be submitted in single stage under Two Bid System i.e. Un-priced Techno-Commercial Bid and Price Bid together. Only the Price Bid should contain the quoted price.			
24	2.2	The price quoted by the successful bidder must be firm during the performance of the contract and not subject to variation on any account except as mentioned in the bid document. Any bid submitted with adjustable price quotation other than the above will be treated as non-responsive and rejected.			
25	2.3	Bid security shall be furnished as a part of the Techno Commercial Un-priced Bid. The amount of bid security should be as specified in the forwarding letter. Any bid not accompanied by a proper bid security will be rejected.			
26	2.4	Bid Documents/User Id & Password for OIL's E-Tender portal are not			

TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

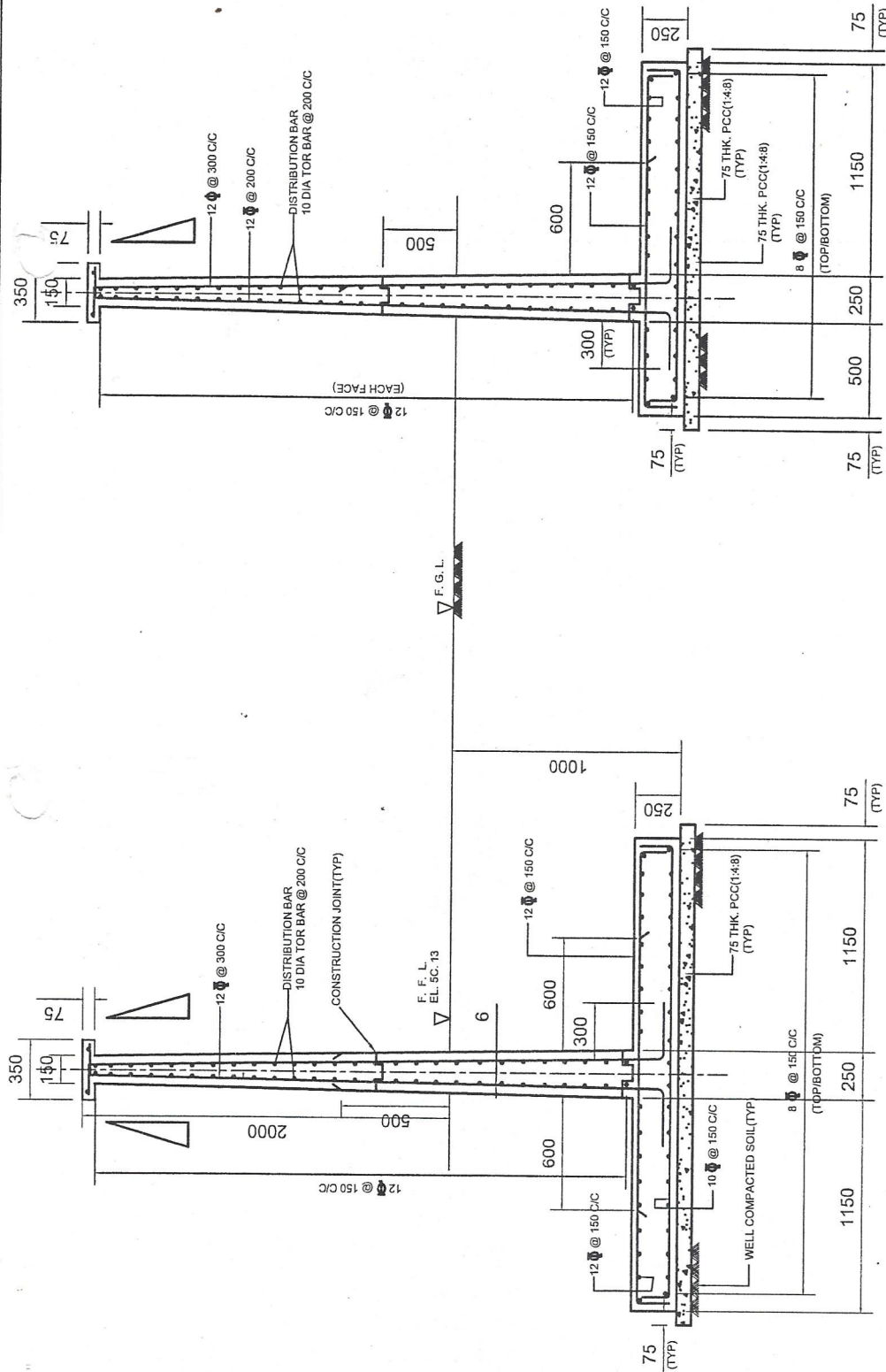
		transferable.			
27	2.5	Any bid received in the form of Physical document/Telex/Cable/Fax/E-mail will not be accepted.			
28	2.6	Bids shall be typed or written in indelible ink. The bidder or his authorized representative shall sign the bid digitally, failing which the bid will be rejected.			
29	2.7	Bids shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by bidder, in which case such corrections shall be initiated by the persons(s) signing (digitally) the bid. However, white fluid should not be used for making corrections. Any bid not meeting this requirement shall be rejected.			
30	2.8	Any bid containing false statement will be rejected and action will be taken by Company as per Bid Document.			
31	2.9	Bidders must quote clearly and strictly in accordance with the price schedule outlined in Price Bidding Format attached under "Notes and Attachments" tab in the main bidding engine of OIL's E-Tender portal; otherwise the bid will be rejected. All other techno-commercial documents other than price details to be submitted with Un-priced Techno-Commercial Bid as per tender requirement under "Technical Attachment" Tab Page only.			
32	2.10	<p>Bidder must accept and comply with the following provisions as given in the Tender Document in toto, failing which offer will be rejected:</p> <ul style="list-style-type: none"> (i) Firm price (ii) EMD/Bid Bond (iii) Period of validity of Bid (iv) Price Schedule (v) Performance Bank Guarantee/Security deposit (vi) Delivery/Completion Schedule (vii) Scope of work (viii) Guarantee of material/work 			

TECHNICAL EVALUATION SHEET FOR BEC
E-TENDER NO. CDO2173P20

		<p>(ix) Liquidated Damages clause</p> <p>(x) Tax liabilities</p> <p>(xi) Arbitration/Resolution of Dispute Clause</p> <p>(xii) Force Majeure</p> <p>(xiii) Applicable Laws</p> <p>(xiv) Specifications</p> <p>(xv) Integrity Pact</p>			
33	2.11	There should not be any indication of price in the Un-priced Techno-Commercial Bid. A bid will be straightway rejected if this is given in the Un-priced Techno-Commercial Bid.			
34	2.12	Bid received with validity of offer less than 120 (One Hundred Twenty) days from the date of Technical Bid opening will be rejected.			
35	2.13	The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide “ Part-VI/Integrity Pact ” of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the Un-priced Techno-Commercial Bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid.			
36	3.0	<p><u>GENERAL:</u></p> <p>3.1 In case bidder takes exception to any clause of bidding document not covered under BEC/BRC, then the Company has the discretion to load or reject the offer on account of such exception if the bidder does not withdraw/modify the deviation when/as advised by company. The loading so done by the company will be final and binding on the bidders. No deviation will however be accepted in the clauses covered under BEC/BRC.</p> <p>3.2 To ascertain the substantial responsiveness of the bid the</p>			

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E-TENDER NO. CDO2173P20

		<p>Company reserves the right to ask the bidder for clarification in respect of clauses covered under BEC/BRC also and such clarifications fulfilling the BEC/BRC clauses in toto must be received or before the deadline given by the company, failing which the offer will be will be evaluated based on the submission. However, mere submission of such clarification shall not make the offer responsive, unless company is satisfied with the substantial responsiveness of the offer.</p> <p>3.3 If any of the clauses in the BEC/BRC contradict with other clauses of bidding document elsewhere, the clauses in the BEC/BRC shall prevail.</p> <p>3.4 Bidder(s) must note that requisite information(s)/financial values etc. as required in the BEC/BRC & Tender are clearly understandable from the supporting documents submitted by the Bidder(s); otherwise Bids shall be rejected.</p> <p>3.5 OIL will not be responsible for delay, loss or non-receipt of applications for participating in the bid sent by mail and will not entertain any correspondence in this regard.</p> <p>3.6 The originals of documents [furnished by bidder(s)] shall have to be produced by bidder(s) to OIL as and when asked for.</p>			
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SECTION 7-7

