



BID DOCUMENT

Tender NO. : CGI 6319P25

Construction of 02 Nos. of G+6 Storied Residential Buildings including Electrification works, lifts, Sanitary works, Site Development etc. all complete inside Pipeline Headquarters Township, Oil India Limited (OIL), Guwahati, Assam.

OIL INDIA LIMITED
(A Government of India Enterprise)
CONTRACTS SECTION, PHQ
P.O. Udayan Vihar– 781171, Guwahati, ASSAM

OIL INDIA LIMITED (OIL) invites Bids through its E-Procurement portal “<https://etender.srm.oilindia.in/irj/portal>” for the following services under **Single Stage Two** bid system.

1.0 IFB No.	CGI6319P25
Service Requirement	Construction of 02 Nos. of G+6 Storied Residential Buildings including Electrification works, lifts, Sanitary works, Site Development etc. all complete inside Pipeline Headquarters Township, Oil India Limited (OIL), Guwahati, Assam.
Cost of Bid Document	NIL
Bid Security(EMD)	Rs.21,93,000.00
Period of Sale of Bid Document/Issue of User ID & Password	As per online data
Bid Closing /Opening Date & Time	As per online data

2.0 For participation, the application(s) on applicant’s letter pad with a request for USER ID & PASSWORD is to be submitted /sent to reach the **Office of CGM-Contracts, Contracts section, Pipeline Head Quarter, OIL INDIA LIMITED, P.O. Udayan Vihar, Assam-781171** 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.

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- IFB No.: CGI6319P25

Description of Services: Construction of 02 Nos. of G+6 Storied Residential Buildings including Electrification works, lifts, Sanitary works, Site Development etc. all complete inside Pipeline Headquarters Township, Oil India Limited (OIL), Guwahati, Assam.

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/Fax No.

2.1 No physical Bid documents will be provided. 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.

2.3 a) Bidders without having E-tender Login ID and Password should complete their online registration at least seven (7) days prior to the scheduled bid closing date and time of the

tender. For online registration, Bidder may visit the OIL's E-tender site <https://etender.srm.oilindia.in/irj/portal>

b) Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.

c) **Bid security is applicable against this tender.**

d) For availing benefits under Public Procurement Policy (Purchase preference), the interested MSE Bidders must ensure that they are the manufacturer/ service provider of tendered item(s) and registered with the appropriate authority for the said item(s).. If the technical offer does not include a valid copy of relevant MSE Certificate issued by appropriate authority specifying the item as per tender will be summarily rejected. Late communication in this regard and request for bid closing date extension on that plea shall not be entertained by Company

3.0 EXEMPTION OF EMD: Applicable .

4.0 The details of IFB can be viewed using "Guest Login" provided in the E-Procurement portal and also in OIL's web site www.oil-india.com. The link to OIL's E-Procurement portal has also been provided through OIL's web site www.oil-india.com

Note: All corrigenda, amendments, time extension, clarifications etc. if any to the above tender will be hosted on OIL's website and in the e-portal <https://etenders.srm.oilindia.in/irj/portal> only and no separate notification shall be issued in the press. Prospective bidders are requested to regularly visit the website and e-portal to keep themselves updated.

CONTRACTS SECTION, PHQ
P.O. Udayan Vihar – 781171, Guwahati, ASSAM

OIL INDIA LIMITED invites ON-LINE BIDS from eligible Bidders/Firms for the following mentioned works/services under **SINGLE STAGE TWO BID System** through its e-Procurement site .

DESCRIPTION OF WORK/ SERVICE:

Construction of 02 Nos. of G+6 Storied Residential Buildings including Electrification works, lifts, Sanitary works, Site Development etc. all complete inside Pipeline Headquarters Township, Oil India Limited (OIL), Guwahati, Assam.	
IFB NO:	CGI 6319P25
Type of IFB:	Single Stage Two Bid System
Location:	O.I.L Pipeline Headquarters, Guwahati
Contract Period:	30 months.
Mobilisation Period:	10 DAYS from issue of LOA..
Pre-Bid meeting	As per online data
Technical Bid Closing/ Opening Date & Time:	As per online data
Price Bid Opening Date & Time:	As per online data
Bid Submission Mode:	Bid should be submitted online in OIL's E-Procurement Portal
Bid Form Submission:	Bid Form Proforma-B to be submitted along with Technical Bid
Bid Opening Place:	Office of the CGM(Contracts)PL, OIL INDIA LIMITED , Guwahati- 781171, Assam
Bid Validity:	120 days from Bid opening date
Bid Security Amount:	Rs.21,93,000.00
Amount of Performance Security/ Guarantee :	Performance Security/ Guarantee shall be 10% of the contract value for which Contractor shall submit a Performance Security amounting to 2.5% of the contract value at the time of award of contract and remaining 7.5% shall be deducted from their running bill(s).
Validity of Performance Security:	As per Clause 69.2 of PART -III, SECTION -II of SPECIAL CONDITIONS OF THE CONTRACT.

a) Bid Security deposited vide Demand Draft/Banker Cheque /Bank Guarantee No._____dated_____of_____

Original hard copy of (a) (In case of Bidders submitting Bid Security in the form of Bank Draft/Banker cheque/Bank Guarantee) should reach the office of General Manager(CONTRACTS) on or before 01:45 Hrs (IST) on the bid closing date or it *can be paid through the online payment Gateway against this Tender*, otherwise Bid will be rejected. A scanned copy of Bid security/EMD invoice (In case of Bid security submitted

online) should also be uploaded along with the Un-priced Techno-commercial bid documents.

A Bank Guarantee in the prescribed format issued by any of the following Bank is only acceptable:

- i) Any schedule Indian Bank or Any Branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in case of domestic bidder OR**
- ii) Any foreign Bank which is not a Scheduled Bank in India, provided the Bank Guarantee issued by such Bank is counter-guaranteed by any Branch situated in India of any Scheduled Bank incorporated in India.**

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

The bank guarantee issued by the bank must be routed through SFMS platform as per the following details:

- a) (i) “MT760/ MT760 COV for issuance of bank guarantee”**
- (ii) “MT767/ MT767 COV for issuance of bank guarantee”**

The above message/ intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Guwahati Branch, IFS Code- UTIB0000140, Branch Address – Axis Bank Ltd, Guwahati Branch, Chibber House, G S Road, Dispur, Assam, PIN-781005.”

b) The vendor shall submit to OIL the copy of SFMS message as sent by the issuing bank branch along with the original bank guarantee

- b) Bidders to confirm that in the event of award of Contract, bidder will submit initial Performance Security Deposit @2.5% of a contract value, and this will not earn any interest.**

A Bank Guarantee in the prescribed format (Proforma-E) issued by any of the following Bank is only acceptable:

- i) Any schedule Indian Bank or Any Branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in case of domestic bidder OR**
- ii) Any foreign Bank which is not a Scheduled Bank in India, provided the Bank Guarantee issued by such Bank is counter-guaranteed by any Branch situated in India of any Scheduled Bank incorporated in India.**

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

The bank guarantee issued by the bank must be routed through SFMS platform as per the following details:

- a) (i) “MT760/ MT760 COV for issuance of bank guarantee”
(ii) “MT767/ MT767 COV for issuance of bank guarantee”

The above message/ intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Guwahati Branch, IFS Code- UTIB0000140, Branch Address – Axis Bank Ltd, Guwahati Branch, Chibber House, G S Road, Dispur, Assam, PIN-781005.”

- b) The vendor shall submit to OIL the copy of SFMS message as sent by the issuing bank branch along with the original bank guarantee
- c) **Submission of Bid Security/Performance Security in the form of Electronic Bank Guarantee (e-BG) in addition of existing provisions:**

Bidders can also submit the e-BG from any of the following banks: -

SL.NO	BANK NAME	SL.NO	BANK NAME
1	AU Small Finance Bank	12	IDFC First Bank
2	Axis Bank	13	Indian Bank
3	Bank of Baroda	14	Indian Overseas Bank
4	Bank of India	15	IndusInd Bank
5	Canara Bank	16	Karur Vysya Bank
6	City Union Bank	17	Kodak Mahindra Bank
7	Federal Bank	18	Punjab National Bank
8	HDFC Bank	19	RBL Bank
9	HSBC Bank	20	State Bank of India
10	ICICI Bank	21	South Indian Bank
11	IDBI Bank	22	Yes Bank

Beneficiary details for issue of E-BG are:-

Sl.No	Particulars	Details
1	Name	OIL INDIA LIMITED
2	PAN	AAACO2352C
3	Date of Incorporation	18.02.1959
4	Email ID	ramanujd@oilindia.in
5	Mobile No.	9435038905
6	Local Address	CGM(C&P)PL CONTRACTS SECTION, PHQ OIL INDIA LIMITED GUWAHATI- 781171, ASSAM.
7	Registered Address	OIL INDIA LIMITED, Duliajan, Dibrugarh, Assam-786602

NOTE: SEALED ENVELOPES containing the **Bid Security, Printed catalogue and Literature, if called for in the tender** shall be marked with the above IFB Number and description of work and submitted in the office of:

- 2.0 (a) SEALED ENVELOPES containing the **Bid Security, Printed catalogue and Literature, if called for in the tender** shall be marked with the above IFB Number and description of work and submitted in the office of:

**CGM-CONTRACTS
Proforma-CONTRACTS SECTION, PHQ
OIL INDIA LIMITED
GUWAHATI- 781171, ASSAM.**

All bidders should submit the Bid Security(PROFORMA-D) /**Declaration for Bid security(PROFORMA-D2) and PROFORMA-B(BID FORM)**confirming that the Bid is valid for minimum 120 days from the date of opening of Bid.

Bids without submission of above will be summarily rejected.

To
M/s. OIL INDIA LIMITED ,
CONTRACTS DEPARTMENT,
OIL INDIA LIMITED
PIPELINE HEADQUARTERS
GUWAHATI, ASSAM, INDIA, PIN - 781171.

WHEREAS, _____(Name of Bidder) (hereinafter called "the Bidder") has submitted their offer Dated _____ for the provision of certain services (hereinafter called "the Bid") against OIL INDIA LIMITED , Duliajan, Assam, India (hereinafter called the Company)'s Tender No. _____ KNOW ALL MEN BY these presents that we _____ (Name of Bank) of _____(Name of Country) having our registered office at _____(hereinafter called "Bank") are bound unto the Company in the sum of (*) for which payment well and truly to be made to Company, the Bank binds itself, its successors and assignees by these presents.
SEALED with the said Bank this _____ day of _____ 2024.

THE CONDITIONS of these obligations are:

1. If the Bidder withdraws their Bid within its original/extended validity; or
2. The Bidder modifies/revises their bid suo moto; or
3. The Bidder does not accept the contract; or
4. The Bidder does not furnish Performance Security Deposit within the stipulated time as per tender/contract; or
5. If it is established that the Bidder has submitted fraudulent documents or has indulged into corrupt and fraudulent practice.

We undertake to pay to Company up to the above amount upon receipt of its first written demand (by way of letter/fax/cable), without Company having to substantiate its demand provided that in its demand Company will note that the amount claimed by it is due to it owing to the occurrence of any of the conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including the date (**--/--/--) and any demand in respect thereof should reach the Bank not later than the above date.

The details of the Issuing Bank and Controlling Bank are as under:

A. Issuing Bank:
BANK FAX NO:
BANK EMAIL ID:
BANK TELEPHONE NO.:
IFSC CODE OF THE BANK:

B. Controlling Office:

Address of the Controlling Office of the BG issuing Bank:

Name of the Contract Person at the Controlling Office with Mobile No. and e-mail address:

Notwithstanding anything contained herein:

- a) Our liability under this Bank Guarantee shall is restricted up to Rs.....
- b) This guarantee shall be valid till
- c) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before (Date of Expiry of BG PLUS one year claim period).
- d) At the end of the claim period that is on or after (Date of expiry of the Bank Guarantee Plus Minimum of 1 year claim period shall be stipulated) all your rights under this

Guarantee shall stand extinguished and we shall be discharged from all our liabilities under this Guarantee irrespective of receipt of original Bank Guarantee duly discharged, by Bank.

Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

- a) SIGNATURE AND SEAL OF THE GUARANTORS _____
- b) Designation _____
- c) Name of the Bank _____
- d) Address _____

Note:

* The Bidder should insert the amount of the guarantee in words and figures.

** Date of expiry of Bank Guarantee should be minimum 30 days after the end of the validity period of the Bid / as specified in the Tender.

*** The Bank Guarantee issuing bank branch must ensure the following:

a. The Bank Guarantee issued by the bank must be routed through SFMS platform as per the following details:

- (i) MT 760/MT 760 COV for issuance of bank guarantee.
- (ii) MT 760/MT 767 COV for amendment of bank guarantee.

[Tender Number should reflect in the SFMS text under MT 760/MT 760 COV]

The above message / intimation shall be sent through SFMS by the BG issuing Bank branch to Axis Bank, Guwahati Branch, IFS Code- UTIB0000140, Branch Address – Axis Bank Ltd, Guwahati Branch, Chibber House, G S Road, Dispur, Assam, PIN- 781005..

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

c. Further correspondence against BG towards Bid Security must contain the Tender Number.

- 3.0 **Bid should be submitted online up to 11:00 AM (IST) (OIL's e-procurement Portal Server Time) on the date as mentioned and will be opened on the same day at/after 02:00 PM (IST) at Office of the GM-Contracts in presence of authorized representative of the bidder.**
- 4.0 All the Bids must be Digitally Signed using "Class 3" digital certificate [Organization] (e-commerce application) only 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. The bid signed using other than "Class 3" digital certificate, will be liable for rejection. Please note Encryption certificate is also required along with Digital Certificate Class III [Organization] in order to submit bid in system. Please refer "Guideline to Bidder for participating in OIL"
- 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 be debarred from participation in future tenders, at the sole discretion of the company.
- (b) Once a withdrawal letter is received from any bidder, the offer will be treated as withdrawn and no further claim / correspondence will be entertained in this regard.
- 7.0 Conditional bids are liable to be rejected at the discretion of the Company.
- 8.0 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 bid documents.
- 8.1 In case of Sole Proprietorship Firm, Copies of Telephone(Landline Bill)/Electricity/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 GST and Central Excise Registration Certificate.
- 8.2 In case of HUF, Copies of Telephone(Landline Bill)/Electricity/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 GST and Central Excise Registration Certificate.
- 8.3 In case of Partnership Firm, Copies of Telephone (Landline Bill)/Electricity/ 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 GST Registration Certificate.
- 8.4 In case of Co-Operative Societies, Copies of Telephone(Landline Bill)/Electricity/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 GST Registration Certificate.

- 8.5 In case of Societies registered under the Societies Registration Act, Copies of Telephone (Landline Bill)/Electricity/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 of GST Registration Certificate.
- 8.6 In case of Joint Stock Companies registered under the Indian Companies Act, Copies of Telephone (Landline Bill)/Electricity/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 GST Registration Certificate.
- 8.7 In case of Trusts registered under the Indian Trust Act, Copies of Telephone (Landline Bill)/Electricity/ 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 GST Registration Certificate.
- 9.0 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.
- 10.0 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.
- 11.0 The contractor will be required to allow OIL officials to inspect the work site and documents in respect of the workers payment.
- 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 within 30 DAYS from date of issue of LOA before signing the formal contract.** The Performance Security Deposit will be refunded to the Contractor after satisfactory completion of the work, but a part or whole of which shall be used by the Company in realization of liquidated damages or claims, if any or for adjustment of compensation or loss due to the Company for any reason. This Performance Security Money shall not earn any interest.
- 13.0 **BACKING OUT BY BIDDER:** In case any bidder withdraws their bid within the bid validity period, the party will be debarred for a period of 2(two) years from the date of withdrawal of bid.
- 14.0 **BACKING OUT BY L-1 BIDDER AFTER ISSUE OF LOA:** In case LOA issued is not accepted by the L1 bidder **the bidder shall be debarred for 2 (two) years from the date of default.**

15.0 **FURNISHING FRAUDULENT INFORMATION/DOCUMENT**: Bidder should note that the documents/information submitted by the bidders(s) against the tender are presumed to be genuine, authentic and true copy of the originals. In case at any stage of tendering process or during execution of contract or after expiry of contract, if it is found at any time that, a Bidder / Contractor has / had furnished fraudulent documents / information, the company shall immediately reject the bid of such bidder(s) or cancel /terminate the contract, as the case may be. Also the bidder / the party/the contractor shall be debarred for a period of two (02) years from the date of issuance of debarment notice, besides legal action.

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

Forwarding Letter.

Instruction to Bidders-**Part-I**

BRC-BEC-Bid Rejection Criteria & Bid Evaluation Criteria –**Part-II.**

General Conditions of Contract. (GCC) **Part –III, Section-I**

Terms of Reference/ Technical Specifications, **Part-III, Section-II**

Special Conditions of Contract (SCC), **Part-III, Section-III**

Schedule of Work, Unit and Quantity (SOQ)- **Part-III, Section-IV**

Proforma and Annexures

17.0 **The Integrity Pact is applicable against this tender:**

OIL has appointed Shri Ram Phal Pawar, IPS (Retd.), Dr. Tejendra Mohan Bhasin, Former Vigilance Commissioner, CVC, and Shri Ajit Mohan Sharan, IAS (Retd.), as Independent External Monitors (IEM) for a period of 03 (Three) years to oversee implementation of Integrity Pact in OIL. Bidders may contact the Independent External Monitors for any matter relating to the Integrity Pact at the following addresses:

- a. Shri Ram Phal Pawar, IPS (Retd.), Former Director, NCRB, MHA
E-mail ID: rpawar61@hotmail.com
- b. Dr. Tejendra Mohan Bhasin,
Former Vigilance Commissioner, CVC
E-mail: tmbhasin@gmail.com
- c. Shri Ajit Mohan Sharan, IAS (Retd.),
Former Secretary, Ministry of Ayush, Govt. of India
E-mail: ams057@gmail.com

18.0 **SPECIAL NOTE:**

GUIDELINES FOR PARTICIPATING IN OIL'S E-PROCUREMENT:

To participate in OIL's E-procurement tender, bidders should have a legally valid digital certificate of Class 3 with Organizations Name as per Indian IT Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India (<http://www.cca.gov.in>). Bidders must have a valid User Id to access OIL e-Procurement site. Bidders can click on Guest login button to view the available open tenders in the E-portal. Bidders shall request OIL through E-mail or fax or letter along with the cost of bid documents as indicated in the NIT for issue of the USER ID for accessing and submitting against the E-procurement tender. The User ID

E-TENDER: CGI6319P25

shall be issued to the eligible bidders on receipt of the requisite cost of the bid document. In case any bidder is exempted from paying the tender fee, they should request OIL with supporting documents for issue of the User Id on free of charge basis. The detailed guidelines are available in OIL's e-procurement site. For any clarification in this regard, bidders may contact OIL.

Please note that all tender forms (Bid document, Integrity Pact, Proforma, Annexure) and supporting documents are to be submitted through OIL's E-Procurement site only except Original Bid Security and any other document if specified in the IFB which are to be submitted in sealed envelope super scribed with tender no. and due date to: The G.M. (Contracts), Pipeline Head Quarter, OIL INDIA LIMITED, Guwahati- 781171, ASSAM

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.

Please note Encryption certificate is also required along with Digital Certificate Class III [Organization in order to submit bid in system. Please refer "Guideline to Bidder for participating in OIL"]

- 19.0 The tender is invited under SINGLE STAGE TWO BID SYSTEM. The bidder has to submit the "Un-Priced Techno-Commercial" and "Price-Bid" through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender portal. **The Technical Bid is to be submitted as per Scope of Work & Technical Specifications along with all technical related documents related to the tender are to be uploaded under Technical RFx Tab.** The Price Bid rates shall be quoted as specified in the "PRICE BID FORMAT" and to be attached as attachment under the Notes & attachment tab. **The price quoted in the "PRICE BID FORMAT" will only be considered for evaluation.**

Please note that no price details should be uploaded under Technical RFx. Details of prices as per Price Bid format / Priced bid can be uploaded as Attachment under Notes & Attachment Tab. Offer not complying with above submission procedure will be rejected.

A few screen shots to find out the required IFB is shown below.

Notes and Attachments	→ Only Price Details Should Be Uploaded
Technical attachments	→ All technical bid documents except price details

Please do refer "**NEW INSTRUCTION TO BIDDER FOR SUBMISSION**" for the above two points and also please refer "**New Vendor Manual (effective 12.0.2017)**" available in the login Page of the OIL's E-tender Portal.

Regarding new bid submission procedure (effective from 12.04.2017 onwards), please refer **new vendor manual** available in OIL's E-tender Site:



Oil India Limited e-Procurement

User ID *

Password *

Logon Problems? [Get Support](#)

[Supplier Enlistment for E-Tender](#)

Important Note for New Portal Users:

[Click here to View Compatibility Settings](#)

[General Guidelines to bidders](#)

[Click for User Manuals](#)

Click here for the New Manual & Instruction

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[Click for Terms of use, Privacy Policy, Refund Policy Docs](#)

Notes :

- * 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 Sign. On Signing a new file with extension .SIG will be created. Close that window. Next click on Add Attachment, a browser window will open, select the .SIG signed file from the PC and name the file under Description, Assigned to General Data and click on OK to save the File.
- 8.0 Bidder is responsible for ensuring the validity of digital signature and its proper usage by their employee.
- 9.0 The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidding company.
- 10.0 OIL reserves the right to increase/decrease the quantum of job at the time of award of contract and it will be obligatory on the part of the successful bidder to accept the same at the offered rates.
- 11.0 The Company reserves the right to reject any or all the tenders or accept any tender without assigning any reason.

12.0 Offer must conform in all respect to the terms and conditions of the enquiry. Deviations, if any, must be clearly and specifically stated. Conditional bids are liable to be rejected at the discretion of the Company.

