E-TENDER NO. CDI7759P16

OIL INDIA LIMITED
(A GOVT. OF INDIA ENTERPRISE)
P.O. DULIAJAN-786602, ASSAM

E-TENDER NOTICE

OIL INDIA LIMITED (OIL) invites Bids from experienced Service Providers through its E- procurement portal **"https://etender.srm.oilindia.in/irj/portal"** for the following services.

IFB No.	**CDI7759P16**
Description of Service	**CONSTRUCTION OF WATER INJECTION STATION AT HAPJAN.**
Type of Bid	**SINGLE STAGE TWO BID SYSTEM**
Period of Sale of Bid Document	**06.07.2015 TO 30.07.2015**
Bid Closing / Opening Date & Time	**06.08.2015 (11:00 HRS / 14:00 HRS : Server Time)**
Bid Submission Mode	Bid should be uploaded in OIL's e-Procurement portal.
Bid Opening Place	Office of the Head-Contracts, Contracts Department, Oil India Limited, Duliajan, District: Dibrugarh (Assam), PIN-786602.
Priced Bid Opening Date & Time	Will be intimated to the eligible bidder(s) nearer time.
Cost of Bid Document	**Rs. 5,000.00**
Bid Security (EMD)	**Rs. 1,85,000.00** The Bid Security should be in the form of **a BANK DRAFT / BANKER'S CHEQUE/ BANK GUARANTEE (valid for minimum 210 days from the date of Technical bid opening i.e minimum up to 02.03.2016)** favouring OIL INDIA LIMITED, payable at DULIAJAN for the amount applicable and purchased from any Nationalised / Scheduled Bank. Alternatively, the Bid Security can be deposited on-line in the E- procurement portal through the online payment gateway. **Notes:** **a.** In case of Bidder(s) submitting Bid Security in the form of BANK DRAFT / BANKER'S CHEQUE/ BANK GUARANTEE, the Original hard copy of Bid Security should reach the office of HEAD-CONTRACTS before Bid opening date and time. **b.** A scanned copy of Bid Security document / EMD Invoice (in case of Bid Security deposited on-line) should also be uploaded along with the Unpriced Techno-Commercial Bid documents.

2.0 For participation, Cost of Bid Document (Non-Transferable and Non-refundable) by way of Demand Draft / Banker's Cheque from any Scheduled Bank in favour of OIL INDIA LIMITED and **payable at Duliajan,** along with the application(s) on applicants letter pad with a request for USER ID & PASSWORD is to be submitted /sent to reach the **Office of Head-Contracts, Contracts Department, Oil India Limited, P.O. Duliajan, Assam-786602** within the period of sale (inclusive both the days i.e. start date & end date) of Bid document. Alternatively, applicants already having User ID & Password for OIL's E-procurement portal can register against the IFB and pay the requisite Bid Document cost through the online payment gateway provided in the E- procurement portal.

2.1 In case the Bidder(s) send their application for Bid Documents in sealed envelopes, the following must be super scribed on the envelope along with the name & registered postal address of the bidder in typed format or in clear legible handwriting:

Application & Tender Fees, IFB No.: CDI7759P16
Description of Services: Construction of Water Injection Station at Hapjan

2.2 Amongst others, the Bidder(s) must also provide the following information in the application for request for Bid documents:

(i) Valid e-mail ID (ii) Registered Postal Address with PIN code (iii) Vendor Code with OIL (if available) (iv) Mobile No. /Telephone No. (v) Whether participated in OIL's e-tender prior to this tender.

3.0 No physical Bid documents will be provided. On receipt of requisite Bid Document Cost (in case Cost of Bid Document is submitted in the form of Demand Draft / Banker's Cheque), USER_ID and initial PASSWORD will be communicated to the bidder through e-mail at the e-mail address provided along with request for Bid documents as mentioned in 2.2 (i) above and will be allowed to participate in the bidding through OIL's E-Procurement portal.

4.0 SALIENT ELIGIBILITY CRITERIA:

4.1 The bidder shall have experience in successfully executing SIMILAR nature of jobs of following magnitude in Central/State Govt./ PSUs/ State Govt. Enterprises during the last 7 (seven) years ending **30.06.2015** .

i) Must have executed a minimum value of **Rs 1,47,52,900.00 (Rupees One Crore Forty Seven Lakh Fifty Two Thousand Nine Hundred only)** in a single contract,

OR

ii) Must have executed a minimum value of **Rs 92,20,600.00 (Rupees Ninety Two Lakh Twenty Thousand Six Hundred only) each** in two separate contracts,

OR

iii) Must have executed a minimum value of **Rs 73,76,500.00 (Rupees Seventy Three Lakh Seventy Six Thousand Five Hundred only) each** in three separate contracts.

Note: "**SIMILAR**" nature of jobs mentioned in 4.1 means-

Supply of Material, Fabrication, Erection, Painting, Testing, and Commissioning of Oil Collecting Station/ Group Gathering Stations/Gas Gathering station /Water Injection stations/Crude Oil Refinery/Petro Chemical Industry/ Tank Farm Terminal including all related civil and mechanical works, viz construction of office building, foundation of process vessel, Oil water traps, drainage, walkways, sheds, process piping network etc.

4.2 The bidder should have an average annual turnover during the last three years ending **31.03.2014** at least of **Rs. 55,32,300.00 (Rupees Fifty Five Lakh Thirty Two Thousand Three Hundred only)**.

4.3 Bid will be rejected if not accompanied with adequate documentary proof (Refer Note-1 below) in support of experience and turnover as mentioned in Para 4.1 and 4.2

Note-1:-

A) For proof of Annual turnover, following documents must be submitted along with the bid:

i) Profit and Loss account.

OR

ii) CA Certificate with Membership Number & Firm Registration Number

B) For proof of requisite Experience, self attested photocopy of following documents must be submitted along with the bid:

i) Relevant pages of Contract documents showing details of works.

AND

ii) Certificate issued by Central/State Govt./ PSUs/ State Govt. Enterprises for the contract mentioned in 4.3 B(i) showing:

(a) Contract number

(b) Gross value of job done,

(c) Contract period /Contract start and completion date.

OR

Any other documents issued by Central/State Govt./ PSUs/ State Govt. Enterprises showing successful execution of the contract mentioned in 4.3 B(i)

5.0 Details of process for submission of Tenders Fees & 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).

6.0 PSU's and SSI units registered with NSIC claiming exemption from payment of tender fee should submit their request with all credentials at least 7 days in advance to get access for participation in the tender.

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

8.0 The details of IFB / Bid Documents can be viewed using "Guest Login" provided in the E-Procurement portal.

9.0 In order to bid for OIL's e-tenders; all the bidders are requested to obtain a legally valid Digital Certificate (Class III with Organisation) as per Indian IT Act from the licensed Certifying Authorities (CA) operating under Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. (**Note:** Digital Signature Certificates having "**Organization Name**" field as "**Personal**" are not acceptable. However, aforesaid Digital Signature Certificates having **Bidder's Name** in the "**Organization Name**" field are acceptable.)

HEAD- CONTRACTS

DATE: 03.07.2015 **FOR RESIDENT CHIEF EXECUTIVE**

OIL INDIA LIMITED
(A GOVT. OF INDIA ENTERPRISE)
CONTRACTS DEPARTMENT, DULIAJAN

OIL INDIA LIMITED invites ON-LINE BIDS from experienced / approved Contractors / Firms for the following mentioned work / service under **SINGLE STAGE TWO BID SYSTEM** through its e-Procurement site:

DESCRIPTION OF WORK/ SERVICE:

CONSTRUCTION OF WATER INJECTION STATION AT HAPJAN.

CONTRACT PERIOD **: 6 (Six) months** from the date of issue of LOA**.**

BID SECURITY : Rs. 1,85,000.00 (RUPEES ONE LAKH EIGHTY FIVE THOUSAND ONLY)

BID CLOSING/ OPENING DATE & TIME : 06.08.2015 (11:00 HRS/14:00 HRS)

a) **Bid Security** deposited vide On-line Payment / Demand Draft / Banker's Cheque / Bank Guarantee

No._____ dated_____ of_____

Original hard copy of (a) (In case of Bidder(s) submitting Bid Security in the form of Bank Draft / Banker's Cheque/ Bank Guarantee) should reach the office of HEAD-CONTRACTS on or before 12:45 Hrs (IST) on the bid closing date, otherwise Bid will be rejected. A scanned copy of Bid Security document / EMD Invoice (in case of Bid Security deposited on-line) should also be uploaded along with the Un-priced Techno-Commercial Bid documents.

b) Bidders to confirm that in the event of the award of Contract will submit Performance Security Deposit **@ 7.5% of the total contract value** and this will not earn any interest.

2.0 SEALED ENVELOPES containing the **Bid Security Deposit, Printed catalogue and Literature**, if called for in the tender shall be marked with the above Tender Number and description of work and addressed to:

HEAD-CONTRACTS
CONTRACTS DEPARTMENT
OIL INDIA LIMITED
DULIAJAN – 786602
ASSAM

All bidders shall deposit the requisite **BID SECURITY DEPOSIT** in the form of **On-line Payment / Demand Draft / Banker's Cheque / Bank Guarantee (should be valid for minimum 210 days from the date of opening of Technical Bid i.e minimum upto 02.03.2016)** from a Nationalised Bank / Scheduled Bank in favour of M/s Oil India Limited and payable at DULIAJAN. 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. 6.0 below. **Bids without Bid Security Deposit in the manner specified above will be summarily rejected.**

3.0 **Bid should be submitted online up to 11:00 AM (IST) (Server Time) on the date as mentioned and will be opened on the same day at 02:00 PM (IST) at Office of the Head-Contracts in presence of authorized representative of the bidder**.

4.0 **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 "c-folder" (Un-priced Techno-Commercial Bid) otherwise the bid will be rejected.**

The bid and all uploaded documents must be Digitally signed using **"Class 3" digital certificate [e-commerce application (Certificate with personal verification and Organization name)]** as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.

Digital Signature Certificates having "Organization Name" field as "Personal" are not acceptable. However, aforesaid Digital Signature Certificates having Bidder's Name in the "Organization Name" field are acceptable.

The authenticity of above digital signature shall be verified through authorized CA after bid opening. If the digital signature used for signing is not of "Class -3" with Organizations name, 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.

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

6.0 (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 debarred from participation in future tenders, at the sole discretion of the company and the period of debarment will not be less than 6 (six) months.

(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.

7.0 The Bid must be valid for 180 (One hundred & eighty) days from the date of opening of the tender.

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

9.0 The work may be split up amongst more than one contractor at the sole discretion of the Company.

10.0 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.

10.1 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 copies of Service Tax and Central Excise Registration Certificate.

10.2 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 copies of Service Tax and Central Excise Registration Certificate.

10.3 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 copies of Service Tax and Central Excise Registration Certificate.

10.4 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 copies of Service Tax and Central Excise Registration Certificate.

10.5 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 copies Service Tax and Central Excise Registration Certificate.

10.6 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 copies of Service Tax and Central Excise Registration Certificate.

10.7 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 copies Service Tax and Central Excise Registration Certificate.

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

12.0 The successful bidder shall furnish a Performance Security Deposit in the form of Demand Draft / Banker's Cheque / 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 (including warranty / guarantee obligations), 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.

13.0 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 liquidate damages and / or penalty from the Contractor as per terms of the tender /contract.

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

15.0 **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 debarred for a period of 2(two) years from the date of withdrawal of bid.

16.0 **BACKING OUT BY L-1 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 debarred for 2 (two) years from the date of default.

17.0 **FURNISHING FRAUDULENT INFORMATION/DOCUMENT**: If it is found at any time that, a Bidder / Contractor has / had furnished fraudulent documents / information, the Bid Security / Performance Security shall be forfeited and the bidder / contractor shall be debarred for a period of three (03) years from the date of detection of such fraudulent act, besides legal action.

18.0 **The tender will be governed by:**

Forwarding Letter.
Instruction to Bidders
BRC-BEC-Bid Rejection Criteria & Bid Evaluation Criteria.
Part-I - General Conditions of Contract. (GCC)
Part-II - Schedule of Work, Unit and Quantity (SOQ)
Part-III - Special Conditions of Contract (SCC)
Part-IV - Schedule of company's Plants, Materials and Equipments - **Not Applicable**
Part-V - Safety Measures (SM)
Part-VI - Integrity Pact
Price Bidding Format
Proformas, Annexures & Sketches/Drawings

SPECIAL NOTE:

Please note that all tender forms (Forwarding Letter, BRC-BEC – Bid Rejection Criteria & Bid Evaluation Criteria, Part – I / General Conditions of Contract / GCC, Part-II / Schedule of Work, Unit and Quantity / SOQ, Part-III / Special Conditions of Contract / SCC, Part-V / Safety Measures / SM, Part-VI / Integrity Pact, Price Bid) 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 Head Contract, 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 Draft / Banker's Cheque/ 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 Draft / Banker's Cheque/ Bank Guarantee) must be received at OIL's Head-Contract's office at Duliajan on or before 12.45 Hrs (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.

19.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. The bidder has to submit both the "Un-Priced Techno-Commercial" 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. The Technical Bid is to be submitted as per Scope of Work & Technical Specification of the tender. 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.

20.0 In Technical Bid opening, only "Technical RFx" Tab Page will be opened. Therefore, the bidder should ensure that Technical bid is uploaded under "Technical RFx Response" Tab Page only. No price should be given under Technical RFx; otherwise the offer will be rejected. Please go through the help document provided in OIL's e-Portal, in detail before uploading the document.

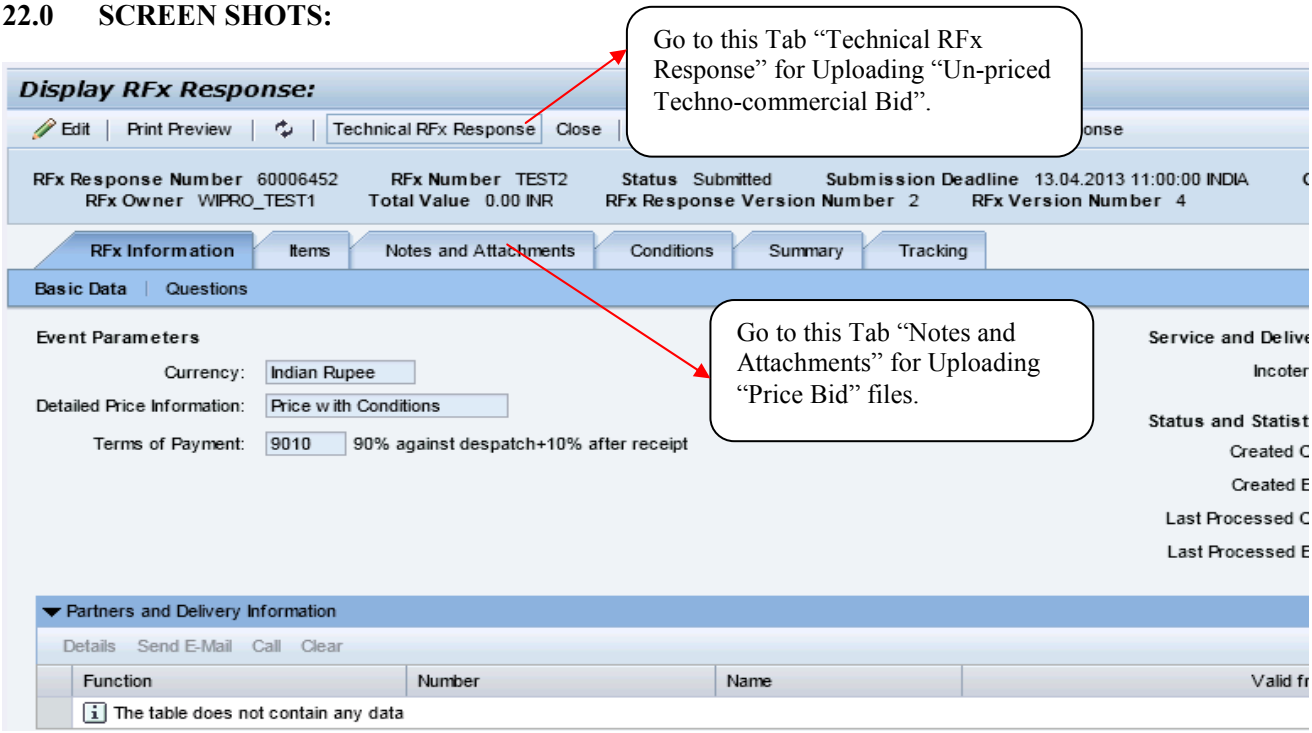
NB: All the Bids must be Digitally Signed using "Class 3" digital signature certificate with Organizations Name *(e-commerce application)* as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.

21.0 The Integrity Pact is applicable against this tender:

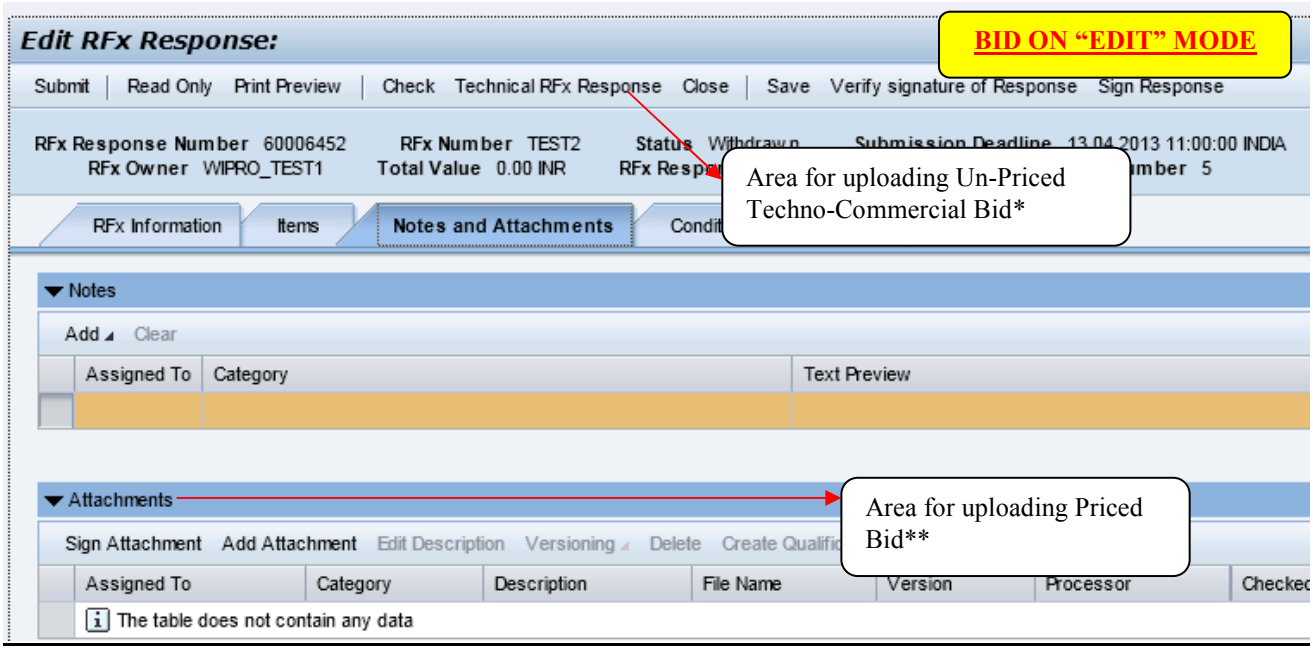
OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide "Part-VI- Integrity Pact" of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the Un-priced 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:** Shri Raghaw Sharan Pandey, IAS (Retd.), Former Secretary, Ministry of Petroleum & Natural Gas, E-Mail ID: rspandey_99@yahoo.com; Shri Rajiv Mathur, IPS (Retd.), Former Director, IB, Govt. of India, E-Mail ID: rajivmathur23@gmail.com have been appointed as Independent External Monitors).

22.0 SCREEN SHOTS:



On "EDIT" Mode- The following screen will appear. Bidders are advised to Upload "Un-priced Techno-Commercial Bid" and "Priced Bid" in the places as indicated below:



Note :

* The "Techno-Commercial Unpriced Bid" shall contain all techno-commercial details **except the prices**.

** The "Price bid" must contain the price schedule and the bidder's commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on Sign to sign the Price Bid. On Signing a new file with extension .SSIG will be created. Close that window. Next click on Add Atachment, a browser window will open, select the .SSIG signed file from the PC and name the file under Description, Assigned to General Data and click on OK to save the File.

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

HEAD-CONTRACTS

OIL INDIA LIMITED
(A GOVT. OF INDIA ENTERPRISE)
CONTRACTS DEPARTMENT, DULIAJAN
DISTRICT: DIBRUGARH (ASSAM), PIN-786602

IFB NO. CDI7759P16
INSTRUCTION TO BIDDERS

1.0 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.

2.0 BIDDING DOCUMENTS:

2.1 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
   (viii) Quantum of liquidated damages for default in timely mobilizations
b) Instructions to Bidders
c) BRC/BEC
d) General Conditions of Contract (GCC): **Part-I**
e) Schedule of Work, Unit, Quantities (SOQ): **Part- II**
f) Special Conditions of Contract (SCC): **Part-III**
g) Schedule of Company's Plants, Materials and Equipments (SCPME): **Part-IV** [Not applicable for this Tender]
h) Safety Measures (SM): **Part-V**
i) Integrity Pact: **Part-VI**
j) Price Bidding Format (Attached under "**Notes and Attachments**" tab in the main bidding engine of OIL's e-Tender portal).
k) Proformas, Annexures & Sketches/Drawings

2.2 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.

3.0 TRANSFERABILITY OF BID DOCUMENTS:

3.1 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.

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

4.0 AMENDMENT OF BIDDING DOCUMENTS:

4.1 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.

4.2 The Addendum will be sent in writing through post / courier / Fax / e-mail to all prospective Bidders to whom Company has sent the bid documents and also be uploaded in the OIL's e-portal in the "Technical RFx" area under the tab "External Area ➔Amendments". The company may, at its discretion, extend the deadline for bid submission for any reason. Bidders shall also check OIL's E-Tender portal ["Technical RFx" area under the tab "External Area ➔Amendments"] for any amendments to the bid documents before submission of their bids.

5.0 PREPARATION OF BIDS

5.1 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 English translated version, which shall govern for the purpose of bid interpretation.

5.2 DOCUMENTS COMPRISING THE BID:

(A) 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 BRC / BEC 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 Draft / Banker's Cheque/ Bank Guarantee) should be sent separately to reach on or before **12.45 Hrs (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 Hrs (IST) on the bid closing date failing which the bid shall be rejected.**
(vii) Integrity Pact.

Note: Please note that no price details should be uploaded in UN-PRICED TECHNO-COMMERCIAL BID under "Technical RFx Response" Tab Page.

(B) 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.

Bidder must include all liabilities including statutory liabilities (but excluding Service Tax) in their quoted rates. The rates shall be fixed and firm for the entire tenure of the contract and shall be binding on both the parties. No changes in these rates shall be allowed under any circumstances during the tenure of this service agreement except as mentioned in the Bid Document.

6.0 PERIOD OF VALIDITY OF BIDS:

6.1 The Bid must be valid for 180 (One hundred & eighty) days from the date of opening of the tender.

6.2 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.

7.0 FORMAT AND SIGNING OF BID:

7.1 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.

8.0 SUBMISSION OF BIDS:

8.1 Bids are to be submitted online through OIL's E-procurement portal with digital signature. The bid and all attached documents should be digitally signed by the bidder using "Class 3 digital certificate with organization's Name" digital certificates [e commerce application (Certificate with personal verification and Organization Name)] as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India while uploading the bid.

Digital Signature Certificates having "Organization Name" field as "Personal" are not acceptable. However, aforesaid Digital Signature Certificates having Bidder's Name in the "Organization Name" field are acceptable.

The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidder to bind the Bidder to the contract. 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 organization's name", the bid will be rejected.

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

8.2 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.

8.3 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.

8.4 E-mail/ Fax/ Telex/Telegraphic/Telephonic offers will not be accepted.

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

8.6 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.

9.0 DEADLINE FOR SUBMISSION OF BIDS:

9.1 Bids should be submitted on-line up to 11.00 AM (IST) (Server Time) on the Bid Closing date mentioned in the Forwarding Letter. Bidders will not be permitted by System to make any changes in their bid after the bid has been uploaded by the bidder. Bidder may however request the administrator through the system for returning their bids 03(three) days before the bid closing date and time for re-submission except in condition mentioned in clause 12.1. But, no such request would be entertained once the due date for submission of bids has been reached and bids are opened.

9.2 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.

9.3 The documents in physical form must be received by Company at the address specified in the "Forwarding Letter" on or before the Bid opening Date & Time mentioned in the "Forwarding Letter". Timely delivery of the same at the address mentioned in the Forwarding Letter is the responsibility of the Bidders.

10.0 LATE BIDS:

10.1 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.

11.0 MODIFICATION AND WITHDRAWAL OF BIDS:

11.1 The Bidder after submission of bid may modify or withdraw its bid by written notice before 03(Three) working days prior to bid closing date.

11.2 A withdrawal notice must also be sent by fax / e-mail but followed by a signed confirmation copy, postmarked not later than the deadline for submission of bids.

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

11.4 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 debarred from participation in future tenders, at the sole discretion of the company.

12.0 EXTENSION OF BID SUBMISSION DATE:

12.1 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. In case of receipt of only one Bid on the Bid Closing Date and Time, OIL may extend the Bid Closing / Opening Date by 2(two) weeks. However, the bidder whose bid has been received within the bid closing date and time will not be allowed to revise their Bid / prices. Withdrawal of such Bid will also not be permitted.

13.0 BID OPENING AND EVALUATION:

13.1.1 The Technical 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.

In Technical bid opening date, only "Technical RFx" Tab Page will be allowed to be opened by the system. Bidders therefore should ensure that Un-priced Techno-Commercial bid is uploaded under "Technical RFx Response" Tab Page only.

13.1.2 In case of two bid system, after the evaluation of the Technical Bids, the Price Bids of the technically qualified Bidders will be opened. The opening Date and Time will be intimated to the technically qualified Bidders in due course. Price bids will be opened in the same procedure as mentioned in Para 13.1.1 above.

13.2 In case it happens to be a bundh / 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).

13.3 Bid for which an acceptable notice of withdrawal has been received pursuant to Clause 11.0 shall not be opened. 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.

13.4 OIL shall prepare, for its own records, minutes of bid opening including the information disclosed to those present in accordance with the sub-clause 13.3

13.5 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.

13.6 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 way 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.

13.7 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.

13.8 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.

14.0 EVALUATION AND COMPARISON OF BIDS:

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

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

14.3 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.

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

15.0 CONTACTING THE COMPANY:

15.1 Except as otherwise provided in Clause 14.0 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 13.5.

15.2 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.

16.0 AWARD CRITERIA:

16.1 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.

17.0 OIL' S RIGHT TO ACCEPT OR REJECT ANY BID:

17.1 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.

18.0 NOTIFICATION OF AWARD:

18.1 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.

19.0 SIGNING OF CONTRACT:

19.1 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)".

19.2 Within 2 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 Demand Draft / Banker’s Cheque / Bank

Guarantee (in specified format) favouring "OIL INDIA LIMITED" payable at "DULIAJAN" from any Nationalised 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.

19.3 This Performance Security must be valid for three months after completion of warranty / guarantee obligations under the contract, i.e. 9 months after completion of works against the contract. 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.