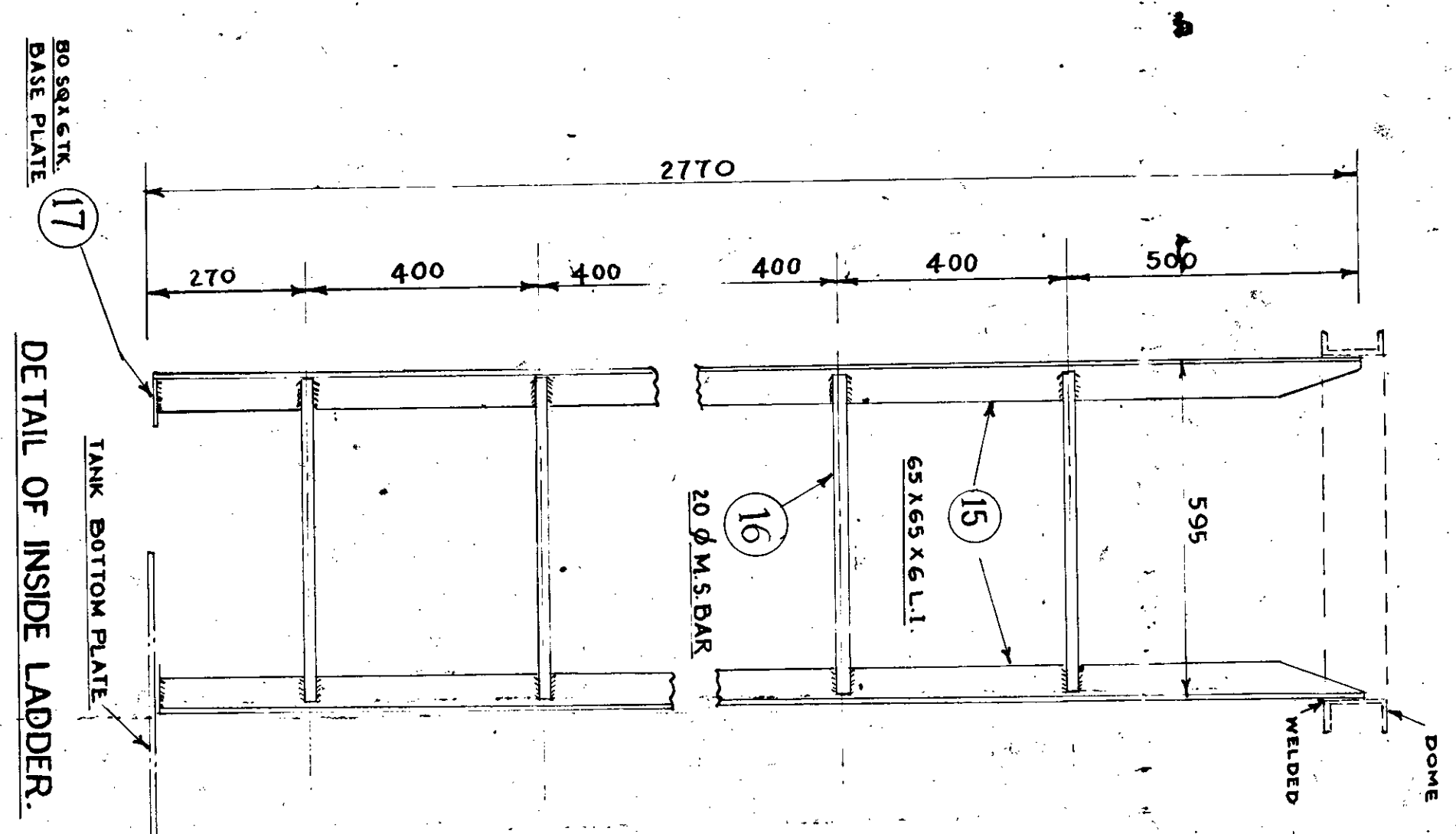
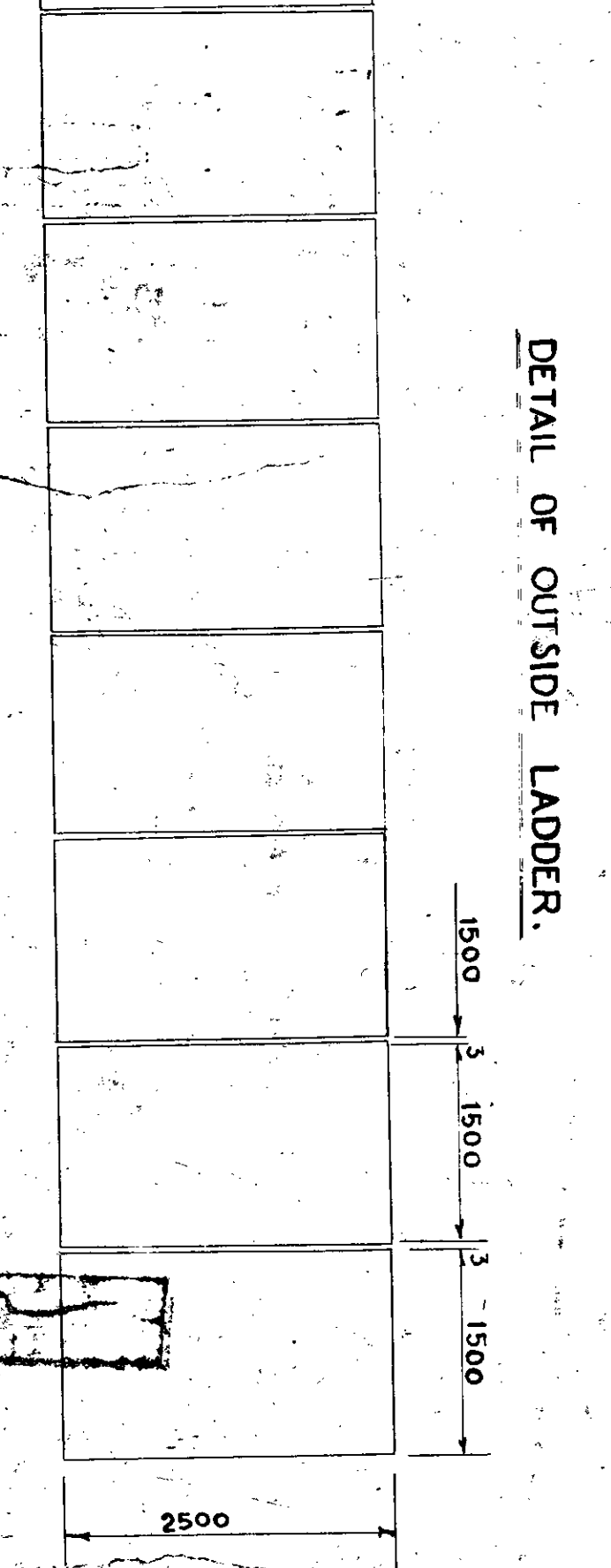
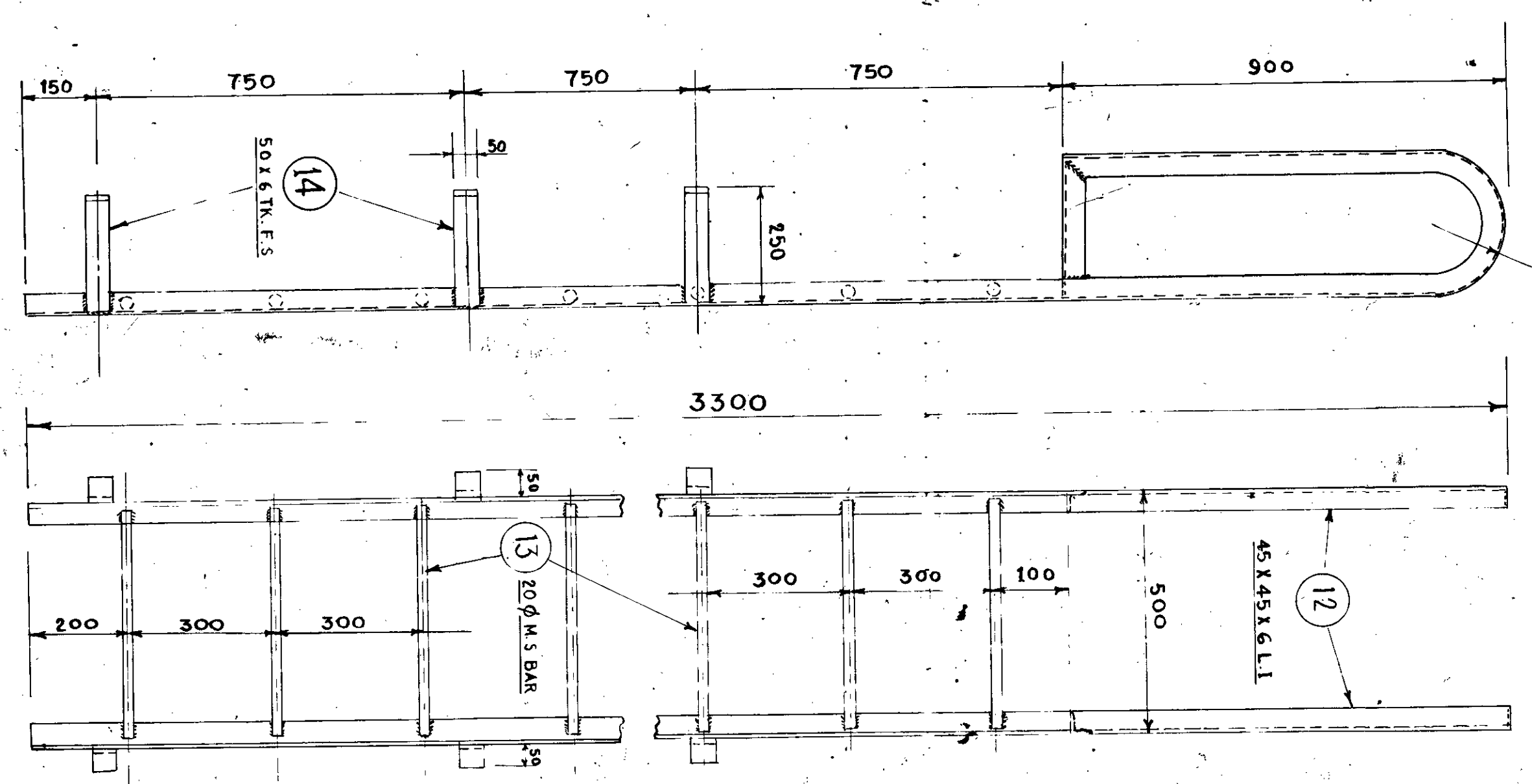
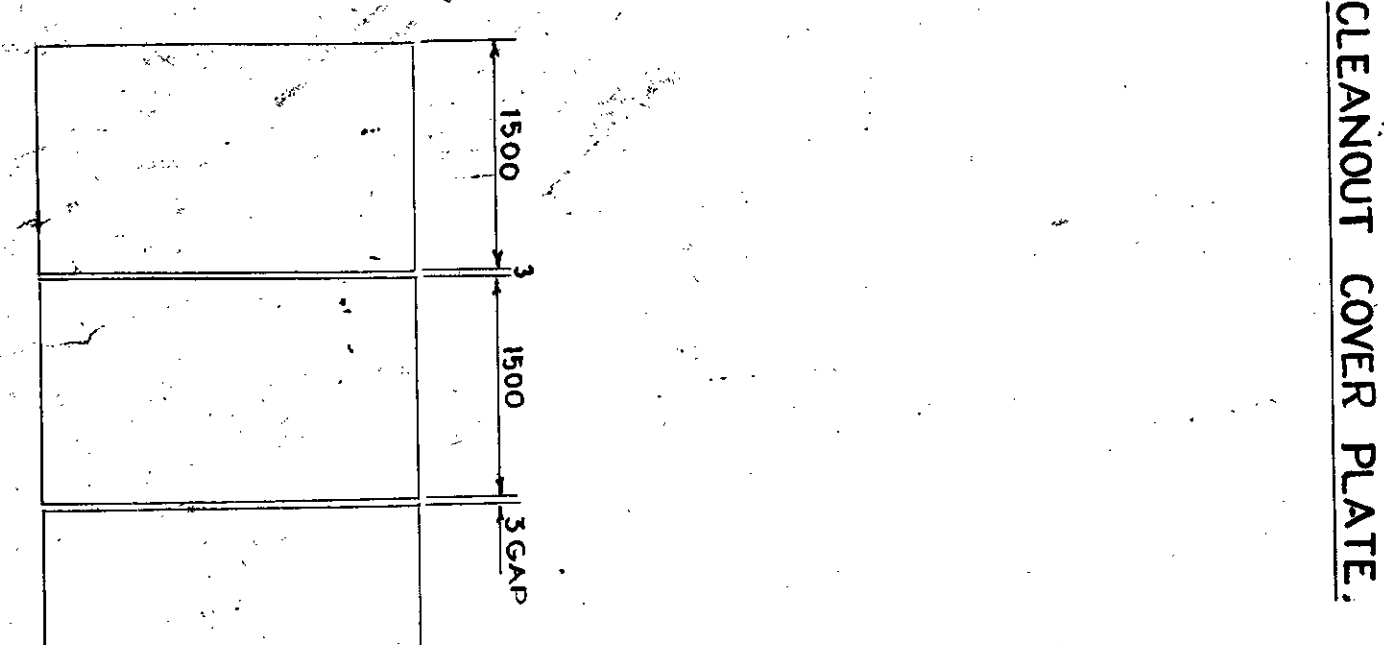
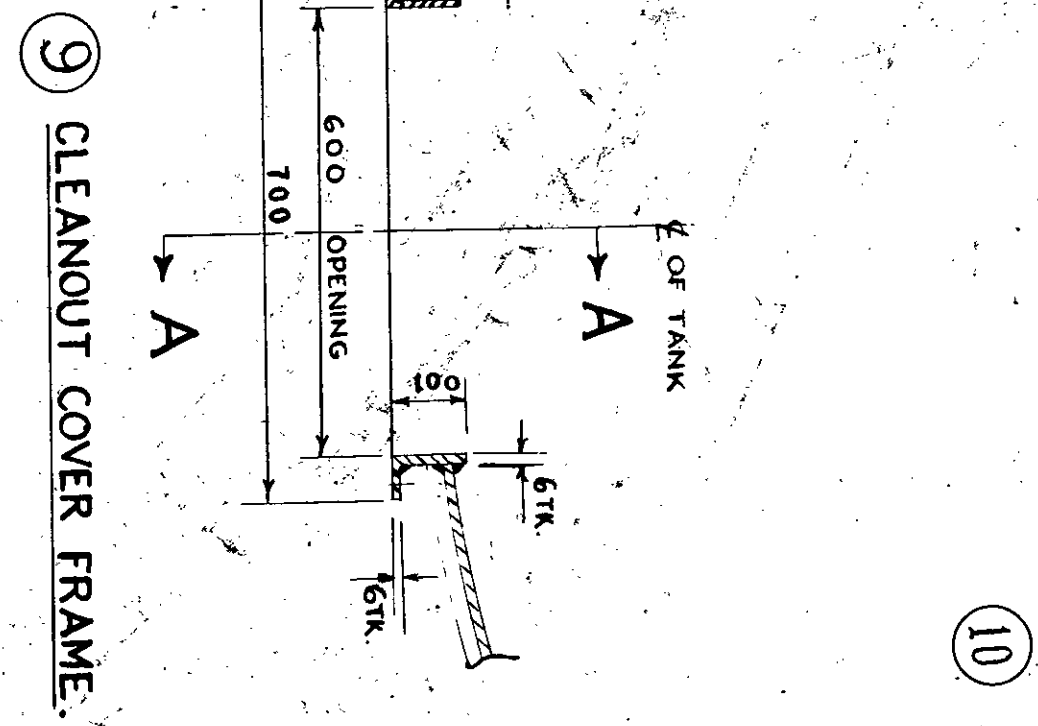
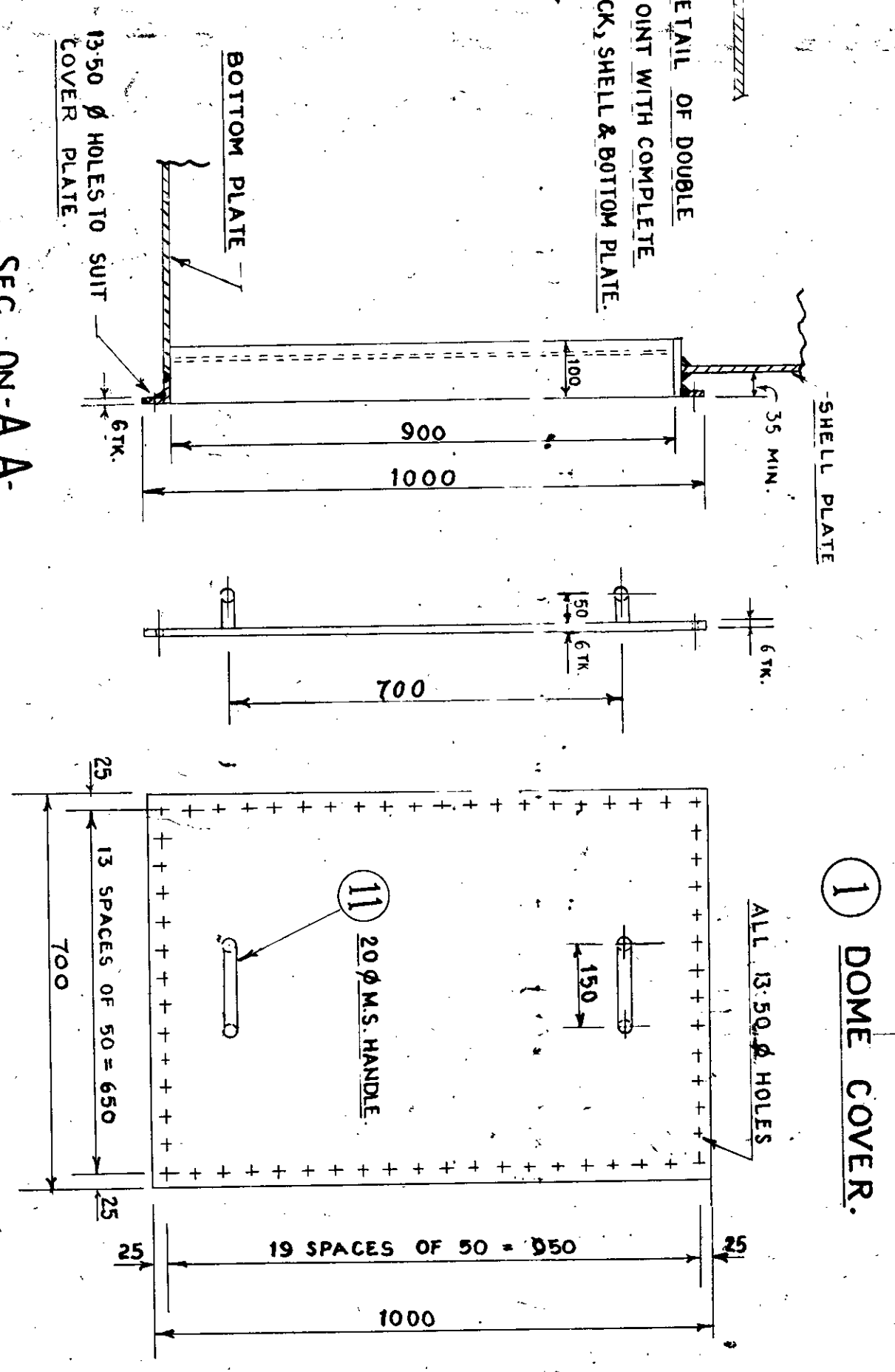
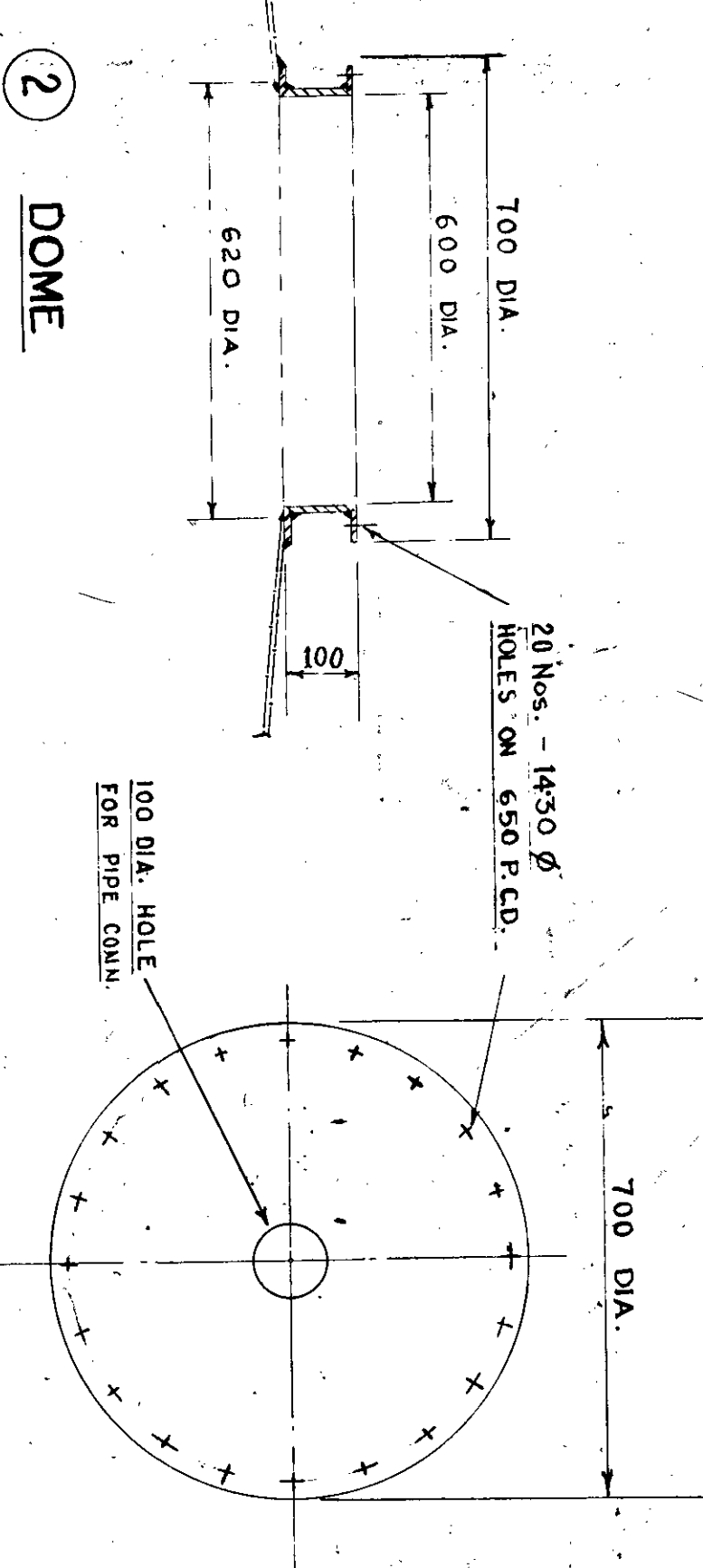
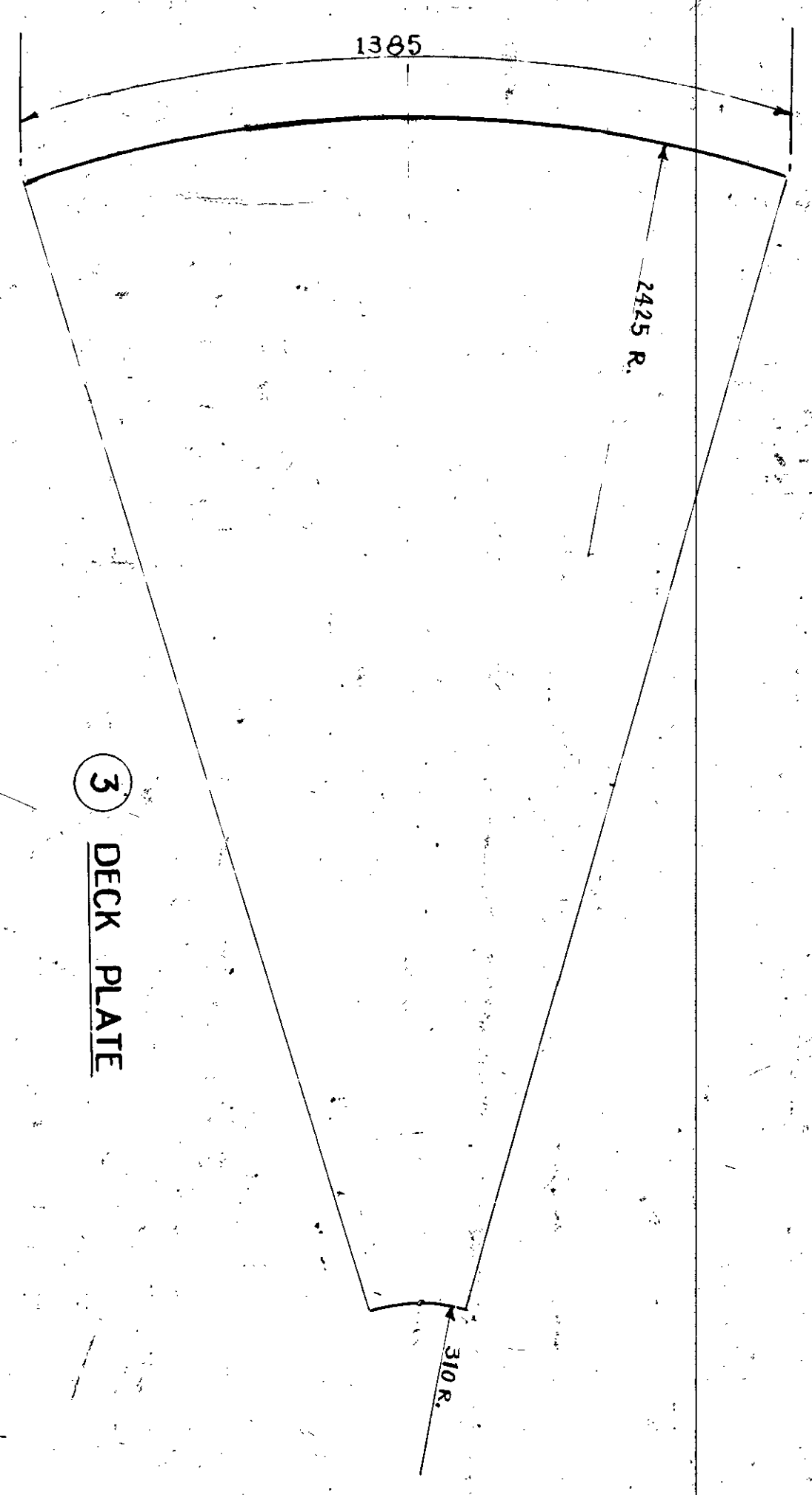
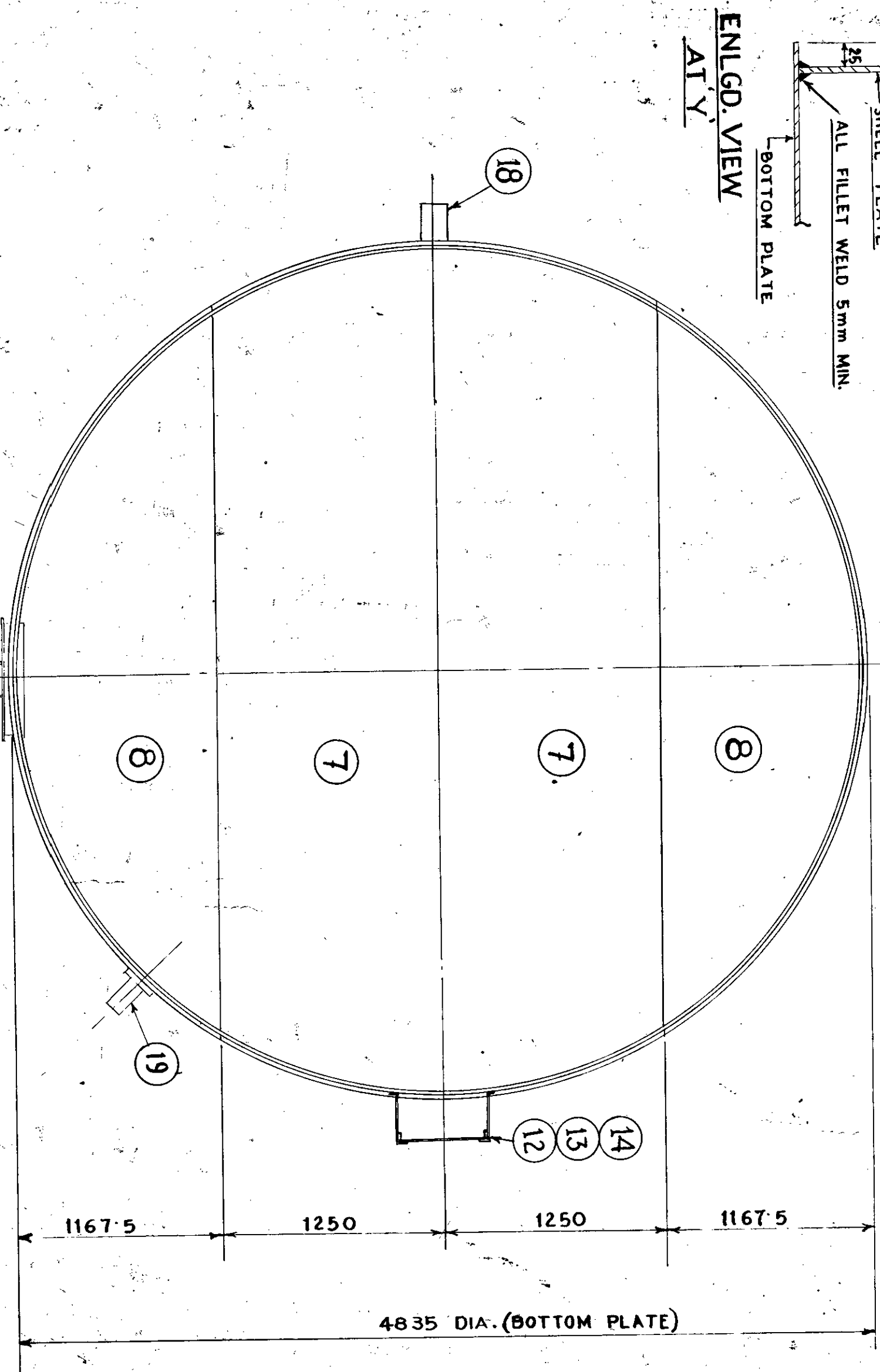
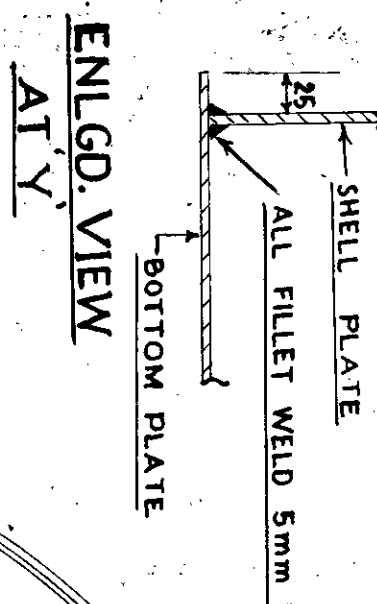
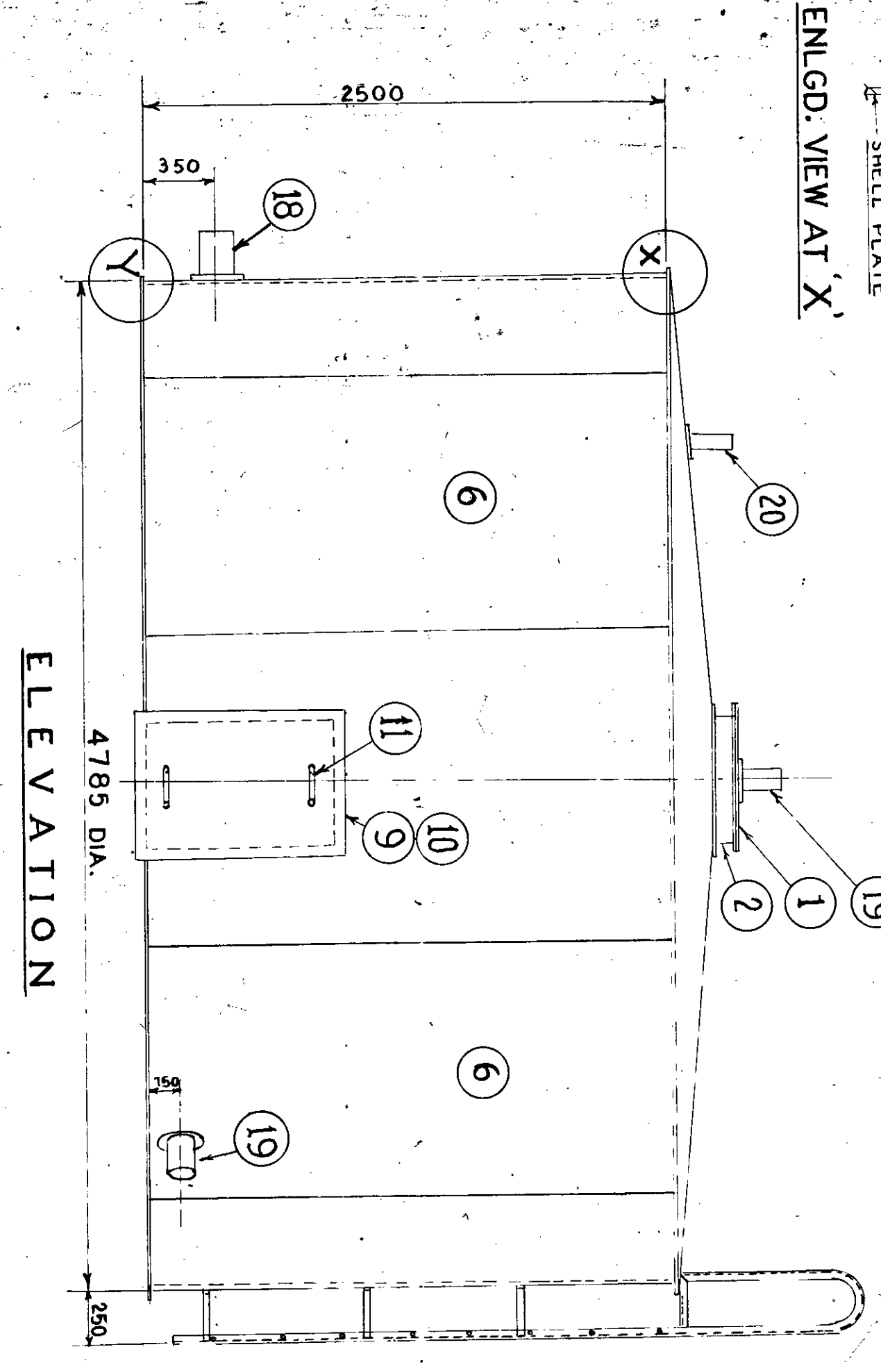
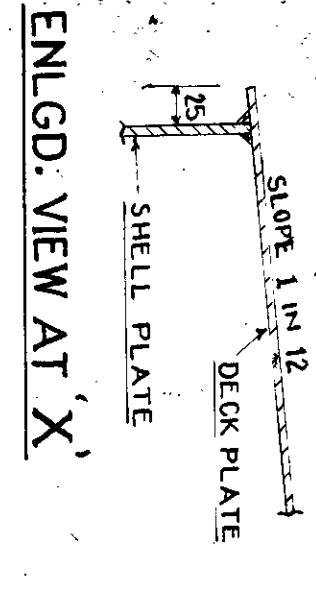
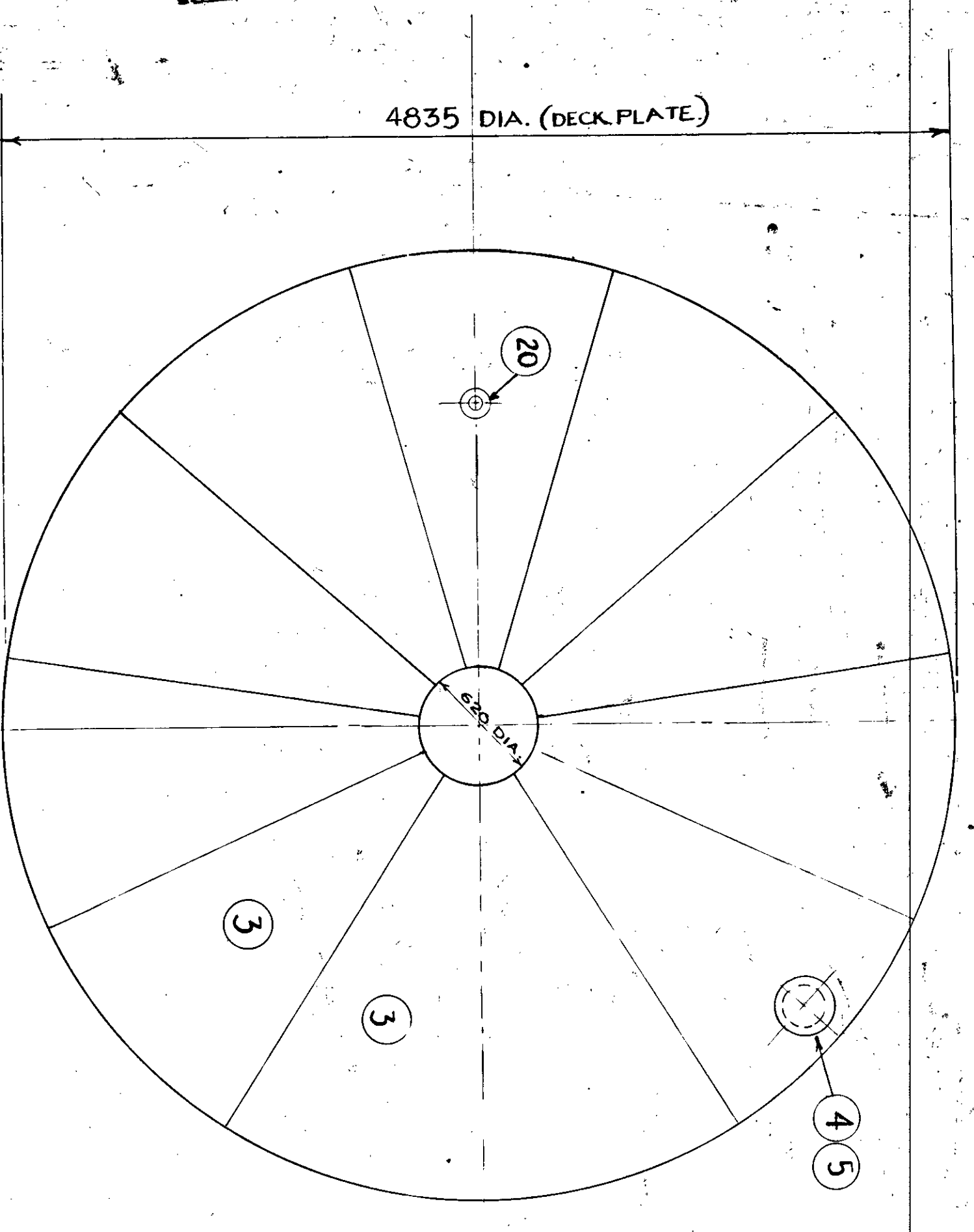
TYPICAL DETAIL OF DYKE WALL (INTERNAL)