Thanking you,
Yours faithfully,
OIL INDIA LIMITED

Chief General Manager (Contracts)PL
For ED (PLS)/C

PART-1
INSTRUCTIONS TO BIDDERS

1.0 Eligibility of the bidder:

- 1.1 The eligibility of the bidder are listed under BID EVALUATION CRITERIA (BEC), PART-2 of the Bid document.
- 1.2 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 Bid Documents:

- 2.1 The services required, bidding procedures and contract terms are prescribed in the Bid Document. This Bid Document includes the following:

- a) A Tender Forwarding Letter
- b) Instructions to Bidders, (Part-1)
- c) Bid Evaluation/Rejection Criteria (Part-2)
- d) General Conditions of Contract, (Part-3)
- e) Schedule of Quantities/Rates, SOQ/SOR (Part-4)
- f) Scope of Work/Terms of Reference, (Part-5)
- g) Payment Terms (Part-6)
- h) Special Conditions of Contract (Part 7)
- i) Price Schedule Format, (Proforma-A)
- j) Bid Form, (Proforma-B)
- k) Statement of Non-Compliance, (Proforma-C)
- l) Bid Security Form (Proforma-D)/Declaration of bid security(D2)
- m) Performance Security Form, (Proforma-E)
- n) Sample Agreement Form (Proforma-F)
- o) Proforma of Letter of Authority (Proforma-G)
- p) Authorization for Attending Bid Opening (Proforma-H)
- q) Integrity Pact (Proforma -I)
- r) Safety Measures (Proforma – J)
- s) Certificate of Compliance of Financial Criteria (Proforma –L)
- t) Format of undertaking by Bidders towards submission of authentic information/documents (Proforma –M)
- u) E-remittance format (Proforma –N)
- v) Format for undertaking notarised -(Proforma –O)
- w) E-Payments vide RTGS/NEFT-(Proforma –P)
- x) Proforma of indemnity bond for supply of materials by purchaser/ owner-(Proforma –Q)
- y) Certificate of Restriction of Procurement (Proforma-R)
- z) Undertaking of Local Content (Proforma-LC)
- aa) Proforma of BG towards PPLC (Proforma-LCBG)
- bb) Undertaking towards Purchase Preference (Proforma-PPLC)
- cc) Exhibit-1 :-Undertaking of restriction of procurement from bidder of a country sharing land border with India
- dd) Exhibit-2 :-Undertaking of sub contracting
- ee) Exhibit-3 :-Undertaking -specified ToT (Transfer of Technology)
- ff) Appendix-1:- Declaration of Financial Standing

- gg) Appendix-2:- Declaration that bidder is not under holiday list/delisted/blacklisted/debarred in OIL
- hh) Commercial check List (Proforma –CL)
- ii) Annexure-I (List of major Plant and machinery in possession of the firm)
- jj) Annexure-II (Declaration of Bidder regarding concurrent commitment)
- kk) Annexure-EE (Undertaking by Vendor on submission of electrical License)

2.2 The bidder is expected to examine all instructions, forms, terms and specifications in the Bid Documents. Failure to furnish all information required in the Bid Documents or submission of a bid not substantially responsive to the Bid Documents in every respect will be at the Bidder's risk & responsibility and may result in the rejection of its bid.

2.3 Bidders shall be deemed, prior to submitting their bids, to have satisfied themselves about the weather conditions, working culture in the area, socio-political environment, safety & security aspects, law & order situation and law of the land, and obtain for themselves all necessary information as to the risks, contingencies and all other circumstances, which may influence or affect the various obligations under the Contract.

3.0 **Transferability of bid documents:**

3.1 Bid Documents are non-transferable. Bid can be submitted only by the bidder in whose name the Bid Document has been issued/registered.

3.2 In case of e-Tender, Bidder must submit the bid using Organizational Class-3 Digital Signature issued by the Competent Authority in favour of the bidder. Bid submitted using Digital Signature other than the Digital Signature of the bidder shall be summarily rejected.

3.3 Unsolicited bids will not be considered and will be rejected straightway.

4.0 **Amendment of bid 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 Bid Documents through issuance of an Addendum(s)/Corrigendum(s)/Amendment(s).

4.2 The Addendum will be uploaded in OIL's E-Tender Portal in the Tab "Technical Rfx" and under External Area - "Amendments" folder. The Company may, at its discretion, extend the deadline for bid submission. Bidders are expected to take the Addendum into account in preparation and submission of their bid. Bidders are to check from time to time the E-Tender portal ["Technical RFX" Tab and under the folder "Amendments"] for any amendments to the bid documents before submission of their bids. No separate intimation shall be sent to the Bidders.

5.0 **Preparation of Bids**

5.1 **Language of Bids:**

5.1.1 The bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the Bidder and the OIL shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, duly authenticated by local chamber of Commerce of bidder's country, in which case, for purposes of interpretation of the bid, the translation shall prevail.

5.2 Bidder's/Agent's Name & address:

5.2.1 Bidders should indicate in their bids their detailed postal address including the Fax/Telephone / Cell Phone Nos. and E-mail address. Similar information should also be provided in respect of their authorised Agents in India, if any.

5.3 **Documents comprising the bid:**

5.3.1 Bids are invited under Single Stage Two Bid System. The bid to be uploaded by the Bidder in OIL's E-Tender portal shall comprise of the following components:

(A) Technical Bid (to be uploaded in "Technical Attachments" tab)

- a) Complete technical details of the services offered.
- b) Documentary evidence established in accordance with Clause 9.0.
- c) Bid Security in Proforma-D
- d) Copy of Bid-Form without indicating prices in Proforma-B.
- e) Statement of Non-compliance as per Proforma-C.
- f) Proforma-A: List of items to be imported without the CIF values (For Global Tenders).
- g) Copy of Priced Bid without indicating prices (Proforma-A).
- h) Integrity Pact digitally signed by OIL's competent personnel as Proforma-I. Annexure-V attached with the bid document to be digitally signed by the bidders Authorised representative.
- i) All Other relevant Undertakings and Proformas as applicable as part of Bid.

Note: Please note that, No price should be mentioned in the "Technical Attachments" tab.

(B) Price Bid (to be uploaded in "Notes and Attachments" tab)

Bidder shall quote their prices in the following Proforma available in OIL's E-procurement portal in the "Notes & Attachments" Tab:

- a) Price-Bid Format as per Proforma-A
- b) Bid Form as per Proforma-B

The Priced Bid shall contain the prices along with the currency quoted and any other commercial information pertaining to the service offered.

6.0 **Bid Form:**

6.1 The bidder shall complete the Bid Form and the appropriate Price Schedule furnished in their Bid.

7.0 Bid Price:

7.1 Prices must be quoted by the Bidders online as per the price bid format available in OIL's E-Tender Portal under "Notes & Attachment" Tab. Prices must be quoted by the bidders as per the Price/Bidding format.

7.2 Prices quoted by the successful bidder must remain firm during its performance of the Contract and is not subject to variation on any account.

7.3 All duties (except customs duty which will be borne by the Company) and taxes (excluding GST) including Corporate Income Tax, Personal Tax, Assam Entry Tax etc. and other Cess/levies payable by the successful bidder under the Contract for which this Bid Document is being issued, shall be included in the rates, prices and total Bid Price submitted by the bidder, and the evaluation and comparison of bids shall be made considering the quoted GST in the proforma. For example, personal taxes and/or any corporate taxes arising out of the profits on the contract as per rules of the country shall be borne by the bidder.

8.0 Currencies of bid and payment:

8.1 A bidder expecting to incur its expenditures in the performance of the Contract in more than one currency, and wishing to be paid accordingly, shall so indicate in the bid. In such a case, the bid shall be expressed in different currencies and the respective amounts in each currency shall together make up the total price.

8.2 Indian bidders too can submit their bids in any currency (including Indian Rupees) and receive payment in such currencies on par with foreign bidders. However, currency once quoted will not be allowed to be changed.

9.0 Documents establishing bidder's eligibility and qualifications:

9.1 These are listed in BID EVALUATION CRITERIA (BEC), PART-2 of the Bid document.

10.0 Bid Security:

1. The Bid Security is required to protect the Company against the risk of Bidder's conduct, which would warrant forfeiture of the Bid Security, pursuant to sub-clause 8.
2. All the bids must be accompanied by Bid Security in Original as prescribed under, for the amount as mentioned in the "Forwarding Letter" of the tender documents:
3. The Bid Security may be submitted in the form of irrevocable Bank Guarantee (as per PROFORMA-D) issued by Nationalized or Scheduled Bank in favour of M/s OIL INDIA LIMITED and payable at GUWAHATI. The Bank Guarantee must be on Non-Judicial Stamp

Paper of requisite value as per Indian Stamp Act purchased in the name of Banker.

4. Alternately Bid Security can also be paid through Bank Draft/Cashier's Cheque/ Banker's Cheque/Fixed Deposit Receipt (Account OIL INDIA LIMITED/irrevocable Letter of Credit/NEFT/RTGS/Electronic Fund Transfer through Online Payment Gateway of OIL's e-tender portal (subject to credit in OIL's account within prescribed time) to designated account of OIL.
5. If the Bid Security is submitted in the form of Bank Draft, Banker's Cheque, Cashier's Cheque, Fixed Deposit Receipt or Letter of Credit, the same should be in favour of "OIL INDIA LIMITED " payable at Guwahati.
6. Bid Security amount through NEFT or RTGS mode may be deposited on or before bid closing date and time to the following designated OIL's bank account:

BANK DETAILS OF BENEFICIARY		
a	Bank Name	AXIS BANK
b	Branch Name	GUWAHATI
c	Branch Address	CHIMBER HOUSE, G.S.ROAD, DISPUR ASSAM
d	Banker Account No.	140010200027654
e	Type of Account	CURRENT ACCOUNT
f	IFSC Code	UTIB0000140
g	MICR Code	781211002
h	SWIFT Code	Axisinbb140
i	Contact No.	8876501401
j	Contact Person Name	Mr. Dibakar Ghaosh
k	Fax No.	Not available
l	Email Id	Guwahati.branchhead@axisbank.com

7. If the bid security is submitted through NEFT or RTGS mode, details such as UTR No., Tender No., Bidder's name & Deposited Amount etc. must be uploaded with the Unpriced Techno-Commercial Bid documents.
8. In case of Bidders submitting Bid Security in the form of Bank Guarantee/ Bank Draft/Cashier's Cheque/Banker's Cheque/Fixed Deposit Receipt/Letter of Credit, the original hard copy of Bid Security should reach the office of GM-CONTRACTS, OIL PHQ GUWAHATI-781171 on or before 01:45 p.m. (IST) on the bid closing / opening date otherwise bid will be rejected.

- a. A scanned copy of Bid Security document should also be uploaded along with the Unpriced Techno-Commercial Bid documents.
- b. 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. 8 below. Bids without Bid Security Deposit in the manner specified above will be summarily rejected.
- c. No other mode of payment will be accepted by the Company. The Bid Security shall not earn any interest to the bidder from the Company.

Note:

1. Bidders claiming waiver of Bid Security shall upload supporting documents as mentioned in Para No. c(ii) below along with technical bid.

2. Any offer not accompanied with the Bid Security shall be treated as invalid and summarily rejected unless the bidder is exempted from submission of Bid Security as per Bid Security Exemption Criteria of this tender and proper proof towards this exemption is submitted by the bidder. Any subsequent deposit of Bid Security after the bid closing date shall not be permitted. Also, adjustment of Bid Security due against the instant tender, against dues from the Company or on any account shall not be permitted.

3. Any bid not secured in accordance with sub-clause c(ii) above shall be rejected by the Company as non-responsive.

4. The bidders shall extend the validity of the Bid Security suitably, if and when specifically advised by OIL, at the bidder's cost.

5. Unsuccessful Bidder's Bid Security will be discharged and / or returned within 30 days after finalization of the Tender.

6. Successful Bidder's Bid Security will be discharged and / or returned upon Bidder's furnishing the Performance Security and signing of the contract. Successful bidder will however ensure validity of the Bid Security till such time the Performance Security in conformity with Clause No. 9© below is furnished.

7. Bid Security shall not accrue any interest during its period of validity or extended validity.

8. The Bid Security may be forfeited:

a. If the bidder withdraws the bid within its original / extended validity.

b. If the bidder modifies / revises their bid suo-moto within its original / extended validity.

c. If the bidder does not accept the contract.

d. If the bidder does not furnish Performance Security Deposit within the stipulated time as per tender / contract.

e. If it is established that the bidder has submitted fraudulent documents or has indulged into corrupt and fraudulent practice, the bid security shall be forfeited after due process in addition to other action against the bidder.

9.(a) In case any bidder withdraws their bid during the period of bid validity, Bid Security will be forfeited, and the party shall be debarred as per the prevailing Banning Policy of the Company (OIL).

.(b) A bid shall be rejected straightway if Original Bid Security is not received within the stipulated date & time mentioned in the Tender and / or if the Bid Security validity is shorter than the validity indicated in Tender and / or if the Bid Security amount is lesser than the amount indicated in the Tender.