19.4 The "Performance Security" will be refunded to the contractor after satisfactory completion of the work (including warranty / guarantee obligations and extension, if any), but part or whole of which shall be used by the Company in realisation of liquidated damages or claims, if any or for adjustment of compensation or loss due to the Company for any reason.

19.5 Failure of the successful bidders to comply with the conditions as specified in Para 19.2 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 party shall also be debarred for a period of 2(two) years from the date of default.

20.0 FURNISHING FRAUDULENT INFORMATION / DOCUMENTS:

If it is found that a bidder has furnished fraudulent information / documents, it shall constitute sufficient ground for annulment of the award and the party shall be debarred for a period of 3(three) years from the date of detection of such fraudulent act besides the legal action.

21.0 In the event of awarding contract the Contractor shall have to submit Invoice of Service Tax as per the following Format

(Format of Invoice (As per Rule 4A (1) of the Service Tax Rule's 1994)

TAX INVOICE

Name of the Service Provider.....
Address of the Service Provider.....
Service Tax Regn. No of the service provider.....

Name & address of the Service Receiver
Oil India Limited, Duliajan, Assam

Invoice Serial No.....
Invoice Date.....

Particulars	Amount (Rs)
Description of the service provided or agreed to be provided (e.g. AMC Bill against Contract No.....for the period.....)	A
Add service Tax 12.36 % on (A) above(In case of taxable value of service is not 100%, than specify the value of taxable service and apply 12.36 % of the qualifying amount) (e.g. if the value of service is only 40%, than service tax should be calculated at 12.36% on 40% of the value declared at (A) above.)	B
Total amount (Including service Tax) (A + B)	C
Less: Service Tax Payable by Oil India Limited under reverse charge	D
Net Bill Amount	E

Signature of Proprietor/partner

1.0 BID REJECTION CRITERIA (BRC):

1.1 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. Not-withstanding 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 BRC must be submitted along with the Techno-Commercial Bid.

1.2.1 The bidder shall have experience in successfully executing SIMILAR nature of jobs of following magnitude in Central/State Govt./ PSUs/ State Govt. Enterprises during the last 7 (seven) years ending **30.06.2015**.

i) Must have executed a minimum value of **Rs 1,47,52,900.00 (Rupees One Crore Forty Seven Lakh Fifty Two Thousand Nine Hundred only)** in a single contract,

OR

ii) Must have executed a minimum value of **Rs 92,20,600.00 (Rupees Ninety Two Lakh Twenty Thousand Six Hundred only) each** in two separate contracts,

OR

iii) Must have executed a minimum value of **Rs 73,76,500.00 (Rupees Seventy Three Lakh Seventy Six Thousand Five Hundred only) each** in three separate contracts.

Note: "**SIMILAR**" nature of jobs mentioned in 1.2.1 means-

Supply of Material, Fabrication, Erection, Painting, Testing, and Commissioning of Oil Collecting Station/ Group Gathering Stations/Gas Gathering station /Water Injection stations/Crude Oil Refinery/Petro Chemical Industry/ Tank Farm Terminal including all related civil and mechanical works, viz construction of office building, foundation of process vessel, Oil water traps, drainage, walkways, sheds, process piping network etc.

1.2.2 The bidder should have an average annual turnover during the last three years ending **31.03.2014** at least of **Rs. 55,32,300.00 (Rupees Fifty Five Lakh Thirty Two Thousand Three Hundred only)**.

1.2.3 Bid will be rejected if not accompanied with adequate documentary proof (Refer Note-1 below) in support of experience and turnover as mentioned in Para 1.2.1 and 1.2.2

Note-1:-

A) For proof of Annual turnover, following documents must be submitted along with the bid:

i) Profit and Loss account.

OR

ii) CA Certificate with Membership Number & Firm Registration Number

B) For proof of requisite Experience, self attested photocopy of following documents must be submitted along with the bid:

i) Relevant pages of Contract documents showing details of works.

AND

ii) Certificate issued by Central/State Govt./ PSUs/ State Govt. Enterprises for the contract mentioned in 1.2.3 B(i) showing:

(a) Contract number
(b) Gross value of job done,
(c) Contract period /Contract start and completion date.

OR

Any other documents issued by Central/State Govt./ PSUs/ State Govt. Enterprises showing successful execution of the contract mentioned in 1.2.3B(i)

1.3 COMMERCIAL:

1.3.1 The bids are to be submitted in single stage under 2 (two) bid system i.e. Un-priced Techno-Commercial Bid and Price Bid together. Only the Price Bid should contain the quoted price.

1.3.2 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.

1.3.3 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.

Note: In case the Bidder submits Bid security in the form of Bank Guarantee (BG); the BG must be valid for minimum 210 days from the date of Technical bid opening i.e minimum up to **02.03.2016**.

1.3.4 Bids received after bid closing date and time will be rejected.

1.3.5 The bid documents are not transferable. Bid made by parties who have not purchased the bid document from the company will be rejected.

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

1.3.7 Bids shall be typed or written in indelible ink. The bidder or his authorized representative shall sign on all pages, failing which the bid will be rejected.

1.3.8 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 the bid. However, white fluid should not be used for making corrections. Any bid not meeting this requirement shall be rejected.

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

1.3.10 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 in the c-Folder link (collaboration link) under "Technical RFx Response" Tab Page only.

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

- **(i)** Performance Guarantee Bond Clause
- **(ii)** Force Majeure Clause
- **(iii)** Tax liabilities Clause
- **(iv)** Arbitration Clause
- **(v)** Acceptance of Jurisdiction and Applicable Law
- **(vi)** Liquidated Damage cum Penalty clause
- **(vii)** Integrity Pact

1.3.12 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.

1.3.13 Bid received with validity of offer less than 180 (one hundred eighty) days from the date of Technical Bid opening will be rejected.

1.3.14 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 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.

2.0 BID EVALUATION CRITERIA (BEC):

2.1 The bids conforming to the specifications, terms and conditions stipulated in the tender documents and considered to be responsive after subjecting to Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria given below.

2.2 To ascertain the inter-se-ranking, the comparison of the responsive bids will be made subject to loading for any deviation. Comparison of offers will be done on total evaluated cost on the basis of rates quoted in the Price Bid Format.

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

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 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 toto must be received or before the deadline given by the company, failing which the offer will be summarily rejected. 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 BRC contradict with other clauses of bidding document elsewhere, the clauses in the BRC shall prevail.

3.4 Bidder(s) must note that requisite information(s)/financial values etc. as required in the 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.

OIL INDIA LIMITED
(A GOVT. OF INDIA ENTERPRISE)
CONTRACTS DEPARTMENT, DULIAJAN
DISTRICT: DIBRUGARH (ASSAM), PIN-786602
TEL: (91) 374-2800548, FAX: (91) 374-2803549
Website: www.oil-india.com

DESCRIPTION OF WORK/SERVICES:-

CONSTRUCTION OF WATER INJECTION STATION AT HAPJAN.

GENERAL CONDITIONS OF CONTRACT (GCC)

MEMORANDUM OF AGREEMENT made this_____ day of _____ Between OIL INDIA LIMITED a Company incorporated under the Companies Act 1956 and having its Registered Office at Duliajan in the District of Dibrugarh, Assam (hereinafter called Company) of the one part and Shri/Smti _____and Shri/Smti _____ carrying on business as partners /proprietor under the firm name and style of M/s._____ with the main Office at _____in the District of _____ aforesaid (hereinafter called 'Contractor') on the other part.

WITNESSETH:

1. 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 at _____.

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. 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. 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. 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. 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. 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, 1963.
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) AGST Act.
xi) Service Tax 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. 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. The duration of the contract shall be **6 (Six) months** from the date of issue of LOA. The Contractor must complete the work as mentioned in PART – III (SPECIAL CONDITIONS OF CONTRACT: SCC) within the contract period. During the currency of the job, the work progress must be commensurate with the time elapsed. In the event of any delay on the contractor's part, he/she will be liable to pay to the company liquidated damages at the rate of 1/2% (Half p.c) per week of the contract price of the item(s) delayed in completion and the maximum value of the liquidated damage will be 7.5% of the contract price of the item(s) delayed provided the item(s) delayed are not critical for commissioning and final utilization of the work. If, however, the item(s) delayed in completion are critical for commissioning and final utilisation of the work then the contractor will be liable to pay liquidated damages by way of penalty at the rate of 1/2% (Half percent) per week of delay of the total contract cost subject to a maximum of 7.5% of total contract cost.

The Chief Engineer's certificate as to the criticality or otherwise of an item shall be final.
The payment of liquidated damages/penalty may be reduced or waived at the sole discretion of the Company whose decision in this regard will be final.
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. 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 neighbourhood.

10. The tendered all-inclusive Price (the Contract price) is ₹ _____ ***(Not to be filled up by bidder while submitting the offer in c-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.

11. The contractor employing 20 (twenty) or more workmen on any day preceding 12 months shall be required to obtain requisite licence 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. The Company for any reason whatsoever and of which the company shall be sole judge may terminate this Contract with a 24 hours notice in writing to the Contractor and in the event of Company's so doing the clause 5 here of shall prevail and the accounts between the parties will be in accordance therewith finalised.

13. 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.

14. 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.

15. All Statutory taxes levied by the Central and State Government or any other competent authority from time to time will be borne by Contractor and the amount of the contract specified in the contract is inclusive of all tax liabilities but excluding Service Tax. Service Tax if applicable shall be, to the Company's account. However, Service Tax portion payable directly by the Service provider (if applicable) shall be reimbursed to the Contractor on the basis of the documentary evidence.

16. The Contractor shall deploy local persons in all works.

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

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

19.1 **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.

20. **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.

21. **ARBITRATION:**

Any dispute under this contract will be settled through Arbitration as per Indian Arbitration and Conciliation Act, 1996.
Place of Arbitration: Duliajan

22. **FORCE MAJEURE:**

Force Majeure (exemption) Clause of the International Chamber of Commerce (ICC Publication No. 421) is hereby incorporated in this contract.

23. **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. 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. **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:**

If it is found that a Bidder/Contractor has furnished fraudulent document/information the party shall be debarred for period of 3(three) years from date of detection of such fraudulent act, besides the legal action.

27.0 **LIQUIDATED DAMAGES FOR DELAY IN MOBILISATION AND/ OR COMPLETION OF WORKS AND SERVICES**

In normal case of works /service contracts, liquidated damages will be applicable @ 0.5% of the contract value per week or part thereof, for delay in contract mobilization /completion date subject to a maximum ceiling of 7.5% of contract value .

28.0 **SUBCONTRACTING:**

CONTRACTORS shall not subcontract or assign, in whole or in part, their obligations to perform under this contract, except with COMPANY'S prior written consent.

29.0 **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.

30.0 **LIABILITY:**

30.1 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.

30.2 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.

30.3 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.

30.4 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.

30.5 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.

30.6 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.

30.7 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.

30.8 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.

31.0 **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.

32.0 **INDEMNITY AGREEMENT:**

32.1 Except as provided hereof CONTRACTORS 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 AUDITOR'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.

32.2 Except as provided hereof COMPANY agrees to protect, defend, indemnify and hold CONTRACTORS 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.

33.0 **APPLICABLE LAW:**

33.1 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.

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

34.0 **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.
34.1 All Statutory taxes levied by the Central and State Government or any other competent authority from time to time shall be on COMPANY'S account. However, liability for payment of such Taxes shall lie on the CONTRACTOR.

35.0 Subsequently Enacted Laws: Subsequent to the date of issue of letter of award if there is a change in or enactment of any law or interpretation of existing law, which results in additional cost/reduction in cost to Contractor on account of the operation under the Contract, the Company/Contractor shall reimburse/pay Contractor / Company for such additional / reduced costs actually incurred.

IN WITNESS whereof the parties hereunto set their hands seals the day and year first written above:-

SIGNED & DELIVERED FOR AND	----------
ON BEHALF OF	(Signature of Contractor or his legal Attorney)
by the hand of	(Full Name of Signatory)
----------	----------
its Partner/Legal Attorney	(Seal of Contractor's Firm)

And in presence of (Signature of witness)

Date : _____ ---

(Full Name of Signatory)

Address:

(Signature of Acceptor)

SIGNED & DELIVERED FOR & ON
BEHALF OF OIL INDIA LIMITED Designation _____

Date_____

OIL INDIA LIMITED
(A Government of India Enterprise)
Duliajan, Assam

DESCRIPTION OF WORK/ SERVICE: CONSTRUCTION OF WATER INJECTION STATION AT HAPJAN.
Part-II (SOQ) Schedule of Work, Unit and Quantity

Item No.	Description of Services	UOM	Quantity
10	**Foundation for WI Pumps:** Marking, Excavation of Earth, supply of all materials, shuttering, Construction of R.C.C Foundations of minimum grade M20 strength. All RCC work of minimum Grade M20 shall conform to IS456-2000 and all TOR steel bars Grade Fe 415 shall conform to latest IS 1786 as per sketch no. 1. However physical dimensional measurement of the foundations of each equipment will be measured by the contractor prior to casting. The job may also involve piling job, if necessary depending on soil conditions. All materials and labour required for the job will be supplied by the contractor. All the materials required for the R.C.C foundations will have to be stocked in the project site and have to be approved by OIL before execution. All necessary tests certificates for materials including Cube test, slum test etc. will also have to be carried out by the contractor at his own cost. Contractor must follow all the relevant IS codes and the general specification as per TOR of this contract.	CUBIC METER	62.920
20	**Dressing of WIS Land Area:** Development of Land - Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m for all kinds of soil for an area of 3365 sq. m	SQUARE METER	3365
30	**Excavation Work:** Extra for excavating trenches for pipes, cables etc. in all kinds of soil for depth exceeding 1.5 m, but not exceeding 3 m.	METER	450
40	**Demolishing of RCC Area:** Demolishing C.C. / R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1000m, stacking serviceable and unserviceable material separately including cutting reinforcement bars.The area to be demolished is as advised and approved by the OIL personnel.	CUBIC METER	20
50	**CC Mattress:** Construction of 100 mm thick C C mattress (1:3:6). The job includes grading, ramming, laying of a brick layer at different places as per directive of site engineer and then construction of 100 mm thick C.C mattress. Before brick soling, earth will be consolidated by proper ramming. All materials required for the job will be supplied by the contractor. Rest refer civil engg. TOR of this tender document.	CUBIC METER	150
60	**Sound Barrier Wall:** Supply of all materials(except 2 7/8" used tubing pipes.), construction of sound retaining wallconsisting of double wall of corrugated asbestos sheets or any suitable materials covering the perimeter 220m of the Water injection station . All the materials to be supplied by the contractor except 2 7/8" used tubing pipes. The wall should fully enclose the water injection station of perimeter from all sides and height should be 4.8 m .Minimum thickness of asbestos should be 0.6 mm.The foundation of the sound barrier wall shall be of CC / RCC of minimum grade M20 to be designed as per releavant IS Code.	NUMBER	1
70	**Supply of Sand Shingles/Pebbles:** Supply of Sand Shingle(containing 60 to 80% sand & 40 to 20% shingle of size 20mm graded down to 5mm), clean and free from clay and rubbish etc. Tobe spread and rammed at various locations as directed.	CUBIC METER	60
80	**Supply of Soil for Earth filling:** Collecting / excavating sand, soil, silt, ordinary earth from any source, load into lorries, transport it to distant place of work including procuring earth and laying in layer of 150mm thickness and dry ramming, profile properly made for taking measurement, including all measurable lead upto 30m and lift as required. (The contractor shall be responsible for all formalities of supply of earth such as purchase of land including royalties, monopoly / other statutory taxes as required from any distance).	CUBIC METER	300
90	**Supply of Hand broken Stone:** Supply of Hand broken hard stone metal from river boulder fairly cubical in shape, free from dust/dirt disingrated pieces, organic and other foreign matters(63mm to 45mm graded).	CUBIC METER	10
100	**Drainage System (Leader drain):** Supply of all materials, construction of leader drains inside/ outside of the installation to be carried as detailed in clause no. 32.1.7.The inside of the drain is to be completed by polishing and finishing.	METER	240
110	**Drainage System (sub leader drain):** Supply of all materials, construction of sub leader drains inside of the installation connecting the structures. Proper gradient to be maintained as detaile d in clause no. 32.1.7.All the materials to be supplied by the contractor.The inside of the drain to be completed by polishing and finishing.	METER	140
120	**Toilet and Washroom:** Supply of all materials and construction/ erection , supply and installation of all sanitary fittings(OIL approved), water supply for Lavatory & Urinal as detailed in clause no. 36.1.9	NUMBER	1

Item No.	Description of Services	UOM	Quantity
130	**Sheds for WIS Pump House:** Supply, erection / construction of the pump house Shed as detailed below. This item includes supply of all materials, mechanical fabrication/erection and all associated Civil Engineering jobs like,RCC works, Brick-soling, CC Flooring, Cement plastering, Cable trenches of required size, Drains around the sheds including plinth protection work with apron etc as detailed in clause 36.1.1. All walls shall be polyester coated galvanished steel sheets as detailed in clause no. 26.0(iv) . All other specification of civil engg. / electrical engg. Works to be followed as per TOR of the contract. All materials like CGI sheet (Polyester coated Galvanised Steel Sheets of 0.60 mm thickness), M.S. plate (6mm thick), Square hollow sections/Rectangular hollow sections / Circular hollow sections of required thickness (as per YST 310 grade & IS: 4923 & IS: 1161), etc. will be supplied by the contractor and these materials should conform to IS specification and should be of TATA/SAIL brand or equivalent quality only. The materials are to be offered to the Company Engineer for inspection with necessary supporting documents before fabrication (as per OEM specification) and erection. All civil engineering materials required are to be supplied by the contractor. The floor level shall be 450 mm above FGL.	NUMBER	1
140	**Lube Oil Shed:** Construction of Industrial Lube Oil Shed of total area 20 sqm and height 3.35 m as per Clause no. 36.1.4	NUMBER	1
150	**Fire Extinguisher Shed:** Construction of Two no. of Fire Extinguisher Shed of approx. 3.0 m length X 1.5 m breadth x 2.5 height as per clause no. 36.1.5	NUMBER	2
160	**Meter Run Shed:** Construction of ONE number of Meter Run Shed with walkways and pipe supports as per OIL Drawing no. OIL/7707 of approx. 3.0 m length X 1.5 m breadth x 3.4 height as per clause no. 36.1.6.	NUMBER	1
170	**Power House/Generator House:** Construction of Generator House of approx. 9 m length X 7.6 m breadth x 3.6 m height. This shed will be used for housing TWO numbers of 125 KVA gensets as per clause no. 36.1.2	NUMBER	1
180	**Security Office:** Construction of Security office of approx. 3.0 length X 3.0 m breadth x 3.35 m height as per clause no. 36.1.7.	NUMBER	1
190	**Dining Room and Kitchen:** Construction of Dining room and kitchen with 115 mm thick brick wall including door and windows of approx. 3.0 m length X 3.0 m breadth x 3.35 height as per clause 36.1.8	NUMBER	1
200	**Operator House:** Construction of Operators House of approx. 9.16 m length X 3.6 m breadth x 3.35 height and veranda of size 9.16m x 1.20m . This shall also include supply and installation of all fittings (OIL approved), water supply for water filter and cooler and other related items required in the operator house as directed by OIL. The operator house shall be of RCC construction with 115 mm brick walls as per clause no. 36.1.3.	NUMBER	1
210	**RCC Supports Piping Network:** Supply of all materials, erection, installation, plastering, curing of RCC Pipe Supports (1:1.5:3 mixture) including clamping System/arrangement. Factory make U clamps with nuts (dia of clamps 1.27 cm) to clamp different diameter pipes with nuts and washers will have to be supplied by the contractor .All civil construction materials will be supplied by the contractor. All the supplied materials must be approved by OIL prior to erection including material test certificates and other documents. The number of such pre-casted pipe supports will be required in 30 numbers.	CUBIC METER	4.860
220	**Oil Water Trap:** Supply of all Materials and Construction of Oil-Water separator trap as per standard practice of oil and gas installations. The job also includes supply and fabrication of top cover made of Xpm and angle iron frame. All materials required for the job will be supplied by the contractor.	NUMBER	1
230	**Sign Boards:** Supply of Materials, Fabrication, erection, painting and letter writing of sign boards (safety / statutory/ security/ technical) with aesthetic look of different sizes. The post and frames should be square/ rectangular hollow sections (specification IS: 4923 and YST 310 Grade) of specific size as per sound industry practice and the board section should be MS plates (4mm Thickness of IS specification). The signboards to be grouted (1:2:4 concrete mixture) up to proper depth at specific location to be decided by OIL within and outside the proposed installation. Painting (primer followed by two coats of enamel paints of reputed make) of the sign boards are preferably spray painted to attain proper finishing. All the supplied materials must be approved by OIL prior to fabrication/erection including material test certificates and other documents.SIZE: 2mtrs(L)X 1.5 mtrs(B)X 3.5mtrs high post	NUMBER	5
240	**Sign Boards:** Description same as service line item no.230, but of size: 2mtrs(L)X 1.0 mtrs (B)X 3.5mtrs high post	NUMBER	4
250	**Sign Boards:** Description same as service line item no.230, but of size: 1.0mtrs(L)X 0.8 mtrs (B)X 3.5mtrs high post	NUMBER	4
260	**Sign Boards:** Description same as service line item no.230, but of size: 1.5mtrs(L)X 1.0 mtrs (B)X 3.5mtrs high post	NUMBER	4
270	**Sign Boards:** Description same as service line item no.230, but of size: 1.0mtrs(L)X 0.6 mtrs (B)X 3.5mtrs high post.	NUMBER	6

Item No.	Description of Services	UOM	Quantity
280	**Painting:** Painting of the installation which includes manifolds, separators, piping, valves, sheds, walkway and all other process accessories/items erected and installed against the contract. Painting will involve cleaning of outer surface, application of one coat of red oxide primer and application of two coats of synthetic enamel paint of approved colour. All materials for the job including the primer, paint and external weather proof paints for exterior walls of the building,concrete supports and boundary wall will have to be arranged by the contractor.The inside wall of the office buildings are to be painted with plastic emulsion paint. Prior to application of the same the wall putty is to applied on the inner surface of the building walls. The paint to be used will have to be of reputed brand and will have to be certified by OIL's representative. The job also involves painting of the colour bands on the pipelines as directed by the company engineer.	SQUARE METER	3500
290	**Office Furnitures & Filter for WIS:** Supply of furniture listed below at the proposed installation; as per specifications mentioned in clause no. 36.1.15 of SCC (A) Steel Table, Model:T-8(D.L Top); Make: Godrej/ eqvt.:-3 no. (B) Steel Chair; Make: Godrej Or Equivalent; Model:Ch-7 Or Equivalent.- 6 no. (C) Personal Locker Unit With Keys, 4 Doors. Make : Godrej/ eqvt.-5 no. (D) Godrej Almirah-1 no. (E) Curtains 30 meters including stiching cutting curtain rod readymade (F) First Aid Box-2 nos. (G) Purchase & Installation of Water Purifier system of minimum capacity of 20 litres and capable of filtering the available raw source water to Drinking water standards of IS:10500.2012.-1 no. (H) Supply of standard computer table for accommodating a computer, UPS and Printer.-1no. (I) Purchase and supply of Computer (Office Desktop PC)Technical Specification: 1. Full ATX Motherboard with minimum LGA 1150 Socket or Higher. 2. Processor: (a) Intel Core i7-4770 Processor (3.4GHz, 4 Cores, 8MB Cache) or Higher (b) Generation: Generation of the processor must be 3rd Generation or higher with specification as given in Point 2(a). 3. Memory: Minimum 8-GB (2 X 4GB) DDR3 SDRAM 1600-MHz expandable upto 16GB RAM from brands Corsair, Gskill or Hynix. 4. Hard Disk Drive & controller: Minimum 1 TB SATA 6 Gbps HDD, 7200rpm. 5. Optical Drive: 16X DVD +/-RW with Dual Layer Write Capabilities , accessories and cables. 6. Ethernet: Integrated 10/100/1000 Mbps Ethernet Controller and IPV6 compliant. 7. Expansion Slots: Min 2 Nos of PCI series slots 8. Audio & Sound: Integrated HD audio controller with 1 set of external stereo speaker with minimum 8 watts (rms) output. 9. I/O Interface: Front I/O Ports: Minimum 2 USB ports. Headphone and Microphone Jacks Rear I/O Ports: VGA port: min. 2 USB 2.0 ports: minimum 2 USB 3.0 ports: 2 One Fast Serial port One parallel port 1 Gigabit Ethernet (RJ-45) port. Headphone and Microphone Jacks. 10. System Chassis: Slim chassis with enough cooling fans, one free internal peripheral bay and suitable power supply with chassis volume 8-14 litres. 11. Monitor: OEM 21.5" diagonal viewable image Size: 21.5" diagonal Flat Panel LED Monitor (1920 x 1080 Resolution) with accessories and cables (same colour as CPU box) & TCO certified. 12. Keyboard: 104 Keys OEM keyboard with new Indian Rupee logo (Same colour as CPU box) from reputed brands like Logitech, Microsoft, Lenovo, TVS-e and Razor. 13. Mouse: OEM optical scroll mouse with mouse pad (Preferably same colour as CPU box). 14. Power Supply: Min 500-watts power supply with surge protection and 85% efficiency or better, Energy Star 5.0 compliant. 15. OS: Preloaded Genuine Microsoft ® Windows 8 professional 64 bit OS with recovery CD/DVD and latest service pack in DVD/CD media & documentation. 16. Power management & DMI: System with Power management features & Desktop Management Interface implementation. 17. Others: (a) Power Cables. (b) All system drivers, monitor drivers on DVD/CD media. (c) Power Extension spike guard with 4 nos. of 5 Amps output - Make: Anchor	LUMPSUM	1