SECTION 7-7

TYPICAL DETAIL OF DYKE WALL (INTERNAL)

OIL INDIA LIMITED		NAME	DATE
DRAWING OFFICE		DESIGNED	
DULIAJAN		DRAWN	
TITLE		TRACED	
DYKE WALLS FOR TANKS		CHECKED	
		APPROVED	
		DRG. No.	
		OIL / PP / EPS / 32	

REV.	DATE	ZONE	APPROVED



ITEM NO.	DESCRIPTION	QTY.	REMARKS
1	1 DOME COVER PLATE 6TK.	1	
2	1 DOME COVER PLATE 6TK.	1	
3	1 DOME COVER PLATE 6TK.	1	
4	1 DOME COVER PLATE 6TK.	1	
5	1 DOME COVER PLATE 6TK.	1	
6	1 DOME COVER PLATE 6TK.	1	
7	1 DOME COVER PLATE 6TK.	1	
8	1 DOME COVER PLATE 6TK.	1	
9	1 DOME COVER PLATE 6TK.	1	
10	1 DOME COVER PLATE 6TK.	1	
11	1 DOME COVER PLATE 6TK.	1	
12	1 DOME COVER PLATE 6TK.	1	
13	1 DOME COVER PLATE 6TK.	1	
14	1 DOME COVER PLATE 6TK.	1	
15	1 DOME COVER PLATE 6TK.	1	
16	1 DOME COVER PLATE 6TK.	1	
17	1 DOME COVER PLATE 6TK.	1	
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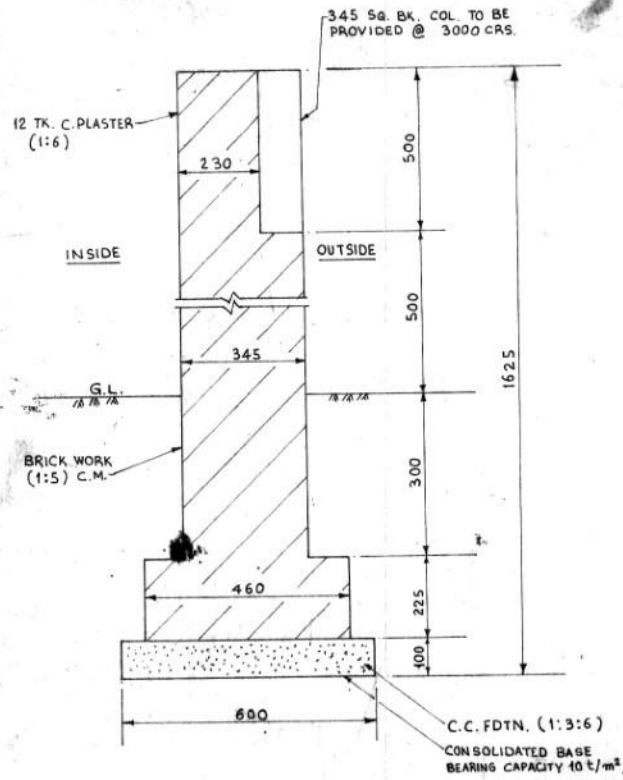
OIL INDIA LIMITED
 DRG NO. OIL/2402/DOME IS.14.74
 SUBJECT: 40X1(250 BBL) WELDED
 TANK GEN. ARRGT. & DETAIL
 RETRACED ON 17-7-84

NOTE
 1. ALL WELDED CONSTRUCTION.
 2. ALL FILLET WELD 5mm MIN.
 3. DOUBLE V BUTT WELDING JOINT
 WITH COMPLETE PENETRATION
 FOR DECK, SHELL & BOTTOM PLATE.



ITEM NO.	D	DI
18	152.40 (6)	250
19	101.60 (4)	200
20	50.80 (2)	150

ALL DIMENSIONS IN MILLIMETRE

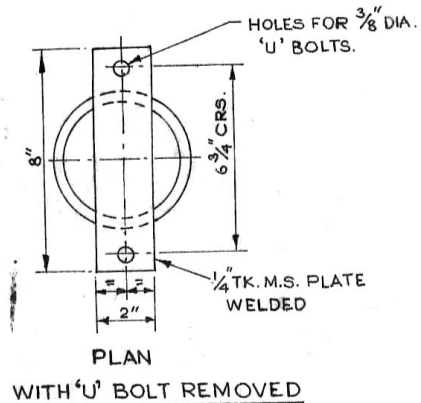
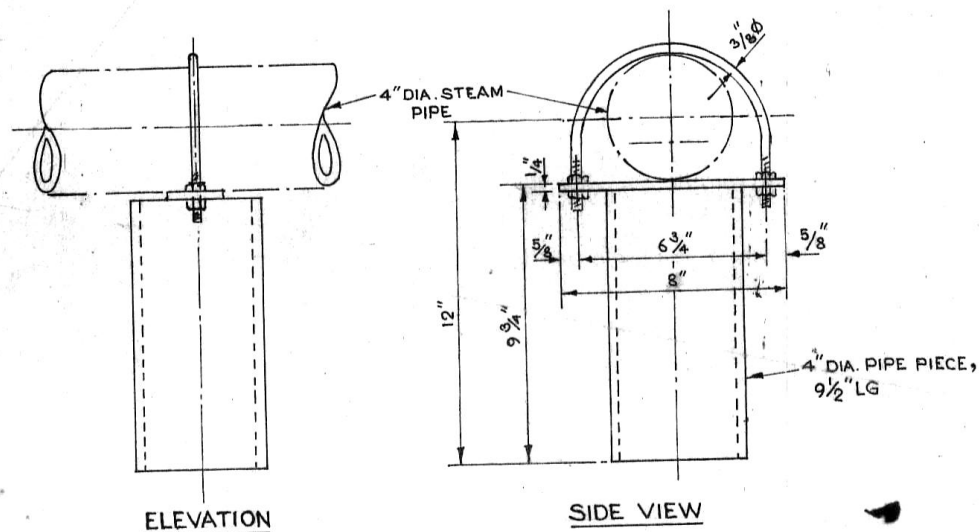
SK. NO. OIL/ 2488







RETRACED ON DATED - 25.2.97.

		OIL INDIA LIMITED		NAME		DATE
		DRAWING OFFICE		DESIGNED		
		DULIAIAN		DRAWN		24.9.80
SCALE <u>N.T.S.</u>		TITLE BRICK WALL AROUND CRUDE OIL STORAGE TANK AT JORA- JAN AND O.C.S.FLARE PIT.		TRACED		25.2.97
				CHECKED		
				APPROVED		
				SK. NO		
				OIL/2488		

REV. DATE ZONE BRIEF RECORD APPROVED



RETRACED ON 03-10-05

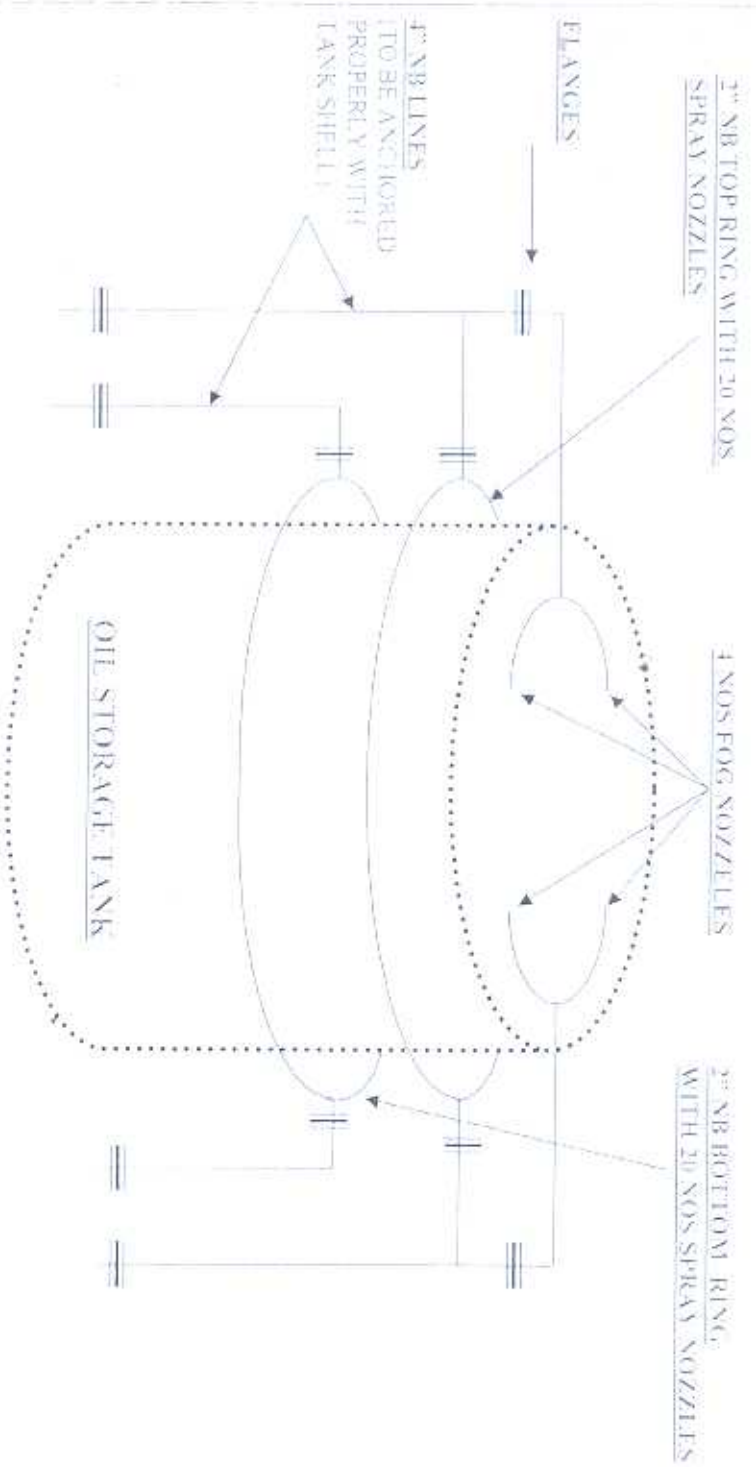
 	OIL INDIA LIMITED		NAME	DATE
	DRAWING OFFICE		TRACE CHECKED <i>Chand</i>	3.10.05
	DUHAJAN		DRAWN R. K. AICH	22.3.82
			TRACED <i>Sharma</i>	03.10.05
			CHECKED <i>So/-A.C.B.</i>	
SCALE	TITLE		APPROVED	
	SUPPORTS FOR HEATING		SK. NO OIL/2616	
	COIL INSIDE CRUDE OIL			
	TANKS-35' DIA (5000 BBL)			
	34 NOS. FOR EACH 35' DIA. TANK			
 				

REV.	DATE	ZONE

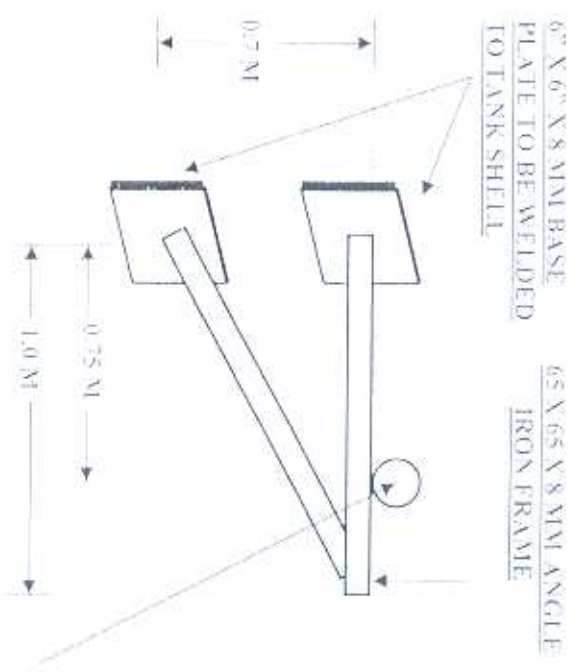
BRIEF RECORD

APPROVED

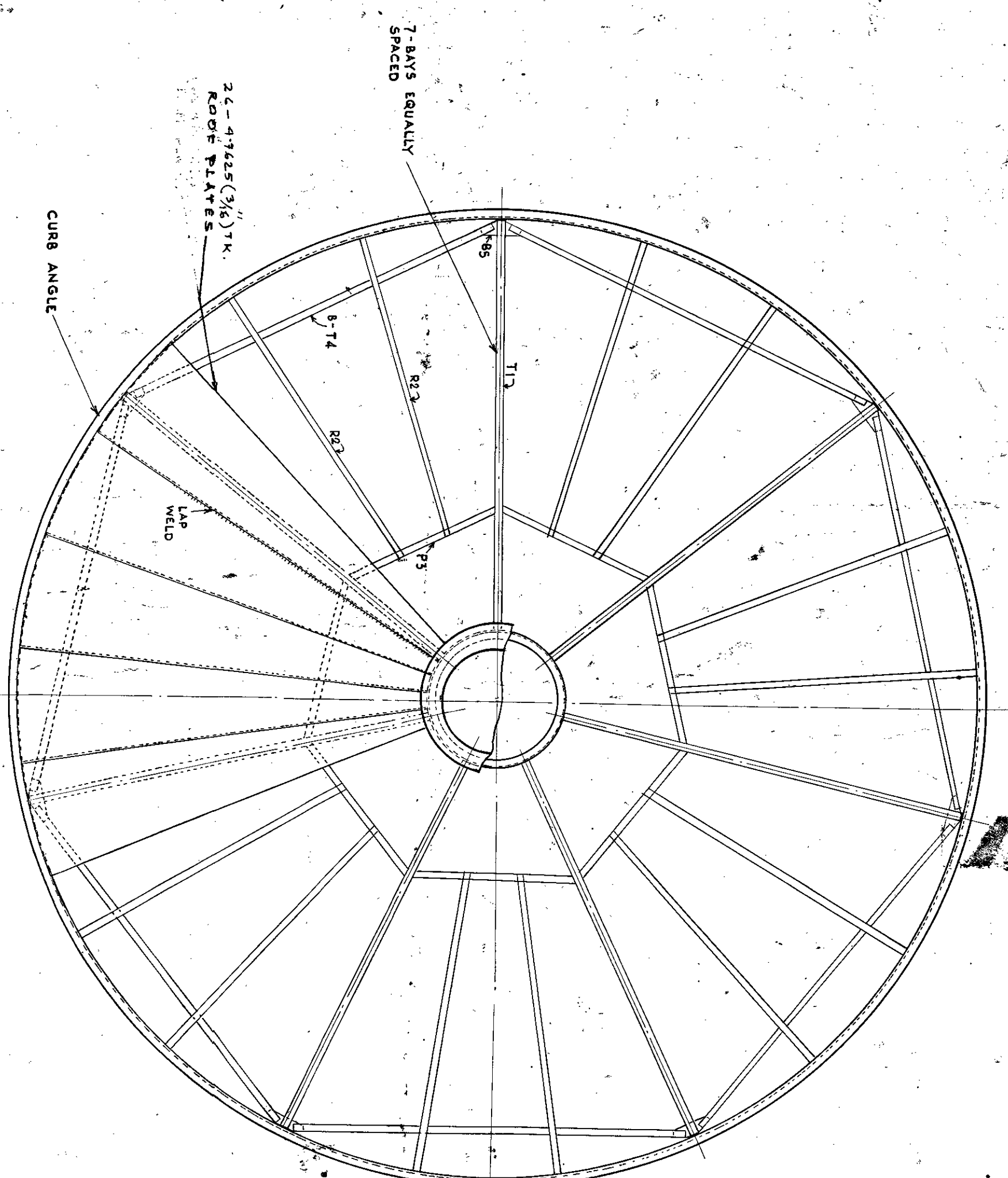
		OIL INDIA LIMITED DRAWING OFFICE DULMIAN		NAME _____ DATE _____
SCALE AS NOTED	TITLE 1000 BBL (W) HIGH WELDED TANK 554 DIA X 4070 HIGH DETAIL OF ROOF STAIN-TURN ETC.	DESIGNED DRAWN CHECKED APPROVED	DATE 10-1-1964 10-1-1964 17-1-1964	DRG. NO. OIL/3886



DETAILS OF ANGLE IRON FRAME
(FOR SUPPORTING WATER RINGS)