(c) The Bank Guarantee issuing bank branch must ensure the following:

The bank guarantee issued by the bank must be routed through SFMS platform as per the following details:

- a. (i) "MT760/ MT760 COV for issuance of bank guarantee"
- (ii) "MT767/ MT767 COV for issuance of bank guarantee"

The above message/ intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Guwahati Branch, IFS Code- UTIB0000140, Branch Address – Axis Bank Ltd, Guwahati Branch, chibber House, G S Road, Dispur, Assam, PIN- 781005."

b) The vendor shall submit to OIL the copy of SFMS message as sent by the issuing bank branch along with the original bank guarantee

<u>BANK DETAILS OF BENEFICIARY</u>		
a	Bank Name	AXIS BANK
b	Branch Name	GUWAHATI
c	Branch Address	CHIMBER HOUSE, G.S.ROAD, DISPUR ASSAM
d	Banker Account No.	140010200027654
e	Type of Account	CURRENT ACCOUNT
f	IFSC Code	UTIB0000140
g	MICR Code	781211002
h	SWIFT Code	Axisinbb140
i	Contact No.	8876501401
j	Contact Person Name	Mr. Dibakar Ghaosh
k	Fax No.	Not available
l	Email Id	Guwahati.branchhead@axisbank.com

EXEMPTION FROM SUBMISSION OF BID SECURITY: In case any bidder is exempted from paying the Bid security, they should upload the supporting documents along with their technical bid. The detailed guidelines for exemption of the Bid security are given below.

a) MSEs Units (manufacturers / Service Providers only and not their dealers / distributors) are eligible for exemption of Bid Security.

b) Central Government Departments and Central Public Sector Undertakings (CPSUs) are also exempted from submitting bid security.

Note: Bids without EMD shall be rejected, if the technical offer does not include a valid copy of relevant Document/Certificate towards exemption of EMD, issued by appropriate authority.

c) Documentation required to be submitted by MSEs: **Refer Clause No. 11.3 below.**

Note: If the bid security is submitted through NEFT or RTGS mode, details such as **UTR No., Tender No., Bidder's name & Deposited Amount etc. must be uploaded with the Unpriced Techno-Commercial Bid documents.**

11.0 Exemption from submission of bid security:

11.1 Central Govt. offices and Central Public Sector undertakings are exempted from submission of bid security .

11.2 Micro or Small Enterprises (MSE) bidders are exempted from submitting Bid Security. Categorization and various Criteria applicable to MSE bidders shall be guided by the Gazette Notification No. CG-DL-E-26062020-220191 dated 26.06.2020 issued by MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES. The existing enterprises registered under EM-Part-II or UAM till 30th June'2020 shall continue to be valid only for a period up to the 31st day of March, 2021.

11. 3 The bidder claiming as MSE status (MSE-General, MSE-SC/ST, MSE -Woman) against this tender has to **submit the following documents** for availing the benefits applicable to MSEs:

i. Udyam Registration Number (URN) with Udyam Registration Certificate(URC)

OR

ii. Proof of registration with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or Udyog Adhar registration or registration with any other body specified by Ministry of MSME

11.3.(a) In case bidding MSE is owned by Schedule Caste or Schedule Tribe entrepreneur or Woman Entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur/ Woman Entrepreneurs should also be enclosed.

11.3 (b) In case a bidder is eligible to seek benefits under PP-LC policy as well as Public Procurement Policy for MSEs - Order 2012, then the bidders should categorically seek benefits against only one of the two policies i.e. either PP-LC or MSE policy. If a bidder seeks free of cost tender document under the MSE policy, then it shall be considered that the bidder has sought benefit against the MSE policy and this option once exercised cannot be modified subsequently.

11.3.1 In case bidding MSE is owned by Schedule Caste or Schedule Tribe entrepreneur or Woman Entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur/ Woman Entrepreneurs should also be enclosed.

12.0 PERIOD OF VALIDITY OF BIDS :

- 12.1 Bids shall remain valid as per the requirement mentioned in forwarding letter from the date of closing of bid prescribed by the Company. Bids of shorter validity will be rejected as being non-responsive. If nothing is mentioned by the bidder in their bid about the bid validity, it will be presumed that the bid is valid for **120 days** from Bid Closing Date.
- 12.2 In exceptional circumstances, the Company 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 through Fax or e-mail. The Bid Security provided under Para 10(3) above shall also be suitably extended. 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.

13.0 Signing & submission of bids:

13.1 Signing of bids:

- 13.1.1 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 certificates with Organization's Name [e-commerce application (Certificate with personal verification and Organization Name)] as per Indian IT Act 2000 obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India before bid is uploaded. Digital Signature Certificates having Bidder's Name in the "Organization Name" field are only acceptable. Digital Signature Certificate having "Organization Name" field other than Bidder's Name shall be rejected summarily.

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

If any modifications are made to a document after attaching digital signature, the digital signature shall again be attached to such documents before uploading the same. The Power of Attorney in original shall be submitted by bidder as mentioned in Para 13.2 below.

In case the digital signature is not of "Class-3" with organization name, the bid will be rejected. Bidder is responsible for ensuring the validity of digital signature and its proper usage by their employees.

- 13.1.2 The original and all copies of the bid shall be typed or written in indelible inks. Since bids are to be submitted ONLINE with digital signature, manual signature is NOT relevant. The letter of authorization (as per Proforma-H) shall be indicated by written Power of Attorney accompanying the Bid.
- 13.1.3 Any physical documents submitted by bidders shall contain no interlineations, white fluid erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such correction shall be initialed by the person or persons who has/have digitally signed the Bid.

13.1.4 Any Bid, which is incomplete, ambiguous, or not in compliance with the Bidding process shall be rejected.

13.2 **Submission of bids:**

The tender is processed under single stage - Two bid system. Bidder shall submit the Technical bid and Priced bid along with all the Annexures and Proforma (wherever applicable) and copies of documents in electronic form through OIL's e-procurement portal within the Bid Closing Date & Time stipulated in the e-tender. For submission of Bids online at OIL's E-Tender Portal, detailed instructions is available in "User Manual" available in OIL's E-Tender Portal. Guidelines for bid submission are also provided in the "Forwarding Letter". The Technical Bid is to be submitted as per Terms of Reference/Technical Specifications of the bid document and Priced Bid as per the Price Schedule. The Technical Bid should be uploaded in the "Technical Attachment" Tab Page only. Prices to be quoted as per Proforma-B should be uploaded as Attachment just in the attachment link under "Notes & Attachments" Tab under General Data in the e-portal. No price should be given in the "Technical Attachment", otherwise bid shall be rejected. The priced bid should not be submitted in physical form and which shall not be considered. However, the following documents in one set should necessarily be submitted in physical form in sealed envelope superscribing the "IFB No., Brief Description of services and Bid Closing/Opening date & Time along with the bidder's name and should be submitted to GM-Contracts, OIL INDIA LIMITED., Guwahati-781171 (Assam) on or before 12.45 Hrs (IST) on the bid closing date indicated in the IFB:

- a) The Original Bid Security along with 1(one) copy
- b) Printed catalogue and literature if called for in the bid document.
- c) Power of Attorney for signing of the bid digitally.
- d) Any other document required to be submitted in original as per bid document requirement.

Documents sent through E-mail/Fax/Telephonic method will not be considered.

13.2.1 All the conditions of the contract to be made with the successful bidder are given in various Sections of the Bid Document. Bidders are requested to state their non-compliance to each clause as per Proforma-C of the bid document and the same should be uploaded along with the Technical Bid.

13.2.2 Timely delivery of the documents in physical form as stated in Para 13.2 above is the responsibility of the bidder. Bidders should send the same through Registered Post or by Courier Services or by hand delivery to the Officer in Charge of the particular tender before the Bid Closing Date and Time. Company shall not be responsible for any postal delay/transit loss.

13.2.3 Bids received through the e-procurement portal shall only be accepted. Bids received in any other form shall not be accepted.

14.0 Indian agent/representative/retainer/associate Foreign bidders shall clearly indicate in their bids whether they have an Agent/Representative/Retainer/Associate in India. In the event the overseas bidder is having an Agent/Representative/Retainer/Associate in India, the bidder should furnish the

name and address of their Agent/Representative/Retainer/Associate in India and clearly indicate nature and extent of services to be provided by such an Agent/Representative/Retainer/Associate in India and also stating in their bids whether the Agent/Representative/Retainer/Associate is authorized to receive any commission. The rate of the commission included in the quoted rates of bidder should be indicated which would be payable to Agent/Representative/Retainer/Associate in non-convertible Indian currency according to Import Trade Regulation of India. Unless otherwise specified, it will be assumed that agency commission is not involved in the particular bid.

Further, overseas bidders shall submit their bids directly and not through their Agent/Representative/Retainer/Associate in India. Bid submitted by Indian Agent/Representative/Retainer/Associate on behalf of their foreign principals will not be considered and will be rejected straightway. Moreover, one Indian Agent/Representative/Retainer/Associate cannot represent more than one foreign bidder against the IFB.

The Indian Agent/Representative/Retainer/Associate will not be permitted to submit any Bid Security and Performance Security on behalf of their foreign principals and also the Indian Agent/Representative/Retainer/Associate will not be allowed to execute the contract and receive payment against bid submitted by their foreign principals. Such bids shall be rejected straightway.

15.0 Deadline for submission of bids:

15.1 Bids should be submitted online as per the online tender submission deadline. Bidders will not be permitted by System to make any changes in their bid/quote after the bid submission deadline is reached. Bidders are requested to take note of this and arrange to submit their bids within the submission deadline to avoid last minute rush/network problems.

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

15.3 The documents in physical form as stated in Para 13.2 must be received by Company at the address specified in the "Forwarding Letter" on or before 13:45 Hrs(IST) on the Bid Closing Date mentioned in the "Forwarding Letter". Timely delivery of the same at the address mentioned in the Forwarding Letter is the responsibility of the Bidders.

16.0 Late Bids:

16.1 Bidders are advised in their own interest to ensure that their bids are uploaded in system much before the closing date and time of the bid. The documents in physical form if received by the Company after the deadline for submission prescribed by the Company shall be rejected and shall be returned to the Bidders in unopened condition immediately.

17.0 Modification and withdrawal of bids

17.1 The Bidder after submission of Bid may modify or withdraw its Bid prior to Bid Closing Date & Time in the e-portal using Digital Signature by the person or persons who has/have digitally signed the Bid. Withdrawal or modification of bid through physical correspondence shall not be considered and accepted.

17.2 No Bid can be modified or withdrawn subsequent to the deadline for submission of Bids.

17.3 No Bid can be withdrawn in the interval between the deadline for submission of Bids and the expiry of the period of Bid Validity specified by the Bidder on the Bid Form. Withdrawal of a Bid during this interval shall result in the Bidder's debarment from participation in future tenders of OIL.

18.0 Extension of bid submission date

18.1 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.

19.0 Bid opening and evaluation

19.1 Company will open the Technical Bids, including submission made pursuant to clause 15.0, in presence of Bidder's representatives who choose to attend at the date, time and place mentioned in the Forwarding Letter. However, an authorisation letter (as per Proforma-I) from the Bidder must be produced by the Bidder's representative at the time of Bid Opening. Unless this Letter is presented, the representative will not be allowed to attend the Bid Opening. The Bidder's representatives who are allowed to attend the Bid Opening shall sign a register evidencing their attendance. Only one representative against each Bid will be allowed to attend. In technical bid opening, only "Technical Attachment" will be opened. Bidders therefore should ensure that technical bid is uploaded in the "Technical Attachment" Tab Page only in the E-portal.

19.2 In case of any unscheduled holiday or Bandh on the Bid Opening Date, the Bids will be opened on the next full working day. Accordingly, Bid Closing Date / time will get extended up to the next working day and time.

19.3 Bids which have been withdrawn pursuant to clause 17.0 shall not be opened. Company will examine bids to determine whether they are complete, whether requisite Bid Securities have been furnished, whether documents have been digitally signed and whether the bids are generally in order.