Item No.	Description of Services	UOM	Quantity
300	**Transportation of Pipes:** Loading, transportation, unloading & stacking on wooden skids of various diameter pipes ranging from 25 mm NB to 250mm NB bevel/ screwed end from different pipe yards, inside / outside the New and Old Industrial area or any other company's store yard, Duliajan or any other yard nearer to the work site, with the help of approved pipe trailers without causing any damage to the pipe/ pipe ends. Defective pipes shall be rejected at the yard prior to receiving with the approval of Company's representatives. Distance Between workplace HJN-30 and Duliajan is about 42 kms. Approx. weight a truck trailer can carry per trip: 8 tons Avg. weight of 25mm NB pipe: 2.46 kg / mtr Avg. weight of 50mm NB pipe: 5.17kg / mtr. Avg. weight of 65 mm NB pipe: 15.24 kg / mtr. Avg. weight of 50mm NB and 65 mm NB tubing: 7.1 kg/mtr and 9.74kg/mtr. Avg. weight of 100mm NB pipe with wall thickness 0.281": 22 kg / mtr. Avg. weight of 100mm NB pipe with wall thickness 0.438": 32 kg / mtr. Avg. weight of 150mm NB pipe with wall thickness 0.280": 36 kg / mtr. Avg. weight of 200mm NB pipe with wall thickness 0.277": 42 kg / mtr.	TON-KILOMETRE	10000
310	**Transportation of Valves, Pipe Fittings, Electrical, Mechanical, Instrumentation, Fire Fighting Items including Coating & Wrapping Materials:** Loading, unloading, transportation and safe custody of various sizes/types of valves such as gate / ball /plug / check /control / motor valve, pipe fittings such as elbow, bend, flange, swage, tees of various godown at PP office / New and old Industrial area / Project godown near OCS-3 to worksite in approved trucks. (Maximum load per trip=8.0 tonnes). Distance Between workplace (HJN-30) and Duliajan is about 42 kms via TSK.	ROUND TRIP	25
320	**Stringing, Aligning, Minor End Repairing, Swabbing and Cleaning of Inside of the Pipes:** Manual stringing and aligning for screwing / welding the following sizes of screwed / bevel end pipes on ground / above ground / elevated position. Sufficient precautions to be taken while stringing the pipes to protect the welded / screwed ends. In case any defect is observed, the contractor should repair the same free of cost. Contractor must use the end protector while loading, unloading, transportation, stringing and aligning the pipes. Dragging and skidding of pipes shall not be permitted and unchecked rolling of pipes from truck-trailer should not occur. After pipe stringing every length must be inspected for dents, grooving, gauging and damage of the pipe ends. Each joint of pipe shall be swabbed and cleaned with a leather or canvass belt disc of the proper diameter and sufficient length to remove dirt, mill scale and other foreign substances immediately before joining up. Any obstruction remaining in the pipe after the completion of line shall be removed at the expense of the Contractor. The open ends of the pipe shall be securely closed by bolt-on metal night caps at the end of each day work and shall not be opened until the work is resumed. Minor Repairing of pipe ends, which will be a part of alignment of joints during the welding operations are also scope of the contractor. The size of the pipe within the scope of this item ranges from 250mmNB to 50mmNB for screwed / bevel end.	METER	350
330	**Welding of Pipe:** Welding of pipe joints of different thickness including other forged butt welding fittings like bends, flanges, Tees, Reducers, Bull Plugs, Expanders etc. to make a continuous piping network. The contractor shall supply the entire machine / equipment / manpower and consumables like electrodes, grinding discs wooden skids as necessary for the entire job. The entire operation shall be carried out under constant supervision of the Third party inspection / Company's representative. The welding shall not be done when the Third party inspection / Company's representative decides that the weather condition is unfavourable. The contractor shall have to provide canopy during mild drizzle for the welding. The welded joints shall be subjected to approximately 10% selective or random radiography. The defective joints shall be repaired and radio graphed at contractor's cost. Welding shall be done in accordance with the API Standard for field welding of pipelines, API Standard No.1104 /1108(latest edition).Refer SCC point no.37.1.4 for further guidance. For 250 mm NB Dia pipes.	JOINT	40
340	**Same as Item No. 330 but 150 mm NB Dia pipe**	JOINT	60
350	**Same as Item No. 330 but 100 mm NB Dia pipe**	JOINT	70
360	**Same as Item No. 330 but 50 mm NB Dia pipe**	JOINT	20
370	**Installation of Flanged Type Valve:** Handling , aligning and Installation of flanged valves like Control / gate / Check / Plug / Ball etc. of the following sizes with already existing flanges on piping network laid on ground / above ground / underground at all elevation where ever required with proper gaskets, nuts& bolts in both sides as per the instruction of site engineer. No tension on lines on either side of the valves will be allowed. For 250mm NB Dia	NUMBER	5
380	**Same as Item No. 370 but 150 mm NB Dia**	NUMBER	18
390	**Same as Item No. 370 but 100 mm NB Dia**	NUMBER	20
400	**Same as Item No. 370 but 50 mm NB Dia**	NUMBER	18
410	**Same as Item No. 370 but 25 mm NB Dia**	NUMBER	10

Item No.	Description of Services	UOM	Quantity
420	**Hooking Up of Two Welded Flanges with Nuts, Bolts and Gaskets:** Hooking up of companion weld neck type flanges on pipeline above ground/underground/ overhead as required complete with gasket, studs and nuts (supplied by Company) as per directive of the company's engineer/representative after proper alignment and with out any strain on the line. All the above jobs to be carried out as per directive and satisfaction of the company representative Size 250mm NB Dia.	NUMBER	4
430	**Same as Item No. 420 but 150 mm NB Dia**	NUMBER	25
440	**Same as Item No. 420 but 100 mm NB Dia**	NUMBER	5
450	**Same as Item No. 420 but 50 mm NB Dia**	NUMBER	5
460	**Fabrication of welded mitre bend, standard bevel ended Tee/Reducer/Bull plug (orange peel) as per ANSI B31.4 / ANSI B31.8 and API 1104/1108:** For the mitre bend to obtain gradual and smooth curvature which shall have at least 4 nos. (for 100mmNB to 150mm NB) and 5 nos. (For 200mmNB to 250mm NB) of weld joints between the straight portion of the bend. While fabrication of Tee, the 3 ends of straight portion should be minimum 300mm with bevel ends from the saddle. Fabrication of tee also includes welding of saddle (with tell tale hole), stiffener, guide bar etc. With respect to fabrication of reducer and bull plug there should be at least 6(for 100mmNB to 150mm NB)and 8(for 200mmNB to 250mm NB) cutting, beveling and welding on the circumference of the pipe. All the fabricated fitting are subjected to radiography. Any repair if necessary shall be done by the contractor at his own cost. The job will be quantified as per unit length of welding measured in centimeter.	CENTIMETER	10000
470	**Radiography of Pipes:** Radiographic inspection of weld joints as per API 1104 by the third party inspection agency (approved by BARC) as directed by site engineer. All necessary equipment including the inspection agency to be arranged by the contractor with the approval of Company engineer. 250NB pipe joint	JOINT	40
480	**Description same as Item No. 470, but size - 150 mm NB pipe joint.**	JOINT	60
490	**Description same as Item No. 470, but size - 100 mm NB pipe joint.**	JOINT	70
500	**Laying of S&C Pipelines:** Handling, aligning, swabbing / purging, screwing and laying of screwed pipelines on aboveground / overhead / at all elevations including aligning the pipelines to correct level, plumb for proper connection to the various equipment like pressure, vessels, tanks, pumps, manifold, indirect heaters, meter runs etc. as per instruction of Company Representative. Before screwing, thread should be cleaned with brush and thread dope to be applied. Laying of lines will also include fixing of various online pipe fittings such as nipples, bend, elbow, flange, tee etc. as necessary. Also threaded nipples (NPT) which might be required for completion of the pipe length are required to be made by the contractor as per site requirement.Size of the S&C pipes – 75/50 mm NB dia.	METER	200
510	**Description same as Item No. 500, but for size - 25 mm & below NB dia S&C pipes.**	METER	100
520	**Installation of Screwed Type Gate / Ball / Plug / Globe / Check Valve:** Handling , aligning and Installation of screwed type valves like gate/Check/Plug/Ball etc. of the following sizes with the screwed piping network laid on ground / above ground / under ground at all elevation where ever required with proper cleaning of thread in both ends including application of thread dope as per the instruction of site engineer. No tension on lines on either side of the valves will be allowed. Size of the S&C valve - 75/50 mm NB dia.	NUMBER	25
530	**Installation of Gas / Oil Separators:** Installation of Vertical Gas Separators which includes installation/fixing of all accessories on the body of the unit such as safety valves, drain valve, level controllers, float door, pressure / temperature gauges, and all other associated jobs including grouting of foundation bolts as directed and to the satisfaction of the company engineer. Foundation bolts including washers shall be supplied by Contractor.	NUMBER	1
540	**Manifold:** Handling, aligning, fabrication, erection and testing of Manifold completed with fixing of all types (Both screwed and welded) of pipe fittings, pipe nipples, check / gate / plug / ball valves both flanged and screwed on or above ground / overhead/at all elevations, generally asas per standard manifolds of existing water injection stations of Oil India Limited. The manifolds are then to be tested hydraulically to a maximum pressure of 180 kg/cm2 for the Delivery one and up to 50 Kg/cm2 for the Suction one for 24 hours.	NUMBER	2
550	**Hydraulic testing of the installation:** All piping, vessels, and equipment installed are to be hydraulically tested to the pressure range given below for a period of 24 hours. The company will provide necessary pressure recorders, charts and pressure gauge for the job. Contractor will have to arrange for suction/filling line, water pump, testing pump, source water and lay necessary pipelines of required length with connections and other arrangement for the following testing jobs. i) 10" Suction Manifold & piping at 50 Ksc. ii) 10" Delivery Manifold & Piping at 180 Ksc	LUMPSUM	1
560	**Supply of valve:** Supply of flanged type valves as per API Specifications with companion flanges, applicable gaskets, nuts and bolts. For 250 NB Dia. GATE VALVE (ASME 900 Class)(API 600)	NUMBER	1

Item No.	Description of Services	UOM	Quantity
570	**Same as Item No. 560 but GATE VALVE (API 600) For 250 NB Dia. (ASME 150 Class).**	NUMBER	3
580	**Same as Item No. 560 but GATE VALVE (API 600) For 150 NB Dia. (ASME 150 Class)**	NUMBER	2
590	**Same as Item No. 560 but SWING CHECK VALVE(API 6D) For 150 NB Dia. (ASME 150 Class)**	NUMBER	5
600	**Same as Item No. 560 but GLOBE VALVE For 150 NB Dia. (ASME 150 Class)**	NUMBER	5
610	**Same as Item No. 560 but GATE VALVE (API 600) For 100 NB Dia. (ASME 900 Class)**	NUMBER	6
620	**Same as Item No. 560 but GLOBE VALVE For 100 NB Dia. (ASME 900 Class)**	NUMBER	6
630	**Same as Item No. 560 but SWING CHECK VALVE (API 6D) For 100 NB Dia. (ASME 900 Class)**	NUMBER	6
640	**Same as Item No. 560 but SAFETY RELIEVE VALVE For 50 NB Dia. (ASME 900 Class).**	NUMBER	2
650	**Same as Item No. 560 but SAFETY RELIEVE VALVE For 50 NB Dia. (ASME 150 Class)**	NUMBER	2
660	**Same as Item No. 560 but GATE VALVE (API 600) For 50 NB Dia. (ASME 900 Class)**	NUMBER	2
670	**Same as Item No. 560 but GLOBE VALVE For 50 NB Dia. (ASME 150 Class)**	NUMBER	7
680	**Same as Item No. 560 but GLOBE VALVE For 50 NB Dia. (ASME 150 Class) (Gas Service)**	NUMBER	4
690	**Same as Item No. 560 but GLOBE VALVE For 25 NB Dia. (ASME 150 Class) (Gas Service)**	NUMBER	11
700	**Drinking Water Tank 3 KL (Two Nos.) with Staging:** Supply of two numbers of 3 KL Sintex tank and fabrication, erection and grouting of staging facilty and other accessory with ladder and covering on the ladder for safe access to tanks. Also supply and sinking of shallow tube well including 5 HP submersible motor with electrical accessories. Further installtion of two number of 3 KL tanks and laying of drinking water pipelines of various sizes with necessary tap and valves, from tank to the respective houses ie. Kitchen, Operator house, Security House, Lube oil house or any other as directed by the OIL engineer. Further, commsioning and testing of the drinking water system and conforming that the received tube well water matches with the quality of reference surrounding ground water as selected by OIL engineer.	NUMBER	1
710	**Earth Electrode with brick enclosure:** Supply and Installation of Earth Electrode with brick enclosureSupply with installation & commissioning of readymade maintenance free CPRI approved chemical earthing system with 50 mm dia 3.00 Metres length corrosion free G.I. pipe electrode complete with backfill compound Minerals 50 Kg. A brick enclosure at least 50 cm high shall be erected around the electrode, rectangular in shape (0.7 m x 0.7 m), keeping gaps for insertion of earth straps. The pit shall finally be watered and covered with a RCC or chequer plate cover of the same size as the enclosure. The complete job will be considered as one unit.	NUMBER	32
720	**Supply and Installation of G.I strap 50 x 6 mm:** Providing and fixing 50mm X 6 mm G.I strap on surface or in recess for connections as required from equipment to earth electrode or earth bus.	METER	300
730	**Supply and Installation of G.I strap 30 x 6 mm:** Providing and fixing 30mm X 6 mm G.I strap on surface or in recess for connections as required from equipment to earth electrode or earth bus.	METER	100
740	**Supply and Installation of G.I strap 25 x 3 mm:** Providing and fixing 25mm X 3 mm G.I strap on surface or in recess for connections as required from equipment to earth electrode or earth bus.	METER	200
750	**Laying and Installation of area light/power cables (Laying in buried cable trench):** Laying and installation of cables of all sizes in buried underground cable trench with supply of all materials and installation: The job involves cutting trench (45 cm width and 75 cm depth) in ground, spreading a layer of sand at the bottom of the trench, laying the cable and earth wire/cable on the layer of the sand, then covering the cables with another layer of sand 7.5 cm thick, then covering the top sand layer with first class local bricks (bricks are to be placed crosswise over the cables without any gap) and finally refilling the trench with the excavated earth and putting cable trench markers 20 metres apart or as directed by company engineer (cable trench markers shall be supplied by OIL).	CUBIC METER	400
760	**Laying and Installation of additional area light/power cables (Additional cable laying):** Laying of cable/s of size up to 4 core x 120 sq. mm in the existing trench of item No. 10 (Laying in existing/already dug trench)	METER	800
770	**Installation of area light/power cables (Laying and fixing on wall/roof surface):** Laying and installation of cables of all sizes with supply of all materials (fixing) of area light/power cables on wall/roof/any flat surface: The job involves fixing of the cable on wall (or any exising flat surface) with the help of saddles, screws and plastic fasteners. The cost to be measured in per metre.	METER	300
780	**Termination of cables:** Termination of cables with supply of all materials for PVCA Al. cable - up to size 3.5C X 120 mm2 Termination, testing and connection of PVCA aluminium cables (cable sizes up to 3.5 c x 120 mm2) with supply of all materials required for termination like cable glands, lugs, thimbles etc.: Job involves bringing the cable to required position, shaping, glanding, crimping of lugs/terminals, connection of finished terminal to the equipment. Item to be measured as one no. against each termination.	NUMBER	150

Item No.	Description of Services	UOM	Quantity
790	**Supply and Installation of Light poles for area lighting:** Supply and installation of all materials required for installation of one 9 m MS swaged (stepped) pole with base plate and two nos. brackets for fixing light fittings and/or ladder, including cement collar: The job involves transportation of pole to site, fixing of brackets, excavation of earth (to a depth of 1.5 m) with augur/spade, burying the pole in the pit, refilling and ramming in the excavated earth and brick/stone chips (leaving space for construction of cement collar), fixing a GI strap 2.5 m length, 30x6 mm2 as earthing connection of pole (to be bolted to the pole 1 m above ground and 1.5 m buried), casting of a cement concrete collar around the pole (annular with a thickness of 10 cm, to a depth of 0.5 m below ground and 0.5 m above ground and finishing with cement plaster/polish).	NUMBER	20
800	**Supply and Installation of light fitting for area illumination (on poles):** Supply and installation of all materials and installation of one no. of 400 W SON-T/HPMV/Metal Halide light fitting on existing pole (as in item 10). The job involves fixing of controlgear box/junction box at the foot of the pole (about 1 m above ground), fixing of incoming cable to CG/junction box, fixing of cable from CG/junction box to light fitting, earthing of light fitting and testing/orientation of the fitting.	NUMBER	20
810	**Supply and Installation of Light Fittings 2X28W T5 at Pump House:** Supply and installation of 2x28w T5 industrial batten light fittings (with plastic/perspex/polycarbonate covers) complete with all accessories such as ballast, starter, lamps, connection glands, switches, metallic switchboards etc. directly on wall/ceiling/roof of shed including connection of cable	NUMBER	8
820	**Supply and Installation of Light Fittings 2X28W T5 at Generator House:** Supply and installation of 2x28w T5 industrial batten light fittings (with plastic/perspex/polycarbonate covers) complete with all accessories such as ballast, starter, lamps, connection glands, switches, metallic switchboards etc. directly on wall/ceiling/roof of shed including connection of cable	NUMBER	6
830	**Installation of FLP light fittings at Lube Oil Shed:** Installation of FLP wellglass light fittings (160 W MLL/2 X 23 W CFL) with all materials for fixing like eye bolt, mounting arrangement etc. for pump house shed lighting: Job involves fixing of light fitting with eye bolt, mounting frame on pipe structure/truss/roof/pole or other supports and earthing.	NUMBER	2
840	**Installation of FLP switches at Lube Oil Shed:** Installation of FLP switch with all materials for fixing like mounting frame/pipe, arrangement etc. for control of light fittings etc. in Hazardous areas: Job involves fixing of FLP switch on mounting frame or pipes or other supports and earthing with 8 SWG GI wire	NUMBER	2
850	**Supply and Installation of Light Fittings 1X28W T5 at Operator House and Bathroom:** Supply, Installation, testing and commissioning of pre-wired, 1 x 28 W T5 Batten type fluorescent fitting with all accessories and tube etc., including fixing arrangement on wall, wiring and connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc as required. Fitting shall be similer to Philips TWG207 make type luminaire, including 1 No 28 W TL5 tube. Make: Philips/Crompton/GE/Bajaj/Havells or Approved by Engineer in Charge.	NUMBER	6
860	**Supply and installation of Ceiling fans, 1400 mm at Operator house:** Supply, Installation, testing and commissioning of 1400 mm sweep ceiling fan without modular step regulator, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable etc. as required. Make of fan: Havell/Crompton Greaves/Bajaj/ Orient or approved by concern Engineer in Charge.	NUMBER	2
870	**Point wiring at Operator House and Bathroom:** Wiring for light point/ fan point/ exhaust fan point/ call bell point with 3x1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium grade ISI approved PVC casing-capping, with modular switch, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. (identical size phase, neutral and earth wires, colour coded red, black and green respectively). Point wiring includes laying of PVC casing/capping on the roof also. Make of cable: Havells/Finolex/L&T/ Polycab, Make of PVC casing-capping: AKG/PLaza/Richa, Make of Modular switch: Legrand/L&T/MK/Scheider/Crabtree/ Indo-Asian or Approved by Engineer in Charge.	NUMBER	8
880	**Light plug point at Operator House and Bathroom (6 A switch socket wiring + supply and installation of 3 pin 5/6 A switch socket):** Wiring for light plug point (7 m length) with 3X1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium grade ISI approved PVC conduit alongwith FRLS PVC insulated copper conductor single core cable for loop earthing as required (identical size phase, neutral and earth wires, colour coded red, black and green respectively) and supply and installation of 6 A separate switch socket. Concealed Plug point wiring includes laying of PVC casing/capping on the roof also. Make of cable: Havells/Finolex/L&T/Polycab, Make of PVC conduit : AKG/PLaza/Richa or Approved by the Engineer in Charge.	NUMBER	2
890	**12 modules, PVC box at Operator House:** Supplying and fixing 12 modules, PVC box alongwith modular base & cover plate for modular switches in recess etc. as required. Make of Modular item: Legrand/L&T/MK/ Scheider/Crabtree/ Indo-Asian or Approved by Engineer in Charge. Supplying and fixing 12 modules, PVC box alongwith modular base & cover plate for modular switches in recess etc. as required. Shall also include 5/6 A modular switch socket and 2 nos. modular fan regulators. Make of Modular item: Legrand/L&T/MK/ Scheider/Crabtree/ Indo-Asian or Approved by Engineer in Charge.	NUMBER	1

Item No.	Description of Services	UOM	Quantity
900	**Supply and Installation of MCB DB at Operator House:** Supply and installation of MCBDB, 8 way [with 32 A RCBO- 01 no. +C series MCBs- 08 nos. (6 nos. 10A+ 2 nos. 20A)+ Metallic box- prewired] with all accessories on brick wall by means of adequate number (min. 4 nos.) of screws to be embedded in wall (holes are to be drilled in wall and filled up with approved type of plastic gutka/rowl plug to receive screws). Make of RCBO, MCBs and box shall preferably same and shall be Merlin-Gerin/ Siemens/Havell/Legrand/Indo-Asian.	NUMBER	1
910	**Supply and installation of Light Fittings 1X28W T5 at Dining and Kitchen Room:** Supply, Installation, testing and commissioning of pre-wired, 1 x 28 W T5 Batten type fluorescent fitting with all accessories and tube etc., including fixing arrangement on wall, wiring and connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc as required. Fitting shall be similer to Philips TWG207 make type luminaire, including 1 No 28 W TL5 tube. Make: Philips/Crompton/ GE/ Bajaj/Havells or Approved by Engineer in Charge.	NUMBER	4
920	**Supply and installation of Ceiling fans, 1400 mm at Dining Room:** Supply, Installation, testing and commissioning of 1400 mm sweep ceiling fan without modular step regulator, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable etc. as required. Make of fan: Havell/Crompton Greaves/Bajaj/ Orient or approved by concern Engineer in Charge.	NUMBER	1
930	**Point wiring at Dining and Kitchen Room:** Wiring for light point/ fan point/ exhaust fan point/ call bell point with 3x1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium grade ISI approved PVC casing-capping, with modular switch, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. (identical size phase, neutral and earth wires, colour coded red, black and green respectively). Point wiring includes laying of PVC casing/capping on the roof also. Make of cable: Havells/Finolex/L&T/ Polycab, Make of PVC casing-capping: AKG/PLaza/Richa ,Make of Modular switch: Legrand/L&T/MK/Scheider/Crabtree/ Indo-Asian or Approved by Engineer in Charge.	NUMBER	4
940	**10 modules, PVC box at Dining Room:** Supplying and fixing 10 modules, PVC box alongwith modular base & cover plate for modular switches in recess etc. as required. Make of Modular item: Legrand/L&T/MK/ Scheider/Crabtree/ Indo-Asian or Approved by Engineer in Charge. Supplying and fixing 10 modules, PVC box alongwith modular base & cover plate for modular switches in recess etc. as required. Shall also include 5/6 A modular switch socket and 1 no. modular fan regulators. Make of Modular item: Legrand/L&T/MK/ Scheider/Crabtree/ Indo-Asian or Approved by Engineer in Charge.	NUMBER	1
950	**Light plug point (6 A switch socket wiring + supply and installation of 3 pin 5/6 A switch socket) at Dining Room:** Wiring for light plug point with 3X1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium grade ISI approved PVC conduit alongwith FRLS PVC insulated copper conductor single core cable for loop earthing as required (identical size phase, neutral and earth wires, colour coded red, black and green respectively). Concealed Plug point wiring includes laying of PVC conduit in the roof/Wall also.Make of cable :Havells/Finolex/L&T/Polycab, Make of PVC conduit : AKG/PLaza/Richa or Approved by the Engineer in Charge.	NUMBER	2
960	**Supply and installation of Light Fittings 1X28W T5 at security hut:** Supply, Installation, testing and commissioning of pre-wired, 1 x 28 W T5 Batten type fluorescent fitting with all accessories and tube etc., including fixing arrangement on wall, wiring and connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc as required. Fitting shall be similer to Philips TWG207 make type luminaire, including 1 No 28 W TL5 tube. Make:Philips/Crompton/GE/Bajaj/Havells or Approved by Engineer in Charge.	NUMBER	4
970	**Supply and installation of Ceiling fans, 1400 mm at security hut:** Supply, Installation, testing and commissioning of 1400 mm sweep ceiling fan without modular step regulator, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable etc. as required. Make of fan: Havell/Crompton Greaves/Bajaj/ Orient or approved by concern Engineer in Charge.	NUMBER	1
980	**Point wiring at security hut:** Point wiring Wiring for light point/ fan point/ exhaust fan point/ call bell point with 3x1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium grade ISI approved PVC casing-capping, with modular switch, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. (identical size phase, neutral and earth wires, colour coded red, black and green respectively). Point wiring includes laying of PVC casing/capping on the roof also. Make of cable: Havells/Finolex/L&T/ Polycab, Make of PVC casing-capping: AKG/PLaza/Richa ,Make of Modular switch: Legrand/L&T/MK/Scheider/Crabtree/ Indo-Asian or Approved by Engineer in Charge.	NUMBER	4

Item No.	Description of Services	UOM	Quantity
990	**Light plug point at security hut:** Light plug point (6 A switch socket wiring + supply and installation of 3 pin 5/6 A switch socket) Wiring for light plug point with 3X1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium grade ISI approved PVC conduit alongwith FRLS PVC insulated copper conductor single core cable for loop earthing as required (identical size phase, neutral and earth wires, colour coded red, black and green respectively). Concealed Plug point wiring includes laying of PVC conduit in the roof/Wall also.Make of cable :Havells/Finolex/L&T/Polycab, Make of PVC conduit : AKG/PLaza/Richa or Approved by the Engineer in Charge.	NUMBER	2
1000	**10 modules, PVC box at security hut:** Supplying and fixing 10 modules, PVC box alongwith modular base & cover plate for modular switches in recess etc. as required. Make of Modular item: Legrand/L&T/MK/ Scheider/Crabtree/ Indo-Asian or Approved by Engineer in Charge. Supplying and fixing 10 modules, PVC box alongwith modular base & cover plate for modular switches in recess etc. as required. Shall also include 5/6 A modular switch socket and 1 no. modular fan regulators. Make of Modular item: Legrand/L&T/MK/ Scheider/Crabtree/ Indo-Asian or Approved by Engineer in Charge.	NUMBER	1
1010	**Supply and Installation of MCB DB at security hut:** Supply and installation of MCBDB, 8 way [with 32 A RCBO- 01 no. +C series MCBs- 08 nos. (6 nos. 10A+ 2 nos. 20A)+ Metallic box- prewired] with all accessories on brick wall by means of adequate number (min. 4 nos.) of screws to be embedded in wall (hole are to be drilled in wall and filled up with approved type of plastic gutka/rowl plug to receive screws). Make of RCBO, MCBs and box shall preferably same and shall be Merlin-Gerin/ Siemens/Havell/Legrand/Indo-Asian.	NUMBER	1
1020	**Nomenclature of electrical panels, equipment and provision of danger/caution boards:** Nomenclature of electrical panels, equipment, earth pits, lighting poles etc. as per TOR of the contract and Supply and fixing of Danger /Caution boards at all electrical panels and equipment as per TOR of the contract clause	LUMPSUM	1

1. Bidder must include all liabilities including statutory liabilities but excluding Service Tax in their quoted rates. Service Tax, if applicable, shall be to the Company's account. However, Service Tax portion payable directly by the Service Provider (if applicable) shall be reimbursed to the Contractor on the basis of the documentary evidence.
2. Contractors are required to raise monthly Service Tax Invoices for reimbursement of Service Tax against the contract. In absence of Service Tax Invoices, Service Tax will not be reimbursed and the consequences of the same shall entirely rest upon the Contractor.
3. 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 "c-folder" (Un-priced Techno-Commercial Bid) otherwise the bid will be rejected.
4. Mobilisation Period: 15 (Fifteen) days from the date of issue of Letter of Award (LOA).
5. Tenure of Agreement: 6 (Six) months from the date of issue of LOA.
6. The quantities mentioned above are purely for evaluation purpose only. However, payment shall be made as per actuals.

OIL INDIA LIMITED
(A Govt. of India Enterprise)
DULIAJAN (ASSAM)

PARTICULAR SPECIFICATIONS AND INSTRUCTIONS OF WATER INJECTION STATION HAPJAN-MAKUM

A. GENERAL TERMS AND CONDITIONS:

1.0 WORK ORDER:

i) Soon after this contract is signed by both the parties i.e. THE CONTRACTOR and OIL INDIA LIMITED (OIL), OIL shall issue work order upon receipt of labour clearance advice, specifying the actual date of commencement of the works / service and the date of its completion based on the contract provisions.

ii) During the execution of the works, THE CONTRACTOR must maintain a steady rate of progress to complete the works within the time provided in this contract.