SKETCH NO. : OIL / P0 / 01	
TITLE	DRENCHING WATER SYSTEM
APPROVED BY	



PLAN LAYOUT OF ROOF STRUCTURE

CIRCUITRY OF SHELL INCLUDING WELDING JOINT GAPS									
COURSE 7									
5007.1 (9'-8 1/2" h.)	5007.2 (9'-8 1/2" h.)	5007.3 (9'-8 1/2" h.)	5007.4 (9'-8 1/2" h.)	5007.5 (9'-8 1/2" h.)	5007.6 (9'-8 1/2" h.)	5007.7 (9'-8 1/2" h.)	5007.8 (9'-8 1/2" h.)	5007.9 (9'-8 1/2" h.)	5007.10 (9'-8 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5008.1 (9'-7 1/2" h.)	5008.2 (9'-7 1/2" h.)	5008.3 (9'-7 1/2" h.)	5008.4 (9'-7 1/2" h.)	5008.5 (9'-7 1/2" h.)	5008.6 (9'-7 1/2" h.)	5008.7 (9'-7 1/2" h.)	5008.8 (9'-7 1/2" h.)	5008.9 (9'-7 1/2" h.)	5008.10 (9'-7 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5009.1 (9'-6 1/2" h.)	5009.2 (9'-6 1/2" h.)	5009.3 (9'-6 1/2" h.)	5009.4 (9'-6 1/2" h.)	5009.5 (9'-6 1/2" h.)	5009.6 (9'-6 1/2" h.)	5009.7 (9'-6 1/2" h.)	5009.8 (9'-6 1/2" h.)	5009.9 (9'-6 1/2" h.)	5009.10 (9'-6 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5010.1 (9'-5 1/2" h.)	5010.2 (9'-5 1/2" h.)	5010.3 (9'-5 1/2" h.)	5010.4 (9'-5 1/2" h.)	5010.5 (9'-5 1/2" h.)	5010.6 (9'-5 1/2" h.)	5010.7 (9'-5 1/2" h.)	5010.8 (9'-5 1/2" h.)	5010.9 (9'-5 1/2" h.)	5010.10 (9'-5 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5011.1 (9'-4 1/2" h.)	5011.2 (9'-4 1/2" h.)	5011.3 (9'-4 1/2" h.)	5011.4 (9'-4 1/2" h.)	5011.5 (9'-4 1/2" h.)	5011.6 (9'-4 1/2" h.)	5011.7 (9'-4 1/2" h.)	5011.8 (9'-4 1/2" h.)	5011.9 (9'-4 1/2" h.)	5011.10 (9'-4 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5012.1 (9'-3 1/2" h.)	5012.2 (9'-3 1/2" h.)	5012.3 (9'-3 1/2" h.)	5012.4 (9'-3 1/2" h.)	5012.5 (9'-3 1/2" h.)	5012.6 (9'-3 1/2" h.)	5012.7 (9'-3 1/2" h.)	5012.8 (9'-3 1/2" h.)	5012.9 (9'-3 1/2" h.)	5012.10 (9'-3 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5013.1 (9'-2 1/2" h.)	5013.2 (9'-2 1/2" h.)	5013.3 (9'-2 1/2" h.)	5013.4 (9'-2 1/2" h.)	5013.5 (9'-2 1/2" h.)	5013.6 (9'-2 1/2" h.)	5013.7 (9'-2 1/2" h.)	5013.8 (9'-2 1/2" h.)	5013.9 (9'-2 1/2" h.)	5013.10 (9'-2 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5014.1 (9'-1 1/2" h.)	5014.2 (9'-1 1/2" h.)	5014.3 (9'-1 1/2" h.)	5014.4 (9'-1 1/2" h.)	5014.5 (9'-1 1/2" h.)	5014.6 (9'-1 1/2" h.)	5014.7 (9'-1 1/2" h.)	5014.8 (9'-1 1/2" h.)	5014.9 (9'-1 1/2" h.)	5014.10 (9'-1 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5015.1 (9'-1/2" h.)	5015.2 (9'-1/2" h.)	5015.3 (9'-1/2" h.)	5015.4 (9'-1/2" h.)	5015.5 (9'-1/2" h.)	5015.6 (9'-1/2" h.)	5015.7 (9'-1/2" h.)	5015.8 (9'-1/2" h.)	5015.9 (9'-1/2" h.)	5015.10 (9'-1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5016.1 (9'-0 1/2" h.)	5016.2 (9'-0 1/2" h.)	5016.3 (9'-0 1/2" h.)	5016.4 (9'-0 1/2" h.)	5016.5 (9'-0 1/2" h.)	5016.6 (9'-0 1/2" h.)	5016.7 (9'-0 1/2" h.)	5016.8 (9'-0 1/2" h.)	5016.9 (9'-0 1/2" h.)	5016.10 (9'-0 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5017.1 (9'-0" h.)	5017.2 (9'-0" h.)	5017.3 (9'-0" h.)	5017.4 (9'-0" h.)	5017.5 (9'-0" h.)	5017.6 (9'-0" h.)	5017.7 (9'-0" h.)	5017.8 (9'-0" h.)	5017.9 (9'-0" h.)	5017.10 (9'-0" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5018.1 (9'-0" h.)	5018.2 (9'-0" h.)	5018.3 (9'-0" h.)	5018.4 (9'-0" h.)	5018.5 (9'-0" h.)	5018.6 (9'-0" h.)	5018.7 (9'-0" h.)	5018.8 (9'-0" h.)	5018.9 (9'-0" h.)	5018.10 (9'-0" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5019.1 (9'-0" h.)	5019.2 (9'-0" h.)	5019.3 (9'-0" h.)	5019.4 (9'-0" h.)	5019.5 (9'-0" h.)	5019.6 (9'-0" h.)	5019.7 (9'-0" h.)	5019.8 (9'-0" h.)	5019.9 (9'-0" h.)	5019.10 (9'-0" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
COURSE 8									
5020.1 (9'-8 1/2" h.)	5020.2 (9'-8 1/2" h.)	5020.3 (9'-8 1/2" h.)	5020.4 (9'-8 1/2" h.)	5020.5 (9'-8 1/2" h.)	5020.6 (9'-8 1/2" h.)	5020.7 (9'-8 1/2" h.)	5020.8 (9'-8 1/2" h.)	5020.9 (9'-8 1/2" h.)	5020.10 (9'-8 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5021.1 (9'-7 1/2" h.)	5021.2 (9'-7 1/2" h.)	5021.3 (9'-7 1/2" h.)	5021.4 (9'-7 1/2" h.)	5021.5 (9'-7 1/2" h.)	5021.6 (9'-7 1/2" h.)	5021.7 (9'-7 1/2" h.)	5021.8 (9'-7 1/2" h.)	5021.9 (9'-7 1/2" h.)	5021.10 (9'-7 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5022.1 (9'-6 1/2" h.)	5022.2 (9'-6 1/2" h.)	5022.3 (9'-6 1/2" h.)	5022.4 (9'-6 1/2" h.)	5022.5 (9'-6 1/2" h.)	5022.6 (9'-6 1/2" h.)	5022.7 (9'-6 1/2" h.)	5022.8 (9'-6 1/2" h.)	5022.9 (9'-6 1/2" h.)	5022.10 (9'-6 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5023.1 (9'-5 1/2" h.)	5023.2 (9'-5 1/2" h.)	5023.3 (9'-5 1/2" h.)	5023.4 (9'-5 1/2" h.)	5023.5 (9'-5 1/2" h.)	5023.6 (9'-5 1/2" h.)	5023.7 (9'-5 1/2" h.)	5023.8 (9'-5 1/2" h.)	5023.9 (9'-5 1/2" h.)	5023.10 (9'-5 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5024.1 (9'-4 1/2" h.)	5024.2 (9'-4 1/2" h.)	5024.3 (9'-4 1/2" h.)	5024.4 (9'-4 1/2" h.)	5024.5 (9'-4 1/2" h.)	5024.6 (9'-4 1/2" h.)	5024.7 (9'-4 1/2" h.)	5024.8 (9'-4 1/2" h.)	5024.9 (9'-4 1/2" h.)	5024.10 (9'-4 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5025.1 (9'-3 1/2" h.)	5025.2 (9'-3 1/2" h.)	5025.3 (9'-3 1/2" h.)	5025.4 (9'-3 1/2" h.)	5025.5 (9'-3 1/2" h.)	5025.6 (9'-3 1/2" h.)	5025.7 (9'-3 1/2" h.)	5025.8 (9'-3 1/2" h.)	5025.9 (9'-3 1/2" h.)	5025.10 (9'-3 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5026.1 (9'-2 1/2" h.)	5026.2 (9'-2 1/2" h.)	5026.3 (9'-2 1/2" h.)	5026.4 (9'-2 1/2" h.)	5026.5 (9'-2 1/2" h.)	5026.6 (9'-2 1/2" h.)	5026.7 (9'-2 1/2" h.)	5026.8 (9'-2 1/2" h.)	5026.9 (9'-2 1/2" h.)	5026.10 (9'-2 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5027.1 (9'-1 1/2" h.)	5027.2 (9'-1 1/2" h.)	5027.3 (9'-1 1/2" h.)	5027.4 (9'-1 1/2" h.)	5027.5 (9'-1 1/2" h.)	5027.6 (9'-1 1/2" h.)	5027.7 (9'-1 1/2" h.)	5027.8 (9'-1 1/2" h.)	5027.9 (9'-1 1/2" h.)	5027.10 (9'-1 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5028.1 (9'-1/2" h.)	5028.2 (9'-1/2" h.)	5028.3 (9'-1/2" h.)	5028.4 (9'-1/2" h.)	5028.5 (9'-1/2" h.)	5028.6 (9'-1/2" h.)	5028.7 (9'-1/2" h.)	5028.8 (9'-1/2" h.)	5028.9 (9'-1/2" h.)	5028.10 (9'-1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5029.1 (9'-0 1/2" h.)	5029.2 (9'-0 1/2" h.)	5029.3 (9'-0 1/2" h.)	5029.4 (9'-0 1/2" h.)	5029.5 (9'-0 1/2" h.)	5029.6 (9'-0 1/2" h.)	5029.7 (9'-0 1/2" h.)	5029.8 (9'-0 1/2" h.)	5029.9 (9'-0 1/2" h.)	5029.10 (9'-0 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5030.1 (9'-0" h.)	5030.2 (9'-0" h.)	5030.3 (9'-0" h.)	5030.4 (9'-0" h.)	5030.5 (9'-0" h.)	5030.6 (9'-0" h.)	5030.7 (9'-0" h.)	5030.8 (9'-0" h.)	5030.9 (9'-0" h.)	5030.10 (9'-0" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
COURSE 9									
5031.1 (9'-8 1/2" h.)	5031.2 (9'-8 1/2" h.)	5031.3 (9'-8 1/2" h.)	5031.4 (9'-8 1/2" h.)	5031.5 (9'-8 1/2" h.)	5031.6 (9'-8 1/2" h.)	5031.7 (9'-8 1/2" h.)	5031.8 (9'-8 1/2" h.)	5031.9 (9'-8 1/2" h.)	5031.10 (9'-8 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5032.1 (9'-7 1/2" h.)	5032.2 (9'-7 1/2" h.)	5032.3 (9'-7 1/2" h.)	5032.4 (9'-7 1/2" h.)	5032.5 (9'-7 1/2" h.)	5032.6 (9'-7 1/2" h.)	5032.7 (9'-7 1/2" h.)	5032.8 (9'-7 1/2" h.)	5032.9 (9'-7 1/2" h.)	5032.10 (9'-7 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5033.1 (9'-6 1/2" h.)	5033.2 (9'-6 1/2" h.)	5033.3 (9'-6 1/2" h.)	5033.4 (9'-6 1/2" h.)	5033.5 (9'-6 1/2" h.)	5033.6 (9'-6 1/2" h.)	5033.7 (9'-6 1/2" h.)	5033.8 (9'-6 1/2" h.)	5033.9 (9'-6 1/2" h.)	5033.10 (9'-6 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5034.1 (9'-5 1/2" h.)	5034.2 (9'-5 1/2" h.)	5034.3 (9'-5 1/2" h.)	5034.4 (9'-5 1/2" h.)	5034.5 (9'-5 1/2" h.)	5034.6 (9'-5 1/2" h.)	5034.7 (9'-5 1/2" h.)	5034.8 (9'-5 1/2" h.)	5034.9 (9'-5 1/2" h.)	5034.10 (9'-5 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5035.1 (9'-4 1/2" h.)	5035.2 (9'-4 1/2" h.)	5035.3 (9'-4 1/2" h.)	5035.4 (9'-4 1/2" h.)	5035.5 (9'-4 1/2" h.)	5035.6 (9'-4 1/2" h.)	5035.7 (9'-4 1/2" h.)	5035.8 (9'-4 1/2" h.)	5035.9 (9'-4 1/2" h.)	5035.10 (9'-4 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5036.1 (9'-3 1/2" h.)	5036.2 (9'-3 1/2" h.)	5036.3 (9'-3 1/2" h.)	5036.4 (9'-3 1/2" h.)	5036.5 (9'-3 1/2" h.)	5036.6 (9'-3 1/2" h.)	5036.7 (9'-3 1/2" h.)	5036.8 (9'-3 1/2" h.)	5036.9 (9'-3 1/2" h.)	5036.10 (9'-3 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5037.1 (9'-2 1/2" h.)	5037.2 (9'-2 1/2" h.)	5037.3 (9'-2 1/2" h.)	5037.4 (9'-2 1/2" h.)	5037.5 (9'-2 1/2" h.)	5037.6 (9'-2 1/2" h.)	5037.7 (9'-2 1/2" h.)	5037.8 (9'-2 1/2" h.)	5037.9 (9'-2 1/2" h.)	5037.10 (9'-2 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5038.1 (9'-1 1/2" h.)	5038.2 (9'-1 1/2" h.)	5038.3 (9'-1 1/2" h.)	5038.4 (9'-1 1/2" h.)	5038.5 (9'-1 1/2" h.)	5038.6 (9'-1 1/2" h.)	5038.7 (9'-1 1/2" h.)	5038.8 (9'-1 1/2" h.)	5038.9 (9'-1 1/2" h.)	5038.10 (9'-1 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5039.1 (9'-1/2" h.)	5039.2 (9'-1/2" h.)	5039.3 (9'-1/2" h.)	5039.4 (9'-1/2" h.)	5039.5 (9'-1/2" h.)	5039.6 (9'-1/2" h.)	5039.7 (9'-1/2" h.)	5039.8 (9'-1/2" h.)	5039.9 (9'-1/2" h.)	5039.10 (9'-1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5040.1 (9'-0 1/2" h.)	5040.2 (9'-0 1/2" h.)	5040.3 (9'-0 1/2" h.)	5040.4 (9'-0 1/2" h.)	5040.5 (9'-0 1/2" h.)	5040.6 (9'-0 1/2" h.)	5040.7 (9'-0 1/2" h.)	5040.8 (9'-0 1/2" h.)	5040.9 (9'-0 1/2" h.)	5040.10 (9'-0 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5041.1 (9'-0" h.)	5041.2 (9'-0" h.)	5041.3 (9'-0" h.)	5041.4 (9'-0" h.)	5041.5 (9'-0" h.)	5041.6 (9'-0" h.)	5041.7 (9'-0" h.)	5041.8 (9'-0" h.)	5041.9 (9'-0" h.)	5041.10 (9'-0" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
COURSE 10									
5042.1 (9'-8 1/2" h.)	5042.2 (9'-8 1/2" h.)	5042.3 (9'-8 1/2" h.)	5042.4 (9'-8 1/2" h.)	5042.5 (9'-8 1/2" h.)	5042.6 (9'-8 1/2" h.)	5042.7 (9'-8 1/2" h.)	5042.8 (9'-8 1/2" h.)	5042.9 (9'-8 1/2" h.)	5042.10 (9'-8 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5043.1 (9'-7 1/2" h.)	5043.2 (9'-7 1/2" h.)	5043.3 (9'-7 1/2" h.)	5043.4 (9'-7 1/2" h.)	5043.5 (9'-7 1/2" h.)	5043.6 (9'-7 1/2" h.)	5043.7 (9'-7 1/2" h.)	5043.8 (9'-7 1/2" h.)	5043.9 (9'-7 1/2" h.)	5043.10 (9'-7 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5044.1 (9'-6 1/2" h.)	5044.2 (9'-6 1/2" h.)	5044.3 (9'-6 1/2" h.)	5044.4 (9'-6 1/2" h.)	5044.5 (9'-6 1/2" h.)	5044.6 (9'-6 1/2" h.)	5044.7 (9'-6 1/2" h.)	5044.8 (9'-6 1/2" h.)	5044.9 (9'-6 1/2" h.)	5044.10 (9'-6 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5045.1 (9'-5 1/2" h.)	5045.2 (9'-5 1/2" h.)	5045.3 (9'-5 1/2" h.)	5045.4 (9'-5 1/2" h.)	5045.5 (9'-5 1/2" h.)	5045.6 (9'-5 1/2" h.)	5045.7 (9'-5 1/2" h.)	5045.8 (9'-5 1/2" h.)	5045.9 (9'-5 1/2" h.)	5045.10 (9'-5 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5046.1 (9'-4 1/2" h.)	5046.2 (9'-4 1/2" h.)	5046.3 (9'-4 1/2" h.)	5046.4 (9'-4 1/2" h.)	5046.5 (9'-4 1/2" h.)	5046.6 (9'-4 1/2" h.)	5046.7 (9'-4 1/2" h.)	5046.8 (9'-4 1/2" h.)	5046.9 (9'-4 1/2" h.)	5046.10 (9'-4 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5047.1 (9'-3 1/2" h.)	5047.2 (9'-3 1/2" h.)	5047.3 (9'-3 1/2" h.)	5047.4 (9'-3 1/2" h.)	5047.5 (9'-3 1/2" h.)	5047.6 (9'-3 1/2" h.)	5047.7 (9'-3 1/2" h.)	5047.8 (9'-3 1/2" h.)	5047.9 (9'-3 1/2" h.)	5047.10 (9'-3 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R
5048.1 (9'-2 1/2" h.)	5048.2 (9'-2 1/2" h.)	5048.3 (9'-2 1/2" h.)	5048.4 (9'-2 1/2" h.)	5048.5 (9'-2 1/2" h.)	5048.6 (9'-2 1/2" h.)	5048.7 (9'-2 1/2" h.)	5048.8 (9'-2 1/2" h.)	5048.9 (9'-2 1/2" h.)	5048.10 (9'-2 1/2" h.)
7 R	7 R	7 R	7 R	7 R	7 R	7 R	7 R		

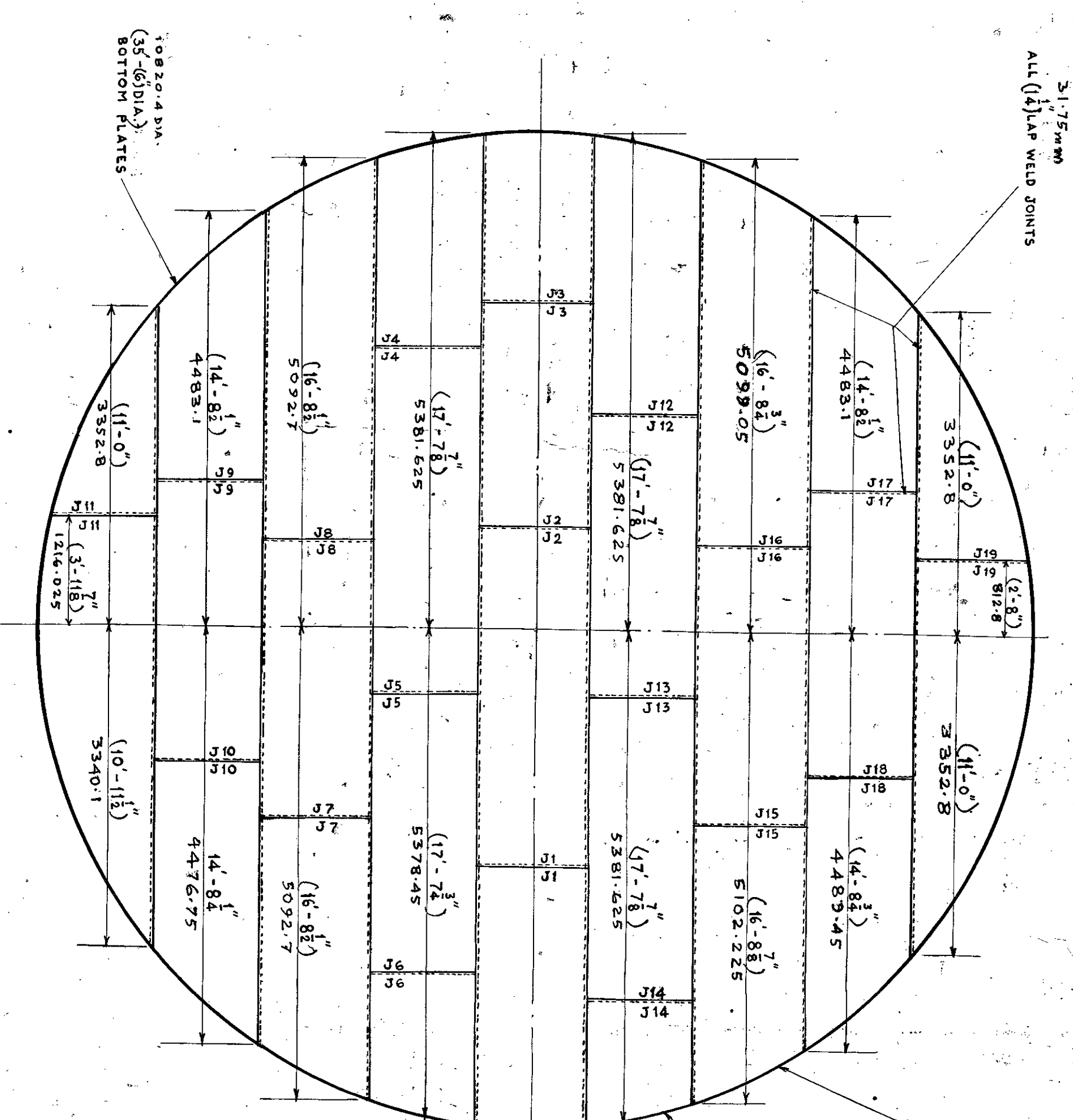
LAYOUT OF $\left(\frac{1}{4}\right)_{\text{THK. SHELL PLATE}} = 6.35$

GAPS MARKED BETWEEN TWO PLAT
ARE FOR WELDING JOINT.