19.4 At bid opening, Company will announce the Bidder's names, written notifications of bid modifications or withdrawal, if any, the presence of requisite Bid Security, and such other details as the Company may consider appropriate.

19.5 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. In all the above situations, the Bidder will not be allowed to change the basic structure of the Bid already submitted by them and no change in the price or substance of the Bid shall be sought, offered or permitted.

- 19.6 Prior to the detailed evaluation, Company will determine the substantial responsiveness of each bid to the requirement of the Bid Documents. For purpose of these paragraphs, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bid Document without material deviations or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, or performance of work, or which limits in any substantial way, in-consistent way with the Bid 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. The Company's determination of Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.
- 19.7 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.
- 19.8 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.

20.0 Opening of priced bids

- 20.1 Company will open the Priced Bids of the techno-commercially qualified Bidders on a specific date in presence of representatives of the qualified bidders. The techno-commercially qualified Bidders will be intimated about the Priced Bid Opening Date & Time in advance. In case of any unscheduled holiday or Bandh on the Priced Bid Opening Date, the Bids will be opened on the next working day.
- 20.2 The Company will examine the Price quoted by Bidders to determine whether they are complete, any computational errors have been made, the documents have been properly signed, and the bids are generally in order.
- 20.3 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price (that is obtained by multiplying the unit price and quantity) the unit price shall prevail and the total price shall be corrected accordingly. If there is a discrepancy between words, and figures, the amount in words will prevail. If any Bidder does not accept the correction of the errors, their Bid will be rejected.

21.0 Conversion to single currency

While evaluating the bids, the closing rate (B.C. Selling Rate) of exchange declared by State Bank of India on the day prior to price bid opening will be taken into account for conversion of foreign currency into Indian Rupees. Where the time lag between the opening of the price bids and final decision exceeds three months, the rate of exchange declared by State Bank of India on the date prior to the date of final decision will be adopted for conversion.

22.0 Evaluation and comparison of bids

The Company will evaluate and compare the bids as per BID EVALUATION CRITERIA (BEC), PART-2 of the Bid Documents.

22.1 Discounts / rebates

(Deleted)

22.2 Loading of foreign exchange

There would be no loading of foreign exchange for deciding the inter-se-ranking of domestic bidders.

22.3 Exchange rate risk

Since Indian bidders are now permitted to quote in any currency and also receive payments in that currency, Company will not be compensating for any exchange rate fluctuations in respect of the services.

22.4 Repatriation of rupee cost

In respect of foreign parties rupee payments made on the basis of the accepted rupee component of their bid, would not be repatriable by them. A condition to this effect would be incorporated by the Company in the contract.

23.0 Contacting the company

23.1 Except as otherwise provided in Clause 19.0 above, no Bidder shall contact Company 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 Company vide sub-clause 19.5.

23.2 An effort by a Bidder to influence the Company in the Company's bid evaluation, bid comparison or Contract award decisions may result in the rejection of their bid.

24.0 Award of contract

24.1 Award criteria

24.1.1 The Company 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.

25.0 Company's right to accept or reject any bid

Company 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 Company's action.

26.0 Notification of award

Company will notify the successful Bidder in writing by registered letter or by fax or E-mail (to be confirmed in writing by registered / couriered letter) that its Bid has been accepted.

26.1 The notification of award will constitute the formation of the Contract.

26.2 Upon the successful Bidder's furnishing of Performance Security pursuant to Clause 27.0 below, the Company will promptly notify each un-successful Bidder and will discharge their Bid Security, pursuant to Clause 10.0 hereinabove.

27.0 Performance security:

As per clause no 69.2 of Special Conditions of the Contract.

Signing of contract

27.1 At the same time as the Company notifies the successful Bidder that its Bid has been accepted, the Company will either call the successful Bidder for signing of the agreement or send the Contract Form provided in the Bid Documents, along with the General & Special Conditions of Contract, Technical Specifications, Schedule of Rates incorporating all agreements agreed between the two parties.

27.2 The successful Bidder shall sign and date the contract and return it to the Company after receipt of LOA. Till the contract is signed, the LOA issued to the successful bidder shall remain binding amongst the two parties.

27.3 In the event of failure on the part of the successful Bidder to sign the contract, OIL reserves the right to terminate the LOA issued to the successful Bidder and the party shall be debarred for a period of 2(two) years from the date of default.

(Signing of the Contract may be done at the place of award in presence of both parties)

28.0 Credit facility

Bidders should indicate clearly in the Bid about availability of any credit facility inclusive of Government to Government credits indicating the applicable terms and conditions of such credit.

29.0 Mobilization and advance payment

29.1 Request for advance payment shall not be considered by Oil India Limited.

30.0 Integrity pact: *Applicable for this tender*

30.1 OIL shall be entering into an Integrity Pact with the Bidders as per format enclosed vide **Proforma-J** of the Bid Document. The Integrity Pact has been duly signed digitally by OIL's competent signatory and uploaded in the OIL's e-portal. The Integrity Pact shall be returned by the bidder (along with the technical Bid) duly signed by the same signatory who signed the Bid i.e. who is duly authorized to sign the Bid. Uploading the Integrity Pact in the OIL's E-portal with digital signature will be construed that all pages

of the Integrity Pact has been signed by the bidder's authorized signatory who has signed the bid. If any bidder refuses to sign Integrity Pact or declines to submit the Integrity Pact, their bid shall be rejected straightway.

30.2 Bidders may contact the Independent External Monitors for any matter relating to the IFB.

OIL has appointed Shri Ram Phal Pawar, IPS (Retd.), Dr. Tejendra Mohan Bhasin, Former Vigilance Commissioner, CVC, and Shri Ajit Mohan Sharan, IAS (Retd.), as Independent External Monitors (IEM) for a period of 03 (Three) years to oversee implementation of Integrity Pact in OIL. Bidders may contact the Independent External Monitors for any matter relating to the Integrity Pact at the following addresses:

- a. Shri Ram Phal Pawar, IPS (Retd.), Former Director, NCRB, MHA
E-mail ID: rpawar61@hotmail.com
- b. Dr. Tejendra Mohan Bhasin,
Former Vigilance Commissioner, CVC
E-mail: tmbhasin@gmail.com
- c. Shri Ajit Mohan Sharan, IAS (Retd.),
Former Secretary, Ministry of Ayush, Govt. of India
E-mail: ams057@gmail.com

31.0 Local conditions

It is imperative for each Bidder to be fully informed themselves of all Indian as well as local conditions, factors and legislation which may have any effect on the execution of the work covered under the Bidding Document. The bidders shall be deemed, prior to submitting their bids to have satisfied themselves of all the aspects covering the nature of the work as stipulated in the Bidding Document and obtain for themselves all necessary information as to the risks, contingencies and all other circumstances, which may influence or affect the various obligations under the Contract.

No request will be considered for clarifications from the Company (OIL) regarding such conditions, factors and legislation. It is understood and agreed that such conditions, factors and legislation have been properly investigated and considered by the Bidders while submitting the Bids. Failure to do so shall not relieve the Bidders from responsibility to estimate properly the cost of performing the work within the provided timeframe. Company (OIL) will assume no responsibility for any understandings or representations concerning conditions made by any of their officers prior to award of the Contract. Company (OIL) shall not permit any Changes to the time schedule of the Contract or any financial adjustments arising from the Bidder's lack of knowledge and its effect on the cost of execution of the Contract.

32.0 Specifications

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/services to be executed under the contract.

34.0 Purchase preference policy (linked with Local Content) (PP-LC) notified vide letter no. FP-20013/2/2017-FP-PNG-Part(1) E(-36682) dated 23.02.2022 of MoPNG.

Purchase preference policy (linked with Local Content) (PP-LC) (**Applicable for tenders of value greater than Rs 1 Crore.**)

1 *Preamble*

1.1 In tune with Make in India (MII) campaign in oil and gas sector, the Government has decided to incentivize the growth in local content in goods and services while implementing oil and gas projects in India, and

1.2 Whereas the Public procurement policy rests upon the core principles of competitiveness, adhering to sound procurement practices and execution of orders for supply of goods or services in accordance with a system which is fair, equitable, transparent, competitive and cost effective, and

1.3 Whereas, the local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them etc.

1.4 Whereas incentivizing enhanced local content in the procurement of goods and/or services in oil and gas business activities would lead to increased local industry content;

1.5 Therefore, the Ministry of Petroleum and Natural Gas (MoPNG) has decided to stipulate the following policy for providing Purchase Preference to the manufacturers/ service providers having the capability of meeting/ exceeding the local content targets in oil and gas business activities;

1.6 This policy considers the Local Content (LC) as the added value brought to India through the activities of the oil and gas industry. This may be measured (by project, affiliate, and/or country aggregate) and undertaken through Workforce development and investments in supplier development through developing and procuring supplies and services locally.

2 *Definitions*

2.1 Oil and Gas Business Activity shall comprise of Upstream, Midstream and Downstream business activities.

2.2 Domestic products shall be goods and/or service (including design and engineering), produced by companies, investing and producing in India.

2.3 Local Content hereinafter abbreviated to LC means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

2.4 Domestic Manufacturer shall be business entity or individual having business activity established under Indian law and producing products domestically.

2.5 Supplier of goods and/or provider of service shall be a business entity having capability of providing goods and/or service in accordance with the business line and qualification thereof and classified as under:

'Class-I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50% as defined under this Policy.

'Class-II local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than or equal to 20% but less than 50%, as defined under this Policy.

'Non-local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than 20%, as defined under this Policy.

2.6 Steering Committee means the committee to be constituted by MoPNG to provide effective guidance and to oversee the implementation of the Policy on a regular and continuing basis.

2.7 Verification shall be an activity to verify the accomplishment of LC by domestic manufacturers and/or suppliers of goods and/or providers of service with the data obtained or collected from respective business activities.

2.8 Purchase preference: Where the quoted price is within the margin of purchase preference of the lowest price, other things being equal, purchase preference may be granted to the bidder concerned, at the lowest valid price bid.

2.9 Local Content (LC) in Goods shall be the use of raw materials, design and engineering towards manufacturing, fabrication and finishing of work carried out within the country.

2.10 Local Content (LC) in Services shall be the use of services up to the final delivery by utilizing manpower (including specialist), working appliance (including software) and supporting facilities carried out within in the country.

2.11 Local Content (LC) in EPC contracts shall be the use of materials, design and engineering comprising of manufacturing, fabrication, assembly and finishing as well as the use of services by utilizing manpower (including specialist), working appliance (including software) and supporting facility up to the final delivery, carried out within the country.

2.12 Factory overhead cost shall be indirect costs of manpower, machine/working appliance/facility and the whole other fabrication costs needed to produce a unit of product with the cost not chargeable directly to specified product.

2.13 Company overhead cost shall be costs related to the marketing, administration and general affairs cost of the company.

2.14 Indian Company means a company formed and registered under the Companies Act, 2013.

2.15 Foreign company means any company or body corporate incorporated outside India which-
(a) has a place of business in India whether by itself or through an agent, physically or through electronic mode; and (b) conducts any business activity in India in any other manner.

3. Scope

3.1 The regulation shall be intended to:

3.1.1 Support and boost the growth of domestic manufacturing sector so as to be able to support oil and natural gas business activities and contribute added value to economy, absorb manpower as well as have national, regional and international competitiveness;

3.1.2 Support and boost the growth of innovation/technology of domestic manufacturing sector.

3.2 This policy shall apply to all the Public Sector Undertakings and their wholly owned subsidiaries under the Ministry of Petroleum and Natural Gas; Joint Ventures that have 51% or more equity by one or more Public Sector Undertakings under the Ministry of Petroleum and Natural Gas; attached and subordinate offices of MoPNG.