2.0 PROGRAMME OF WORKS TO BE APPROVED BY THE OIL INDIA LIMITED (OIL):

i) Immediately after receipt of the work order, as described under Clause no. A.1.0 above, but not later than fifteen days thereof THE CONTRACTOR shall submit the programme of works to the Engineer for his approval showing:

a) Generally, the order of procedure and method in which the contractor proposes to carry out the works in relation to time.

b) The distinct phases of works arrangement of constructional plant and equipment, temporary works, delivery at site of such materials are to be supplied by THE CONTRACTOR, site placement and plan of utilization of THE COMPANY's materials, stages of inspection of works in phases by the Engineer and all other relevant parts of the work all in relation to Time. Upon receipt of such program from THE CONTRACTOR, the Engineer shall finalize the program after such modifications in consultation with THE CONTRACTOR, as are deemed necessary for efficient and timely completion of works. The copy of approved program shall be issued by the Engineer to THE CONTRACTOR, and THE CONTRACTOR shall be bound by this program, not only wholly but also phase-wise.

ii) Revised program of works can be submitted, while the works are still in progress, by THE CONTRACTOR and approved by the Company Engineer if and when an unforeseen condition or a combination of such conditions demand provided, the Engineer is fully satisfied about the changed circumstances necessitating a revised program. Such approved Revised Program shall then replace the earlier program without extension of time.

iii) The Engineer shall have power to call THE CONTRACTOR at any time while the works are still in progress for a further detailed program of works in respect of any particular phase of works, if such a phase is considered as complex in the opinion of the engineer and requiring further break-up into sub-phases. In such an event, THE CONTRACTOR shall, if so required by the Engineer, furnish such information to the Engineer so as to enable him to assess and approve the sub-phase program or phase previously considered. THE CONTRACTOR shall be bound by such sub-phase of the program as part of the overall program.

3.0 COMMMENCEMENT OF WORK:

THE CONTRACTOR shall commence the works within the required number of days after the date of issue of the work order or of an instruction in writing to this effect by the Company Engineer or from the date specifically mentioned in the work order, THE CONTRACTOR shall proceed with the work in an efficient manner following the detailed program which is previously approved by the company ENGINEER, as described in the contract.

4.0 SEQUENCE OF WORKS:

The work shall commence at the point or points approved by THE COMPANY and shall proceed in an orderly workman like manner to complete as specified by THE COMPANY unless the COMPANY may at any time during the progress of the works require that works shall be done upon and part as specified by the COMPANY's representatives. No change in sequence of works shall be made without express 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 in connection therewith. If at any time during the progress of the works any error shall appear or arise in the position levels, dimensions or alignment of any part of the works, THE CONTRACTOR on being required so to do by the COMPANY Engineer shall at his own expense rectify such error/DEFECTS to the satisfaction of the COMPANY Engineer .

6.0 EXECUTION OF WORKS:

i) Decision of the Company's engineer regarding clarification of any item of the contract will be final and no compromise will be made in any respect.

ii) THE CONTRACTOR shall execute and complete the works in strict accordance with the specifications hereto and shall be entirely responsible for the execution of the works in all respect in accordance with the terms and conditions specified herein notwithstanding any approval which the Company Engineer or any other representative of THE COMPANY 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. Subject to the foregoing THE CONTRACTOR shall be at liberty at his own risk, to employ his own method subject to the approval of the Company Engineer, for the execution of the works. If in the opinion of THE COMPANY or THE COMPANY's Engineer duly authorized for the purpose hereof, the works or any item thereof is found to be not in accordance with the specifications and exhibits, THE CONTRACTOR shall remove the defect and re-execute the works or the item in accordance therewith at his own expense, whether such defect be discovered during the normal course of inspection hereafter or subsequently. Delay caused in remedying any defective performance shall not absolve THE CONTRACTOR from adhering to the time schedule as provided in the contract hereof, and no extension in time shall be granted for such delay under any circumstances whatsoever.

iii) THE CONTRACTOR shall give THE COMPANY's Engineer reasonable notice 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 works requiring appropriate approval of the company or testing are covered up without such approval having been given or such test (s) carried out, 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 it on completion of such examination or test. THE CONTRACTOR shall uncover any inspected by subsequently questioned work or item of work if so requested by the Company Engineer. If such works are found to be in accordance with the specifications and exhibits, the work involved in re-examination and replacement shall be treated as an addition and shall be paid for by THE COMPANY. If such works be found not in accordance with the specifications and exhibits all costs involved in re-examination and making good the defect and replacement shall be borne by THE CONTRACTOR.

7.0 WORKS TO THE SATISFACTION OF THE COMPANY:

THE CONTRACTOR shall execute the works entirely in strict accordance with the accepted practices, laid out standards and in accordance with the specifications as spelt out, to the complete satisfaction of the Engineer and shall comply with and adhere strictly to the Company Engineer's instructions and directions on any matter relating to this contract.

8.0 ACCEPTANCE OF WORKS:

THE CONTRACTOR shall be responsible for the care and maintenance of the works until the works are accepted in writing by THE COMPANY, such acceptance to be made without unreasonable delay after THE COMPANY is satisfied, that the works have been completed in accordance with the specifications. THE CONTRACTOR shall give THE COMPANY prompt notice of completion. Failure or neglect on the part of the ENGINEER to condemn or reject inferior work or materials shall not imply acceptance of such works or materials. It may further be noted that the giving of written 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 to be subject to such defects, 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:

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 fulfillment 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 Company Engineer.

ii) In respect of completed works accepted by the Company Engineer either in part or in full at his discretion, the Engineer shall in consultation with THE CONTRACTOR call upon THE CONTRACTOR by a notice, written or verbal to be present at work site on specific date and at specific hour for the purpose of making measurements and recording the same. THE CONTRACTOR or its authorized representative shall be present at the site and shall furnish to the Company Engineer all particulars required for a proper measurement. If THE CONTRACTOR fails to attend or neglect or omit to send such authorized representative, then the measurement made by the Engineer or approved by him/her will be the conclusive measurement of the works and THE CONTRACTOR shall 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 Company Engineer wherein applicable or by measurements of detailed items as described in sub-clause 9 (ii) above as deemed necessary and at the discretion of the Company Engineer wherever applicable.

iv) All measurements shall be duly recorded and certified by the Company Engineer 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 shall be deemed to have been prepared and measurements shall be made in accordance with the procedures described for the various classes of work in the specifications or if no procedure be so specified then the method of measurements shall be as described in the Schedule of Rates for the corresponding items of work.

vi) All materials / equipment to be supplied / used by THE CONTRACTOR in accordance with this contract shall be measured / inspected after the materials / equipment have been duly approved as to their specifications and other requirements by the Company Engineer, before the material / equipment is used on the work in presence of THE CONTRACTOR or its authorized representative. Such measurements shall be duly recorded as per sub-clause 9 (iv) above.

vii) The Engineer shall be free to reject for purpose of measurement any materials / equipment supplied by the CONTRACTOR at sites if such materials are not up to the required specifications and differ from the previously approved samples.

viii) Notwithstanding the fact that certain works and materials have been already measured and recorded by the Company Engineer, THE CONTRACTOR shall remain fully responsible for all such works and materials till the final expiry of the defect liability period(of one year).

10.0 RIGHT OF INSPECTION:

THE COMPANY shall have the right but not the obligation to inspect the works during its progress. THE CONTRATOR shall provide proper access for such inspection. THE COMPANY shall nominate the Inspectors for this purpose and shall arrange for all inspection and tests to be carried out promptly after notification.

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.

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

i) THE COMPANY shall furnish the materials as detailed in clause no. 24.0. All materials shall be checked, agreed and recorded by both THE COMPANY AND THE CONTRCTOR at the time

when THE CONTRACTOR takes delivery. This record shall determine the quantity, description and condition of materials delivered to the CONTRACTOR by the COMPANY. THE CONTRACTOR shall not be relieved of responsibility for such pipes and materials by failure to participate jointly with the Engineer in making or signing materials receiving or transfer records. The Engineers receiving records will determine the specification, quantity and condition of pipe and materials for further accounting purposes. Upon receipt of materials from the Company, THE CONTRACTOR shall visually inspect the same to ascertain that the same are free of defects except in relations to the quality and workmanship. Any defect apparent on visual inspection must be notified to THE COMPANY immediately for effecting necessary replacement / repairs / remedies.

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 DRAWING TO BE SUPPLIED BY THE COMPANY:

i) Pump foundation drawing and meter run shed, walkways and pipe supports drawing (ref. OIL/7707) will be made available. THE CONTRACTOR shall be bound to go through the supplied drawing thoroughly and carefully in conjunction with all other connected drawings and bring to the notice of the Company Engineer discrepancies if any, therein before actually carrying out the works. Copies of all detailed working drawings relating to works shall be kept at THE CONTRACTOR's office on the site and shall be made available to the Engineer at any time during the contract. The drawing shall be returned to THE COMPANY on completion of the works by the contractor.

14.0 MATERIALS, LABOUR, TOOLS, EQUIPMENT etc TO BE FURNISHED BY THE CONTRACTOR:

i) THE CONTRACTOR shall furnish all materials consumables, labour, tools, supervision, plant and equipment necessary to complete the works within the time schedule and in accordance with the specifications. All material furnished 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 also be new. No substitution of any materials shall be made without the written approval of THE COMPANY and any materials which do not conform with the specifications or otherwise rejected, shall be removed immediately from the site and replaced with materials to the satisfaction of THE COMPANY. In all cases where an article is specified with the words 'Approved Equal', THE COMPANY shall be the sole judge as to whether the substitution specified is equal to the materials specified and its decision shall be final. Any equipment furnished by THE CONTRACTOR shall be suitable for the purpose for which it is to be used and shall be in good condition.

ii) THE COMPANY shall have a first lien on all plant and machinery brought or caused to be brought by THE CONTRACTOR for all payments by THE CONTRACTOR to THE COMPANY under this contract with our prejudice to the right of recovery in any other manner as provided in this contract or otherwise.

iii) Electricity, water, accommodation etc. for THE CONTRACTOR's men will not be provided by the Company. These are to be arranged by the Contractor itself. Further electrical power required for construction works shall also be arranged by the contractor.

iv) No transport service for transfer of THE CONTRACTOR's men & material will be provided by the Company.

15.0 THE CONTRACTOR's EMPLOYEES:

i) THE CONTRACTOR shall perform the works in a workmanlike manner with qualified, competent, careful and efficient workmen in strict conformity with the provisions in this contract. The Company Engineer will have the right to require the removal from the works of any employee of THE CONTRACTOR of who in the Engineer's opinion may be incompetent, careless or not qualified 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. The Contractor shall obtain labour clearance certificate/advice from the concerned authority as applicable. The Contractor shall also arrange for Industrial pass for his labours & supervisors from CISF/OIL security for entering into industrial area.

16.0 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 engineer 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 engineer may consider necessary. If in the opinion of the engineer, 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.

17.0 PERFORMANCE GUARANTEE:

Workmanship and quality of materials supplied by THE CONTRACTOR are to be guaranteed for a minimum period of six (06) months from the date of commissioning. THE CONTRACTOR shall repair and replace any defects occurred by way of bad workmanship or mishandling or defective / substandard materials supplied during the guarantee period of six (06) months from the date of commissioning of the installation and acceptance by the Company.

18.0 REPORTING OF PROGRESS:

The Contractor shall furnish to the Company daily Progress Reports along with applicable drawings indicating all details of the construction. Further, the Contractor shall submit to the Company the AS BUILT DRAWING of the installation after completion of the construction job.

19.0 HEALTH, SAFETY & ENVIRONMENT (HSE) MEASURES:

i) All safety measures are to be taken and followed strictly as per Company's rule and as per OIL Mines Regulation, 1984 as well as other relevant codes / standards applicable in oil mines.

ii) THE CONTRACTOR must provide safety appliances & protective gears to his people during works.

iii) THE CONTRACTOR must sign and submit Safety Assurance Certificate along with submission of tender duly filled in.

iv) Any other safety measures which might require to be adopted during the work will be intimated and shall be strictly followed by THE CONTRACTOR.

v) 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 all HSE laws by the sub or sub-sub-contractors.

vi) 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 and Full Body harness has to be DGMS approved. 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. All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.

vii) 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 mining operation / operations to be done by THE CONTRACTOR and how it is to be managed.

viii) 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.

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

x) THE 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.

xi) All persons deployed by THE CONTRACTOR for working in a mine must undergo Mines Vocational Training, initial medical examination (IME)/PME. They should be issued photo identity cards stating the name of THE CONTRACTOR and the work and its validity period, indicating status of MVT, IME & PME.

xii) 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 MVT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons.

xiii) The return shall be submitted quarterly for contracts of more than one year. However, for contracts of less than one year, returns shall submit monthly.

xiv) 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 / Engineer / Official / Supervisor/Junior Engineer for safe operation.

xv) 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.

xvi) Any compensation arising due to accident of THE CONTRACTOR's personnel while carrying out the job, will be payable by THE CONTRACTOR.

xvii) THE CONTRACTOR shall have to report all incidents including near miss to Installation Manager / departmental representative of the concerned department of OIL.

xviii) 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.

xix) 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.

xx) The health check-up of contractor's personnel is to be done by THE CONTRACTOR in authorized Health Centers as per OIL's requirement & proof of such test(s) is to be submitted to OIL.

xxi) THE CONTRACTOR to arrange daily tool box meeting and regular site safety meetings and maintain records.

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

xxiii) THE CONTRACTOR's 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 employees' act or omissions at work.

xxiv) THE CONTRACTOR's employee must, while at work, cooperate with his or her employer or other persons so 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.

xxv) THE CONTRACTOR's arrangements for health and safety management shall be consistent with those for the mine owner.

xxvi) In case THE 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.

xxvii) 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.

xxviii) THE CONTRACTOR should prevent the frequent change of his contractual employees as far as practicable.

xxix) THE CONTRACTOR should frame a mutually agreed bridging document between OIL & THE CONTRACTOR with roles and responsibilities clearly defined.

xxx) For any HSE matters not specified in the contract document, THE CONTRACTOR will abide by the relevant and prevailing Acts /rules /regulations / pertaining to Health, Safety and Environment.

20.0 TIME OF COMPLETION:

Time of completion of the WIS (Water Injection Station) HAPJAN/MAKUM along with all other associated jobs is 06 (SIX) months from the date of issue of LOA.

21.0 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 Intent awarding the contract. Further, all mobilization activities shall be completed by THE CONTRACTOR within 15 (fifteen) days from the date of issue of LOA by the company.

22.0 SPLITTING OF WORKS:

The works may be split up amongst more than one contractor at the sole discretion of the Company.

23.0 RESPONSIBILITY OF THE CONTRACTOR:

i) THE CONTRACTOR shall be responsible for all that are covered in Technical Specifications, Schedule of Rates, General Conditions of Contract, Special Conditions of Contract and elsewhere expressed in this tender document and subsequently, stipulations of the contract agreement to be entered into between the Company & THE CONTRACTOR.

ii) THE CONTRACTOR shall bear all the cost in his quoted price towards mobilization at site and demobilization including bringing in equipment, work force, materials, dismantling the equipment and clearing the site etc.

iii) THE CONTRACTOR shall be solely responsible for making available all requisite construction equipment, special aids, cranes, transport facilities, tools, tackle and testing equipment and appliances for successful execution of the work.

iv) THE CONTRACTOR shall take utmost care for not damaging or interfering with any Public Utility System, OIL's benchmarks, proximate facilities & operations during execution of the project. Any inadvertent damage / interference caused however shall be expressly repaired / restored to the original state by the Contractor at his own cost.

24.0 OIL'S SCOPE OF SUPPLY:

OIL will provide the following materials for the project.

i) All process and utility pipes, Pipe Fittings, Equipment with accessories, pressure vessels(only vertical unfired),

ii) Four numbers of Water injection Pumping Units

iii) Two numbers of 125 KVA Genset.

iv) 2.7/8 inch used tubing pipe

All other materials required for the project, including electric power required during execution of the project will have to be arranged by THE CONTRACTOR himself.

25.0 WORKS DURING RAINY DAYS & DEWATERING:

i) The execution of the work may entail working in rainy days or with damaged soil condition in and around work site also. It is the responsibility of the contractor at his cost to keep the work site as well as area surrounding it workable with appropriate measures so as to facilitate uninterrupted work. The Contractor must therefore cater adequately for such situations as may be required for the job and plan and execute the project in strict adherence to implementation schedule and according to the terms and conditions of the Contract.

ii) During work in the rainy days, it shall be the responsibility of THE CONTRACTOR to keep the work site free from water at his own cost.

26.0 APPROVED MAKE:

All supplies for the project execution and shall be from vendor(s) as approved by the company. The bidder in his techno-commercial bid shall indicate the particular vendor(s) in respect of supply items with documentation for our approval. Documents pertaining to the following supply items shall be forwarded by the bidders.

i) Steel plates if required should be from TATA/SAIL or equivalent

ii) All structural materials for the various sheds and houses should be from TATA/SAIL or equivalent

iii) Structural materials (I sections, , angle irons of different sizes, square hollow sections, rectangular hollow sections, circular hollow sections) for different sheds are to be from TATA/SAIL or equivalent.

iv) All the metal roofing & side wall(wherever necessary) should be Polyester Coated Galvanized Steel Sheets having 38 mm crest height and 190mm centre to center pitch distance, 1060 mm width made from cold rolled low carbon steel conforming to IS 513 , the same are hot dipped galvanized in a continuous coil coating line as per IS 277, and finally Coated with polyester coating ,primer coating and alkaloid coating with approved colour, size and quality as per IS: 14246:95 fitted with guard film. More over the accessories of the Polyester coated Galvanized Sheet (viz. ridges, gutters, valleys, flashings) 500mm width made as per the specification as mentioned above with approved colour size and quality as per IS: 14246:95 fitted with guard film. Self-drilling self-tapping screws are to be xylan coated conforming to AS3566, 1000h SST and fitted with EPDM washers. The thickness of the roofing must be of min. 0.60 mm. All the materials have to be approved by OIL. Documentary evidence of procurement must be furnished before its use.

27.0 EQUIPMENT FOR RADIOGRAPHIC INSPECTION, VACUUM & AIR TEST ETC:

All shall be arranged by THE CONTRACTOR and cost shall be included against respective items.

28.0 PERSONNEL FOR RADIOGRAPHIC INSPECTION & EXAMINATION:

THE CONTRACTOR shall arrange suitable personnel / inspection agency at his cost with the approval of the Company before starting of works.

29.0 WELDERS TEST:

All welders engaged by THE CONTRACTOR for performance of the work shall be subjected to welders test as per relevant codes in presence of OIL's engineer and Third Party Inspection Agency and they will be allowed to work only after satisfactory performance in the test and also to the satisfaction of the site engineer. All arrangement for the test including passport photograph, bio-data of the welder shall be arranged by THE CONTRACTOR at their cost.

30.0 PAYMENT:

Payment will be released against each service line items for the quantity of work completed as progressive payment during the progress of the contract. However, Payments will be released only once in a month.

31.0 DELIVERABLES FOR THIS CONTRACT

The ultimate deliverable for the above project is the Construction and Commissioning of Water Injection Installation with all the required surface facilities and equipment in compliance with the current statutory regulation and norms. The above construction should be completed in a phased manner as elucidated in the contract document.

Phase I: Development of available land and construction of foundation and plinths.
Phase II: Construction of various industrial sheds and housings for pumps, gensets etc.
Phase III: Transportation and installation of various pipes, valves and fittings.
Phase IV: Installation of Electrical Systems, lightings and instrumentation units.
Phase V: Testing & Commissioning of Water Injection Station.

PHASE I: DEVELOPMENT OF AVAILABLE LAND AND CONSTRUCTION OF FOUNDATION AND PLINTHS, EARTHWORK, EXCAVATION AND BACK FILLING

32.0 SCOPE OF WORK:

The Scope of Work under this contract shall generally include design, detail engineering, preparation of drawings, obtaining approval from OIL, construction, fabrication, erection, installation, tie-up/hook up with existing system, testing, painting, supply of all materials, items, equipment, transportation, labour, consumables, tools and tackles including Commissioning etc. required for completion of job as per specifications, standards, codes, data sheets, drawings & good engineering/ national/ international standards/practice.

Soil testing, detailed Planning & design of all civil works shall be done as per relevant IS codes applicable for the site & area of the plant. Soil testing report, Architectural, detailed structural and working drawings for the purpose of construction; detailed drawings for plumbing; detailed planning of drains & landscaping shall be submitted by the contractor for OIL's approval prior to execution. All structural working drawings regarding buildings and any other structures shall have to authenticated and approved by reputed bodies like IIT, EIL,etc.

32.1 CIVIL ENGINEERING TERMS AND CONDITIONS:

32.1.1 Structures, facility supports, painting etc.

i) Design of structures & buildings for wind load shall be as per relevant IS & other codes.

ii) Design of structures for seismic load shall be as per IS:1893 part I 2004.

iii) Detail soil testing shall be carried out as per relevant code at site by a reputed party in this field to find out Bearing Capacity of soil. The report shall be submitted to OIL for final approval prior to utilise the data for design of structures.

iv) Design and construction of pile foundations if required shall be carried out as per relevant IS & other codes.

v) The effect of ground water table shall be duly considered while designing the structures.

vi) Minimum depth of foundation for all structures shall be from the Finished Grade Level (FGL) where cutting has been done and shall be from the Natural Grade Level (NGL) where filling has been done at respective location, for achieving the required FGL (200mm above the concrete cellar top of a nearby well which possesses MSL).

vii) Minimum grade of concrete used for various types of structures, shall be M20.

viii) Finished Ground Level of the project site shall be 200 mm above the cellar top of the nearby well. Finished floor level should be 450mm above the Finish Ground Level (FGL).

ix) The cement to be used shall be Ordinary Portland Cement (OPC) conforming to IS: 269 or Portland slag cement conforming to IS: 455.

x) Overhead tanks shall rest on independent staging with proper design and to be approved by OIL.

xi) All bricks shall be kiln burnt of class designation 75.

xii) All steel structures etc. shall be constructed & fabricated in accordance with relevant IS codes.

xiii) All structures shall be thoroughly cleaned of all dirt, grease, rust and mill scale as per IS: 1477 (Part-I) - 1971. Removal of rust and scale shall be preferably by power driven wire brushes. Area, which becomes inaccessible after assembly, shall be painted before assembly after cleaning the surfaces as described above. The surfaces shall be perfectly dry before painting.

Wherever shop primer painting is damaged, the surfaces shall be thoroughly cleaned and touched up with the corresponding primer. Site painting shall not be done

in frosty or foggy weather or when humidity is such as to cause condensation on the surface to be painted.

Unless otherwise specified, all structures shall be painted with one coat of red oxide zinc chromate conforming to IS: 2074-1979 as primer to be applied at shop. For all structure second coat of primer shall be applied at site after erection. All structures shall be given two coats of finishing paints of approved quality and colour over primer. The under coat shall have different tine to distinguish from the finishing coats.

xiv) Usage of in-house developed software packages shall not be permitted. Only STAAD-III/ STAAD PRO or any other standard software shall be used for analysis and design of the structures.

xv) A note shall be mentioned in all the relevant drawings, clearly specifying that the foundations and supporting structures have been designed considering the Hydro-test weight of the Vessels/ Facilities / Equipment.

32.1.2 Equipment foundations

RCC foundations for vibrating equipment e.g. Gensets, engines, pumps shall satisfy the following requirements.

i) The minimum grade of concrete to be used shall be M20.

ii) Minimum reinforcement as per requirements of IS:2974 shall be provided unless required otherwise by design.

iii) The soil stress below foundations under dead loads shall not exceed 80% of the allowable soil bearing capacity for static loading.

iv) Foundations shall be so designed that natural frequency of the foundation system shall not resonate with the following:

Operating speed of the motor / engine

2 x Operating speed of the motor / engine

Critical speed of the motor (for centrifugal pumps).

v) Natural frequency of the foundations shall preferably be +/- 20% away from the above mentioned frequencies. However, amplitudes of vibration of the foundation block shall always be checked to be within permissible limits.

vi) Amplitudes of vibration shall be less than values specified by the equipment manufacturer. If not specified, provisions of IS:2974 shall be followed.

vii) The foundation and its superstructure shall be separated from adjacent foundations and platforms. Clear air gap shall be provided in superstructure to avoid transmission of vibrations to adjacent structures. Special note shall be given on the drawing in this respect and suitable details shall be shown as required.

viii) Foundations shall not rest on previously back-filled or sensitive soils.

ix) When several foundations for similar equipment need to be seated on a common raft, the computation for vibration shall proceed assuming that each machine foundation is independent of others by breaking up the raft into sections corresponding to separate foundations. The design value for the permissible amplitude of vibrations may be increased by 30 percent.

x) Minimum reinforcement as per IS: 2974 shall be provided unless otherwise required by design.

32.1.3 Civil Finishing Work

i) All the exposed surface of the RCC work viz. column, beam, slab, terrace (chhajja) etc. shall be plastered with 6 mm thick 1:4 cement mortar.

ii) All the internal brick work shall be plastered with 15 mm thick 1:5 cement mortar.

iii) All the external brick work shall be plastered with 20 mm thick 1:5 cement mortar.

iv) Rolling shutters, wherever required, shall be used 18 SWG rolling shutter with adequate locking arrangement.

v) Aluminium window shall be provided as per IS specification.

vi) Standard steel/aluminium/ decorative flush doors shall be provided to meet the specific requirement.

vii) All internal plastered surfaces shall be distempered with oil-bound distempers (two coats) on top of priming coat with cement primer. Before distempering, surfaces shall be smoothened with plaster of Paris.

viii) All external plastered surfaces shall be painted with two coats weather coating applying weather shield exterior acrylic emulsion paint over one coat primer.

ix) All steel & wooden surfaces shall be painted with two coats of synthetic enamel paint over a coat of primer.

x) Floors of Operator house for installation Manager, Plant Management Control Room and Utility building shall be of vitrified tiles.

xi) All toilet block shall be fitted with modern good quality fittings. Floor shall be covered with good quality marble tiles and wall shall be fitted with good quality glazed tiles.

xii) Certificates for quality assurance for all building materials utilize shall be furnished from appropriate authorities.

32.1.4 Site Grading

i) Actual site grading layout shall be developed by the contractor based on the levelling philosophy. Site grading shall also include micro grading after erection/construction of equipments and structures. All the trees, tree roots and vegetation etc. shall be grubbed up and removed from the site. However, all benchmarks established by OIL, if any, shall be protected. All statutory requirements shall be complied before clearing the vegetation/trees. All the unwanted existing structures, if any, shall also be dismantled /demolished.

ii) If required, the borrow earth for filling up of site shall be arranged by the contractor anywhere outside the terminal limits at his own cost. The right of way, cost of royalties etc. for the borrow areas shall be taken care of by the contractor himself. The contractor shall furnish the characteristics of the good earth to be utilized for filling and the location of the borrow areas for OIL's review and approval. Quality and characteristic of soil shall be as per standard specification.

iii) All unpaved open areas shall be suitably graded and sloped towards the drains. Grading the area shall be done by cutting and filling based on the relevant survey details, indicative layout and the levelling philosophy.

iv) Cutting area: Thoroughly rolled and compacted as per standard practice.

v) Filling area: Compacted in layers not exceeding 15 cm loosey to achieve minimum 90% of max. laboratory dry density as per IS: 2720.

vi) Grading shall be done with the following slopes:

General site grading:

- 1 in 500 - In the areas where facilities are located
- 1 in 1600 - Open area.
- 1 in 200 - During micro-grading

vii) The slope of earth beyond the grading plant shall be 1.5 (H) : 1 (V). Finished Ground Level shall be 200 mm above the concrete cellar top of the nearby well which possesses MSL.