LIST OF SHELL PLATES

SIZES OF PLATES —		No. OF
$6.007 \times 1 \times 3.58 \times 6 \times 6.35$	$(19' - 88'' \times 4' - 58'' \times \frac{1}{4}'')$	1) —
$6.007 \times 1 \times 3.58 \times 9 \times 6.35$	$(19' - 88'' \times 4' - 58'' \times \frac{1}{4}'')$	2) "
$6.038 \times 1 \times 3.58 \times 6 \times 6.35$	$(19' - 92'' \times 4' - 58'' \times \frac{1}{4}'')$	1) "
$5.984 \times 0.75 \times 3.08 \times 6.35$	$(19' - 78'' \times 4' - 58'' \times \frac{1}{4}'')$	1) "
$3.511 \times 5.5 \times 3.58 \times 9 \times 6.35$	$(11' - 64'' \times 4' - 58'' \times \frac{1}{4}'')$	1) "
$5.981 \times 1 \times 1.601 \times 7.75 \times 6.35$	$(19' - 78'' \times 4' - 118'' \times \frac{1}{4}'')$	1) "
$5.979 \times 4 \times 1.501 \times 7.75 \times 6.35$	$(19' - 88'' \times 4' - 118'' \times \frac{1}{4}'')$	1) "
$6.070 \times 6 \times 1.501 \times 7.75 \times 6.35$	$(19' - 114'' \times 4' - 118'' \times \frac{1}{4}'')$	1) "
$5.969 \times 1 \times 1.501 \times 7.75 \times 6.35$	$(19' - 78'' \times 4' - 118'' \times \frac{1}{4}'')$	2) "
$3.536 \times .95 \times 1.501 \times 7.75 \times 6.35$	$(11' - 74'' \times 4' - 118'' \times \frac{1}{4}'')$	1) "
$3.548 \times 1 \times 1.285 \times 0.75 \times 6.35$	$(10' - 02'' \times 4' - 08'' \times \frac{1}{4}'')$	2) "
$3.060 \times 0.7 \times 1.285 \times 0.75 \times 6.35$	$(10' - 02'' \times 4' - 08'' \times \frac{1}{4}'')$	3) "
$3.073 \times 4 \times 1 \times 2.075 \times 6.35$	$(10' - 02'' \times 4' - 08'' \times \frac{1}{4}'')$	2) "
$2.868 \times .85 \times 1.35 \times 0.75 \times 6.35$	$(9' - 04'' \times 4' - 08'' \times \frac{1}{4}'')$	1) "
$4.610 \times 1 \times 1.285 \times 0.75 \times 6.35$	$(10' - 02'' \times 4' - 08'' \times \frac{1}{4}'')$	2) "
$6.096 \times 1 \times 1.226 \times .725 \times 6.35$	$(20' - 00'' \times 4' - 08'' \times \frac{1}{4}'')$	1) "
$3.041 \times 5.5 \times 1.226 \times .725 \times 6.35$	$(20' - 00'' \times 4' - 08'' \times \frac{1}{4}'')$	2) "
$6.096 \times 1 \times 1.219 \times 2 \times 6.35$	$(20' - 00'' \times 4' - 08'' \times \frac{1}{4}'')$	1) "
$6.091 \times 6.5 \times 1 \times 1.219 \times 2 \times 6.35$	$(20' - 00'' \times 4' - 08'' \times \frac{1}{4}'')$	2) "
$3.048 \times 1 \times 1.219 \times 2 \times 6.35$	$(20' - 00'' \times 4' - 08'' \times \frac{1}{4}'')$	2) "
$3.032 \times 4 \times 1 \times 1.219 \times 2 \times 6.35$	$(20' - 00'' \times 4' - 08'' \times \frac{1}{4}'')$	1) "

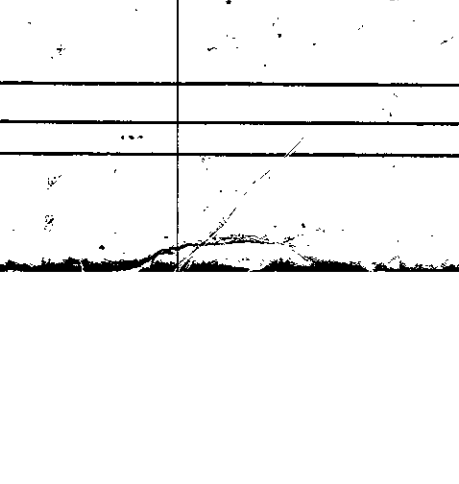
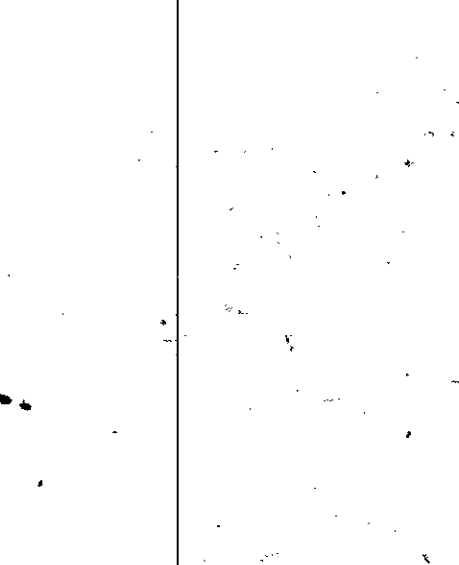
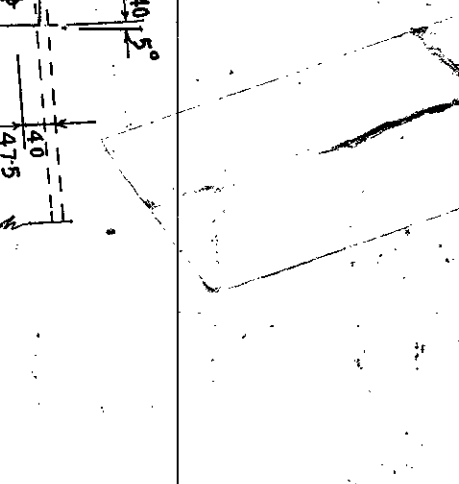
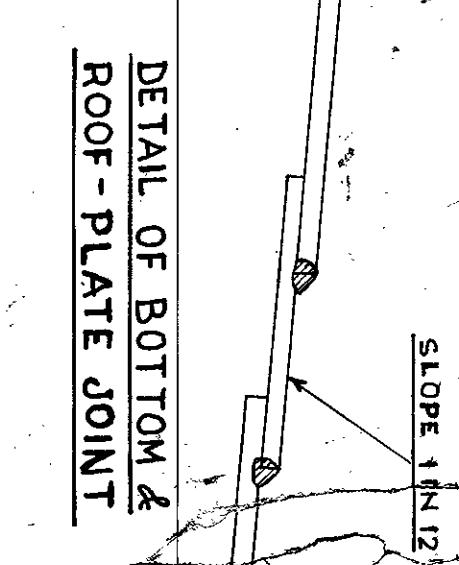
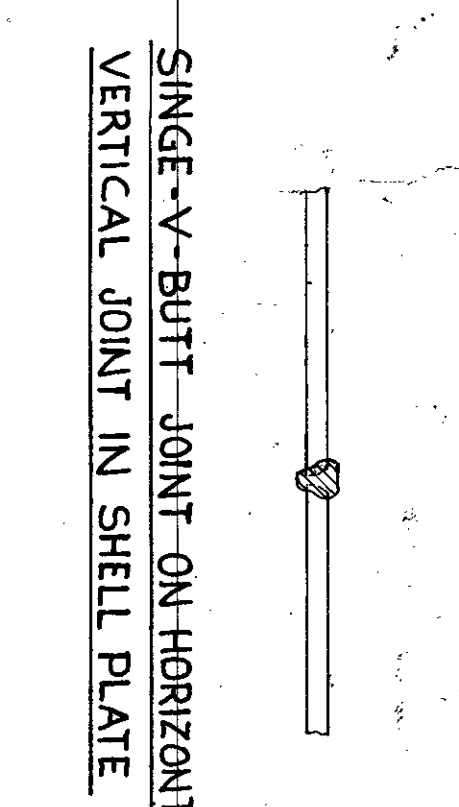
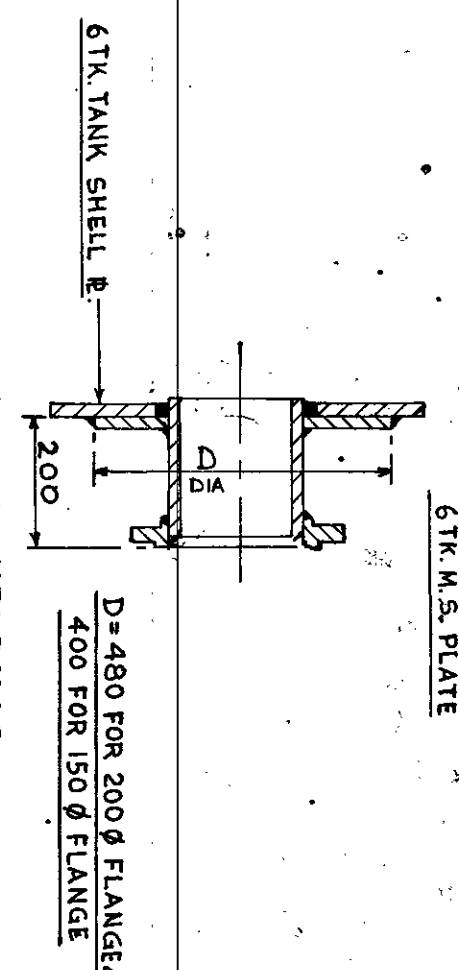
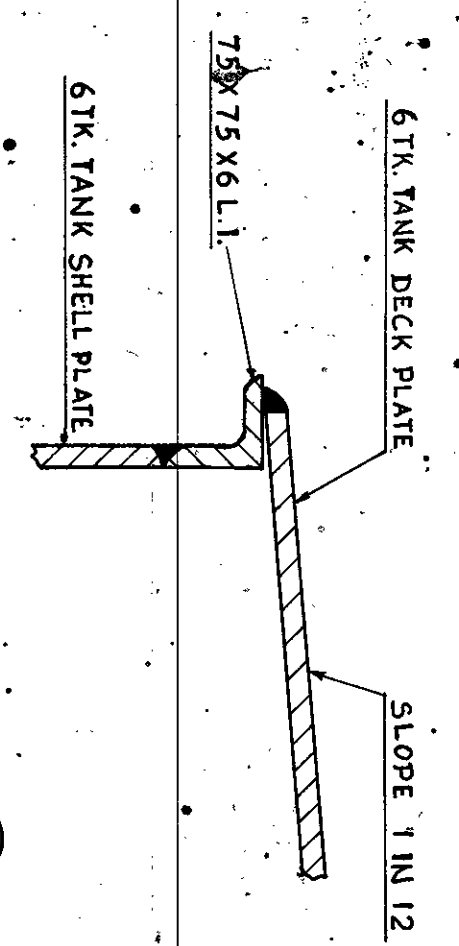
LAYOUT OF BOTTOM PLATES

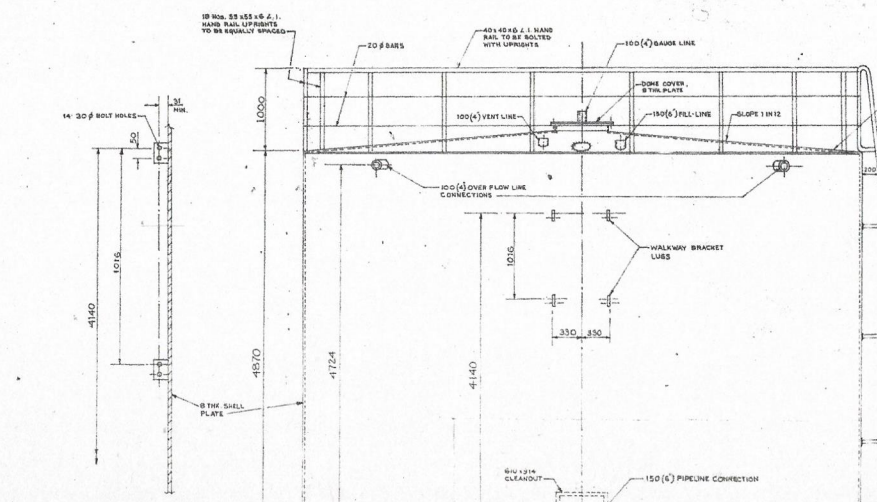


31.75 mm
ALL (14) LAP WELD JOINT

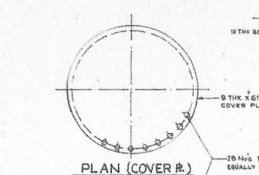
✓ BOTTOM PLATE

OIL INDIA LHMAT
 DULIAJANI
 DIRGMO OIL /0559/A
 106.83 mm
 DATE
 SUBJECT DETAIL OF 35-001A
 OIL TANK
 (Signature)

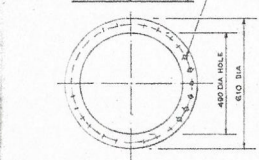




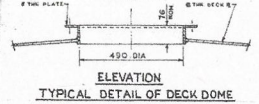
DETAIL OF WALKWAY BRACKET LUGS



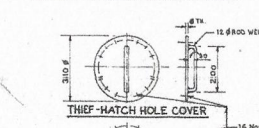
PLAN (COVER #)



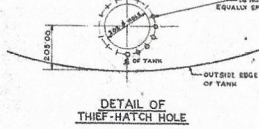
PLAN



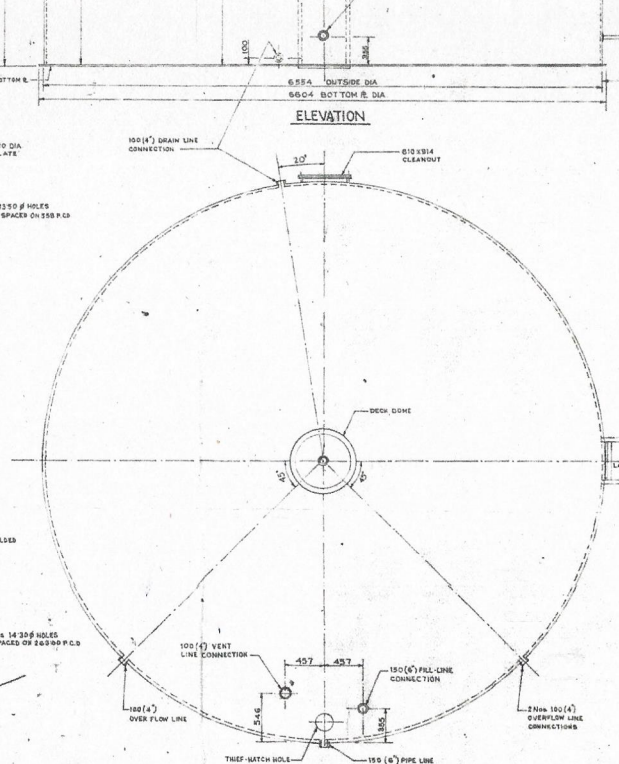
ELEVATION TYPICAL DETAIL OF DECK DOME



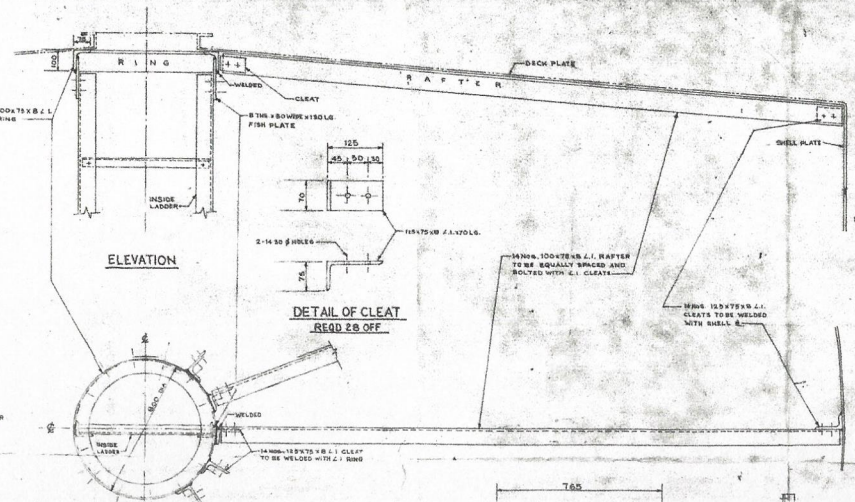
THIEF-HATCH HOLE COVER



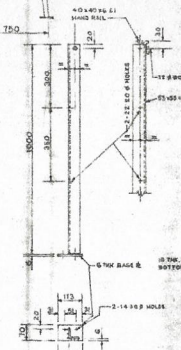
DETAIL OF THIEF-HATCH HOLE



PLAN SCALE - 1:25

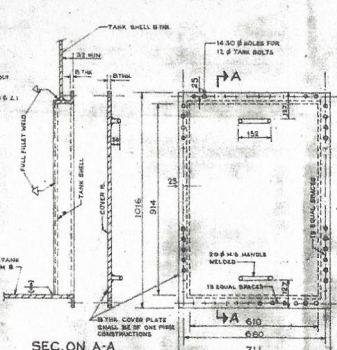


PLAN DETAIL OF ROOF STRUCTURE SCALE 1:10

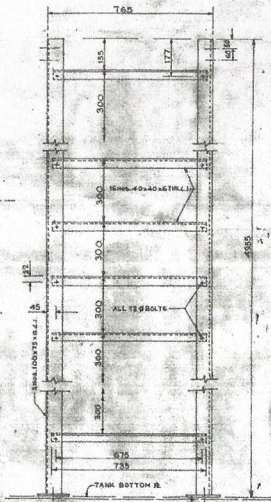


SEC. ON A-A

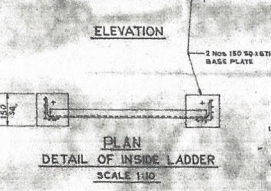
DETAIL OF HAND RAIL UPRIGHT REGD - 18 NOS. SCALE 1:10



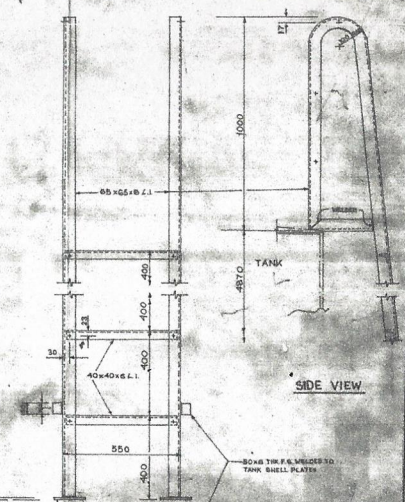
DETAIL OF EXTENDED NECK CLEANOUT SCALE 1:10



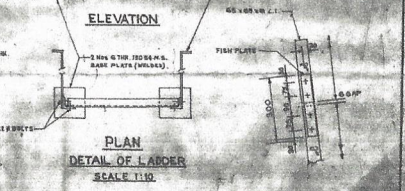
ELEVATION



PLAN DETAIL OF INSIDE LADDER SCALE 1:10



ELEVATION



PLAN DETAIL OF LADDER SCALE 1:10

FIXING DETAIL OF FISH PLATE

- NOTE:
1. ALL WELDED CONSTRUCTIONS AS PER IS: 8000-1968.
 2. ALL 1/2" BOLTS AS PER IS: 8000-1977.
 3. UNLESS OTHERWISE SPECIFIED ALL BOLT HOLES ARE 1/32" R.
 4. MATERIALS TO BE GIVEN AS PER IS: 220.



REF. DRG. FOR OTHER DETAILS SEE DRG. NO. OIL/1000

REVISION NO. 01

OIL INDIA LIMITED		NAME	DATE
DRAWING OFFICE		DESIGNED	BY
DULAIAN		DRAWN	BY
TITLE 1000 BBL (U.S.) HIGH WELDED TANK 65M DIA 4870 GEN. ARR. AS PER API STD. 12D 17TH EDITION AUGUST 1977		CHECKED	BY
SCALE AS NOTED		APPROVED	BY
DRG. NO. OIL/1000		OIL/1000	

ALL DIMENSIONS ARE IN MILLIMETRE.



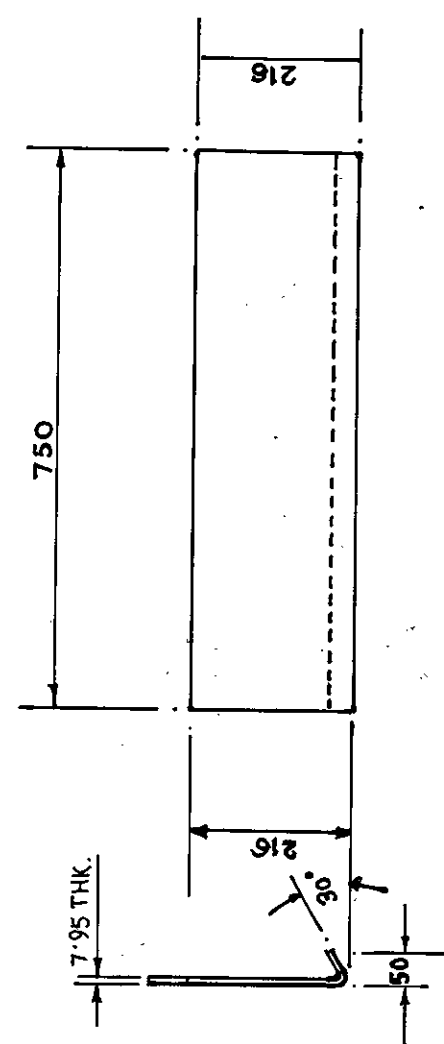
DETAIL OF STAIRWAY

ALL WELDED CONSTRUCTION



SHOWING PIPE & OTHER FITTINGS

ALL DIMENSIONS ARE IN MILLIMETRE.



DETAIL OF TREAD PLATE

NOTE:-



RISE OF SPIRAL SHALL BE 45° FOR ALL TANKS.

Nos. OF TREADS = 47
RISE LAST = 134
RISE LAST = 130
OTHERS = 216

REF. DRGS.

1. DRG. NO. OIL / 3077 DATE 14.2.78 FOR STRUCTURAL DETAILS.
2. A.O.C. DRG. NO. 2647/ RI DATE 11.4.68 FOR STAIR SPECIFICATION.