3.3 This policy shall not include goods/ services falling under Micro Small and Medium Enterprises (MSME) or Domestically Manufactured Electronic Products (DMEP), as those products/ services are already covered under specific policy. However, an option would be given in the tender for the bidder to declare preference for seeking benefit under PP-LC/MSME or DMEP.

3.4 The policy is not applicable for HP-HT operations for the time being. The Charter Hiring of offshore vessels shall continue to be governed by DG, Shipping Guidelines. Indian Flag Vessels shall be considered as having 100% LC.

3.5 The prescribed local content in the Policy shall be applicable on the date of Notice inviting Tender.

4. Procurement

4.1 The procuring companies shall follow their own procurement procedures. Aggregation of annual requirements and such other procurement practices, which facilitate the implementation of this policy, may be adopted by procuring companies.

4.2 In respect of Global Tender Enquiry (GTE) the guidelines as issued by Government of India from time to time shall be applicable on the procuring entities.

4.3 Margin of Purchase preference: The margin of purchase preference shall be 20%.

4.4 (a) In respect of all goods, services or works in respect of which the Nodal Ministry/ Department under DPIIT's Public Procurement (Preference to Make in India) Order, 2017 has communicated that there is sufficient local capacity and local competition, only Class-I local supplier shall be eligible to bid irrespective of purchase value.

4.4 (b) For all other local tenders, Class-I local supplier and Class-II local supplier shall be eligible to bid irrespective of purchase value, but preference to be given as per PP-LC to the Class-I local supplier.

4.4 (c) Only Class-I local supplier and Class-II local supplier, as defined under the Order, shall be eligible to bid in procurements undertaken by procuring entities, except when Global tender enquiry has been issued. In global tender enquiries, Non-local suppliers shall also be eligible to bid along with Class-I local suppliers and Class-II local suppliers.

4.4 (d) Class-II local supplier will not get purchase preference in any procurement, undertaken by procuring entities.

4.5 **In National Competitive Bid procurements of all items not covered by para 4.4 (a) and where the estimated value to be procured i.e. total value of enquiry/ tender, is less than Rs. 1 Crore shall be exempt from this Policy.** In case of International Competitive Bids, the policy shall be applicable irrespective of the tender estimate. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Policy.

4.6 The producers of goods and/or providers of services shall be obliged to fulfil the requirements of quality and delivery time in accordance with the provisions of the respective contracts of goods and services.

4.7 If the Ministry is satisfied that Indian suppliers of an item are not allowed to participate and/or compete in procurement by any foreign government, it may, if it deems appropriate, restrict or exclude bidders from that country from eligibility for procurement of that item and/or other items relating to the Ministry.

4.8 For the purpose of para 4. 7 above, a supplier or bidder shall be considered to be from a country if (i) the entity is incorporated in that country, or (ii) a majority of its shareholding or effective control of the entity is exercised from that country, or (iii) more than 50% of the value of the item being supplied has been added in that country. Indian suppliers shall mean those entities which meets any of these tests with respect to India.

5. Purchase Preference- Linked with Local Content {LC}

5.1 In procurement of all items not covered by para 4.4 (a), the following provisions may be considered for LC linked Purchase Preference:

5.1.1 The manufacturers/ service providers having the capability of meeting/ exceeding the local content targets shall be eligible for purchase preference under the policy, i.e. LC manufacturers/ LC service providers respectively as described below.

5.1.2 Wherever the goods/ services are procured under this policy, eligible (techno-commercially qualified) Class I Local supplier may be granted a purchase preference where the quoted price is within the margin of purchase preference of the lowest price, other things being equal, purchase preference may be granted to the eligible (techno-commercially qualified) Class I Local supplier concerned, at the lowest valid price bid.

5.1.3 Goods: The tender for procuring goods would specify that the contract for 50% of the procured quantity would be awarded to the lowest techno-commercially qualified Class I Local supplier, subject to matching with L1, if such bidders are available. The remaining will be awarded to L1.

5.1.3.1 However, if L1 bidder happens to be a Class Local supplier, the entire procurement value shall be awarded to such bidder;

5.1.3.2 If in the opinion of the procuring company, the tenders (procured quantity) cannot be divided in the prescribed ratio of 50:50, then they shall have the right to award contract to the eligible Class I Local supplier for quantity not less than 50%, as may be divisible.

5.1.3.3 In continuation to 5.1.3.2 above, if the tendered item is non divisible, (to be included in the tender document by procuring company) the contract can be awarded to the eligible Class I Local supplier for the entire quantity.

5.1.4 Services/ EPC Contracts: The tender for oil and gas services/ EPC contracts shall not normally be split. For such procurement the tender would specify that the entire contract would be awarded to the lowest techno-commercially qualified Class I Local supplier, subject to matching with L1, if such bidders are available. However, tender for certain oil & gas services can normally be split, in such cases, splitting shall be allowed and specified in tender document. Such services shall follow the procedure outlined for goods as described in para 5.1.3. The procuring company should clearly specify in the tender document whether the tender shall be split or not.

5.1.5 For para 5.1.3 and 5.1.4 above, only those LC manufacturers/ service providers whose bids are within the margin of purchase preference would be allowed an opportunity to match L1 bid.

5.1.6 The tender conditions would ensure that local content in oil & gas products is encouraged. However, the procuring company may incorporate such stipulations as may be considered necessary to satisfy themselves of the production capability and product quality of the manufacturer.

5.1.7 The procedure for award under the policy is at Enclosure-I.

6. Determination of LC

6.1 LC of goods

6.1.1 LC of goods shall be computed on the basis of the cost of domestic components in goods, compared to the whole cost of product.

6.1.2 The criteria for determination of the local content cost in the goods shall be as follows:

- a) in the case of direct component (material), based on country of origin;
- b) in the case of manpower, based on INR component.

6.1.3 The calculation of LC of the combination of several kinds of goods shall be based on the ratio of the sum of the multiplication of LC of each of the goods

· with the acquisition price of each good to the acquisition price of the combination of goods.

6.2 LC of service

6.2.1 LC of Service shall be calculated on the basis of the ratio of service cost of domestic component in service to the total cost of service.

6.2.2 The total cost of service--shall be constituted of the cost spent for rendering of service, covering:

- a) cost of component (material) which is used;
- b) manpower and consultant cost; cost of working equipment/ facility; and

c) general service cost.

6.2.3 The criteria for determination of cost of local content in the service shall be as follows:

- a) in the case of material being used to help the provision of service, based on country of origin;
- b) in the case of manpower and consultant based on INR component of the services contract;
- c) in the case of working equipment/facility, based on country of origin; and
- d) in the case of general service cost, based on the criteria as mentioned in clauses a, b, and c above.
- e) Indian flag vessels in operation as on date.

6.3 LC of the EPC Contracts:

6.3.1 LC of EPC contracts shall be the ratio of the whole cost of domestic components in the combination of goods and services to the whole combined cost of goods and services.

6.3.2 The whole combined cost of goods and services shall be the cost spent to produce the combination of goods and services, which is incurred on work site. LC of the combination of goods and services shall be counted in every activity of the combination work of goods and services.

6.3.3 The spent cost as mentioned in paragraph 6.3.2 shall include production cost in the calculation of LC of goods as mentioned in clause 6.1.1 and service cost in the calculation of LC of services as mentioned in clause 6.2.2.

6.4 Calculation of LC and Reporting

LC shall be calculated on the basis of verifiable data. In the case of data used in the calculation of LC being not verifiable, the value of LC of the said component shall be treated as nil.

7 Certification and Verification

7.1 Class I/Class II Local suppliers are eligible to bid only if they meet the local content norms, therefore whether or not they want to avail PP-LC benefit, it will still be mandatory for them to give adequate documentation as follows to establish their status as Class-I or Class-II local supplier

7.1.2 At bidding stage:

- a. Price Break-up:
 - The bidder shall provide the percentage of local content in the bid
- b) The bidder shall submit an undertaking from the authorized signatory of bidder having the power of Attorney along with the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
 - In cases of procurement for a value in excess of Rs 10 crores, the undertaking submitted by the bidder shall be supported by a certificate from the statutory auditor or cost auditor of the

company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of other than companies) giving the percentage of local content.

- However, in case of foreign bidder, certificate from the statutory auditor or cost auditor of their own office or subsidiary in India giving the percentage of local content is also acceptable. In case office or subsidiary in India does not exist or Indian office/ subsidiary is not required to appoint statutory auditor or cost auditor, certificate from practicing cost accountant or practicing chartered accountant giving the percentage of local content is also acceptable.

7.1.3 After Contract Award:

- The bidder shall submit an undertaking from the authorized signatory of bidder having the power of Attorney along with the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.

- In cases of procurement for a value in excess of Rs 10 crores, the undertaking submitted by the bidder shall be supported by a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of other than companies) giving the percentage of local content.

- However, in case of foreign bidder, certificate from the statutory auditor or cost auditor of their own office or subsidiary in India giving the percentage of local content is also acceptable. In case office or subsidiary in India does not exist or Indian office/ subsidiary is not required to appoint statutory auditor or cost auditor, certificate from practicing cost accountant or practicing chartered accountant giving the percentage of local content is also acceptable.

7.2 Each supplier shall provide the necessary local-content documentation to the statutory auditor, which shall review and determine that local content requirements have been met, and issue a local content certificate to that effect on behalf of the bidder, stating the percentage of local content in the good or service measured. The Auditor shall keep all necessary information obtained from suppliers for measurement of Local Content confidential.

7.3 The Local Content certificate shall be submitted along with each invoice raised. However, the % of local content may vary with each invoice while maintaining the overall % of local content for the total work/purchase of the pro-rata local content requirement. In case, it is not satisfied cumulatively in the invoices raised up to that stage, the supplier shall indicate how the local content requirement would be met in the subsequent stages.

7.4 As regards cases where currency quoted by the bidder is other than Indian Rupee, exchange rate prevailing on the date of notice inviting tender (NIT) shall be considered for the calculation of Local Content.

7.5 The Procuring Company shall also have the authority to audit as well as witness production processes to certify the achievement of the requisite local content.

8 Governance and Supervision

8.1 A Steering Committee will be constituted by MoPNG to provide effective guidance and to oversee the effective implementation of the Policy including review and amendments required therein. The Steering Committee may consider representations on target Local Content in goods, services and EPC and modify the policy accordingly.

8.2 The Steering Committee shall annually conduct a review of the policy implementation which shall specifically cover the issue of whether there has been adequate competition, and whether the policy has resulted in any reduction in competition/ exclusion of non-local bidders or any cost increase to the purchasing PSU, particularly-in respect of services & works contracts.

9 Sanctions

9.1 The Procuring companies shall impose sanction on manufacturers/ service providers not fulfilling LC of goods/ services in accordance with the value mentioned in certificate of LC.

9.2 The sanctions may be in the form of written warning, financial penalty and blacklisting.

9.3 In the event that a manufacturer or supplier of goods and/or provider of services does not fulfil his obligation after the expiration of the period specified in such warning, the procuring company can initiate action for blacklisting such manufacturer/supplier/service provider.

9.4 A manufacturer and/or supplier of goods and/or provider of services who has been awarded the contract after availing Purchase Preference is found to have violated the LC provision, in the execution of the procurement contract of goods and/or services shall be subject to financial penalty specified in clause 9.4.1.

9.4.1 The financial penalty shall be over and above the PBG value prescribed in the contract and shall not be more than an amount equal to 10% of the Contract Price.

10. Clarification on Goods/ Services: Any issue regarding the coverage of a particular good/ service under the proposed policy would be referred to the Steering Committee for clarification.

11. Powers to grant exemption and to reduce minimum local content: Wherever proper justification exists, Ministry of Petroleum and Natural Gas may by written order, for reasons to be recorded in writing,

- a) Reduce the minimum local content below the prescribed level; or
- b) Reduce the margin of purchase preference below 20%; or

c) Exempt any particular item or supplying entities from the operation of this Order or any part of the Order.