32.1.5 Pavements

RCC/CC/Bituminous pavements shall be provided wherever required within the plant area. RCC pavements/ walkways of 1.5 meters wide shall be in panels of 150 mm thick of grade M20 concrete. If demanded ramp on both sides for entry and exit should be provided.

32.1.6 Storm Water Drainage

Storm water drainage system in the plant shall consist of a well designed open surface drain network so that all the storm water from the plant is efficiently drained off without any water logging. The storm water drainage shall be designed for uncontaminated surface water runoff. The pavement in the unit/ equipment area shall be suitably sloped towards drain for collection of rainwater in the drains around the equipment area. The entire storm water network shall be so designed to discharge the entire storm water of the plant to the nearby

drain/nallah running outside the plant area. The bed level of the drain at the disposal point from the terminal shall be fixed such so that there is no back flow from main drain.

32.1.7 Ditches & drains

Contractor shall select various types of ditches in the plant so as to have an economical ditch layout, based on the guidelines given below. Drains shall be provided along the roadside. In any block normally three sides should have rectangular drain and one side trapezoidal main drain. Secondary drains if required shall also be provided and connected to the main drain along the roadside. The drains shall be covered with suitable cover/grating wherever required for safety/statutory or operational requirement.

Construction
Rectangular Ditches: Brick masonry with cement plaster/ RCC M15
Trapezoidal: PCC M15/RCC M15 in Cement mortar
Sizing of Ditch
Design of drain shall be done as per Manning's formula

- Minimum velocity in ditch : 0.6 m/Sec.
- Maximum velocity in ditch : 2.5 m/Sec.
- Minimum depth : 200 mm
- Minimum rectangular drain width : 300 mm
- Main rectangular drain width : 500 mm
- Main Trapezoidal drains Top width (min) : 750 mm
- Bottom width (min.) : 500 mm
- Maximum Width Slops : 800 mm
- Trapezoidal drains : 1:1000 min
- Rectangular drain : 1:500 min

32.1.8 Culverts

Storm water drains, pipes, cables etc. shall cross the road by suitable pipe culverts or box culverts. Selection of the type of culverts and signing of culverts shall be carried out by the Contractor. Material of construction of culverts shall be as below:
Pipe culverts : RCC pipe class NP3 as per IS: 458 enclosed in PCC/ RCC as per strength requirement (Min. size - 350 MM)
Box Culverts : RCC construction (Min. M20)

Contractor shall furnish the design calculations for the storm water drainage. While furnishing the layout of storm water drainage, contractor shall also furnish the flow diagram for indicating the flow in drains, culverts etc. Excess serviceable/unserviceable material after utilizing the above stated work shall be disposed off by the contractor to locations outside the terminal battery limits after obtaining all necessary approvals from Govt./Local authorities.

33.0 FOLLOWING SAFETY NORMS ARE TO BE STRICTLY FOLLOWED BY THE CONTRACTOR

(i) The contractor personnel have to abide by all relevant statutory safety and environment rules, regulations, applicable codes and standards (i.e. OMR, OISD standards, BIS etc.). Also the contractor will have to supply the necessary approved type PPEs like safety boots, gum boots, hand gloves, safety goggles, safety helmet, safety belts, etc. to his workmen and should ensure strict use of the same. Additional PPE like mask as required has also to be given by the contractor.

(ii) Necessary Cold / Hot work permits are to be obtained from authorized personnel before starting the job(s).

(iii) While carrying out welding and cutting jobs, the contractor should strictly enforce the guidelines as stated in OMR - 1984 and SOP-OIL, Vol-II.

(iv) The oxy acetylene cutting sets will have to be fitted with flash back arrestors in the regulator side as well as nozzle side. The contractor shall engage only skilled, capable and competent personnel who are fully conversant with the job. Before starting the job, the contractor shall submit the list of competent personnel with valid certificates, who will carry out the job.

(v) During transportation of line pipes by road, it should be tied up securely with rope/ chain on trailers, to prevent toppling over of pipes on bumpy roads. The pipes should be unloaded carefully to prevent damage at the ends/ body of the pipes & pipe threads.

(vi) Prior to taking up the job departmental safety officer or mines safety officer will conduct a orientation program on safety and precaution to be observed by the contractor's personnel during execution of the job. The record of such orientation program should be kept in writing and one copy should be submitted to DSO Field Engg.

(vii) Contractor or his authorised representative has to conduct Tool Box meeting everyday where tools used are to be checked and briefing of jobs to be done . The record of Tool Box meeting to be kept in writing and copy of the meeting to be sent to the authorised representative of OIL

(viii) Chain pulley block and other lifting equipment used for lifting should be tested and should be of in good condition and certified by appropriate statutory authority

(ix) Supervising personal should be always present during working hours.

(x) All safety appliances are in the scope of the contractor.

(xi) In case of any welding job, welder should wear safety goggles while welding/ cutting.

(xii) Smoking is not permitted in the work place.

(xiii) All torches, regulators, cylinders and other equipment should be of an approved design of appropriate authority and in good conditions.

(xiv) The contractor has to arrange and fit spark arrestor to the exhaust of the Truck mounted reverse circulatory rotary drilling rig engine and welding machine, if required as per the instruction of representative of OIL.

(xv) Necessary sign boards/ warning signals etc should be used while working. The said sign boards/ warning signals shall have to be arranged by the contractor.

(xvi) First aid box is to be provided by the contractor and same has to be kept ready at work site for contractor's personnel while carrying out the job.

(xvii) Under no circumstances LPG should be used for gas cutting purpose.

(xviii) The contractor shall have to back fill the pit & have to clear away all the rubbish and surplus materials from the site on completion of work and shall have to leave the site clean and tidy.

(xix) The contractor has to ensure complete safety of the personnel engaged by him, and of all the equipment they will handle and must take full responsibility for their safety.

(xxi) The contractor has to ensure the quality and reliability of all the tools, equipment and instruments they use.

(xxii) The contractor has to provide suitable facility such as Drinking Water, Toilets, Lighting, and Canteen etc for their working personal.

(xxiii) The contractor's personnel have to take every possible care to keep the environment clean and free from pollution.

(xxiv) The contractor's personnel should understand the implication of the known hazards related to the work undertaken by them and the necessity of having an emergency plan ready to counter them.

(xxv) While providing the services, the contractor personnel have to follow the procedures and systems taking all control measures in all the stages of works to avoid any untoward incidents/accidents.

(xxvi) The contractor shall have to report all sorts of near miss incidents and accidents to Installation Manager / departmental representative of Field Engineering Dept.

(xxvii) The contractor should deploy a competent person though out the job under whose constant supervision only the job will be carried out.

(xxviii) Any compensation arising out of the job whether related to pollution matter, Safety or Health will be paid by the contractor only.

(xxix) The contractor should deploy only MVT trained person.

(xxx) The contractor has to keep a register of the persons employed by him.

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

(xxxii) Any compensation arising out of the accident cases to contractor employees will be borne by the contractor.

(xxxiii) For any clarification with regard to the above, the contractor should contact OIL.

34.0 LIST OF JOBS:

THE SCOPE OF WORK SHALL BROADLY COMPRISE OF THE FOLLOWING BUT NOT LIMITED TO THE SAME.

34.1 Development of Land - Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m for all kinds of soil for an area of 3365 sq. m

34.2 Foundation for WI Pumps - Marking, Excavation of Earth, supply of all materials, shuttering, Construction of R.C.C Foundations of minimum grade M20. All RCC work of minimum Grade M20 shall conform to IS456-2000 and all TOR steel bars Grade Fe 415 shall conform to latest IS 1786 as per the (SKETCH-01) to be supplied at the time of construction. However physical dimensional measurement of the foundations of equipment will be measured by the contractor prior to casting. The job also involves piling job, if necessary depending on soil conditions. All materials and labour required for the job will be supplied by the contractor. All the materials required for the R.C.C foundations will have to be stocked in the project site and have to be approved by OIL before execution. All necessary tests certificates for materials including Cube test, slum test etc. will also have to be carried out by the contractor at his own cost. Contractor must follow all the IS codes and the general specification as per TOR of this contract. Construction of Pump Foundation FIVE numbers each of size approx (5.2m X 2.2m X 1.0 m) for installing Water injection pumping units.
(The drawing to be referred is Sketch No-01).

34.3 EXCAVATION WORK - Excavating trenches for pipes, cables etc. in all kinds of soil for depth exceeding 1.5 m, but not exceeding 3 m. Excavation will be required for making trenches while cable laying approx running metre 450, as well as at miscellaneous location as and when required during job.

34.4 CC MATTRESS - Construction of 100 mm thick CC mattress (1:3:6). The job includes grading, ramming, laying of a brick layer at different places as per directive of site engineer and then construction of 100 mm thick C.C mattress. Before brick soling, earth will be consolidated by proper ramming. All materials required for the job will be supplied by the contractor. Rest refer civil engg. TOR of this tender document. The mattressing would be done for an area of 1500 sq. m and at the designated places as shown in the layout and after getting approved by the OIL representative.

34.5 DEMOLISHING OF RCC AREA - Demolishing C.C. / R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1000m, stacking serviceable and unserviceable material separately including cutting reinforcement bars. The area of 20 cubic metres has to be demolished is as advised and approved by the OIL personnel

34.6 DRAINAGE SYSTEM (Leader drain and Sub leader drain) - Supply of all the materials and construction of leader drains inside/ outside of the installation as detailed in clause no. 32.1.6. Proper gradient to be maintained as clause no. 32.1.6. All the materials to be supplied by the contractor. The inside of the drain to be completed by polishing and finishing. The length of leader and sub leader drains are respectively 240 metres and 140 metres.

34.7 OIL WATER TRAP - Supply of all the materials and construction of oil water trap as per standard practice of oil and gas installations. The job also includes supply and fabrication of top cover made of XPM and angle iron frame. All materials required for the job will be supplied by the contractor.

34.8 SUPPLY OF SAND SHINGLES/PEBBLES - Supply of Sand Shingle(containing 60 to 80% sand & 40 to 20% shingle of size 20mm graded down to 5mm), clean and free from clay and rubbish etc. To be spread and rammed at various locations as directed.

34.9 SUPPLY OF Soil for Earth filling - Collecting / excavating sand, soil, silt, ordinary earth from any source, load into lorries, transport it to distant place of work including procuring earth and laying in layer of 150mm thickness and dry ramming, profile properly made for taking measurement, including all measurable lead up to 30m and lift as required. (The contractor shall be responsible for

all formalities of supply of earth such as purchase of land including royalties, monopoly / other statutory taxes as required from any distance.)

34.10 Supply of Hand broken stone - Supply of Hand broken hard stone metal from river boulder fairly cubical in shape, free from dust/dirt disintegrated pieces, organic and other foreign matters (63mm to 45mm graded)

PHASE II: CONSTRUCTION OF VARIOUS INDUSTRIAL SHEDS AND HOUSINGS FOR PUMPS, GENSETS ETC

35.0 Supply of material, erection / construction of the following Sheds as per details below. This item includes supply of all materials, mechanical fabrication/erection and all associated Civil Engineering jobs like, Brick-soling, CC Flooring, Cement plastering, Cable trenches of required size, Drains around the sheds including plinth protection work with apron etc as advised by company engineer. All the other specification pertaining to civil engg./ electrical engineering works to be followed as per TOR of the contract. All materials like CGI sheet (Polyester coated Galvanised Steel Sheets of 0.60 mm thickness), M.S. plate(6mm thick), Square hollow sections/Rectangular hollow sections / Circular hollow sections of required thickness(as per YST 310 grade & IS: 4923 & IS:1161), etc. will be supplied by the contractor and these materials should conform to IS specification and should be of TATA/SAIL brand quality only. The materials are to be offered to the Company Engineer for inspection with necessary supporting documents before fabrication (as per OEM specification) and erection. All civil engineering materials required are to be supplied by the contractor. The floor level shall be 450 mm above FGL. The contractor shall submit necessary material test certificates and related documents before execution or erection.

THE SCOPE OF WORK SHALL BROADLY COMPRISE OF THE FOLLOWING BUT NOT LIMITED TO THE SAME.

36.0 LIST OF BUILDINGS/STRUCTURES:

1 WATER INJECTION PUMP HOUSE
2 GENERATOR SHED
3 LUBE OIL SHED
4 OPERATOR HOUSE
5 KITCHEN & DINING HOUSE
6 TOILET
7 SECURITY HOUSE /OFFICE
8 STAGING FOR TANK (2 No. of 3 KL SINTEX TANKS)
9 METER RUN SHED, WALKWAYS AND PIPE SUPPORTS
10 FIRE EXTINGUISHER SHED

36.1 Jobs to be carried out under this category are as follows and the dimensions mentioned is centre to centre.

36.1.1 WATER INJECTION PUMP HOUSE - Construction of Pump House of approx 25.6 m length X 7.6 m breadth x 3.6 m height.

Basic Items of work to be designed and executed as per relevant IS codes, but not limited to the following:

i. RCC Foundation (Minimum grade of concrete M20).
ii. RCC Tie beam (Minimum grade of concrete M20).
iii. brick work(Min thickness 230mm) up to Plinth level
iv. Plinth filling with sand
v. Foundation for pump
vi. Structural steel industrial structure
vii. Pre coated roofing sheet with sloping as per relevant IS Code
viii. Industrial flooring
ix. Double layer wall cladding with Pre coated roofing sheet in three sides with Double glazed window on each layer.
x. Plinth protection works
xi. Plinth drain with normal gradient

xii. Covered cable trenches as per requirement design

36.1.2 GENERATOR HOUSE - Construction of Generator House of approx. 9 m length X 7.6 m breadth x 3.6 m height. This shed will be used for housing TWO numbers of 125 KVA gensets. Basic Items of work to be designed and executed as per relevant IS codes, but not limited to the following:

i. RCC Foundation (Minimum grade of concrete M20).
ii. RCC Tie beam (Minimum grade of concrete M20).
iii. brick work(Min thickness 230mm) up to Plinth level
iv. Plinth filling with sand
v. Foundation for Gensets
vi. Structural steel industrial structure
vii. Pre coated roofing sheet with sloping as per relevant IS Code
viii. Industrial flooring
ix. MS grill at window
x. Plinth protection works
xi. Plinth drain with normal gradient
xii. Covered cable trenches as per design

36.1.3 OPERATOR HOUSE - Construction of Operators House of approx. 9.16 m length X 3.6 m breadth x 3.35 height and veranda of 9.16m x 1.20m. This shall also include supply and installation of all fittings (OIL approved), water supply for water filter and cooler and other related items required in the operator house as directed by OIL. The operator house shall be of RCC construction with 115 mm brick walls.Basic Items of work to be designed and executed as per relevant IS codes, but not limited to the following:

i. RCC framed structure of minimum grade of concrete M20.
ii. Brick work(Min thickness 230mm) up to Plinth level
iii. Plinth filling with sand
iv. 115mm thick brick wall above plinth.
v. Lintel all around the building.
vi. Pre coated roofing sheet with sloping over tubular steel truss as per relevant IS Code
vii. C.C. flooring finished with vitrified tiles.
viii. Plinth protection works
ix. Plinth drain with normal gradient
x. 30mm thick non-decorative single leaf door shutter of minimum size 900mm x 2045mm.
xi. Double track anodized glazed Aluminium window of minimum size1000mm x 1200mm.
xii. Centre hung anodized glazed Aluminium ventilator.
xiii. Construction of toilet of size 3600mm x 1800mm which should include 1 no. Urinal, 1 no. Bath space with towel rack, wash basin, shower, mirror, soup rack, bib cock, pillar cock, flushing cistern etc. and 1 no. latrine. The floor shall be of mat finish ceramic tiles. The wall up to lintel level shall be of glazed tiles. The door shall be 30mm thick non-decorative single leaf water proof block board of size 700mm x 2045mm. Ventilator of Centre hung anodized glazed Aluminium. Small size aluminium window.
xiv. Skirting height should be 100 mm.
xv. Plastering 12mm/15mm.
xvi. Wall finishing: Exterior wall with exterior wall putty, exterior wall primer, acrylic exterior paint of minimum 2 coats. Interior wall with interior wall putty, interior wall primer, acrylic plastic paint of minimum 2 coats.
xvii. Cement board ceiling on wooden frame with 2 coats of white acrylic paint.
xviii. 25 users septic tank with necessary soak pit as per relevant IS code.
xix. Necessary fan hooks to be provided.

36.1.4 LUBE OIL SHED- Construction of Industrial Lube Oil Shed of total area 20 sqm and height 3.35 m. Basic Items of work to be designed and executed as per relevant IS codes, but not limited to the following:

i. RCC Foundation (Minimum grade of concrete M20).
ii. RCC Tie beam (Minimum grade of concrete M20).
iii. brick work(Min thickness 230mm) up to Plinth level
iv. Plinth filling with sand
v. Structural steel industrial structure
vi. Pre coated roofing sheet with sloping as per relevant IS Code
vii. Industrial flooring
viii. Lube oil storage ramp
ix. Wall cladding with Pre coated roofing sheet in three sides with glazed window. MS Grill Wall cladding in one side with MS Grill door.
x. MS grill at window
xi. Plinth protection works
xii. Plinth drain with normal gradient

36.1.5 FIRE EXTINGUISHER SHED - Construction of Two no. of Fire Extinguisher Shed of approx. 3.0 m length X 1.5 m breadth x 2.50 m height.Basic Items of work to be designed and executed as per relevant IS codes, but not limited to the following:

Shed shall be of steel structure with pre coated roofing sheet (red colour) with necessary provision for hanging fire extinguishers and sand buckets.

36.1.6 METER RUN SHED, WALKWAYS AND PIPE SUPPORT - Construction of ONE number of Meter Run Shed with walkways and pipe supports as per OIL DRAWING NO. OIL/7707. Copy of the same will be provided to the bidders.

36.1.7 SECURITY OFFICE/HOUSE - Construction of Security office of approx. 3.0 length X 3.0 m breadth x 3.35 m height. Basic Items of work to be designed and executed as per relevant IS codes, but not limited to the following:

i. RCC framed structure of minimum grade of concrete M20.
ii. Brick work(Min thickness 230mm) up to Plinth level
iii. Plinth filling with sand.
iv. 115mm thick brick wall above plinth.
v. Lintel all around the building.
vi. Pre coated roofing sheet with sloping over tubular steel truss as per relevant IS Code
vii. C.C. flooring finished with vitrified tiles.
viii. Plinth protection works
ix. Plinth drain with normal gradient
x. 30mm thick non-decorative single leaf door shutter of minimum size 900mm x 2045mm.
xi. Double track anodized glazed Aluminium window of minimum size1000mm x 1200mm.
xii. Centre hung anodized glazed Aluminium ventilator.
xiii. Necessary fan hooks to be provided.

36.1.8 KITCHEN AND DINING HOUSE- Construction of Dining room and kitchen with 115 mm thick brick wall incl. door and windows of approx. 3.0 m length X 3.0 m breadth x 3.35 height. Basic Items of work to be designed and executed as per relevant IS codes, but not limited to the following:

i. RCC framed structure of minimum grade of concrete M20.
ii. Brick work(Min thickness 230mm) up to Plinth level
iii. Plinth filling with sand
iv. 115mm thick brick wall above plinth.
v. Lintel all around the building.

vi. Pre coated roofing sheet with sloping over tubular steel truss as per relevant IS Code
vii. C.C. flooring finished with vitrified tiles.
viii. Plinth protection works
ix. Plinth drain with normal gradient
x. 30mm thick non-decorative single leaf door shutter of minimum size 900mm x 2045mm.
xi. Double track anodized glazed Aluminium window of minimum size1000mm x 1200mm.
xii. Centre hung anodized glazed Aluminium ventilator.
xiii. Provision for exhaust fan and cooking platform

36.1.9 TOILET- Basic Items of work to be designed and executed as per relevant IS codes, but not limited to the following:

(i) Construction of toilet of size 16 sq.m. which should include 3 no. Urinal, 1 no. of Bath space with towel rack, wash basin, shower, mirror, soup rack, bib cock, pillar cock, flushing cistern etc and 1 no. latrine. The floor shall be of mat finish ceramic tiles. The wall up to lintel level shall be of glazed tiles. The door shall be 30mm thick non-decorative single leaf water proof block board of size 700mm x 2045mm. Ventilator of Centre hung anodized glazed Aluminium and Small size aluminium window will be required.
(ii) 25 users septic tank with necessary soak pit as per relevant IS code.

36.1.10 DRINKING WATER TANK 3 KL (TWO) nos. WITH STAGING - Supply & installation of two numbers of 3 KL Sintex tank and fabrication, erection and grouting of staging facility and other accessory with ladder and covering on the ladder for safe access to tanks. Also supply and sinking of shallow tube well including 5 HP submersible motor with electrical accessories. Further laying of drinking water pipelines of various sizes with necessary tap and valves, from tank to the respective houses ie. Kitchen, Operator house, Security House, Lube oil house or any other as directed by the OIL engineer. Further, commissioning and testing of the drinking water system and conforming that the received tube well water matches with the quality of reference surrounding ground water as selected by OIL engineer.

36.1.11 SOUND BARRIER WALL - Supply of all materials(except 2 7/8" used tubing pipes.), construction of sound retaining wall consisting of double wall of corrugated asbestos sheets or any suitable materials covering the perimeter of the Water injection station . All the materials to be supplied by the contractor except 2 7/8" used tubing pipes. The wall should fully enclose the water injection station of perimeter 220m from all sides and height should be 4.8 m .Minimum thickness of asbestos should be 0.6 mm. The foundation of the sound barrier wall shall be of CC / RCC of minimum grade M20 to be designed as per releavant IS Code.

36.1.12 RCC SUPPORTS PIPING NETWORK - Supply of all materials, erection, installation, plastering, curing of RCC Pipe Supports (1:1.5:3 mixture) including clamping System/arrangement. Factory make U clamps with nuts (dia of clamps 1.27 cm) to clamp different diameter pipes with nuts and washers will have to be supplied by the contractor .All civil construction materials will be supplied by the contractor. All the supplied materials must be approved by OIL prior to erection including material test certificates and other documents. The number of such pre-casted pipe supports will be required in 30 numbers.

36.1.13 SIGN BOARDS AND LETTER WRITING - Supply of the materials, fabrication, erection, painting and letter writing of sign boards (safety / statutory/ security/ technical) with aesthetic look of different sizes. The nos. of letter per sign board will be around 50 to 100 letters of various sizes as per the instruction of Company Engineer. The post and frames should be square/ rectangular hollow sections (specification IS: 4923 and YST 310 Grade) of specific size as per sound industry practice and the board section should be MS plates (4mm Thickness of IS specification). The signboards to be grouted (1:2:4 concrete mixture) up to

proper depth at specific location to be decided by OIL within and outside the proposed installation. Painting (primer followed by two coats of enamel paints of reputed make) of the sign boards are preferably spray painted to attain proper finishing. All the supplied materials must be approved by OIL prior to fabrication/erection including material test certificates and other documents. Signboards would be required in various sizes as per the practice in OIL. The total quantity of sign boards required is 23 (TWENTY THREE) numbers.

SIZE: 2mtrs(L)X 1.5 mtrs(B)X 3.5mtrs high post NO 5 FIVE
SIZE: 2mtrs(L)X 1.0 mtrs (B)X 3.5mtrs high post NO 4 FOUR
SIZE: 1.0mtrs(L)X 0.8 mtrs (B)X 3.5mtrs high post NO 4 FOUR
SIZE: 1.5mtrs(L)X 1.0 mtrs (B)X 3.5mtrs high post NO 4 FOUR
SIZE: 1.0mtrs(L)X 0.6 mtrs (B)X 3.5mtrs high post NO 6 SIX
A break up of the required sign boards is as given below:

36.1.14 PAINTING - Painting of the installation which includes manifolds, separators, piping, valves, sheds, walkway and all other process accessories/items erected and installed against the contract. Painting will involve cleaning of outer surface, application of one coat of red oxide primer and application of two coats of synthetic enamel paint of approved colour. All materials for the job including the primer, paint and external weather proof paints for exterior walls of the building, concrete supports and boundary wall will have to be arranged by the contractor. The inside wall of the office buildings are to be painted with plastic emulsion paint. Prior to application of the same the wall putty is to applied on the inner surface of the building walls. The paint to be used will have to be of reputed brand and will have to be certified by OIL's representative. The job also involves painting of the colour bands on the pipelines as directed by the company engineer. the approx. total surface area to be painted which included pumping house, operator house, lube oil shed, generator shed, security house and other structures including piping and fittings.

36.1.15 OFFICE FURNITURES & FILTER FOR WIS -

Supply of furniture as per specifications listed below at the proposed installation;

A) Steel Table, Model:T-8(D.L Top); Make: Godrej/ eqvt.: = 03 Nos.

B) Steel Chair; Make: Godrej Or Equivalent; Model: Ch-7 Or Equivalent. = 6 Nos.

C) Personal Locker Unit with Keys, 4 Doors. Make: Godrej/ eqvt. 5nos.

D) Almirah of minimum four shelves of make Godrej or equivalent.

E) Curtains totalling of length 30 metres. The curtains have to be prepared for 08 no. of windows and three numbers of doors. The curtains are to be made ready by stitching and curtains rod of appropriate sizes has to given and fixed along with the stitched curtains.

F) FIRST AID BOX, G. I. WITH ONE NO LOCKING ARRANGEMENT & WITH LOCKAND KEY. SIZE: 1 1/2' X 1' X 1' (L X B X H) 02 nos.

G) Purchase & Installation of Water Purifier system of minimum capacity of 20 litres and capable of filtering the available raw source water to Drinking water standards of IS: 10500.2012.

H) Supply of standard computer table for accommodating a computer, UPS and Printer. Make: Godrej: Model: Target Plus.

I) Purchase of Computer (Office Desktop PC) as per following Technical Specification:

1. Full ATX Motherboard with minimum LGA 1150 Socket or Higher.
2. Processor:
   a) Intel Core i7-4770 Processor (3.4GHz, 4 Cores, 8MB Cache) or Higher
   b) Generation: Generation of the processor must be 3rd Generation or higher with specification as given in Point 2(a).
3. Memory: Minimum 8-GB (2 X 4GB) DDR3 SDRAM 1600-MHz expandable upto 16GB RAM from brands like Corsair, GSkill or Hynix.
4. Hard Disk Drive & controller: Minimum 1 TB SATA 6 Gbps HDD, 7200rpm.