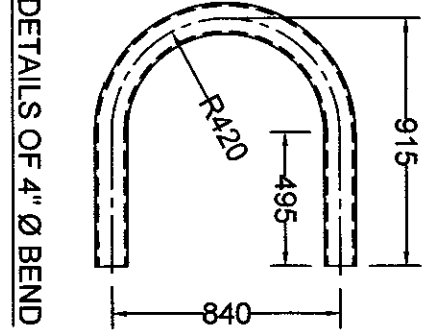
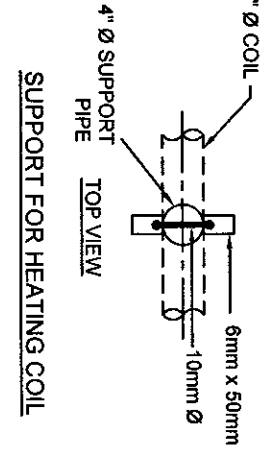
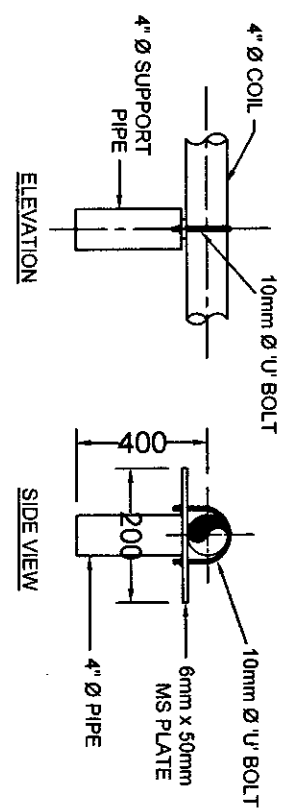
RETRACE ON 22.7.05

	OIL INDIA LIMITED DRAWING OFFICE DULAJAN		DESIGNED <u>Sgt</u> DRAWN <u>84/- R.K.A</u> TRACED <u>Pulka</u> CHECKED <u>Pulka</u> APPROVED <u>Sgt</u>	DATE <u>25.5.83</u> 22.7.06 23.8.05
	TITLE <u>SPIRAL STAIRCASE</u>		DRG. NO OIL / 4240	
FOR THE 795KL WELDED TANK				
SCALE 1:50 1:10				

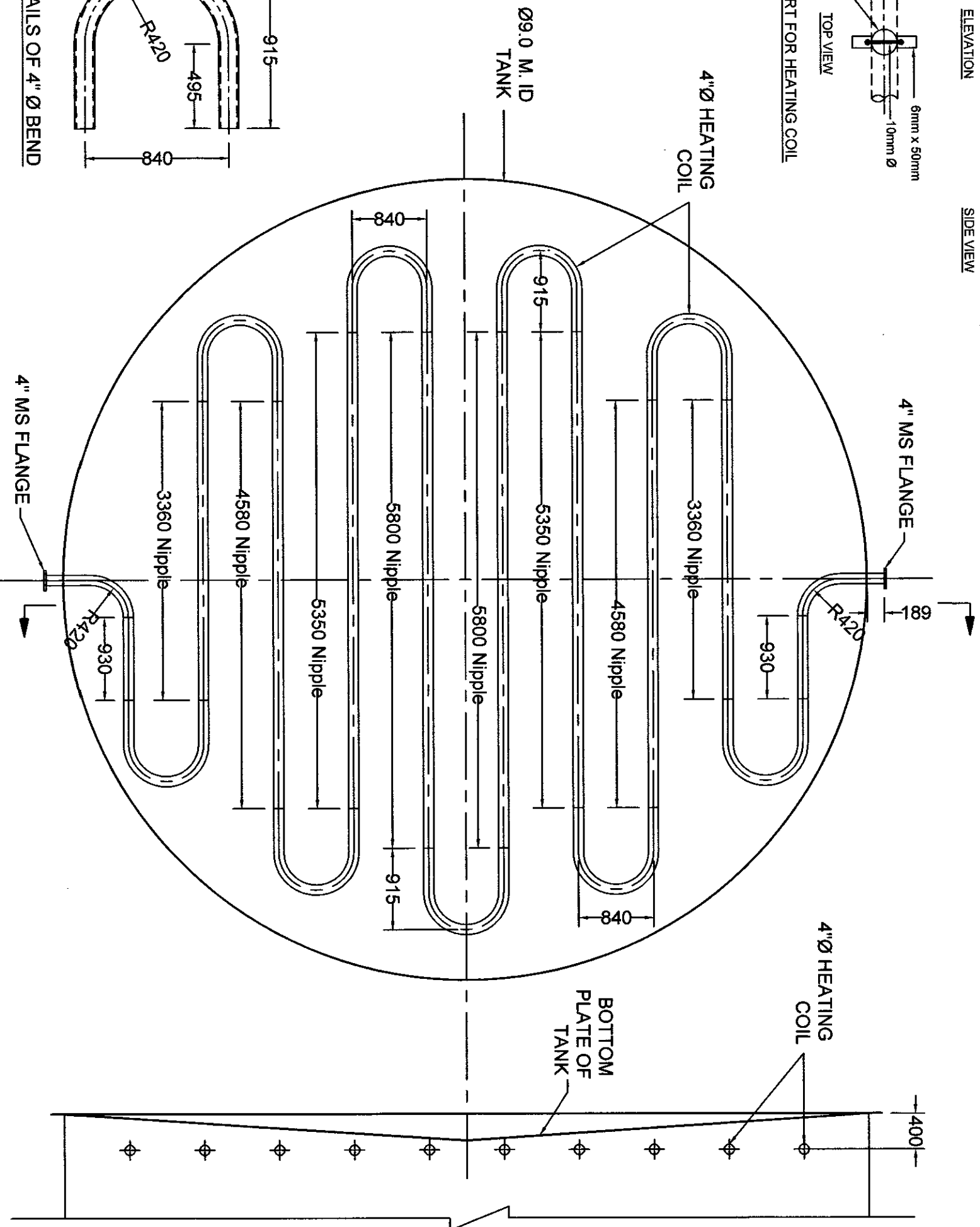
APPROVED

BRIEF RECORD

REV.	DATE	ZONE
------	------	------



HEATING COIL LAYOUT



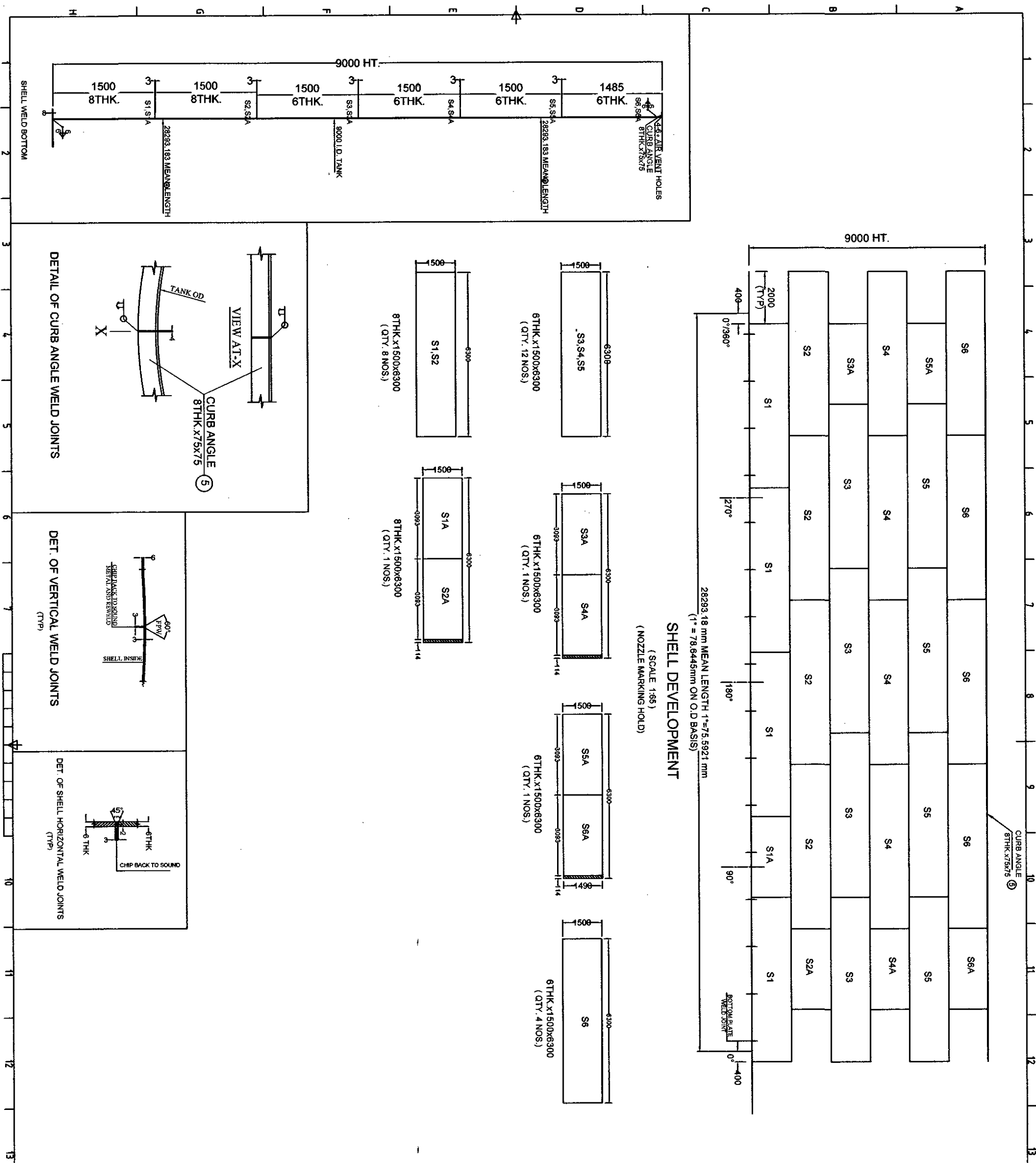
- NOTES
1. - ALL DIMENSION ARE IN MM UNLESS OTHERWISE NOTED.
 2. - NIPPLES ARE TO BE WELDED WITH BENDS AT SITE.
 3. - SUPPORTS LENGTH ARE TO BE PLACED SUITABLY AT SITE.

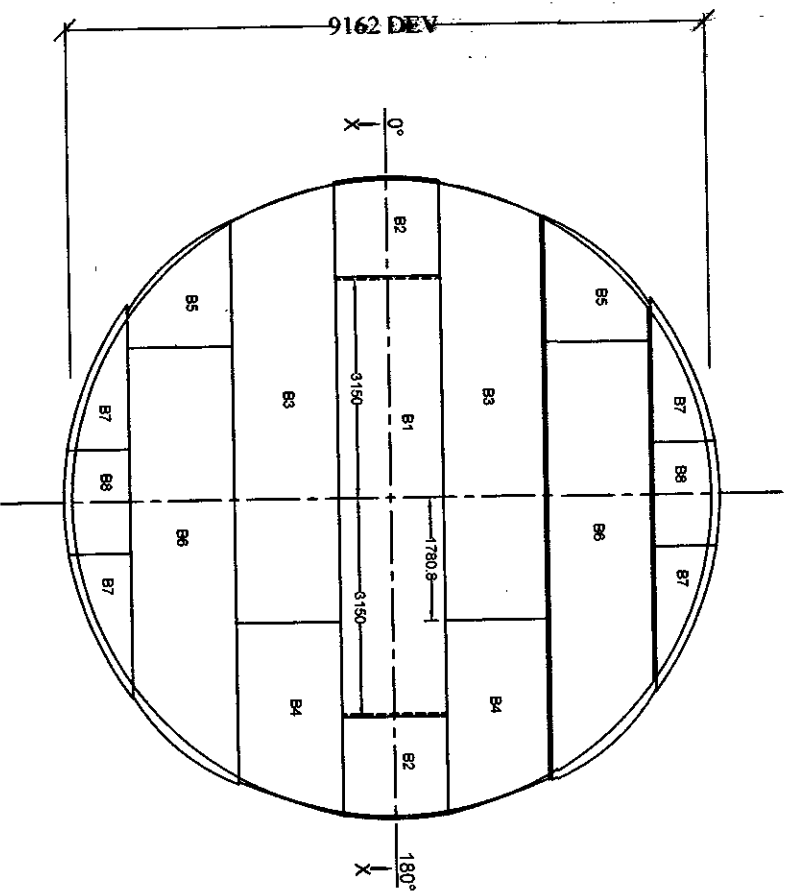
S.NO	DESCRIPTION	SIZE	MATERIAL	QTY	REMARKS
1	FLANGE	100 MM B.O.D. x 150	SA-105	2	
2	HEATING COIL PIPE	100 MM PIPE x 12M LONG	-	6	
3	SUPPORT PIPE	100 MM PIPE x 42 x 12M LONG	-	1	
4	U-BOLT	10MM DIA	-	20	
5	MS PLATE	6MM THK x 500 LONG	-	1	

BILL OF MATERIAL (FOR ONE TANK)

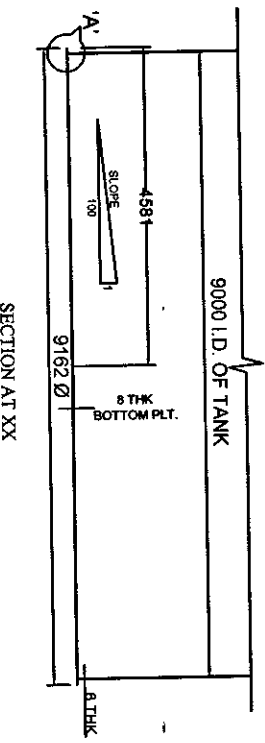
DRG.NO. OIL/10580

CUSTOMER	M/S OIL INDIA LIMITED, DULAJAN.
SUPPLIER	MECH TECHNIK(INDIA) PVT. LTD.
TITLE	HEATING COIL LAYOUT FOR CRUDE OIL STORAGE TANK (9.0 M.I.D x 8.0 M.H.T.) (ITEM NO. TK-01)

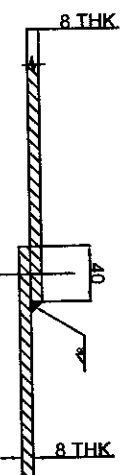
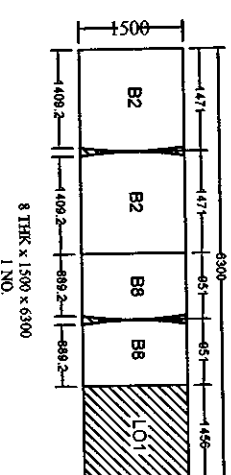
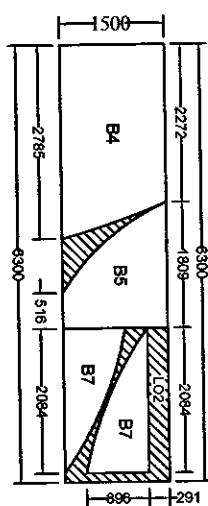
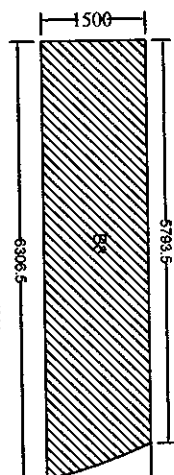
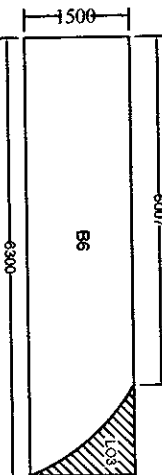
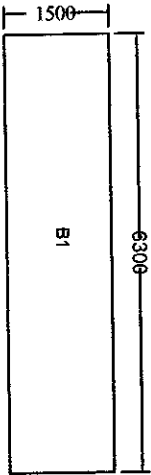




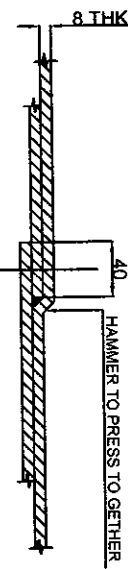
BOTTOM PLATE LAYOUT



SECTION AT XX

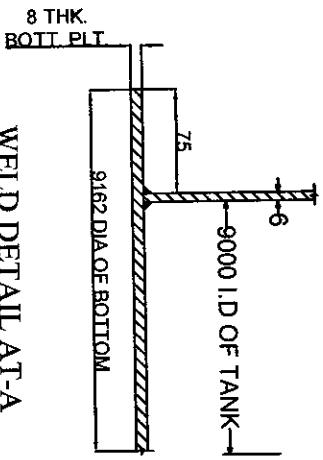


BOTTOM PLATE LAP JOINT-YY



THREE PLTS. LAP JOINTS DETAIL-W1

WELD DETAIL AT-A

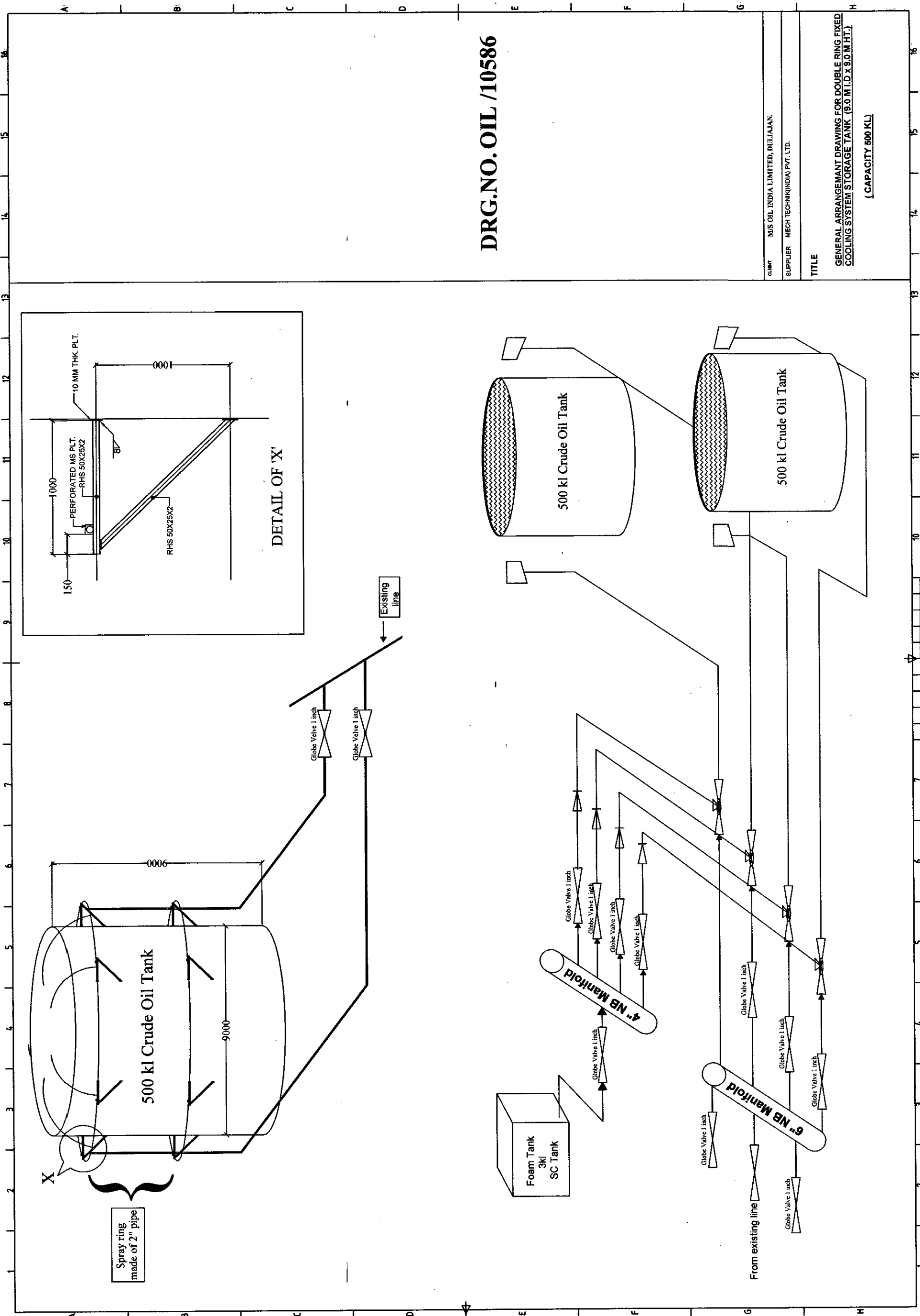


- NOTES :-
- 1 :- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED.
 - 2 :- ALL PLATES SHALL BE SUPPLIED BY M/S CONTRACTOR.
 - 3 :- REF. GA DRAWING FOR GENERAL NOTES.
 - 4 :- REGARDING TESTING AND INSPECTION OF BOTTOM PLTS. REFER API 650 LATEST CODE & TENDER DOCUMENTS.
 - 5 :- THREE PLTS. SHALL NOT BE CLOSER THEN 300 MM FROM EACH OTHER AND ALSO FROM THE TANK SHELL.
 - 6 :- BOTTOM TO BOTTOM PLATES LAP IS 40 MM FOR CALCULATION.
 - 7 :- PLATES CUTTING LAYOUT IS SHOWN FOR ONE TANK ONLY.