12. Time Period: The Policy shall be applicable for 5 years. Except for 2017-18, the Policy shall not be continued unless, the Steering Committee by September 30th of each year, concludes a review as per para 8.2 of the Policy and recommends continuation of the Purchase Preference.

In pursuance of the clause mentioned above, towards fulfillment of conditions pertaining to Local Contents in accordance with the value mentioned in the certificate of LC, the bidder shall have to submit additional Bank Guarantee (format attached at Annexure-XI) equivalent to the amount of PBG.

35.0 Categorization and various Criteria applicable to MSE bidders shall be guided by the Gazette Notification No. CG-DL-E-26062020-220191 dated 26.06.2020 issued by MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES.

The bidder claiming the MSE status (MSE-General, MSE-SC/ST, MSE-Woman) against this tender has to submit the following documents along with the technical bid for availing the benefits applicable to MSEs:

- i. Udyam Registration Number with Udyam Registration Certificate

Note: In case bidding MSE is owned by Schedule Caste or Schedule Tribe or Woman entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST/Woman entrepreneur should also be enclosed.

36.0 Financing of trade receivables of Micro and Small Enterprises (MSEs) through Trade Receivables Discounting System (TReDS) platform.

Based on the initiatives of Government of India to help MSE vendors get immediate access to liquid fund based on Buyers credit rating by discounting, OIL has registered itself on TReDS platform with M/s RXIL and M/s A TReDS Ltd. (Invoice Mart). MSE vendors can avail this benefit by registering themselves with any of the exchanges providing e-discounting / electronic factoring services on TReDS platform and following the procedures defined therein, provided OIL is also participating in such TReDS Platform as a Buyer.

(i) MSE Vendor should be aware that all costs relating to availing the facility of discounting on TReDS platform including but not limited to Registration charges, Transaction charges for financing, Discounting Charges, Interest on financing, or any other charges known by any name shall be borne by MSE Vendor.

(ii) MSE Vendor hereby agrees to indemnify, hold harmless and keep OIL and its affiliates, Directors, officers, representatives, agents and employees indemnified, from any and all damages, losses, claims and liabilities (including legal costs) which may arise from Sellers submission, posting or display, participation, in any manner, on the TReDS Platform or from the use of Services or from the Buyer's breach of any of the terms and conditions of the Usage Terms or of this Agreement and any Applicable Law on a full indemnity basis.

(iii) OIL shall not be liable for any special, indirect, punitive, incidental, or consequential damages or any damages whatsoever (including but not limited to damages for loss of profits or savings, business interruption, loss of information), whether in contract, tort, equity or otherwise or any other damages resulting from using TReDS platform for discounting their (MSE Vendor's) invoices.

Note:

- (i) Buyer means OIL who has placed Purchase Order/ Contract on a MSE Vendor (Seller).
- (ii) Seller means a MSE vendor, who has been awarded Purchase Order/ Contract by OIL (Buyer).

PART-II

BID EVALUATION CRITERIA (BEC)

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

(A) BID EVALUATION CRITERIA (BEC):

1. All the documents related to BEC must be submitted along with the Techno-Commercial Bid. Otherwise, the bid will be considered as non-responsive and rejected.
2. Interested bidders shall have to submit the following documents to qualify for opening of the Price Bid:

1.0 ELIGIBILITY:

- i) The applicant should be a private or government-owned legal entity.
- ii) Bidder should have valid registration with Employees Provident Fund organization under 'EPF and Miscellaneous Provisions Act, 1952'.
- iii) A firm determined non-performing by OIL shall not be eligible to bid during the period so determined.

1.1 TECHNICAL CRITERIA.

EXPERIENCE:

The bidder must have successfully executed/completed similar Works over the last 7 (seven) years reckoned from the Original Bid Closing Date in Central/State Government/ PSUs/ Nationalised Banks/ Public Limited Company listed in the stock exchange duly supported with TDS certificate in evidence of the value of work as under –

- 1. One similar completed works each costing not less than the amount equal to Rs. 35,08,06,979.00; or**
- 2. Two similar completed works each costing not less than the amount equal to Rs. 21,92,54,362.00; or**
- 3. Three similar completed works each costing not less than the amount equal to Rs. 17,54,03,490.00.**

Submission of documentary evidence of Public Limited Company listed in stock exchange is the responsibility of bidder. The project for which the above experience is claimed, should have been satisfactorily completed prior to the original date of bid closing. The bidder shall furnish necessary documentary evidences in the form of completion certificate issued by the client (Project Proponent / Owner) to whom such service has been rendered. Such Certificate shall be supported by a copy of contract document/ Work Order issued by the client (Project Proponent / Owner) against the said contract. The certificates shall contain at least the following information:

- a) Tender/ Contract/Work Order Number with date
- b) Description of the job
- c) Date of Starting & Date of completion of the work.
- d) Executed Value of contract

(Satisfactory supply/completion/installation report (if submitted) should be issued on client's official letterhead with signature and stamp.)

Note:

- i. 'Similar Works' means Civil work comprising— 4 storied (G+3) RCC framed multi- storied Institutional/ Residential/ Industrial building including Electrification, Sanitary & Water Supply works and ancillary services such as Drainage, external area development etc. from Central / State Govt. Departments / PSUs /Govt. Autonomous bodies or Public Limited Companies listed in the stock exchange duly supported with TDS certificate in evidence of the value of work. Submission of documentary evidence of Public Limited Company listed in stock exchange is the responsibility of bidder.
- ii. Experience of repairing/maintenance nature for Sl. No. (i) above will not be considered for evaluation.
- iii. SIMILAR work executed by a bidder for its own organization / subsidiary will not be considered as experience for the purpose of meeting BEC.
- v. The bidder must possess a valid electrical contractor's license issued by Electrical Licensing Board, Govt. of Assam. In support of the above, the bidder shall submit a copy of Electrical Contractor's License.

Or

The bidder must possess a valid Electrical Contractor's License issued by any State Government Electrical Licensing Board of India other than that of Assam. In support of the above bidder shall submit following documents:

(a) Copy of their valid Electrical Contractor's License.

(b) An undertaking (Annexure-EE) stating that on award of contract to them they will submit either a valid Electrical Contractor's License issued by Electrical Licensing Board, Government of Assam in their name or get their Electrical Contractor's License recognized/endorsed by Electrical Licensing Board, Government of Assam for executing the job at Assam.

or

Engage an Electrical contractor with an experience of electrification works in Office/Residential Building of at least seven (07) years reckoned from original bid closing date and holding valid Electrical

Contractor's License issued by Electrical Licensing Board, Govt. of Assam for executing the jobs within 60 days from the award of the contract. Also in case of engaging an Electrical contractor will submit MoU entered into with that firm towards providing the requisite service as per the terms of the contract.

vi. Joint Venture / Consortium: Joint Ventures / consortium are not permitted.

1.2 EQUIPMENT DEPLOYMENT CRITERIA:

- a) Bidder shall comply for deploying the minimum numbers of equipment as per **Annexure-I** of Bid Document.
- b) Bidder shall own the critical equipments as per quantity mentioned in *Annexure-I enclosed* with bid. Otherwise, the equipment may be hired/ leased by the bidder. In case of owned equipment, the bidder shall submit authentic document to establish that they own the equipment specified above. The bidder has to submit the proof of ownership and working condition of equipment with the bid. Bidders are required to submit documentary evidence of ownership of the equipment as indicated below:
- (i) The bidder shall submit either of the following documents to establish that they own the equipment. Registration certificate issued by regulating authority or Insurance coverage or Certificate from Chartered Accountant, certifying that the bidder owns the equipment and the same are available for the Project.
- Or
- For equipment to be purchased: - Purchase order duly accepted by equipment supplier and with equipment delivery to project site, meeting the equipment deployment schedule.
- (ii) Certificate from Chartered Engineer certifying that the bidder own equipments are under good health and working condition.
- (iii) For hired/leased equipment Bidder shall submit an Undertaking on non-judicial stamp paper duly notarized stating that the bidder will deploy all the required equipment/ machineries as per Annexure-I after allotment of work.

2.0 FINANCIAL CRITERIA

- a) Annual Financial Turnover of the bidder during any of preceding three financial/accounting years from the original bid closing date should be at least **₹8,77,01,745.00**.
- b) Net worth of firm/bidder must be more than **₹2,63,10,523.00** and positive for preceding financial/ accounting year.
- c) Considering the time required for preparation of Financial Statements, if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the

Financial Statements of the preceding financial / accounting year are not available with the bidder, then the financial turnover of the previous three financial / accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that the balance sheet/Financial Statements for the preceding financial year (as the case may be) has actually not been audited so far.

Notes:

- d) **Annual Financial Turnover** of the bidder from operations shall mean Aggregate value of the realisation of amount made from the sale, supply or distribution of goods or on account made from the sale, supply or distribution of goods or on account of work/ service rendered, or both, by the company (i.e; bidding entity, as the case may be) during a financial year as per the Companies Act, 2013 section 2 (91).
- e) **Net worth** shall mean the aggregate value of the paid-up share capital and all resources created out of the profits and securities premium account, after deducting the aggregate value of the accumulated losses, deferred expenditure and miscellaneous expenditure not written off, as per the audited balance sheet, but does not include reserves created out of revaluataion of assets, write back of depreciation and amalgamation.
- f) For proof of Annual Turnover & Net worth the following documents must be submitted along with the bid: -
- i) A certificate issued by a practicing Chartered/Cost Accountant (with Membership Number, UDIN and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in **PROFORMA-AA**.
- ii) Audited Balance Sheet along with Profit & Loss account.
- iii) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.
- g) **WORKING CAPITAL**
- (i) The bidder should have minimum working capital equal or more than **₹2,63,10,523.00**, as per immediately preceding audited financial year result.
- (i) In case working capital is short, the bidder can supplement the same through line of credit from a scheduled commercial bank having net worth more than 100 crores as per enclosed **PROFORMA-BB**.

- (ii) In the event of award, the contractor shall open a project specific account in a nationalized bank located in Guwahati where the project will be executed. The contractor shall deposit an amount equal to 10% of the annualized contract value within 15 days from the date of issue of Letter of Award (LOA).
- (iii) All payment against the contract shall be remitted to the project specific account. Any withdrawal from this account shall be only after the first payment against the contract is made by Oil India Limited (OIL).
- (iv) At any point of time the minimum balance after first remittance by OIL against invoice from the contractor shall remain 5% of the annualized contract value.
- (vi) In addition to above the bidder should submit a financial resource / cash flow plan for execution of the contract.
Note: Working Capital shall mean “Current Assets minus Current Liabilities” as per latest year’s audited annual Financial Statements

(h) **AVAILABLE BID CAPACITY:** The bidding capacity of the contractor should be equal to or more than ₹17,54,03,490.00. The Bidding Capacity shall be worked out by the following formula:
 Bidding Capacity=[Ax1.5]-B
 Where,
 A= Maximum annual turnover in any one of the preceding three (3) financial years.
 B= Commitments in the next twelve (12) months from the date of expiry of the bid validity as per **Annexure-II**

ANNEXURE - II DECLARATION BY BIDDER REGARDING CONCURRENT COMMITMENT:

I/ Weaged years on of do hereby solemnly affirm and declare as follows for and on behalf of the Firm:					
LIST OF EXISTING COMMITMENT AND ONGOING WORK					
Sl. No.	Name Of Works	Client Name & Address	Work Order Value (INR)	Work Executed till date of Submission of bid (INR)	Amount of balance work which may fall for execution during the period of 12 months from the date of expiry of the bid validity (INR)
					(4-5)
1	2	3	4	5	6
Balance commitments in 12 Months from the date of expiry of the Bid Validity					INR
It is certified that the above particulars furnished are true and correct. If any information given is found to be misleading at a later date, OIL will have the authority to take necessary action as per provision of the Contract and as per laid down procedure of the Company (OIL).					
SIGNAND STAMP OF BIDDER (AUTHORISED SIGNATORY HAVING POWER OF ATTORNEY)					
Note: Accuracy level of balance commitments as per total of column 6 above should be within +/- 10%.					