5. Optical Drive: 16X DVD +/-RW with Dual Layer Write Capabilities, accessories and cables.
6. Ethernet: Integrated 10/100/1000 Mbps Ethernet Controller and IPV6 compliant.
7. Expansion Slots: Min 2 Nos of PCI series slots
8. Audio & Sound: Integrated HD audio controller with 1 set of external stereo speaker with minimum 8 watts (rms) output.
9. I/O Interface:
   Front I/O Ports: Minimum 2 USB ports. Headphone and Microphone Jacks
   Rear I/O Ports: VGA port: min. 2 USB 2.0 ports: minimum 2 USB 3.0 ports: 2 One Fast Serial port One parallel port 1 Gigabit Ethernet (RJ-45) port. Headphone and Microphone Jacks.
10. System Chassis: Slim chassis with enough cooling fans, one free internal peripheral bay and suitable power supply with chassis volume 8-14 litres.
11. Monitor: OEM 21.5" diagonal viewable image Size: 21.5" diagonal Flat Panel LED Monitor (1920 x 1080 Resolution) with accessories and cables (same colour as CPU box) & TCO certified.
12. Keyboard: 104 Keys OEM keyboard with new Indian Rupee logo (Same colour as CPU box) from reputed brands like Logitech, Microsoft, Lenovo, TVS-e and Razor.
13. Mouse: OEM optical scroll mouse with mouse pad (Preferably same colour as CPU box).
14. Power Supply: Min 500-watts power supply with surge protection and 85% efficiency or better, Energy Star 5.0 compliant.
15. OS: Preloaded Genuine Microsoft ® Windows 8 professional 64 bit OS with recovery CD/DVD and latest service pack in DVD/CD media & documentation.
16. Power management & DMI: System with Power management features & Desktop Management Interface implementation.
17. Others:
    a. Power Cables.
    b. All system drivers, monitor drivers on DVD/CD media.
    c. Power Extension spike guard with 4 nos. of 5 Amps output - Make: Anchor

PHASE III: INSTALLATION AND COMMISSIONING OF VARIOUS MANIFOLDS, PIPES, VALVES AND FITTINGS ETC

37.1 Jobs to be carried out under this category

37.1.1 Loading, transportation, unloading & stacking on wooden skids of various diameter pipes ranging from 50mm NB to 250mm NB bevel/ screwed end from different pipe yards, inside / outside the New and Old Industrial area or any other company's store yard, Duliajan or any other yard nearer to the work site, with the help of approved pipe trailers without causing any damage to the pipe/ pipe ends. Defective pipes shall be rejected at the yard prior to receiving with the approval of Company's representatives. Distance Between workplace HAPJAN-30 and Duliajan is about 42 kms.

37.1.2 Loading, unloading, transportation and safe custody of various sizes/types of valves such as gate / ball /plug / check /control / motor valve, pipe fittings such as elbow, bend, flange, swage, tees of various sizes ranging from 25 mm to 250mm, coating and wrapping materials viz. coal tar, primer, fibre glass inner and outer wrap etc. from company's store yard / project godown at PP office / New and old Industrial area / Project godown near OCS-3 to worksite in approved trucks. (Maximum load per trip=8.0 tonnes)

37.1.3 Manual stringing and aligning for screwing / welding the following sizes of screwed / bevel end pipes on ground / above ground / elevated position. Sufficient precautions to be taken while

stringing the pipes to protect the welded / screwed ends. In case any defect is observed, the contractor should repair the same free of cost. Contractor must use the end protector while loading, unloading, transportation, stringing and aligning the pipes. Dragging and skidding of pipes shall not be permitted and unchecked rolling of pipes from truck-trailer should not occur. After pipe stringing every length must be inspected for dents, grooving, gauging and damage of the pipe ends. Each joint of pipe shall be swabbed and cleaned with a leather or canvass belt disc of the proper diameter and sufficient length to remove dirt, mill scale and other foreign substances immediately before joining up. Any obstruction remaining inside the pipe after the completion of pipe line shall be removed at the expense of the Contractor. The open ends of the pipe shall be securely closed by bolt-on metal night caps at the end of each day work and shall not be opened until the work is resumed. Minor Repairing of pipe ends, which will be a part of alignment of joints during the welding operations are also scope of the contractor. The size of the pipe within the scope of this item ranges from 50mmNB to 250mmNB for screwed / bevel end.

37.1.4 Welding of pipe joints of different thickness including other forged butt welding fittings like bends, flanges, Tees, Reducers, Bull Plugs, Expanders etc. to make a continuous piping network. The contractor shall supply the entire machine / equipment / manpower and consumables like electrodes, grinding discs wooden skids as necessary for the entire job. The entire operation shall be carried out under constant supervision of the Third party inspection / Company's representative. The welding shall not be done when the Third party inspection / Company's representative decides that the weather condition is unfavourable. The contractor shall have to provide canopy during mild drizzle for the welding. The welded joints shall be subjected to approximately 10% selective or random radiography. The defective joints shall be repaired and radio graphed at contractor's cost. Welding shall be done in accordance with the API Standard for field welding of pipelines, API Standard No.1104 /1108(latest edition). Welds shall be made by the manual shielded electric arc process and shall be done in such a manner as to produce welds as stronger as or stronger than the pipe itself. The type of electrodes to be used shall be as follows: Stringer, 'Root' or First PASS-3.2 mm dia. Cellolusic electrode conforming to E6010, 'Hot' or second pass-4mm dia cellolusic electrode conforming to E7010. Filler and subsequent passes-4 mm dia. Cellolustic electrode conforming to E7010. The electrode should be preferably of reputed make such as Lincon / Esab / Phillips make. The number of passes will vary depending upon wall thickness of the pipe. The stringer bead must approach full and complete penetration throughout the periphery of the weld and preferably build up a small reinforcement at the root. Weld projection inside the pipe shall not exceed 3mm. The 'Hot-pass' or second bead shall be run completely around the pipe immediately after stringer bead has been run and cleaned and before the joint and the adjacent pipe has cooled below 940 C. Power tools from each bead for visual inspection shall remove all slag and scale immediately after each bead is run. Welding shall be continuous and uninterrupted during a pass. While the welding is in progress care should be taken to avoid any kind of movement of the components, shocks, vibrations and stresses to prevent occurrence of weld defect.

37.1.5 Supply, handling, aligning and Installation of flanged valves like Control / gate / Check / Plug / Ball etc. as per specifications API 600/ API 6D of the various sizes from 50mm to 200 mm NB with already existing flanges on piping network laid on ground / above ground / underground at all elevation where ever required with proper gaskets, nuts& bolts in both sides as per the instruction of site engineer.

37.1.6 Supply, handling , aligning and Installation of threaded valves like Control / gate / Check / Plug / Ball etc. as per specifications API 600/ API 6D of various sizes from 25mm to 50mm on piping network laid on ground / above ground / underground at all elevation where ever required with proper gaskets, nuts& bolts in both sides as per the instruction of site engineer.

37.1.7 Hooking up of companion weld neck type flanges on pipeline above ground/underground/ overhead as required complete with gasket, studs and nuts (supplied by Company) as per directive of the company's engineer/representative after proper alignment and without any strain on the line. All the above job to be carried out as per directive and satisfaction of the company representative.

37.1.8 Fabrication of welded mitre bend, standard bevel ended Tee/Reducer/Bull plug (orange peel) as per ANSI B31.4 / ANSI B31.8 and API 1104/1108.For the mitre bend to obtain gradual and smooth

curvature which shall have at least 4 nos. (for 100 mmNB to 150mm NB) and 5 nos. (for 200mmNB to 250mm NB) of weld joints between the straight portion of the bend. While fabrication of Tee, the 3 ends of straight portion should be minimum 300mm with bevel ends from the saddle. Fabrication of tee also includes welding of saddle (with tell tale hole), stiffener, guide bar etc. With respect to fabrication of reducer and bull plug there should be at least 6(for 100mmNB to 150mm NB)and 8(for 200mmNB to 250mm NB) cutting, beveling and welding on the circumference of the pipe. All the fabricated fitting are subjected to radiography. Any repair if necessary shall be done by the contractor at his own cost. The job will be quantified as per unit length of welding measured in centimeter.

37.1.9 Handling, aligning, swabbing / purging, screwing and laying of screwed pipelines on aboveground / overhead / at all elevations including aligning the pipelines to correct level, plumb for proper connection to the various equipment like pressure, vessels, pumps, manifold, indirect heaters, meter runs etc. as per instruction of Company Representative. Before screwing, thread should be cleaned with brush and thread dope to be applied. Laying of lines will also include fixing of various online pipe fittings such as nipples, bend, elbow, flange, tee etc. as necessary. Also threaded nipples (NPT) which might be required for completion of the pipe length are required to be made by the contractor as per site requirement.

37.1.10 Radiographic inspection of weld joints as per API 1104 by the third party inspection agency (approved by BARC) as directed by site engineer.All radiographed joints must be certified by the third party inspection agency (approved by BARC). All necessary equipment including the inspection agency to be arranged by the contractor with the approval of Company engineer.The test report must be submitted to the company and approved before processing bill /invoice.Any defects identified must be repaired by the contractor at his/her own expenses and retest report should be submitted to company after correcting the defects and cerification of the same by the third party inspection agency (approved by BARC).

37.1.11 Installation of Vertical Gas Separators which includes installation/fixing of all accessories on the body of the unit such as safety valves, drain valve, level controllers, float door, pressure / temperature gauges, and all other associated jobs including grouting of foundation bolts(1:1:1) as directed and to the satisfaction of the company engineer. Foundation bolts including washers shall be supplied by OIL.

37.1.12 Handling, aligning, fabrication, erection and testing of following Manifold completed with fixing of all types (Both screwed and welded) of pipe fittings, pipe nipples, check / gate / plug / ball valves on or above ground / overhead/at all elevations, generally as per standard manifolds of existing water injection stations of Oil India Limited. The manifold is then to be tested hydraulically to a maximum pressure of 180 kg/cm2 for 24 hours for delivery end and 50 kg/cm2 for 24 hours in case of suction end manifold.

37.1.13 SUPPLY OF FLANGED TYPE CONTROLLERS / GATE / BALL / PLUG / GLOBE / CHECK VALVE

Supply of flanged valves like Control / gate / Check / Plug / Ball etc. as per specifications API 600/ API 6D of the following sizes with already existing flanges on piping network laid on ground / above ground / underground at all elevation where ever required with proper gaskets, nuts& bolts in both sides as per the instruction of site engineer. No tension on lines on either side of the valves will be allowed.

The detailed breakup of the valves required is detailed in Annexure- I (enclosed)

38.0 INSPECTION AND TESTING

38.1 Inspection & Testing of materials:

38.1.1 The Company shall be entitled at all times at the risk of the contractor to inspect and/ or test by itself including radiographic test or through an independent person(s) or agency(ies) appointed by the company and/ or to direct the contractor to inspect and/ or test all materials, items and components whatsoever supplied or proposed for supply for incorporation in the works, inclusive, during the course of manufacture or fabrication by the contractor and/ or at

the contractor's works or otherwise the inspection and/ or test shall be conducted at the expense of the contractor and if conducted by the contractor may be directed by the company to be conducted by the agency(ies) nominated by the company and/ or in the presence of a witness(es) or agency(ies) nominated by the Company.

38.1.2 The site engineer shall be entitled to reject at any time any defective material, item or component (including specially manufactured or fabricated items or components) supplied by the contractor for incorporation in the works notwithstanding previous inspection and/ or testing thereof by or on behalf of the Company without rejection and notwithstanding previous approval thereof by or on behalf of the Company the decision of the site engineer as to any defect as aforesaid being 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 or shall if so required by the site Engineer (whose decision in this behalf shall be final) remove the rejected material/ item/ components from the job site within the time specified by the site engineer and replace it at his own cost and expense with material(s)/ item(s) component(s) approved by the site engineer.

38.2 Inspection & Testing of works:

38.2.1 The contractor shall at all times ensure high standard of workmanship, related to the work to the satisfaction of the site engineer. The site engineer shall have the power to inspect the work in all respects at any and all times up to the completion of the work as also to test or instruct the contractor to test the works or any structure, material(s) or component(s) thereof at the risk and cost of the contractor.

38.2.2 The contractor shall provide all facilities, instruments, materials/ labours etc. required for testing of the works and shall provide the site engineer all assistance necessary to inspect the tests carried out by the contractor.

38.2.3 The contractor 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.

38.2.4 Should the site engineer on inspection or test be not satisfied with the quality or workmanship, of any work, material or component (the decision of the site engineer 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 site engineer.

38.3 Final test and possession of works:

38.3.1 As soon as the works have been completed in all respects to the satisfaction of the site engineer, final tests of the works shall be undertaken by the contractor at the risk and costs of the contractor in the presence of the site engineer. 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.

38.3.2 Upon satisfactory completion of the final tests, the site engineer shall prepare a final test certificate witnessed by the contractor, which shall certify the date on which the final tests in respect of the works have been successfully completed and where final tests have been conducted in piecemeal in respect of the concerned part(s)/ sections(s)/ group(s)/ job site(s).

38.3.3 As and from the date of successful completion of final tests 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.

38.3.4 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 or provide to correct, repair and/ or rectify the defect(s) to the satisfaction of the site engineer.

38.4 Inspection and testing of pipeline:

38.4.1 Visual inspection- 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.

38.4.2 Radiographic examination-

38.4.2.1 The radiography of the welding joints would be carried out by an inspection agency approved by the Company.

38.4.2.2 The procedure of radiographic examination, limits of acceptability, removal and repair of detects shall be as per API 1104 and shall be approved by the engineer in-charge. 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.

38.4.2.3 Contractor shall fulfil all the statutory safety requirements in handling the X-Ray and Gamma rays equipment.

38.4.2.4 Joints to be radio graphed shall be selected by site engineer and the radiography shall be carried out in his presence. The contractor shall submit all the radiographs along with radiographic reports of the defective joints to the site engineer/ engineer-in-charge immediately after processing the radiographs for approval. The details of the radiographs shall be duly recorded and signed by him in the radiographic reports.

38.4.3 Pressure testing of piping:

38.4.3.1 Soundness of the weld shall be tested by the contractor in the presence of site engineer by hydrostatic/ pneumatic means. Prior to test, installation shall be inspected by the site engineer to the extent necessary to ensure compliance with engineering design with respect to material, fabrication and assembly. The contractor shall obtain clearance for such tests from the site engineer.

38.4.3.2 Valves shall be tested individually before installation by the contractor at his own cost.

38.4.3.3 All piping including valves, flanges, fittings etc. shall be tested hydraulically to the recommended pressure in presence of the site engineer. 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 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.

39.0 REPAIRS OR REMOVAL OF DEFECTS:

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

39.2 No repairs shall be carried out without prior approval of site engineer.

39.3 All leaks defected during testing shall be repaired to the satisfaction of site engineer and on completion; the entire tank shall be tight and free from leaks.

39.4 When the tank is filled with water for testing, defects in the shell joints shall be repaired with the water level at least 300 mm below the joint being repaired.

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

40.0 PROCESS PIPING NETWORK:

Transportation including loading and unloading of all materials from OIL Yard / New and Old Industrial area / other project go down at Duliajan to the proposed worksite at HJN-30; fabrication and installation of all piping works; final alignment of PIPINGS; fabrication and installation of manifolds, supports, walkways, various sheds etc; laying of electrical cables; providing earthing system pressure vessels; execution of other electrical engineering jobs, execution of various civil engineering jobs and water supply works; painting of all pipe fittings, piping & vessels; hooking up of all vessels / piping etc. including relevant hydraulic tests, as detailed in Schedule of Works of the contract. All materials for construction of the OCS will be supplied by the Company except the materials which are clearly specified to be supplied by the contractor. All other equipment and services like welding set, grinding sets, lifting tackles, tools, skilled and unskilled workmen, supervisions etc. will have to be provided by the contractor.

Water supply, security, Electrical powers for the welding / grinding & for running other machineries during the construction phase are to be arranged by Contractor. The job will be normally carried out in the day hours only.

However, in case of urgency company may consider to allow the contractor to carryout the jobs in the night hours if the proper illumination at work site is arranged by the contractor at their own cost. The welding jobs are to be done as per API Std. 1104. Approximately 10% of the welding joints would be radio graphed by the third party inspection agency arranged by the contractor and approved by the company. Any joint, if found defective will be repaired by the contractor at his own cost.

41.0 FABRICATION & CONSTRUCTION SPECIFICATIONS OF PROCESS AND UTILITY PIPING NETWORK:

41.1 MATERIALS:

a) 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.

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

c) 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 a safe and secured manner.

d) 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.

e) The contractor shall inspect the materials supplied to him at the time of taking delivery and satisfy himself of the quality, quantity and condition there of 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.

42.0 PIPING FABRICATION AND INSTALLATION

i) The scope of piping covers the jobs as specified in the "Schedule of Works" 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 fitting / valves, for the entire plant. (supply of materials viz. pipes; pipe fittings, valves etc. are under OIL's scope).

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

iii) The ends of line pipe shall be beveled 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 radio graphed by competent agency engaged by the contractor as per direction of Company's Engineer. All arrangements for radiography test including testing agency, source, films etc. are to be done by the contractor with prior intimation to Company's Engineer. After radiography, the processed films along with inspection report from the testing agency will be submitted to OIL for inspection and approval.

PHASE IV: INSTALLATION OF ELECTRICAL SYSTEMS, LIGHTINGS AND INSTRUMENTATION UNITS.

43.0 ELECTRICAL ENGINEERING SCOPE OF WORKS, TERMS AND CONDITIONS:

- Supply of Power from generator house to each of the four (04) Deep Tube Wells (DTWs)
- Installation of motor connections and panel boards for operating DTWs
- Providing power supply and lighting arrangement to Operator house, lube oil shed, generator house, pump shed etc.
- Installation of Area lighting and shed lighting to ensure proper illumination
- Earthing of all equipment, sheds, buildings etc.
- Providing power connections for instruments panel boards
- In addition to the above, any other electrical requirement

43.1 The Contractor's broad scope of the electrical works includes:

a) Cabling: Installation (laying, fixing etc.), termination, testing and commissioning of all Electrical Cables (unless otherwise stated)

b) Earthing: Complete earthing (including supply of all materials) of the gensets, PMCC panels, starters, NGRs, lighting transformer, instrument panels, lighting DBs, buildings, sheds, vessels, equipment (any non-current carrying) etc.

c) Illumination jobs: Area and Peripheral lighting, Shed Lighting, Building Lighting etc. with area light poles and light fittings, cables and auxiliaries

d) Complete Wiring for lighting and power circuit and other auxiliary supply in various rooms/buildings/sheds in the installation including supply of all materials

e) Installation & Commissioning of all the above jobs including any electrical equipments & Switchgears required for entire installation including termination of all Electrical cables, tools& tackles, equipment /gadgets required for proper Installation and commissioning of the Electrical system

f) Testing and handing over of Electrical System

The following are not included in contractor's scope of supply and commissioning:

g) Gensets and Neutral Grounding resistors (NGRs)

h) Electrical PMCC panel and stand-alone starter panels (for DTW motors)

i) Lighting transformer and lighting distribution board for the illumination system

j) Electrical powerand earth continuity cables (unless otherwise stated)

The above shall be supplied and installed by OIL, as otherwise stated.

43.2 CABLING:

43.2.1 PARTICULARS AND SPECIFICATIONS FOR CABLE LAYING

a) The normal size of the trench will be 45 cm wide and 75 cm deep. The size of the pit will be 120 cm to 150 cm diameter with same depth that of the trench. The bottom ofthe trench must be leveled and properly dressed. Any change in the above mentioned size shall be instructed by the Engineer-in-Charge.

b) 75 mm thick sand beds shall be spread at the bottom of the trench/pit. Then cable shall be uncoiled and laid as per instruction. Cable shall be covered againwith another 75mm of sand over the cable.Sand bed should cover entire width of trench/pit.

c) Bricks are then placed crosswise (irrespective of one or more cables laid in the trench pit) over the cable /cables as well as the entire pit as per instructions. There shall be at leastten bricks in every 1150mm long normal trench and covering the entire cable/cables (brick size 230mm x 115mm). The bricks should be placed close to each other withoutany gap. Afterwards, the trench shall be filled up with loose soil and rammed in.

d) In case of multiple cables in a trench including earth continuity cables, trench cutting cost for the first cable shall only be considered, and laying cost of subsequent cables in the same trench shall be cable handling cost only.

e) Cable markers shall be fixed up as per instructions.

f) Cable/Cables are to be laid and pulled inside the trench only.

g) Cable laid through same cable trench shall be properly dressed keeping adequate clearance in between.

h) The cable trenches inside any shed shall be filled with sand after completion of dressing and termination of all cables.

i) All cables shall have at least 5 meters of spare length at both ends and kept in the cable pit. All cable pits must have cable marker.

j) Identification tags in a permanent manner shall be provided in a regular intervals of 10metres to trace the cable from amongst bunches of cables.

k) Cables shall be laid and dressed such that they are not twisted or knots amongst them.

l) The cost is to be measured per cubic metre.

43.2.2 INSTRUCTIONS:

a) The trench must be filled back and properly rammed preferably in the same day the cable is laid.

b) Adequate number of personnel shall be employed while laying and pulling the cable to avoid any damages to the cable.

c) The cable pits are to be covered fully only after the cable termination at switchgear etc. is completed.

d) At crossings of pipe lines, drains, other cables etc. the depth of the cable trench may be increased depending on the obstruction encountered.

e) At gravel /metal road crossings the cable will be pushed through a steel pipe and no sand or brick will be necessary over the pipe and such crossing will be treated as cable laying in pucca trench irrespective of length of pipe and size of the cable.

f) The job should be completed within the stipulated date on the individual work order.

g) The Contractor shall be required to do all the jobs (handling of cable/cable drum/steel pipe/earth wire at electrical office cable yard as well as at work site) connected withthe cable laying. The handling will include uncoiling, cutting and re-coiling the required length of cable at cable yard as well as at site, loading, unloading and fixing the drumon jacks including return of the drum to the cable yard after job is completed.

h) The contractor shall supply at site sand and approved variety of 1st Class local bricks (Prior approval of the sample must be obtained before commencing bulk supply).

i) The contractor shall ensure that all statutory and Company's safety rules are observed /complied with by his/their workmen and the contractor shall provide the necessarysafety gadgets to his/ their workmen as required.

j) The contractor is responsible for safe custody and security of all the materials after the cable drum/cable and the allied materials are handed over, till such time the cablelaying work is completed in full and the balance materials are transported back to the departmental storing space.

k) If any damage occurs to any of the Company's materials during handling of the materials, laying, recovering of the cable and which is in Contractor's custody, thecontractor shall reimburse the Company all the expenses loss incurred due to the negligence, the actual repairs/replacement cost.

l) No joint anywhere in the cable shall be allowed.

m) The contractor shall have to arrange his own transport for transportation of his men and materials (sand &brick).

Additionally, laying (fixing) and installation of cables of all sizes with supply of all materials (fixing) of area light/power cables on wall/any flat surface is also in the scope of the contractor. The job involves fixing of the cable on wall (or any existing flat surface) with the help of saddles, screws and plastic fasteners. Thecost is to be measured in per metre.

In genset house shed, cable trench with pucca walls shall be constructed by the contractor as per dimensions and instructions of the Electrical Engineer-in-charge of OIL.

43.2.3 MATERIALS TO BE SUPPLIED BY THE COMPANY:

The following materials shall be supplied by OIL:

a) Cables (unless otherwise stated)

b) Cable route marker

43.2.4 MATERIALS AND TOOLS TO BE SUPPLIED BY CONTRACTOR:

The contractor shall supply:

a) G.I. or M.S. pipes for road crossing

b) Approved variety of sand

c) 1st Class local bricks

d) All excavating tools, cable handling tools like jacks, rollers etc. and earth handling tools and tackles

e) Transportation of men and materials

f) Cable identification tags (aluminium)

44.0 EARTHING:

The contractor shall provide complete earthing system including supply of all materials (GI straps of all sizes, GI earth electrodes, fasteners, earth pit enclosure etc.)to various equipment, engines, pumps, flow lines, vessels, buildings, sheds, gensets, panels, motors, starters, light poles etc. and any other metallic surface exposed to atmosphere and all other items erected against various items of the tender. The earthing system shall consist of earthing bus, earth straps, earth electrode, connected firmly to the surface as per IS: 3043 & IS: 7689 also as per instruction of Engineer-In-Charge.

This item includes supply of all materials, fabrication and erection as necessary for complete installation of the system with earth pit enclosure. [Refer Drgs. included in the Electrical Annexure].

44.1 EQUIPMENT EARTHING OF EQUIPMENT, ENGINES, PUMPS, FLOW LINES, VESSELS, PANELS, BUILDINGS:

The contractor shall provide complete earthing including supply of all materials to all equipment, engines, pumps, flow lines, vessels, panels, buildings, sheds etc. (non current carrying items). The earthing system shall consist of earth straps, earth bus and earth electrodes, connected firmly to the equipment/item as per IS: 3043 & IS: 7689 and as per instruction of Engineer-In-Charge.

This item includes supply of all materials, fabrication and erection as necessary for complete installation of the earthing system with earth pit enclosure. [Refer Drgs. included in the Electrical Annexure].

44.2 EARTHING OF ALTERNATORS, MOTORS, PANELS, SHEDS AND BUILDINGS:

The contractor shall provide complete earthing to all electrical equipment which includes motors, generators, panels, starter panels, lighting transformers,metallic shedsetc. Theearthing system shall consist of earth bus, earth straps, earth electrodes, connected firmly to the body of the equipment as per instruction of the engineer-in-charge from OIL. Each equipment must have double earthing with two separate points leading to two individual earth electrodes through separate earth buses.

This item shall include supply of all materials, fabrication and erection as necessary for complete installation of the system with earth enclosure.

44.3 EARTH ENCLOSURE:

The contractor shall construct brick or RCC enclosure with concrete/chequered plate cover at various earthpits of the installation as per sketch [Refer Drgs. included in the Electrical Annexure].

All materials shall be supplied by the contractor.

44.4 INSTRUCTIONS:

a) The earthing system for the entire plant including switchgears, panels, vessels, engines, manifolds, all the sheds, equipments etc. shall be designed by the contractor as per relevant IS and the norms mentioned below and shall take prior approval of the earthing system from the Electrical engineer-in-charge of OIL.

The system and requirements under this Technical Specification shall comply with latest revision of the following:

IS:3043-1987
Central Electricity Authority Regulations, 2010
National Electricity Codes, 1985

b) The earthing system shall ensure effective operation and safety aspects of the protective system in case of earth faults.

c) The Contractor shall measure the earthing resistance of the earthing system (both combined and individual) in presence of the OIL's representative. The Contractor shallhave to carry out the modification as directed by the OIL's representative to bring the earth resistance within limits of the relevant standards/ practices.

d) Wherever interconnecting ground conductors cross cable trenches / pipes etc., the conductors shall be taken through GI pipes and shall be laid at least 300 mm below the bottom level of the cable trenches/pipes.

e) Each earth pit has to be provided with a name plate of permanent nature indicating Earth electrode number, earth resistance values (both combined and individual) and date in good letter writing. Professional painter may also be engaged for such jobs.

f) Earthing flats/conduits shall be above ground. Hence it is best to lay the earth straps once the ground surface is in finished state (e.g., cement polished/brick soled floors etc.). Buriedand underground earth conductors are to be avoided at all costs.

g) The connection between earth straps shall be done with minimum two nos. proper sized fasteners, consisting of hexagonal head bolts, nut, flat washer and spring washer (all GI) in drilled holes. Holes made with gas cutting are not acceptable. In case the straps are welded, the welded joints shall be painted with bitumen paint as per the relevant IS. All the materials such as nuts and bolts, washers (flat and spring) used for the earthing system shall have to be approved by OIL's electrical engineer-in-charge.

h) Wherever the equipment does not have provision of termination of GI earth flat directly, suitable tinned copper jumpers lugged on both ends shall be used.

i) All Electrical equipment must have double earthing as per IS.

j) System neutral to be properly & separately earthed as per IS/IER

44.5 CONDUCTOR SIZES FOR EARTHING

Earthing conductors of following minimum sizes and materials shall be used in the Earthing System as listed below:

Sl. No.	Description	Size	Materials
1	Main earthing ring /grid over ground	50mm x 6 mm	GI strap
2	Vessels, tanks , PMCC, MCC panels etc.	50mm x 6 mm	GI strap
3	Motors, motor starters, lighting transformers etc.	30mm x 6 mm	GI strap

4	Smaller rating motor, Local Control Stations, Junction Boxes, Conduits, Pipes etc.	25mm x 3 mm	GI strap
5	Neutral earthing of alternator and lighting transformer	1x120 sq.mm PVC insulated conductor	PVC insulated aluminum cable

45.0 ILLUMINATION:

i) GENERAL AREA AND PERIPHERAL LIGHTING:

General area and peripheral lighting arrangement shall be in contractor's scope. The contractor shall perform the fabrication and erection of lighting pole as required. This item includes supply and/or fabrication of lighting pole (single or double pole structure), light fittings with HPMV/HPSV 400 watt weatherproof flood light fittings, 125/250 W HPMV street light fittings, 28/36 watt T5/FTL street light fittings etc. with frames of switchgears required if any and erection of the same at required locations of the installation as per requirement. This item also includes grouting of foundation (civil works) of the poles. All materials for the lighting arrangement shall be provided by the contractor.