S.NO.	DESCRIPTION	MATERIAL	UNIT	QTY	TOTAL WGT	REMARKS
1	BOTTOM PLATE B1	16.250 QMS	1	1	16.250	
2	BOTTOM PLATE B2	16.250 QMS	2	2	32.500	
3	BOTTOM PLATE B3	16.250 QMS	2	2	32.500	
4	BOTTOM PLATE B4	16.250 QMS	2	2	32.500	
5	BOTTOM PLATE B5	16.250 QMS	2	2	32.500	
6	BOTTOM PLATE B6	16.250 QMS	2	2	32.500	
7	BOTTOM PLATE B7	16.250 QMS	2	2	32.500	
8	BOTTOM PLATE B8	16.250 QMS	2	2	32.500	
9	BOTTOM PLATE B9	16.250 QMS	2	2	32.500	
10	BOTTOM PLATE B10	16.250 QMS	2	2	32.500	
11	BOTTOM PLATE B11	16.250 QMS	2	2	32.500	
12	BOTTOM PLATE B12	16.250 QMS	2	2	32.500	
13	BOTTOM PLATE B13	16.250 QMS	2	2	32.500	
14	BOTTOM PLATE B14	16.250 QMS	2	2	32.500	
15	BOTTOM PLATE B15	16.250 QMS	2	2	32.500	
16	BOTTOM PLATE B16	16.250 QMS	2	2	32.500	
17	BOTTOM PLATE B17	16.250 QMS	2	2	32.500	
18	BOTTOM PLATE B18	16.250 QMS	2	2	32.500	
19	BOTTOM PLATE B19	16.250 QMS	2	2	32.500	
20	BOTTOM PLATE B20	16.250 QMS	2	2	32.500	
21	BOTTOM PLATE B21	16.250 QMS	2	2	32.500	
22	BOTTOM PLATE B22	16.250 QMS	2	2	32.500	
23	BOTTOM PLATE B23	16.250 QMS	2	2	32.500	
24	BOTTOM PLATE B24	16.250 QMS	2	2	32.500	
25	BOTTOM PLATE B25	16.250 QMS	2	2	32.500	
26	BOTTOM PLATE B26	16.250 QMS	2	2	32.500	
27	BOTTOM PLATE B27	16.250 QMS	2	2	32.500	
28	BOTTOM PLATE B28	16.250 QMS	2	2	32.500	
29	BOTTOM PLATE B29	16.250 QMS	2	2	32.500	
30	BOTTOM PLATE B30	16.250 QMS	2	2	32.500	
31	BOTTOM PLATE B31	16.250 QMS	2	2	32.500	
32	BOTTOM PLATE B32	16.250 QMS	2	2	32.500	
33	BOTTOM PLATE B33	16.250 QMS	2	2	32.500	
34	BOTTOM PLATE B34	16.250 QMS	2	2	32.500	
35	BOTTOM PLATE B35	16.250 QMS	2	2	32.500	
36	BOTTOM PLATE B36	16.250 QMS	2	2	32.500	
37	BOTTOM PLATE B37	16.250 QMS	2	2	32.500	
38	BOTTOM PLATE B38	16.250 QMS	2	2	32.500	
39	BOTTOM PLATE B39	16.250 QMS	2	2	32.500	
40	BOTTOM PLATE B40	16.250 QMS	2	2	32.500	
41	BOTTOM PLATE B41	16.250 QMS	2	2	32.500	
42	BOTTOM PLATE B42	16.250 QMS	2	2	32.500	
43	BOTTOM PLATE B43	16.250 QMS	2	2	32.500	
44	BOTTOM PLATE B44	16.250 QMS	2	2	32.500	
45	BOTTOM PLATE B45	16.250 QMS	2	2	32.500	
46	BOTTOM PLATE B46	16.250 QMS	2	2	32.500	
47	BOTTOM PLATE B47	16.250 QMS	2	2	32.500	
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73	BOTTOM PLATE B73	16.250 QMS	2	2	32.500	
74	BOTTOM PLATE B74	16.250 QMS	2	2	32.500	
75	BOTTOM PLATE B75	16.250 QMS	2	2	32.500	
76	BOTTOM PLATE B76	16.250 QMS	2	2	32.500	
77	BOTTOM PLATE B77	16.250 QMS	2	2	32.500	
78	BOTTOM PLATE B78	16.250 QMS	2	2	32.500	
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94	BOTTOM PLATE B94	16.250 QMS	2	2	32.500	
95	BOTTOM PLATE B95	16.250 QMS	2	2	32.500	
96	BOTTOM PLATE B96	16.250 QMS	2	2	32.500	
97	BOTTOM PLATE B97	16.250 QMS	2	2	32.500	
98	BOTTOM PLATE B98	16.250 QMS	2	2	32.500	
99	BOTTOM PLATE B99	16.250 QMS	2	2	32.500	
100	BOTTOM PLATE B100	16.250 QMS	2	2	32.500	

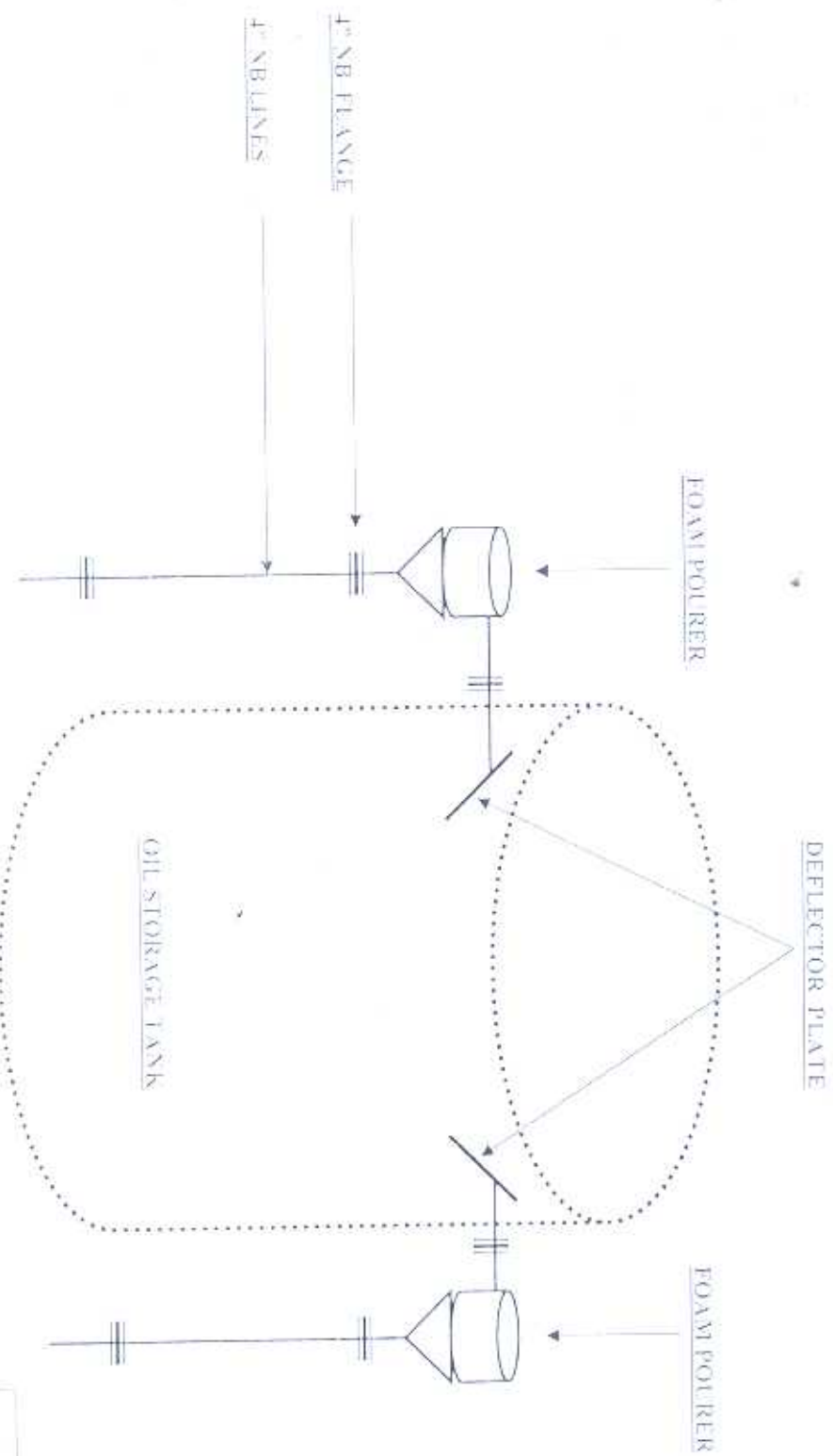
DRG.NO. OIL /10582

CLIENT	M/S OIL INDIA LIMITED, DULAJAN.
SUPPLIER	MECH TECHNIK(INDIA) PVT. LTD.
TITLE	BOTTOM PLATE CUTTING LAYOUT FOR CRUDE OIL STORAGE TANK (9.0 M.I.D x 9.0 M HT.) (CAPACITY 500 KL)



DRG.NO.OIL /10586

CLIENT	M/S OIL INDIA LIMITED, DULAJAN.
SUPPLIER	MECH TECHNIQ(INDIA) PVT. LTD.
TITLE	GENERAL ARRANGEMENT DRAWING FOR DOUBLE RING FIXED COOLING SYSTEM STORAGE TANK (9.0 M.I.D x 9.0 M.H.T.) (CAPACITY 500 KL)



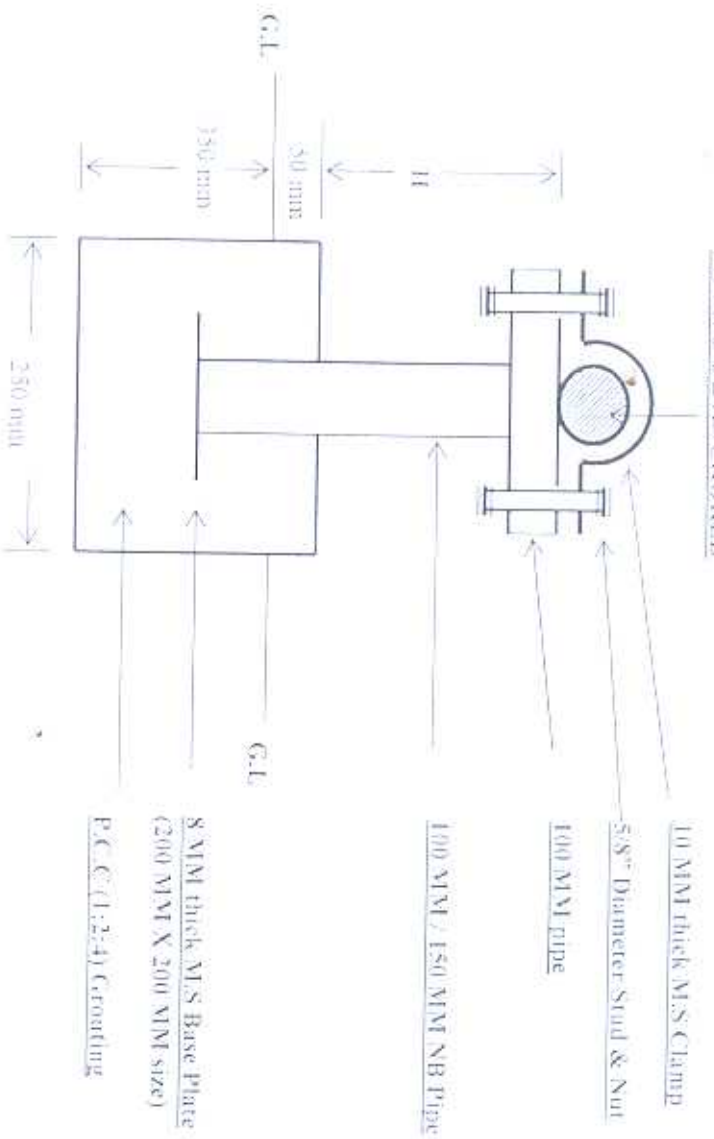
OTE: SCHEMATIC SKETCH ONLY. DOES NOT CONFORM TO SCALE

DRAWING NO : OIL / P-02

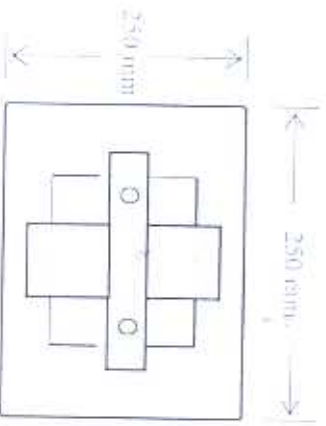
TITLE : FOAM POURING SYSTEM

APPROVED BY :

PIPE TO BE ANCHORED



ELEVATION



PLAN

NOTE

1. The value of 'H' will vary in between 0.1 Meter to 1 Meter.
2. Schematic sketch only. Does not conform to scale
3. All dimension are in MM.

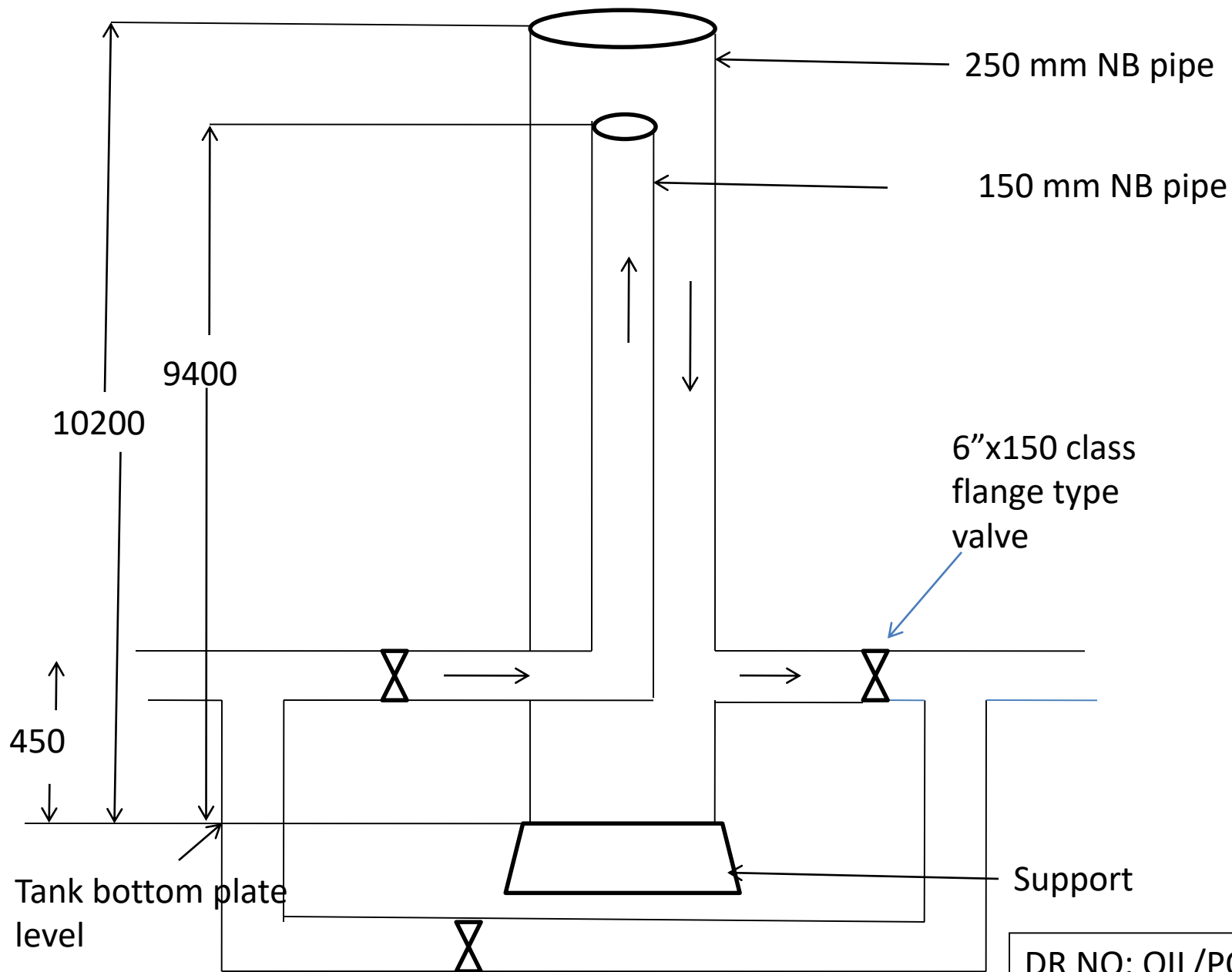
SKETCH NO : OH / PG / 0-1

TITLE : SINGLE LEGGED PIPE SUPPORT

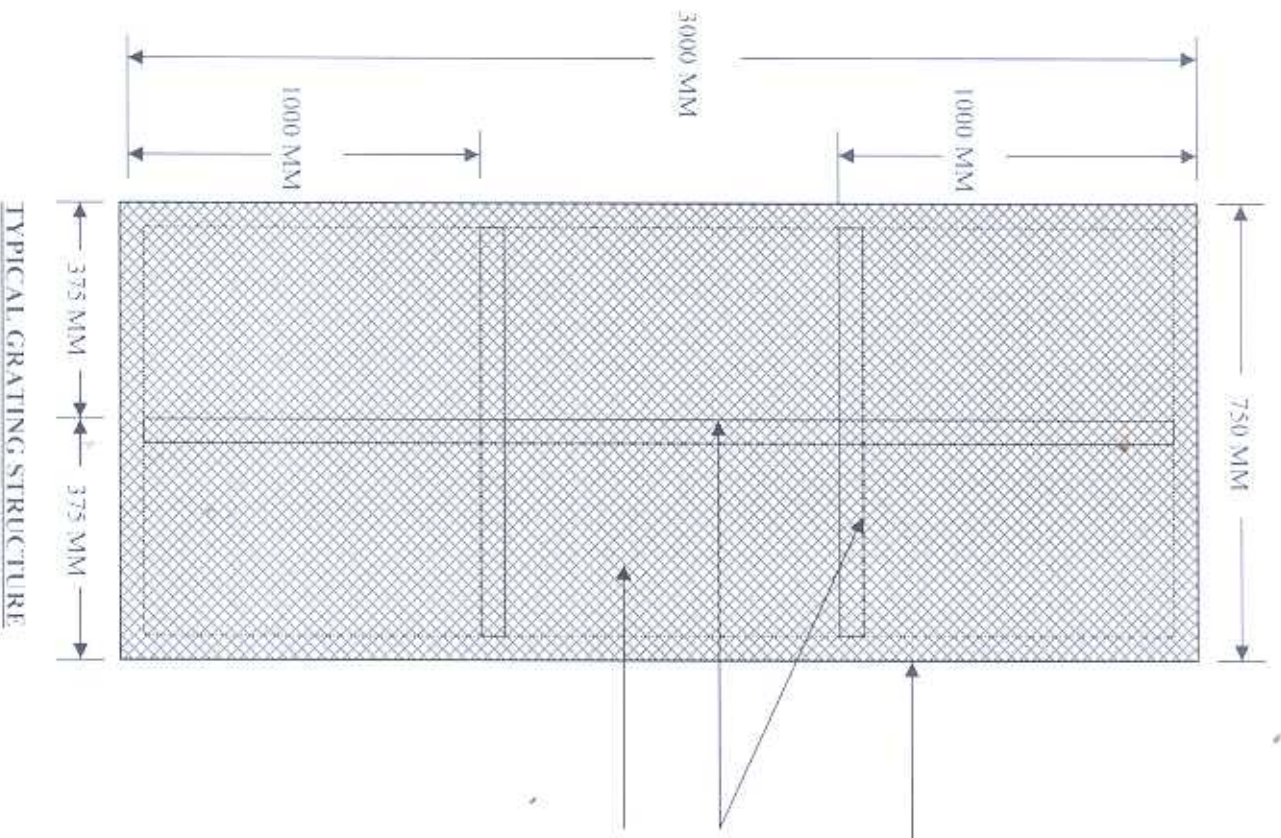
APPROVED BY :



APPROVED BY:



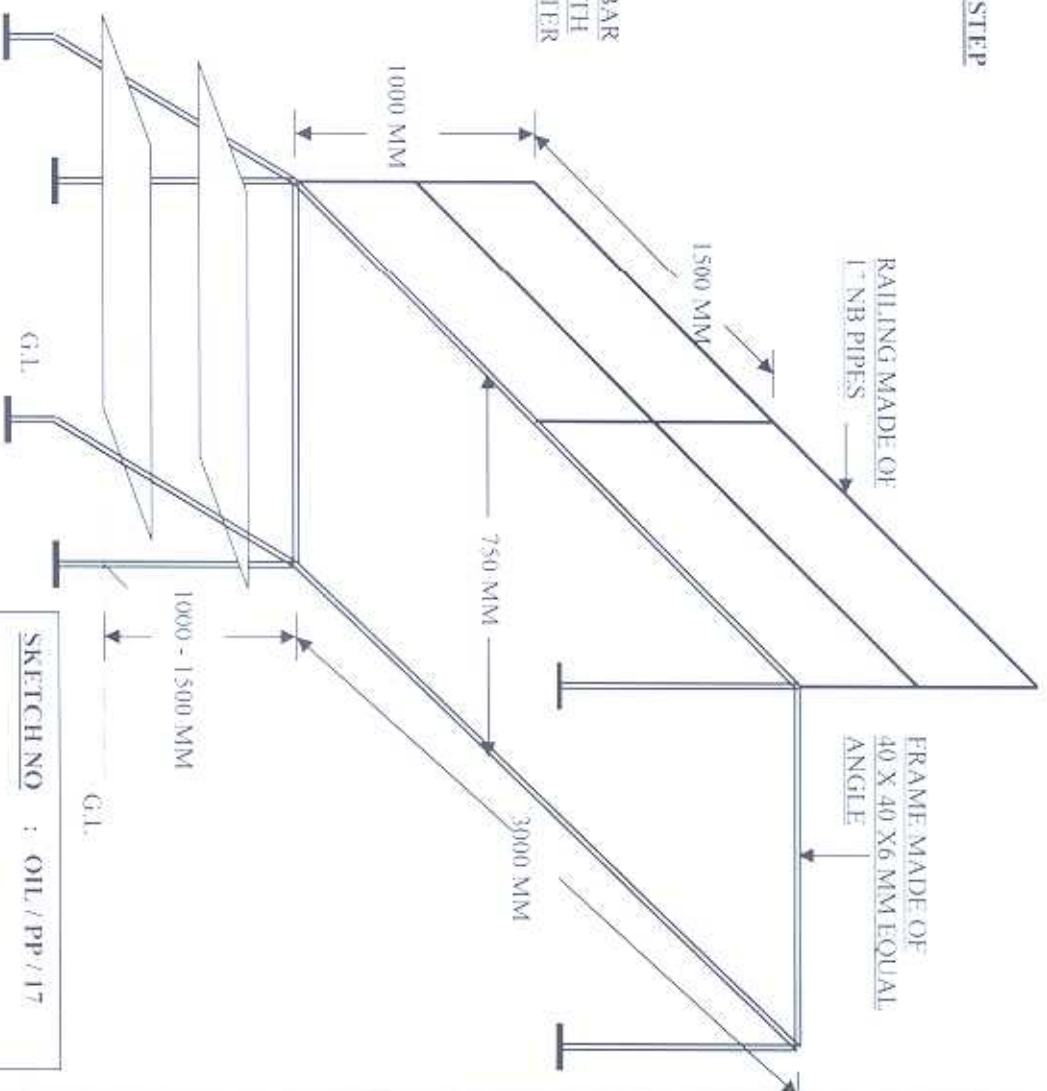
DR NO: OIL/PO/10
TITEL: SYPHON BARREL
Prepared By: S Thakur



TYPICAL GRATING STRUCTURE



FOOT STEP



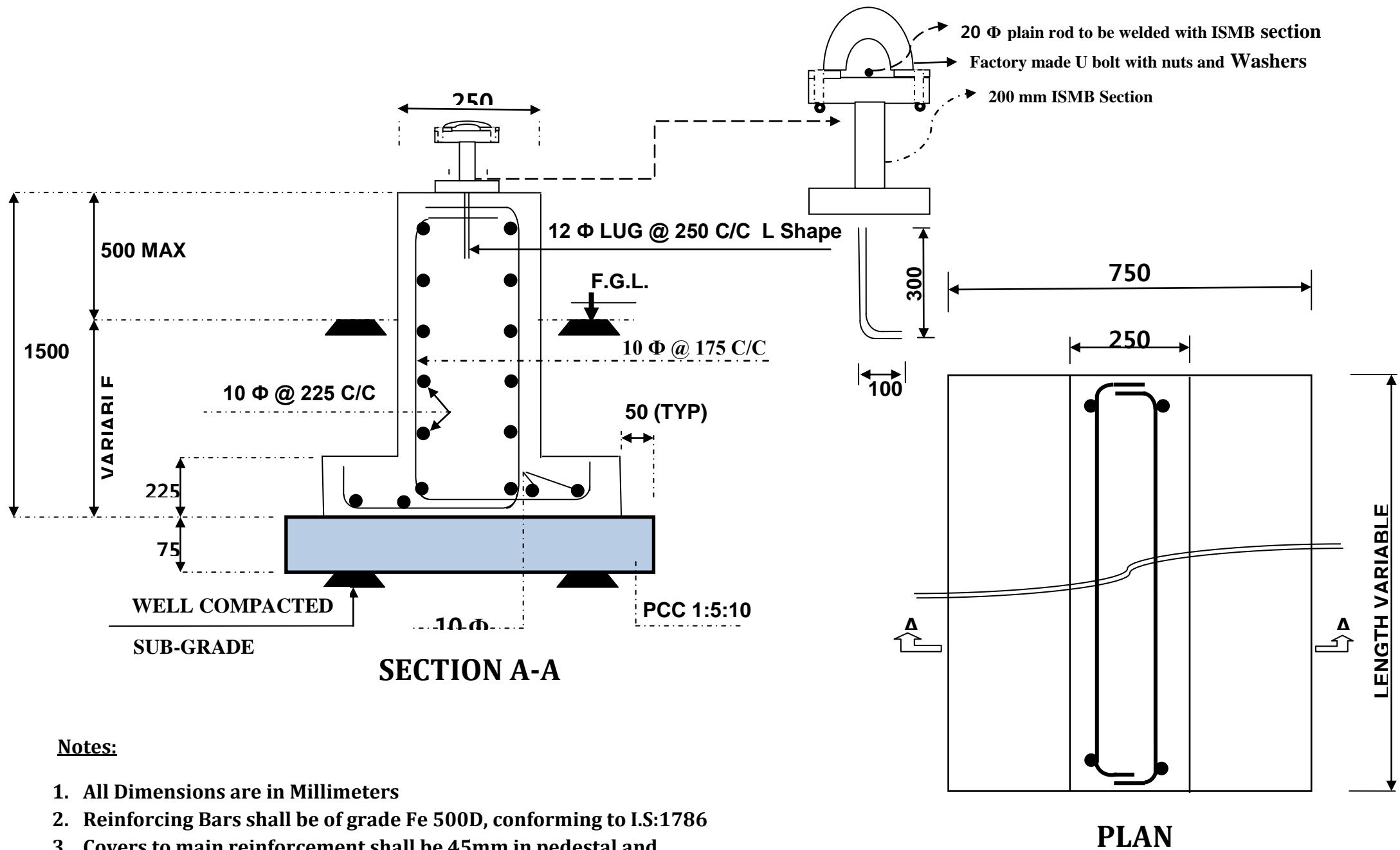
TYPICAL FRAME OF WALKWAY

- NOTE :**
1. Walk way posts are to be grouted with 1:2:4 P.C.C
 2. Foot steps are to be provided as and where required on operational reasons.