Contractor shall submit a lighting arrangement scheme with bill of materials which will be approved by the electrical engineer-in-charge of OIL.

ii) ELECTRIFICATION OF SHEDS:

The electrification of sheds (Pump House, Generator House, Operators House, Lube Oil Shed, MeterRun Shed etc.) including lighting arrangement and power circuits shall be done by the contractor as per instruction of the engineer-in-charge.

The contractor shall fabricate frames, hooks etc. for fixing of electrical fittings and switchgears, conduit pipes for cable entry in suitable places as required. Cables are to berouted through perforated G.I. tray of required sizes.

All materials for electrification and lighting arrangement including industrial type FTL/T5 fittings (2 x 36/28 Watt), medium bay HPMV125 W industrial shed lights etc., associated switchgear (RCBO in each phase and MCBs in outgoing circuits, piano switches, metallic switchboards, power socket outlets (16/20 A with individual RCBOs),cable fixing/mounting support arrangement through cable trays etc. shall be supplied by the contractor. However, FLP equipment like light fittings (160 W MLL/20 W CFL), switches, junction boxes etc. shall be supplied by OIL. Erection, installation and commissioning of the same shall also be in scope of the contractor.

Contractor shall submit shed lighting and power supply schematic diagram with bill of materials for approval by OIL's electrical engineer-in-charge. Samples of the materials shall also be approved by the OIL's electrical engineer-in-charge.

iii) ELECTRIFICATION OF BUILDINGS:

The electrification operator house building, security barrack, dining room, kitchen, toilets, supervisor's office, fitter shed and any other sheds and building constructed in safe area shall be done by the contractor. Supply of all materials such as FTL/T5 fittings (1 x 36/28 Watt), single core colour coded FRLS copper cables (red for phase, black for neutral and green for earth, all identical in size for each circuit), all wiring materials such as PVC casing/cappings, bends, tees, ceiling rose, square box etc., associated switchgear (RCBO in each phase and MCBs in outgoing circuits, piano switches, PVC switchboards, switchboard socket outlets (6 A), power socket outlets (16/20 A with individual RCBOs),1400/1600 mm ceiling fans, fan speed regulators, cable laying/mounting support arrangement through cable trays etc. shall be in the scope of contractor.

Erection, installation and commissioning of the same shall also be in scope of the contractor.

Contractor shall submit building lighting and power supply schematic and wiring diagram with bill of materials for approval by OIL's electrical engineer-in-charge. Samples of the materials shall also be approved by the OIL's electrical engineer-in-charge.

All the electrical items shall be of OIL's approved make.

46.0 CABLE TERMINATION OF ALL ELECTRICAL EQUIPMENT:

The contractor shall provide terminal connections to all electrical equipment installed in the installation including termination of Genset cables up to PMCC panel & Neutral Grounding resistors (NGRs).

a) Termination shall include termination of cable to the terminal points of electrical equipment (including alternator, motor, control panel, light fittings, control gears, instrumentation panels etc.)

through proper crimping. It includes cable glanding, dressing of cable, numbering/marking of cable, fixing cable casing pipe etc.

b) The contractor must have crimping tools of proper size, insulation tester and other tools required for carrying out the above jobs.

c) Contractor must test and record insulation resistance of individual electrical equipment prior to termination.

d) All termination jobs shall be done by authorized electrical personnel only, having requisite valid electrical workman permit from Licensing board, Assam. All electrical jobs shall be supervised by contractor's authorized supervisor having valid electrical supervisor's certificate of competency issued/vetted by Licensing Board, Govt. of Assam.

e) Crimping lugs/sockets and cable glands for above jobs shall be supplied by the contractor.

47.0 INSTALLATION OF SWITCHGEAR AND EQUIPMENT:

Supply and installation of switchgears such as PMCC panel, motor starter panel, NGRs, genset control panel (if separately supplied), lighting transformers, lighting distribution board for the lighting transformers etc. shall be in OIL's scope.

However, the contractor shall arrange supply and installation of all earthing materials for the above equipment, as stated earlier. Grouting of frames of the panels/ starters shall also be in the scope of the contractor.

Contractor shall also arrange for laying, installation and commissioning of the outgoing cables from PMCC (to starter panels and lighting transformer) and outgoing cables from starter panels to DTW motors, lighting transformer to lighting DB and from lighting DB to individual area light circuits, peripheral light circuits, building/shed lighting and power etc.

If required, contractor shall also arrange supply and installation of sirens and call bell system (from security hut/entrance gate to security barrack/operator room) with suitable call bell/hooter and other accessories necessary for the system.

48.0 NOMENCLATURE OF ELECTRICAL EQUIPMENT AND CAUTION/WARNING BOARDS:

a) The contractor shall engage professional painter for letter writing/nomenclature of the switch boards, motors, panels, light poles etc. wherever necessary as per instruction of the Electrical-in-Charge.

b) The contractor shall make suitable arrangement and fix danger boards/ caution boards at motors, panel boards, switches and wherever necessary as per instruction of the Electrical engineer-in-charge.

49.0 INSTALLATION, TESTING, COMMISSIONING AND HANDING OVER:

a) The contractor shall complete the electrical works as per the terms and condition of the contract and to the satisfaction of OIL's electrical engineer-in-charge.

b) The contractor shall submit the detailed documents and test reports prior to final testing, commissioning and handing over the electrical system of the installation to OIL.

c) The set points of relays, timers and other protective equipments must be documented and submitted prior to initial testing of electrical equipment.

d) The overall electrical job must be done under supervision of an electrical supervisor having valid Supervisors certificate of competency from Electrical Licensing Board, Guwahati, Assam.

e) The contractor shall submit the following documents at the time of handing over:

- **i)** Layout Diagram of the Installation
- **ii)** Cable route and Cable schedule
- **iii)** Earthing layout, Earth resistance values and position of earth pits, with numbers
- **iv)** IR values of alternators, motors and other electrical equipment
- **v)** Single Line Diagram of power schematic and bill of materials

50.0 SPECIAL INSTRUCTION:

a) The particulars, specification and inspection of works may deviate to a certain extent according to the prevailing condition of the site during the commissioning jobs.

b) Contractor shall agree to install and commission any additional electrical equipment, light fittings, cables, switchgear that may be provided by OIL (but not mentioned above) for better operability and safety of the installation and operating personnel.

c) A reliability run (test run) of 3 days shall be done prior to the final approval of the commissioning jobs by OIL's engineer-in-charge. Any defect/ fault occurred during the test run shall be rectified by the contractor.

d) Contractor shall bear the damages caused to the electrical network as well as to the system arising out of wrong connection and poor workmanship.

51.0 IMPORTANT NOTES:

a) The contractor has to follow IS codes, CEA Regulations, DGMS & OISD guidelines and standard practices for the execution of jobs.

b) Personal Protective Equipment [PPE] viz. helmet, safety shoes, safety belt, insulated hand gloves etc. must be used by the contractor personnel.

c) All electrical panels, switchgears, and equipment shall be accommodated in a cement concrete/RCC house or metallic structure shed.

d) Electrical equipment such as gensets, NGRs, PMCC panels and starter panels for DTWs shall be supplied by OIL.

e) Drawings / sketches provided are for reference only.

f) All payments shall be made as per actual.

52.0 TECHNICAL PERSONNEL: All electrical jobs shall be carried out under direct supervision of competent and experienced Electrical Supervisor. The supervisor shall have valid Electrical Supervisor's certificate of Competency issued/vetted by Licensing Board, Assam. The technicians engaged inthe erection, testing, commissioning jobs should posses valid requisite electrical workmen permit issued/vetted by State Licensing Board. The licenses, permits, credentials of working personnel, supervisors and other relevantdocuments shall be examined by the OIL's electrical engineer-in-chargeof the site prior to starting of the electrical jobs.

53.0 Electrical Annexure

List of Electrical Drawings

01. Earth Electrode Drawings (Chemical earth electrode): As detailed in - Sketch E01

02. Earth Electrode Enclosure: As detailed in - Sketch E02

03. Earth Connection Drawings of Pressure Vessels and Equipments : As detailed in - Sketch E03

04. Shed Lighting Arrangement: As detailed in - Sketch E04

PHASE V: TESTING & COMMISSIONING OF WATER INJECTION STATION.

54.0 INSPECTION AND TESTING:

54.1 INSPECTION & TESTING OF MATERIALS:

a) The Company shall be entitled at all times at the risk of the contractor to inspect and or test by itself or thorough an independent person(s) or agency (ies) appointed by the company and / or to direct the contractor to inspect and / or test all materials, items and components whatsoever supplied or proposed for supply for incorporation in the works, inclusive, during the course of manufacture or fabrication by the contractor and / or at the contractors works or otherwise the inspection and / or test shall be conducted at the expense of the contractor and if conducted by the contractor may be directed by the company to be conducted by the agency (ies) nominated by the company and / or in the presence of a witness (es) or agency (ies) nominated by the Company.

b) The site engineer shall be entitled to reject at any time any defective material, item or component (including specially manufactured or fabricated items or components) supplied by the contractor for incorporation in the works notwithstanding previous inspection and / or testing thereof by or on behalf of the Company without rejection and notwithstanding previous approval thereof by or on behalf of the Company the decision of the site engineer as to any defect as aforesaid being 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 or shall if so required by the site Engineer (whose decision in this behalf shall be final) remove the rejected material / item / components from the job site within the time specified by the site engineer and replace it at his own cost and expense with material (s) / item (s) component (s) approved by the site engineer.

54.2 INSPECTION & TESTING OF WORKS:

a) The contractor shall at all times ensure high standard of workmanship, related to the work to the satisfaction of the site engineer. The site engineer shall have the power to inspect the work in all respects at any and all times up to the completion of the work as also to test or instruct the contractor to test the works or any structure, material (s) or component (s) thereof at the risk and cost of the contractor.

b) The contractor shall provide all facilities, instruments, materials / labour etc. required for testing and the works and shall other the site engineer all assistance necessary to inspect the tests carried out by the contractor.

c) The contractor 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.

d) Should the site engineer on inspection or test be not satisfied with the quality or workmanship, of any work, material or component (the decision of the site engineer 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 site engineer.

54.3 FINAL TEST AND POSSESSION OF WORKS:

a) As soon as the works have been completed in all respects to the satisfaction of the site engineer, final tests of the works shall be undertaken by the contractor at the risk and costs of the contractor in the presence of the site engineer. 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.

b) Upon satisfactory completion of the final tests, the site engineer shall prepare a final test certificate witnessed by the contractor, which shall certify the date on which the final tests in respect of the works have been successfully completed and where final tests have been conducted in piecemeal shall certify in date on which the final tests in respect of the concerned part (s) / sections (s) / group (s) / job site (s) / have been successfully completed.

c) As and from the date of successful completion of final tests 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.

d) 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 or provide to correct, repair and / or rectify the defect (s) to the satisfaction of the site engineer.

54.4 INSPECTION AND TESTING OF PIPELINE WORKS:

54.4.1 Visual Inspection: 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.

54.4.2 Radiographic Examination:

1. The procedure of radiographic examination, limits acceptability, removal and repair of detects shall be as per API 1104 and shall be approved by the engineer in-charge. 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 shall make necessary arrangements for the equipment as well as radiographic films at his own cost for the satisfactory completion of the job.

2. The extent of radiography shall be as indicated in schedule of works of the contract. In cases where the extent of radiography is not specifically mentioned, the engineer in-charge will determine the same, depending on the criticality of service.

3. Contractor shall fulfill all the statutory safety requirements in handling the X-Ray and Gamma rays equipment.

4. In case of random radiography, the percentages given in schedule of works indicate only the overall extent of radiography to be carried out. Joints to be radio graphed shall be selected by site engineer and the radiography shall be carried out in his presence. The contractor shall submit all the radiographs along with radiographic reports to the site engineer / engineer in-charge immediately after processing the radiographs for approval. The details of the radiographs shall be duly entered and signed by him in the radiographic reports.

55.0 REPAIRS OR REMOVAL OF DEFECTS:

i) Defects which 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 approval of site engineer.

56.0 PRESSURE TESTING OF PIPELINES NETWORK:

i) Soundness of the weld shall be tested by the contractor in the presence of site engineer by hydrostatic / pneumatic means. Prior to test, installation shall be inspected by the site engineer to the extent necessary to ensure compliance with engineering design with respect to material, fabrication and assembly. Clearance for such tests shall be obtained by the contractor from the site engineer.

ii) Valves also shall be tested individually before installation by the contractor at his own cost.

iii) All pipelines including valves, flanges, fittings etc. shall be tested hydraulically to the recommended pressure in presence of the site engineer. 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 the pressure does not hold good due to contractor's fault, defects shall be rectified & hydraulic testing shall be redone free of cost.

57.0 CLEANING:

i) All equipment in the system shall be cleaned and flushed free of all dirt, debris and loose foreign material after approval of pressure testing by the engineer / engineer-in-charge.

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.

58.0 PICKLING OF WELDS:

i) All welded joints shall be cleaned or salt and spatter. 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) Equipment shall be tagged after cleaning is completed and approved by site engineer.

59.0 PAINTING:

i) Painting covers the general requirements like surface preparation, painting, application sequence, colour codes etc.

ii) Paint selected shall be such that they should be able to withstand all weather conditions as well as atmospheric conditions of the plant area. Site Engineer shall approve all paints that are used for work.

iii) In all cases primer coat must be applied with 3 hours after cleaning.
iv) For painting work, latest revisions of relevant standards shall be followed.
v) Primer shall be of Red Oxide Zinc chromate conforming to IS:2074.

60.0 SYNTHETIC ENAMEL FINISH: 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.

60.1 ALUMINIUM PAINT: The aluminium paint used for atmospheric services (temperature up to and including 70 degree celcius) shall conform to IS: 2339.

60.2 SURFACE PREPARATION FOR PAINTING:

i) 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.
ii) Solvent cleaning shall be adopted only in extreme cases with the approval for the site engineer.
iii) Surface treatment shall not be done under hurried conditions without approved precautions and prior approval of the Engineer-in-charge.
iv) All surface which show traces of oxidation after cleaning and before applying paint shall be cleaned again.
v) Spark proof tools shall be sued in flammable areas.

60.3 COLOUR CODE: The colour coding shall be as per instructions of site engineer.

61.0 WELDERS TEST: All welders engaged by the contractor for performance of the work shall be subjected to welders 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 site engineer of OIL.

62.0 INSTALLATION, TESTING, COMMISSIONING AND HANDING OVER:

i) The contractor shall complete the electrical works as per the terms and condition of the contract and to the satisfaction of electrical OIL's engineer in charge.
ii) The contractor shall submit the detailed documents and test reports prior to final testing, commissioning and handing over the electrical system of the installation to OIL.
iii) The set points of relays, timers and other protective equipments must be documented and submitted prior to initial testing of electrical equipment.
iv) The overall electrical job must be done under supervision of an electrical supervisor having valid Supervisors certificate of competency from Electrical Licensing Board, Guwahati, Assam.
v) The contractor shall submit the following documents at the time of handing over:
- **a)** Layout Diagram of the Installation.
- **b)** Cable rout and earthing layout.
- **c)** Cable schedule.
- **d)** IR values of alternator, motor and other electrical equipment
- **e)** Earth resistance values.
- **f)** Single Line Diagram of power schematic and bill of materials.

63.0 SPECIAL INSTRUCTION:

i) The particulars, specification and inspection of works may deviate to a certain extent according to the prevailing condition of the site during the commissioning jobs.
ii) A reliability run (test run) of 3 days shall be done prior to the final approval of the commissioning jobs by OIL's engineer in charge. Any defect/ fault occurred during the test run shall be rectified by the contractor.
iii) Contractor shall bear the damages caused to the electrical network as well as to the system arising out of wrong connection and poor workmanship.

64.0 IMPORTANT NOTES.

1. The contractor has to follow IS codes, IE rules, DGMS & OISD guidelines and standard practices for the execution of jobs.

2. Personal Protective Equipment [PPE] viz. helmet, safety shoes, safety belt, insulated hand gloves etc. must be used by the contractor personnel.

3. All panels, switchgears, and equipment shall be accommodated in a cement concrete house or shed.

4. Electrical equipment viz. switchgear, light fitting, cables etc. shall be supplied by OIL.

5. Drawings / sketches provided are for reference only.

6. All payments shall be made as per actual.

To,
HEAD-CONTRACT
OIL INDIA LIMITED
DULIAJAN-786602

SUB: SAFETY MEASURES

Description of work/service:

CONSTRUCTION OF WATER INJECTION STATION AT HAPJAN.

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. 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 all HSE laws by the sub or sub-sub contractors.
2. 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 and Full Body harness has to be DGMS approved. 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. All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.

3. 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 mining operation / operations to be done by the contractor and how it is to be managed.

4. 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.

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

6. 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.

7. 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.

8. 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.

9. 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.

10. 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 / Engineer / Official / Supervisor/Junior Engineer for safe operation.

11. 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.

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

13. The contractor shall have to report all incidents including near miss to Installation Manager / departmental representative of the concerned department of OIL.

14. 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.

15. 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.

16. The health check up of contractor's personnel is to be done by the contractor in authorized Health Centers 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.

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

18. Records of daily attendance, accident report etc. are to be maintained in Form B, E, J (as per Mines Rules

1955) by the contractor.

19. 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.

20. A contractor employee must, while at work, cooperate with his or her employer or other persons so 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.

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

22. 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.

23. 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.

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

25. The contractor should frame a mutually agreed bridging document between OIL & the contractor with roles and responsibilities clearly defined.

26. 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 **CONSTRUCTION OF WATER INJECTION STATION AT HAPJAN. - UNDER IFB NO. CDI7759P16.** 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 Organisation "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 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 h e/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.

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 risibility 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.

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 3 % of the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.

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 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.

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 Bidder/Contractor undertakes to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.

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 (three in number depending on the size of the contract) (to be decided by the Chairperson of the Principal)

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.

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.

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 intensions.

---------- **----------**

For the Principal **For the Bidder/Contractor**

Place. Duliajan. **Witness 1: .....**

Date. . **Witness 2: .....**

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.

LETTER OF AUTHORITY FOR ATTENDING BID OPENING

TO
HEAD (CONTRACTS)
OIL INDIA LIMITED
P.O. Duliajan - 786 602
Assam, India

Sir,

Sub: **OIL's IFB No. CDI7759P16**

I / We _____ confirm that Mr. _____ (Name and address) as authorised to represent us during bid opening on our behalf with you against IFB Invitation No. **CDI7759P16** for **CONSTRUCTION OF WATER INJECTION STATION AT HAPJAN.**

We confirm that we shall be bound by all and whatsoever our said representative shall commit.

Yours Faithfully,

Authorised Person's Signature: _____

Name: _____

Signature of Bidder: _____

Name: _____

Date: _____

PROFORMA-III

FORMAT OF BID SECURITY (BANK GUARANTEE)
OR ANY OTHER FORMAT ACCEPTABLE TO OIL

To:
M/s. OIL INDIA LIMITED
For Head (Contracts)
Duliajan, Assam, India, Pin - 786 602.

WHEREAS, (Name of Bidder) _____ (hereinafter called "the Bidder") has submitted their offer Dated _____ for the provision of Hiring services for **CONSTRUCTION OF WATER INJECTION STATION AT HAPJAN** (hereinafter called "the Bid") against OIL INDIA LIMITED, Duliajan, Assam, India (hereinafter called the Company)'s **IFB No. CDI7759P16.**

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 common seal of the said Bank this _____ day of _____ 2015.

THE CONDITIONS of these obligations are:

(1) If the Bidder withdraws their Bid during the period of Bid validity specified by the Bidder; or

(2) If the Bidder, having been notified of acceptance of their Bid by the Company during the period of Bid validity:

(a) Fails or refuses to execute the form of agreement in accordance with the Instructions to Bidders; or

(b) Fails or refuses to furnish the Performance Security in accordance with the Instructions to Bidders;

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 one or both of the two 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.

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 in INR.

* * Date of expiry of Bank Guarantee should be minimum 210 days from the date of opening of Bid i.e minimum up to **02.03.2016.**

PROFORMA-IV

STANDARD FORMAT OF PERFORMANCE SECURITY (BANK GUARANTEE)

To,
OIL INDIA LIMITED
DULIAIJAN – 786602
ASSAM

ON NON – JUDICIAL STAMP PAPER OF ADEQUATE VALUE AS PER STAMP DUTY ACT

This deed of guarantee made between …… (**Full address of the issuing Bank**) …… having the head office at ……. (hereinafter called the "Bank", which expression, unless repugnant to the context or contrary) to the ONE PART and Oil India Limited, a Company incorporated in India, having its Registered Office at Duliajan 786602, Assam (hereinafter called "**OIL**", which expression shall include its successors and assignees) of the OTHER PART.

Whereas OIL has placed a contract vide Contract No./**Agreement No**. …….. (hereinafter referred to as the said "Agreement") for ……. (brief description of the nature of the contract) …….. for the period from ……. to …….. with M/s. ……(**Contractor**) ……. (Full address of the contractor) …… having its Regional Headquarters at ……(hereinafter called the "said Contractor").

And whereas it is one of the terms of the said Contract/Agreement that the said Contractor shall furnish to OIL a guarantee to the extent of **Rs**. …… (Rupees ……) towards the security deposit / mobilization advance/ release of retention money/performance security from a Bank. Whereas the Bank has, at the request of the Contractor, agreed to give in favour of OIL a guarantee in the manner hereinafter appearing which OIL has agreed to accept.

1. We, the Bank, do hereby undertake to pay to OIL an amount not exceeding **Rs**……. (Rupees …….) against any loss or damage caused to or suffered or would be caused to or suffered by OIL by reason of any breach by the said Contractor of any of the terms and conditions contained in the said Agreement.

2. We, the Bank, do hereby undertake to pay the amounts due and payable under this guarantee without any demur merely on receipt of a written demand from OIL stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by OIL by reason of any breach by the said Agreement or by reason of the Contractor's failure to perform, the said Agreement provided such demand in writing is received by the Bank on or before ……. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee, subject however, our liability under this guarantee shall be restricted to an amount not exceeding Rs. ……..

3. We, the Bank, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of OIL under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till OIL certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor and accordingly discharges the guarantee or till……... whichever is earlier. Unless a demand or claim under this guarantee is made on and received by us in writing on or before ……. we shall be discharged from all liabilities under this guarantee thereafter.

4. We, the Bank, further agree with OIL that OIL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by OIL against the said Contractor and to forbear or to enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability during the currency of this guarantee by reason of any such variation or extension being granted to the said Contractor or for any forbearance, act on omission on the part of OIL or for any indulgence shown by OIL

Contd…..P/2

to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of so relieving us.

5. We, the Bank, undertake not to revoke this guarantee during the currency of this guarantee except with the previous consent of OIL in writing.

6. This guarantee shall not in any way be affected by the change in the constitution of the contractor or us nor shall be affected by the change in the constitution, amalgamation, absorption or reconstruction of the contractee company or otherwise but shall ensure for and be available to and enforceable by the absorbing, amalgamated or reconstructed company of the contractee.

7. Notwithstanding anything contained in the foregoing our liability under this guarantee is restricted to Rs. …….. (Rupees ……..) our guarantee shall remain in force until…….… Unless a claim in writing is received in this office before the close of business on ……..……. all your rights under this guarantee shall be forfeited and we shall be released and discharged from all liabilities thereunder.