SKETCH NO : OIL / PP / 17

TITLE : WALK WAY

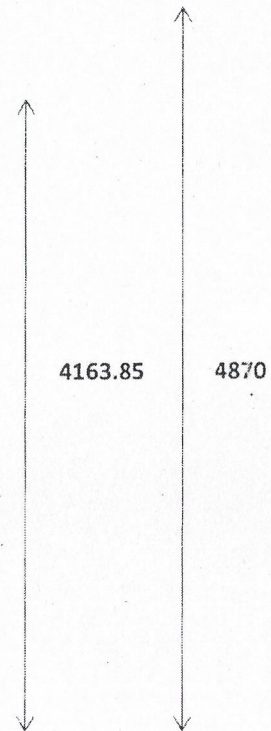
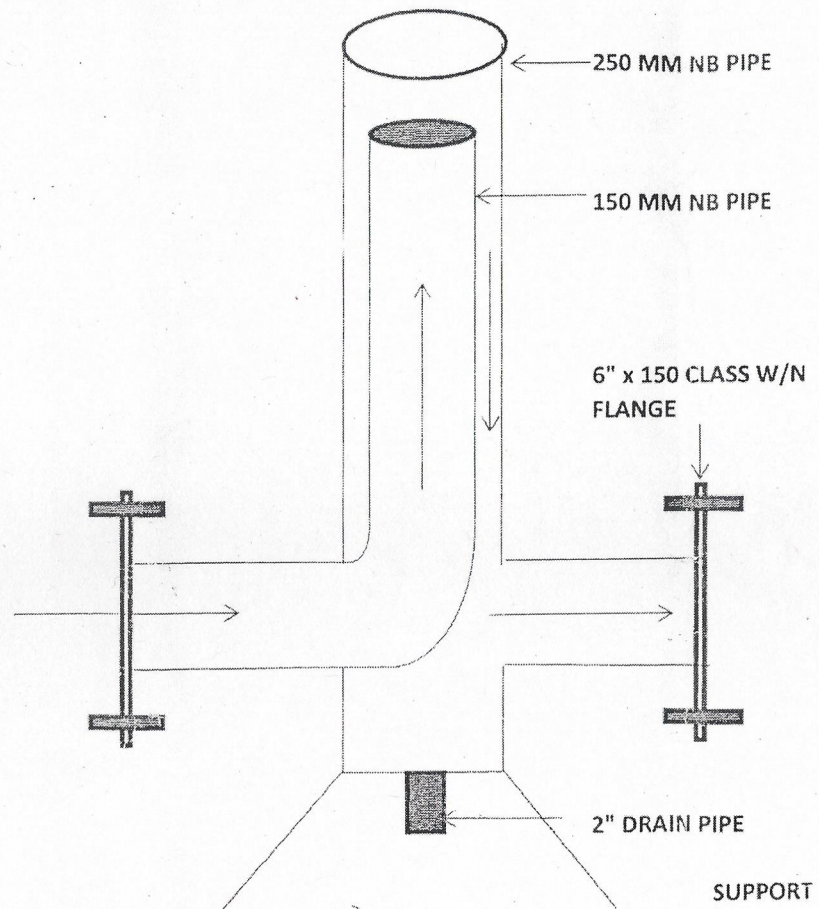
APPROVED BY :



Notes:

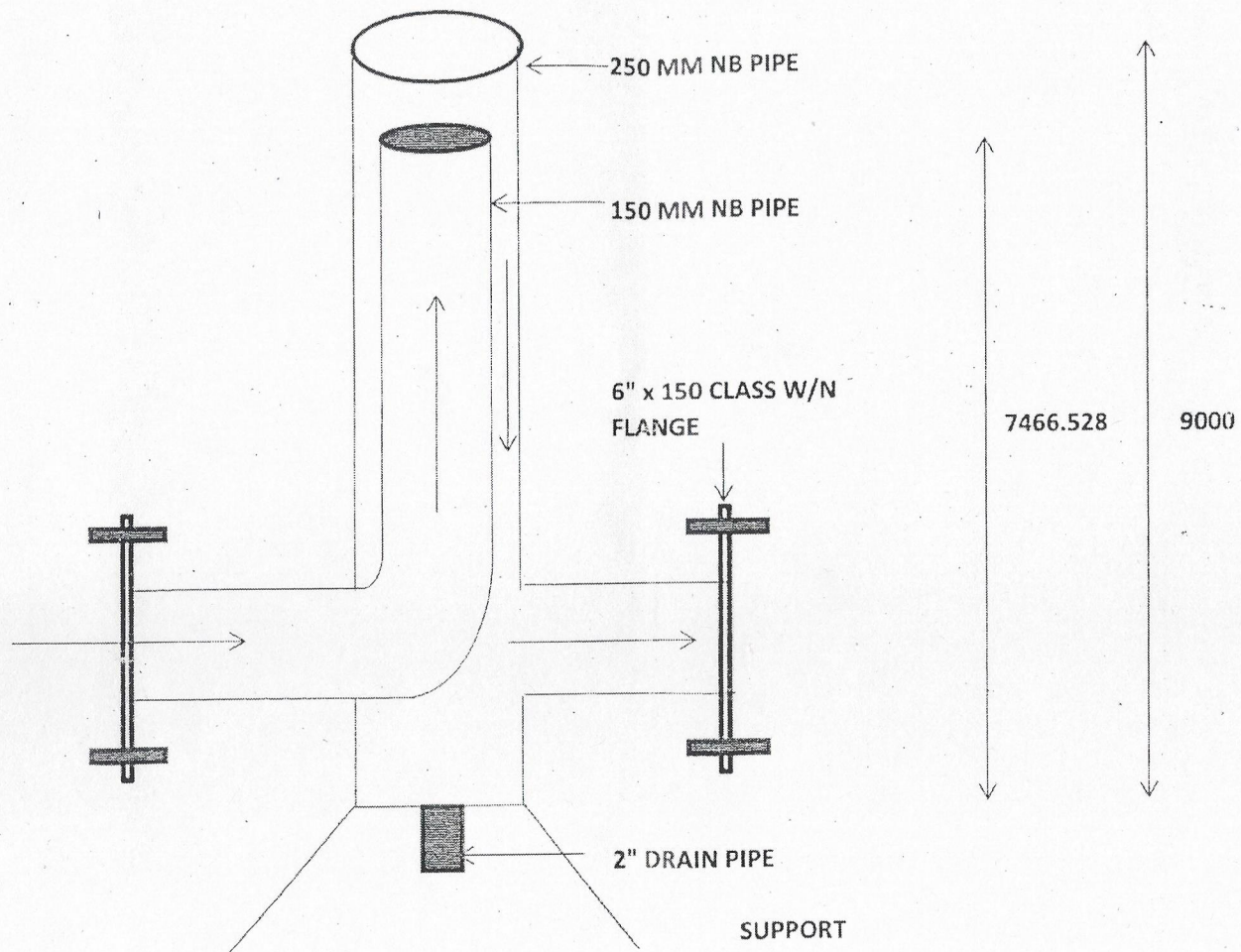
1. All Dimensions are in Millimeters
2. Reinforcing Bars shall be of grade Fe 500D, conforming to I.S:1786
3. Covers to main reinforcement shall be 45mm in pedestal and 500 mm in bottom slab.
4. Grade of concrete as per structural general notes (Minimum M25)

SKETCH NO. : OIL/PSS/01



BETWEEN 160 KL AND 40 KL TANKS

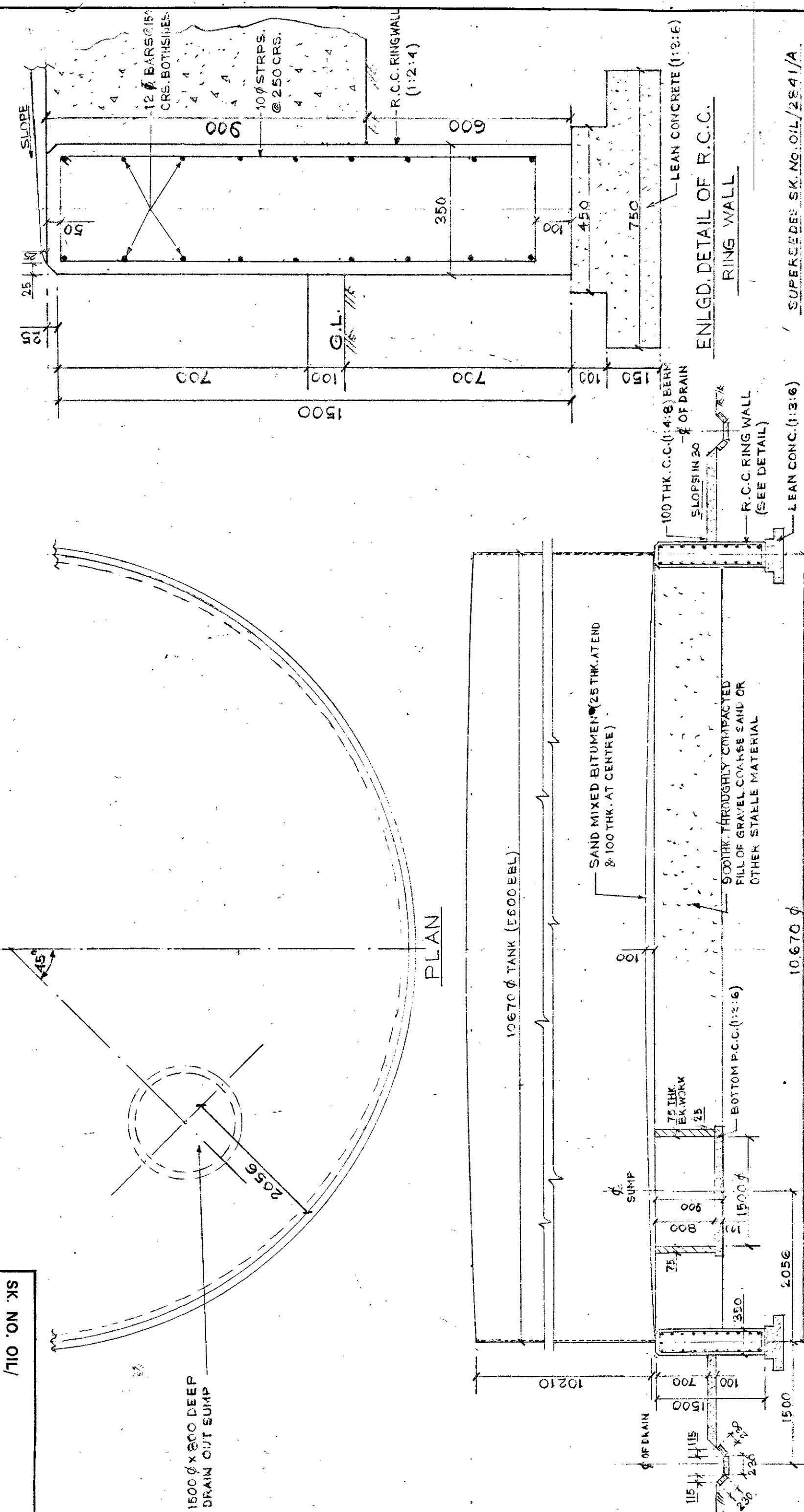
Drawing no: PSS-SIP-01
 Prepared by: Sayjen Phokun



BETWEEN 500 KL AND 160 KL TANKS

Drawing no. PSS-SIP-02
 Prepared by: Sanjay Akur

SK. NO. OIL/



OIL INDIA LIMITED DRAWING OFFICE DULIAJAN		DESIGNED	NAME	DATE
TITLE FOUNDATION FOR 10' 67m DIA x 10' 2 HIGH CRUDE OIL STORAGE TANK (AS PER DRG. No OIL/3077)		DRAWN	11.9.99	
SCALE 1:50 & 1:10		TRACED		
1:50 & 1:10		CHECKED		
1:50 & 1:10		APPROVED		
APPROVED		SK. NO OIL/4113		

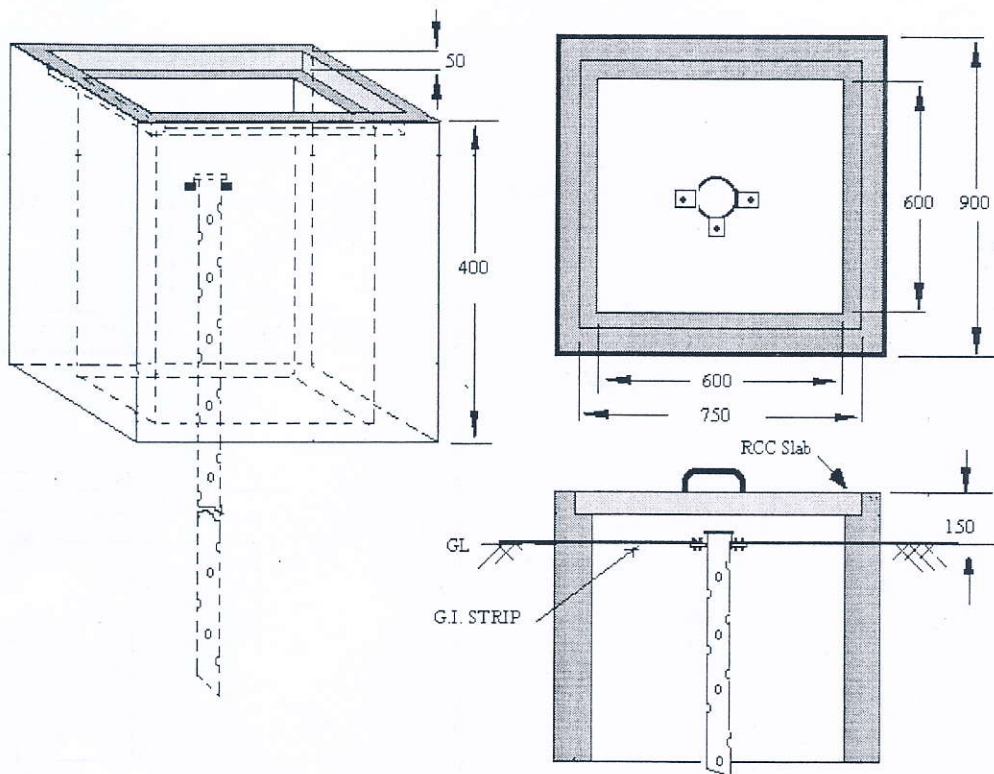
NOTE:-
TOLERANCE FOR SMOOTHNESS OF TOP
SURFACE OF RING WALL 13 mm IN EVERY SM.
CIRCUMFERENTIAL LENGTH.

APPD. BY *[Signature]* NAME A. N. SARMAH DESIGNATION DY. CE (P)
DATE 03.11.99

REV.	DATE	ZONE	BRIEF RECORD	APPROVED

ALL DIMENSIONS ARE IN MILLIMETRE.

ENCLOSURE OF AN EARTH ELECTRODE



SPECIFICATION:

1. The internal dimension of the enclosure will be 600(L) x 600(B) x 400(H).
2. The enclosure shall be made of 1st class local bricks or RCC.
3. All sides of the brick enclosure shall be cement plastered.
4. Enclosure shall be constructed such that electrode will be located at the center of the enclosure.
5. Enclosure shall be projected 150 mm above the ground level.
6. RCC cover shall be suitably inserted at the top of the enclosure as shown in the sketch.

Note:

1. All dimensions are in mm.
2. Sketch is not to scale.

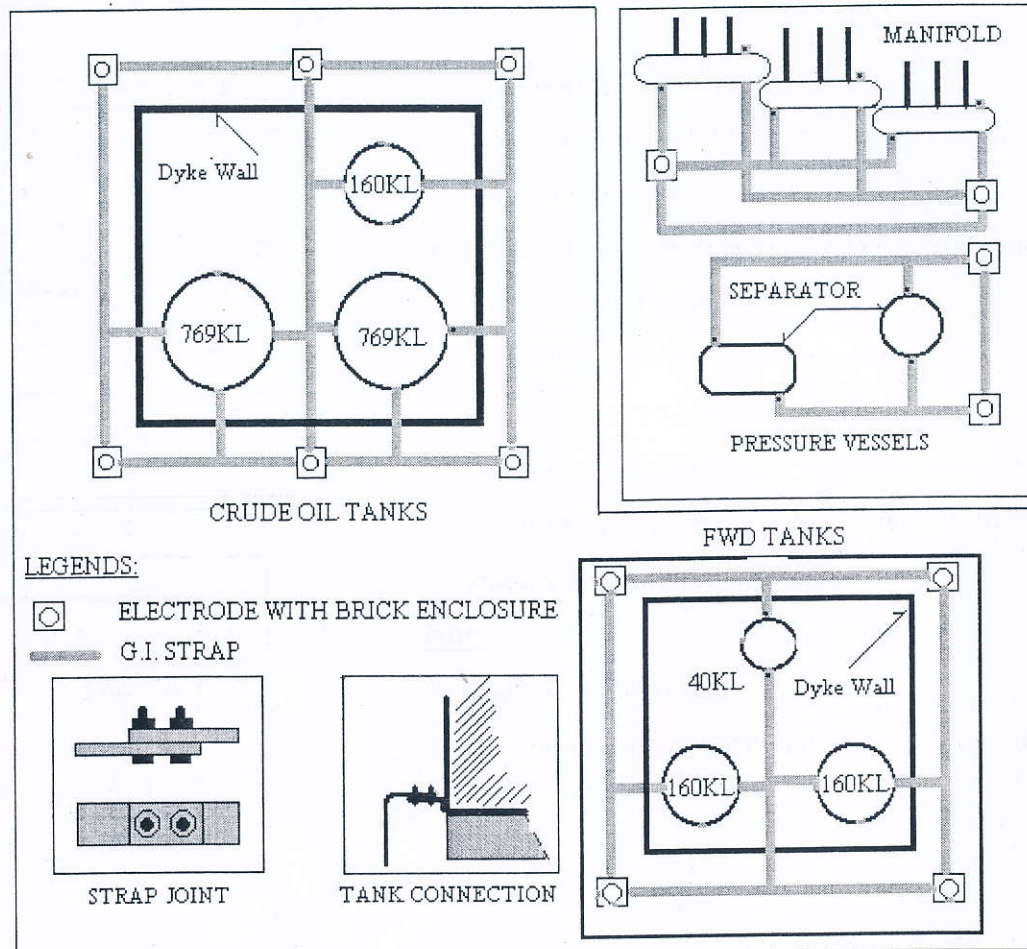
SKETCH NO. OIL/EPS/ELECT -002

TITLE : ENCLOSURE FOR EARTH ELECTRODE

DRAWN BY : ABANI GOGOI. EE (P&C)

UPDATED : 22.11.2010

SPECIFICATION AND JOB DESCRIPTION



EARTH CONNECTIONS OF CRUDE OIL, FWD
TANK AND PRESSURE VESSELS

1. Size of the Earth Pipe : 100 mm dia, G. I. Tubular Pipe.
2. All connections will be done by 2 nos. of $\frac{1}{2}$ " x 1" G.I. nuts and bolts with flat and spring washers.
3. Size of G.I. Strap shall be 50mm x 6 mm .
4. Earth pit shall be outside the Dyke Wall and its distance from the dyke wall shall not be less than 1.5 M.
5. Earthing of pressure vessels, manifold etc. shall be done by 2 nos. of earth connections on opposite sides.
6. In case, the perimeter of a tank is more than 30 M , 3 nos. earth connections are required and if it is more than 60 M 4 nos. earth connections are required to be done.

Note :

1. Sketch is not to scale.
2. No gas cutting and welding shall be done in joints of the earthing grid.
3. Only G. I. Nuts, bolts and washers shall to be used.
4. Every earth electrode shall be enclosed by brick or RCC enclosure.
5. Position of earth electrode and connecting points are subjected to space constraints.

DRAWING NO: OIL/EPS/ELECT -007

TITLE: TYPICAL EARTHING ARRANGEMENT OF
CRUDE OIL FWD TANKS AND PRESSURE VESSELS.

DRAWN BY : ABANI GOGOI. E.E.(P&C) **UPDATED :** 25.08.2006