Dated this _____ day of _____ **2015**

Place: …… (**Address of the Bank/Branch in full**)

AUTHORIZED SIGNATORY WITH SEAL AND AUTHORIZATION NUMBER

E-TENDER NO. CDI7759P16

PROFORMA-V

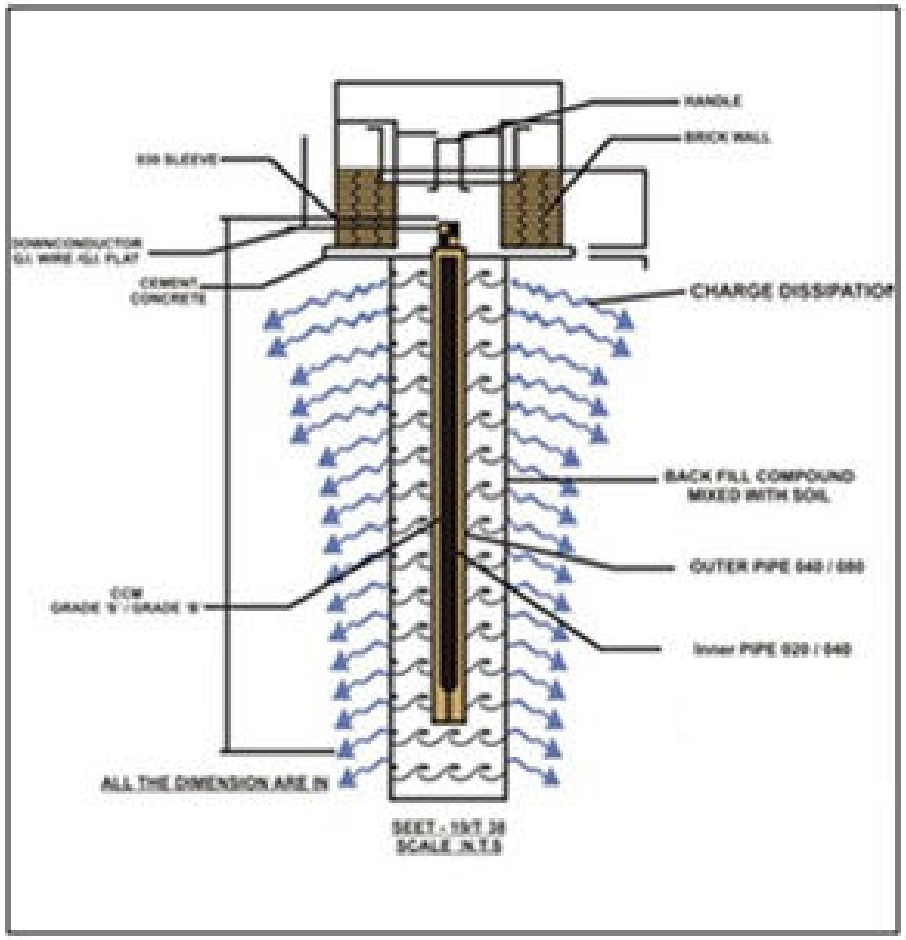
DETAILS OF BIDDER
(WHEREVER APPLICABLE, TO BE FILLED BY THE BIDDER)

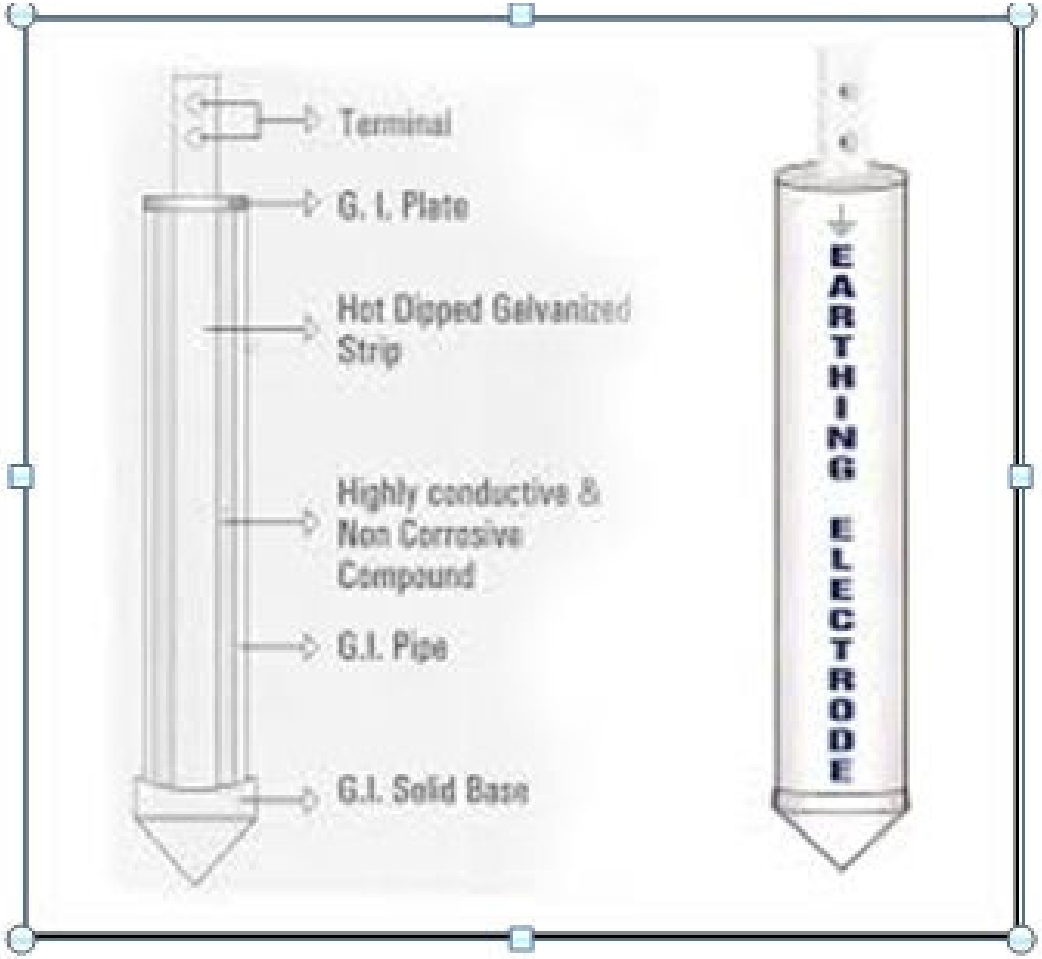
a.	Name of the Bidder / Firm:				
b.	Registered postal address with PIN code:				
c.	Telephone No:				
d.	Mobile No:				
e.	E-mail ID:				
f.	Fax No:				
g.	Contact Person:				
h.	Contact person's contact No:				
i.	PAN No:				
j.	Bidder's Bank details:	Name: Address: A/c Type: A/c No.: IFSC/RTGS Code: NEFT Code:			
k.	EMD / Bid Security Details:				
	EMD / Bid Security Deposited vide: (Tick √ whichever is applicable)	ONLINE PAYMENT	DEMAND DRAFT (DD)	BANKER'S CHEQUE (BC)	BANK GUARANTEE (BG)
	EMD Instrument No. & Date:				
	Validity of BG: (If EMD submitted vide BG)				
	Name & Address of EMD issuing Bank / Branch (only in case of EMD submitted in the form of DD / BC / BG)				
l.	VAT Regn. No.				
m.	Service Tax Regn. No. (If not available then to be submitted on issuance of LOA)				
n.	PF code no. (Or a declaration by the applicant that provisions of Provident Fund Act is not applicable to them. In case P.F. is required to be deposited later on, the same will be deposited by the bidder)				
o.	Vendor code with OIL (if available)				

Signature: _____

Name in Block letters _____

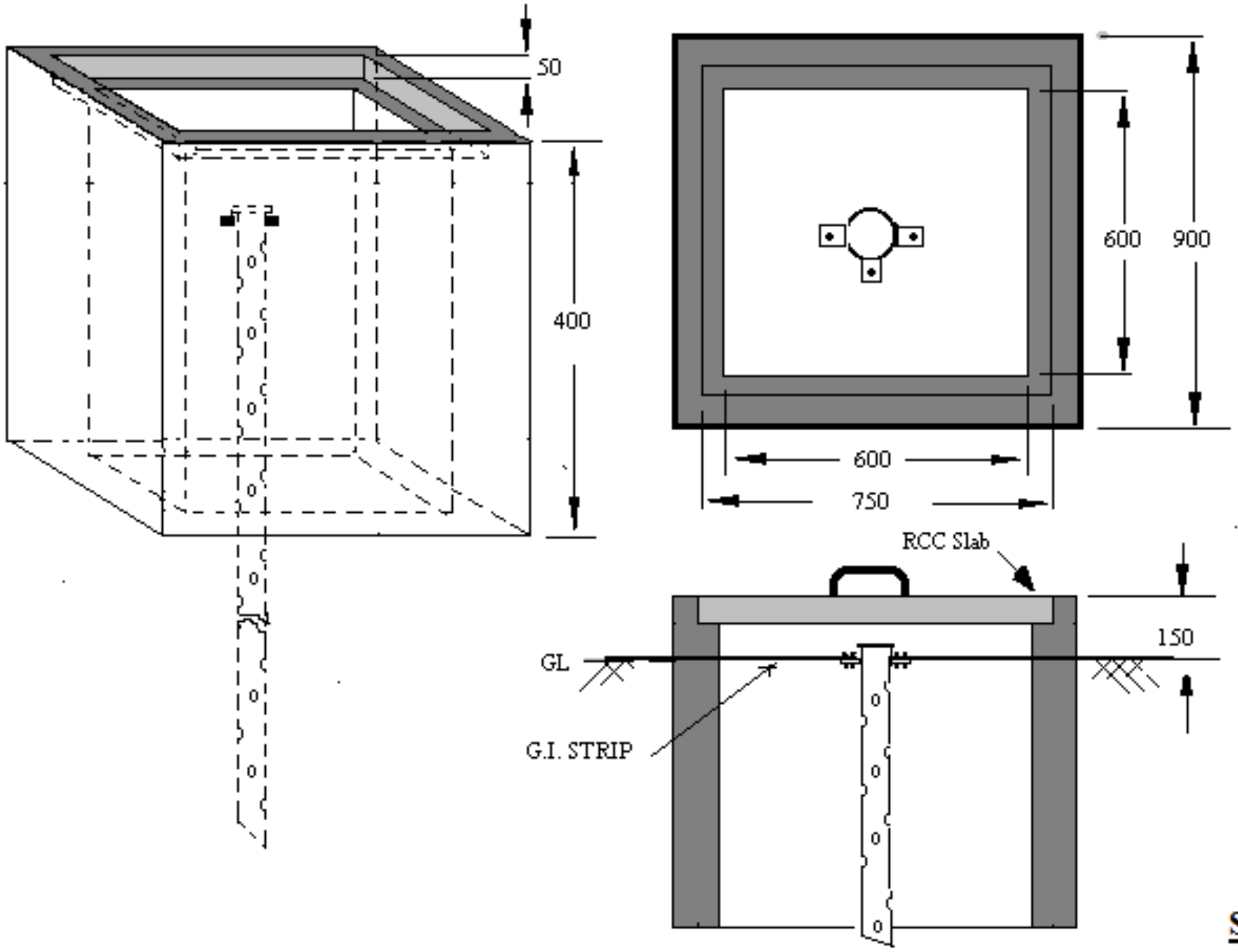
For M/S. _____


HANDLE
BRICK WALL
CHARGE DISSIPATION
BACK FILL COMPOUND MIXED WITH SOIL
OUTER PIPE 640 / 686
Inner PIPE 620 / 640
ALL THE DIMENSION ARE IN

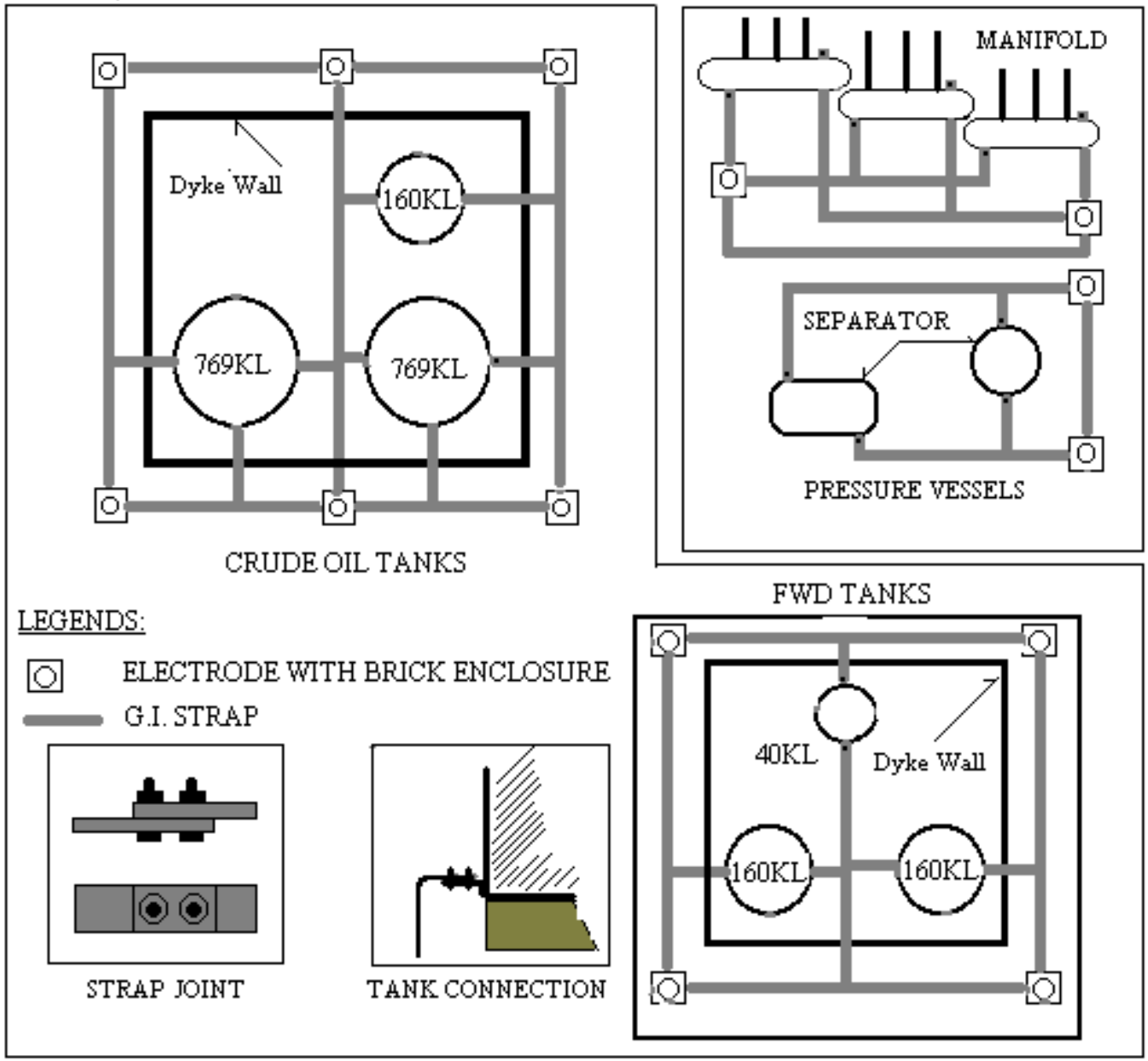

Terminal
G. I. Plate
Hot Dipped Galvanized Strip
Highly conductive & Non Corrosive Compound
G.I. Pipe
G.I. Solid Base
EARTHING ELECTRODE

SKETCH E01

ENCLOSURE OF AN EARTH ELECTRODE

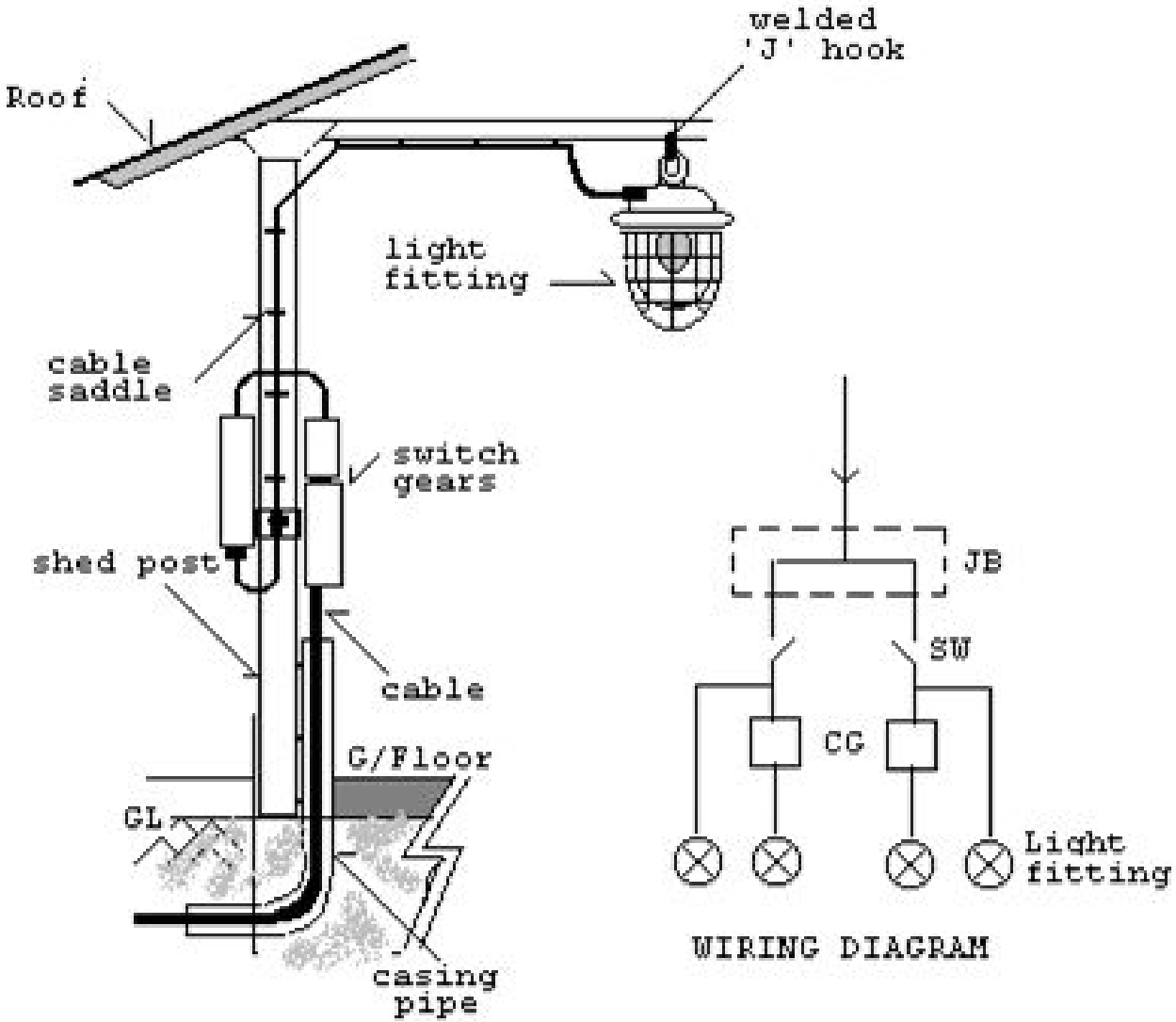


SKETCH E02



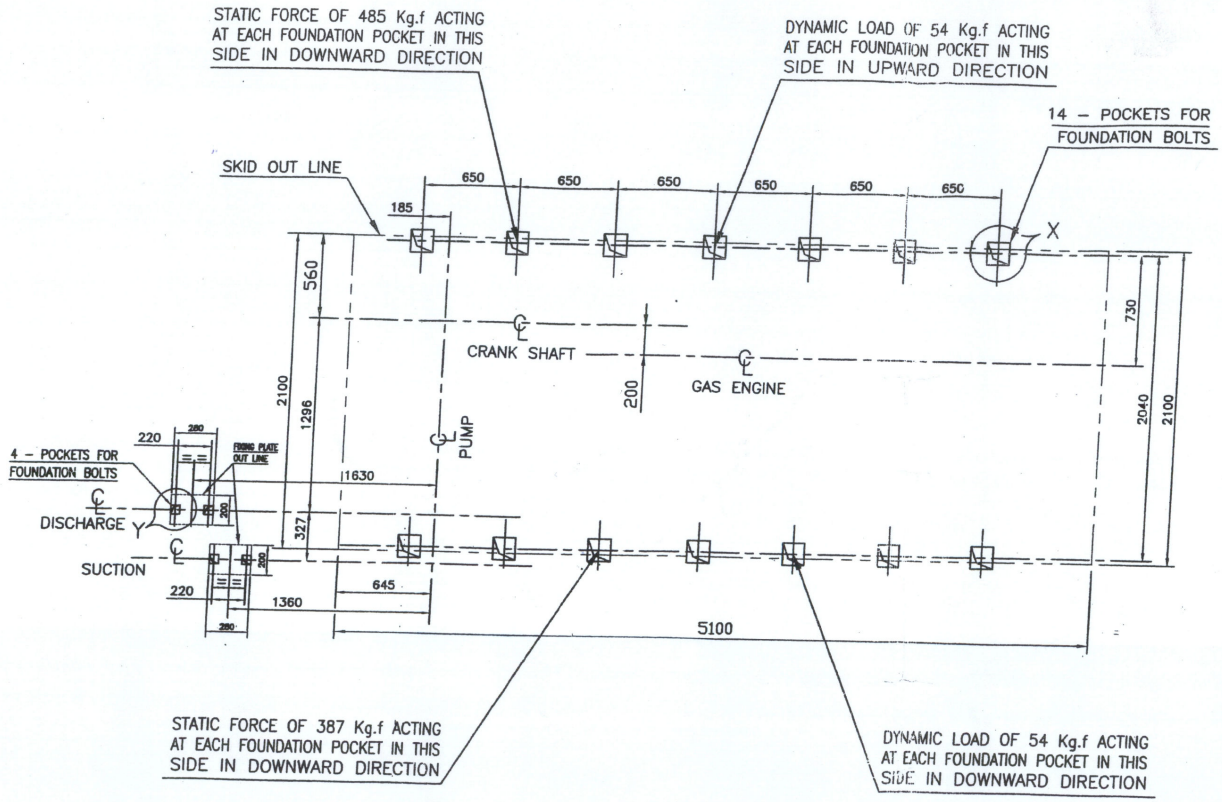
EARTH CONNECTION OF EQUIPMENT AND VESSELS

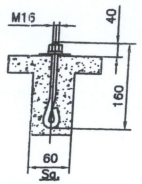
SKETCH E03



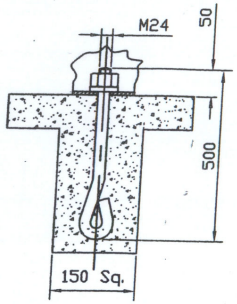
WIRING DIAGRAM

SKETCH E04





DETAIL Y



DETAIL – X

NOTES:–

1. FOUNDATION HEIGHT SHALL BE DECIDED BY PURCHASER.
2. FOUNDATION POCKET SHALL BE FULL GROUTED TYPE AND GROUTING SHALL BE IN PURCHASER'S SCOPE.
3. REFER GENERAL ARRANGEMENT DRG. No. 1 900 294/2

SKETCH No - 01

CLIENT : OIL INDIA LTD, DULIAJAN
PROJECT : OIL INDIA LTD, DULIAJAN
P.O.No. : 7905215/SDG/P8
DATE: 29.02.2012

BPCLtd.(Ref)
S.O.No. 102012001–01
DATE : 29.02.2012

REVISIONS	DATE	BY	APPD

ISSUED BY — RP DESIGN

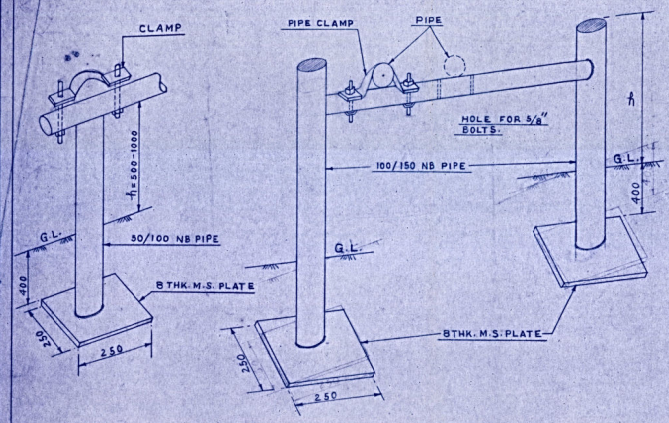
SUPERSEDES	SUPERSEDED BY

DATE 31/05/2012
DRN
CHD
APPD

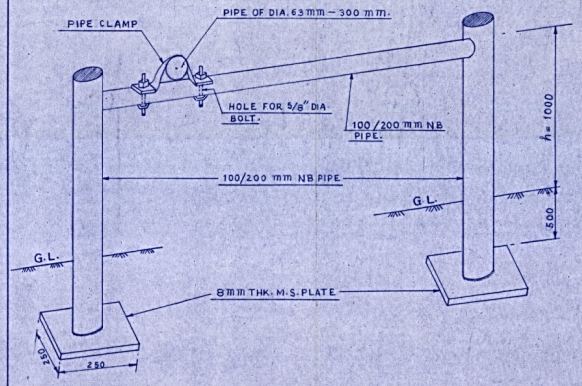
BHARAT PUMPS & COMPRESSORS LTD.
NAINI ALLAHABAD

FOUNDATION DETAIL
(FOR PUMP TYPE A336 (63–10))
(S.O.No. 102012001–01)

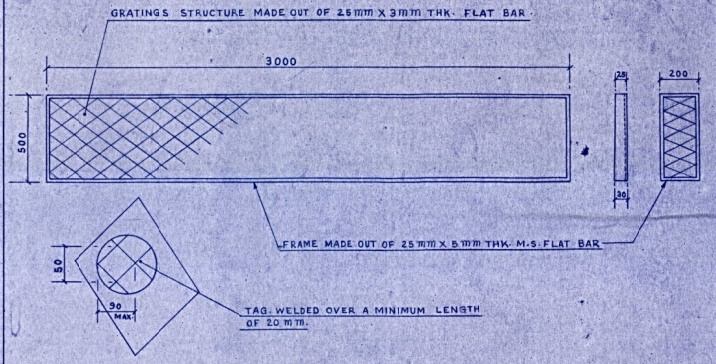
MATL	SCALE	WT.	KG.
ASSLY.DRG.	4SK11056		REV. 0
REF.DRG.			



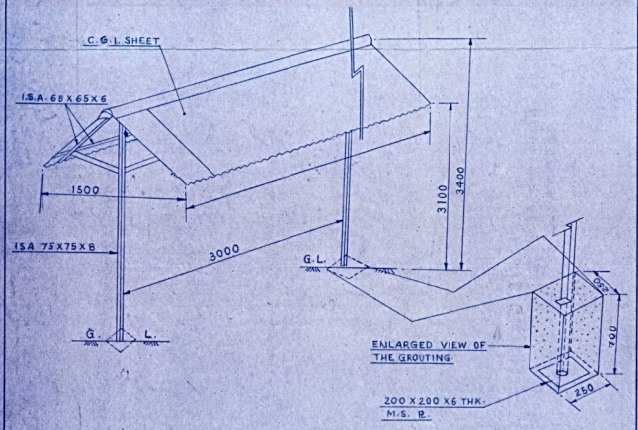
PIPE SUPPORTS



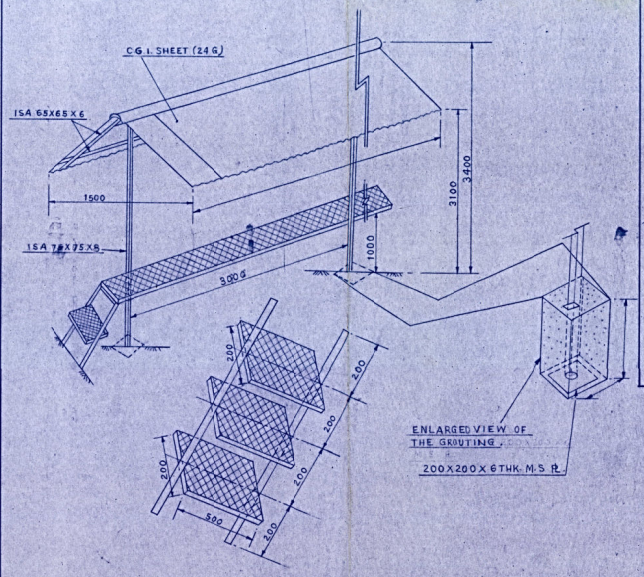
PIPE SUPPORTS



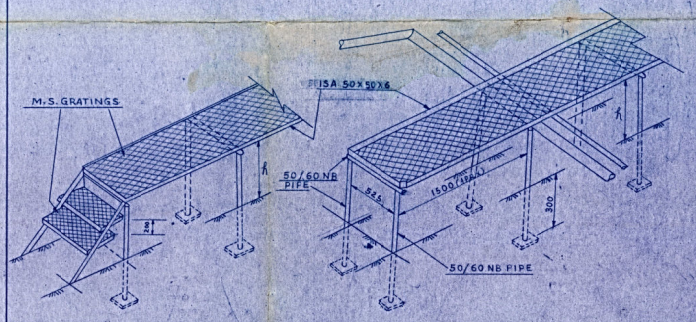
M.S. GRATING



METER SHED



METER SHED



WALKWAYS

NOTES:

1. h - WILL VARY FROM 500 TO 700 mm.
2. THE UNDERGROUND PORTION OF EACH POST TO BE GROUTED. (C.C. WORK OF MIXTURE 1:2:4 RATIO) IN HOLES OF 150 X 150 X 300 DEPTH.

DRG. PREPARED FROM SKETCH SUPPLIED BY THE DEPT.

ALL DIMENSIONS ARE IN MILLIMETRE

REV.	DATE	ZONE	BRIEF RECORD	APPROVED

OIL INDIA LIMITED
DRAWING OFFICE
DULIAJAN

	NAME	DATE
DESIGNED		
DRAWN		
TRACED	[illegible]	18-8-88
CHECKED	[illegible]	30.5.92
APPROVED		

SCALE: NOT TO SCALE

TITLE: METER RUN SHED, WALKWAYS AND PIPE SUPPORTS.

DRG. No. OIL/7707