- (i) **GST Registration:** The Bidder should have GST Registration. GST Registration Certificate shall be submitted with the tender document.
- (j) **EPF Registration:** The agency should have EPF registration. In case EPF registration is not there, the agency should obtain EPF registration on allotment of work. In case of failure, OIL India Ltd./OIL INDIA will deduct EPF & deposit as per EPF norms.
- (k) **Disqualification:** Even if an applicant meets the eligibility criteria and BEC/BRC, he shall be subject to disqualification if he or any of the constituent partners is found to have:
 - (i) Made misleading or false representations in the forms, statements, affidavits and attachments submitted in proof of the qualification requirements, and/ or
 - (ii) On account of currency of debarment by Oil India Limited.

3.0 COMMERCIAL EVALUATION CRITERIA.

- 1.0 The following points are deemed as “non-negotiable” and offer shall be rejected straightaway without seeking clarification:
 - i. Validity of bid shorter than validity indicated in the tender.
 - ii. Bid Security declaration not received as per format
(As per PROFORMA-CC)
 - iii. In case the party refuses to sign Integrity Pact.
- 2.0 Bidder must accept and comply with the following clauses as given in the Bid Document, failing which bid shall be liable for rejection:
 - a. Firm price
 - b. EMD / Bid Bond Bid Security Declaration
 - c. Scope of work
 - d. Specifications
 - e. Price schedule
 - f. Delivery / completion schedule
 - g. Period of validity of bid
 - h. Liquidated Damages
 - i. Performance bank guarantee / Security deposit
 - j. Guarantee of material / work
 - k. Arbitration / Resolution of Dispute
 - l. Force Majeure
 - m. Applicable Laws
 - n. Integrity Pact, if applicable
- 3.0 To ascertain the inter-se-ranking, the comparison of the responsive bids will be made.
- 3.1 In case of identical lowest offered rate by more than 1 (one) bidder, the selection of priority1 and priority 2 bidder will be made by draw of lots

amongst the parties offering the same lowest price. The tender shall be awarded to priority 1 bidder only, but if priority 1 bidder fails to accept the LOI/found non-eligible/ fails to execute the job, then Company reserves the right to award the same to priority 2 bidder after taking management approval for the same.

4.0 PRICE SCHEDULE:

Bidder shall submit the Price Break up as per Price Bid Format. Bidders should fill up the proforma, sign and upload under “Notes & Attachments” >“Attachments” only. Evaluation of offers shall be done on as per price bid format.

4.1 Comparison of offers shall be done on as per price bid format. Contract shall be awarded to the L1 bidder evaluated as per the price bid format.

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

4.3 Price bids of only those bidders will be opened whose offers are found to be techno-commercially acceptable.

5.0 No press advertisement will be published regarding amendment to Bidding Document or extension of Bid Closing Date. The same will be uploaded in OIL’s website and informed to all prospective bidders who have received the bidding documents. Bidders to keep themselves updated.

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

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

8.0 There should not be any indication of price in the Un-priced Techno-Commercial Bid. If there is any indication of price in the Un-priced Techno-Commercial Bid, Such Bid will be rejected straightway.

9.0 Bidder must accept and comply with the following provisions as given in the tender document. Deviations to such provisions shall make the bid liable for rejection.

- a. Firmprice
- b. Bid Security Declaration (As per **PROFORMA-CC**)
- c. Scope of work
- d. Specifications
- e. Price schedule

- f. Delivery / completion schedule
- g. Period of validity of bid
- h. Liquidated Damages
- i. Performance bank guarantee / Security deposit
- j. Guarantee of material / work
- k. Arbitration / Resolution of Dispute
- l. ForceMajeure
- m. Applicable Laws
- n. IntegrityPact

10. VERIFICATION BY INDEPENDENT INSPECTION AGENCIES:

1.0 Oil India Limited (OIL) has engaged the following 09 (Nine) Independent Inspection to verify and certify of various documents required against BEC/BRC of the tender:

- i. M/s. RINA India Pvt. Ltd.
- ii. M/s Dr. Amin Controller Pvt. Ltd.
- iii. M/s. Germanischer Lloyd Industrial Services GmbH (DNV GL- Oil & Gas)
- iv. M/s. TUV SUD South Asia Pvt. Ltd.
- v. M/s. IRCLASS Systems and Solutions Private Limited
- vi. M/s. Gulf Llyods Industrial Services (India) Pvt. Ltd.
- vii. M/s. TUV India Private Limited
- viii. M/s. TUV Rheinland (India) Pvt. Ltd.
- ix. M/s. Bureau Veritas (India) Private Limited

NOTE: The aforementioned list of Agencies may vary in subsequent times and in that case, the updated list will be incorporated during the publishing of tender.

2.0 The Bidders have to get verified and certified the various documents required against BEC/BRC of the tender by anyone of the above Independent Inspection Agencies and submit the duly certified Inspection Certificate by the Inspection Agencies along with the Technical Bid of the Tender. All Charges of the Third-party Independent Inspection Agencies towards verification of bidder's documents and certification thereof shall be borne by the respective bidders and Payments on account of above inspection, verification and certification shall be made directly by the Bidder to the Inspection Agency(s). OIL will not be responsible for any payment dispute between Bidders and Third Party Inspection Agencies.

3.0 As mentioned above, Bidder(s) have to submit the verified documents along with the Technical Bids. Bid submitted with un-verified supporting documents shall not be normally considered. However, in case a bidder submits its bid

alongwith all relevant supporting documents as per BEC/BRC without getting all/some of them verified by the designated Independent Inspection agency, such bid can be provisionally considered provided it is accompanied by an Undertaking by the Bidder on their official letterhead to submit the duly verified copies/verification certificate within seven (7) days of actual bid opening. Company will neither send any reminder nor seek any clarification in this regard from such bidders, and the bid will be rejected outright if the bidder fails to submit the verified copies/verification certificate within seven (7) days of actual bid opening at its own risk and

responsibility. If a bidder does not submit the undertaking towards submission of third party certification within 7 days from date of Bid Closing date, but certified document reaches us within the cut-off date of above seven (7) days, then such bids shall be- considered.

4. The methodology of inspection/ verification of documents followed by the agencies is broadly as under but not limited to:

(a) The prospective bidder will contact any of the empanelled inspection agencies against such tender. When prospective bidders approach any of the OIL's empanelled Inspection Agency, the agency will ask for the tender document and should go through the Tender Document, especially the requirements of BEC/BRC and list the documents to be verified. The inspection Agency shall depute their qualified/competent inspector to the Bidder's premises to check the original documents and certify the copies which the bidder shall submit along with their bids. OIL will reserve the right to ask the inspection agencies to verify the documents with source, if required **at no extra cost to OIL**. A copy of the Inspection Certificate shall be directly sent to the Concerned Tendering officer of OIL INDIA LIMITED, mentioned in the respective tender.

(b) Verification of documents are normally categorised as under:

➤ **General Requirement:**

- Check Bidder's PAN Card
- Check Bidder's GST Certificate
- Check ITR of company — last three years (minimum)
- Check Bidder's Certificate of Incorporation - Domestic Bidder.

➤ **Additional Documents : (If applicable against the tender)**

- Joint Ventures Agreements — To Double-check with JV Partners
- Consortium Agreements — To Double-check with Consortium Partners
- Holding/ Parent/Subsidiary Company — To check the notarized Share Holding pattern.

➤ **Technical Criteria**

- Experience Proof —To check Original Work Order as per BEC /criteria
- To check Company Name
- To check Similar Work Definition against Work Order, Scope of work (JV or Consortium too)
- To check the Execution period

- To Check the Completion Certificates — Letter of Appreciations of proper Execution
- Reference contact verification and true copy verification
- Match Original Work Order/Contract Copy with Soft Copies or notarized scan copies.

➤ **Financial Criteria**

- Check Audited Balance Sheet — Turnover as per BEC along with the bidder's compliance with respect to the following clause:

Considering the time required for preparation of Financial Statements, if the last date of the preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial / accounting year are not available with the bidder, then the financial turnover of the previous three financial accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that ‘the balance sheet/Financial Statements for the financial year _____ (as the case may be) has actually not been audited as on the Original bid closing date as per format’.

- Check Net-Worth — as per BEC
- Check Notarization validity
- Check original audited Balance Sheet with scan copies.
- To check the Line of Credit, if incorporated in the tender.

PROFORMA-BB

Format for Line of Credit from Scheduled commercial bank

Confirmation from the bank for the availability of unutilized line of credit:

We (Name of bank) having our registered office at hereby confirm the company M/s. (bidder) having registered office at is having account with our bank. Presently the credit limits of the company are as under:			
	Item	INR	
	Sanctioned Line of Credit		
	Utilized Line of Credit		
	Balance Line of Credit		

We further confirm that we are scheduled commercial bank having Net Worth more than 100 Crs.

Authorized Signatory of Bank

ANNEXURE-I

List of major Plant and Machinery in possession of the firm

S. No.	Name of Plant & Machinery / equipment	Minimum Required site	No. at	Others & when required) (As)
A	B	C		D
1.	Excavator			01
2.	JCB	01		
3.	Dozer			01
4.	Dumper/Tipper	04		
5.	Truck	02		
6.	Tractor with trolley	01		
7.	Water Tanker	01		
8.	Batching Plant : Capacity (50 Cum/Hr.)	01		
9.	Transit Mixer	02		
10.	Site Mixers with weigh batcher	02		
11	Skip Hoist/Tower Crane			01
12	Dewatering / WaterPumps	02		
13	Survey Equipment:			
	a) Total Stn,			01
	b)Theodolite			
	c) Level instruments	02		
14	Details of Steel Shuttering, Staging & props materials	6000 Sqm		
15	Placer Boom/ Concrete Pump Set assembly			01
16	Hand Vibrator	10		
17	Welding Machine	04		
18	DG Set 40 KVA	01		
	** Any other machinery (if required) as per site conditions shall be arranged by the contractor			

Note:

- * *In case of any arrangement for getting the equipment on lease, etc., authenticated proof of the same is to be submitted.*

Proforma-CC

BID SECURITY DECLARATION

To,
OIL INDIA LIMITED
PIPELINE HEADQUARTER, Guwahati,ASSAM, INDIA

Whereas (herein after called 'the Bidder') has submitted their Bid No. dated..... against OIL INDIA LIMITED, GUWAHATI, ASSAM, INDIA (hereinafter called the Purchaser)'s tender No..... for the supply of
... (hereinafter called 'the Bid') KNOW ALL MEN by these presents that if I/We withdraw or modify our Bid during the period of validity, or if I/We are awarded the contract and I/We fail to sign the contract, or to submit a performance security before the deadline defined in the NIT / Purchase Order, then I/We shall be suspended for the period of two (2) years. This suspension of two years shall be automatic without conducting any enquiry.

Signature & Seal of the Bidder

CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

TO BE ISSUED BY PRACTISING CHARTERED ACCOUNTANTS' FIRM ON THEIR LETTER HEAD

TO WHOM IT MAY CONCERN

This is to certify that the following financial positions extracted from the audited financial statements of M/s..... (Name of the Bidder) for the last three (3) completed accounting years upto(as the case may be) are correct.

YEAR	TURNOVER In INR (Rs.)	NET WORTH In INR (Rs.)

WORKING CAPITAL OF THE FIRM AS PER IMMEDIATELY PRECEDING YEAR:

Place:

Date:

Seal:

Membership No. :

Registration Code. :

Signature

(in vendors letter head)

Annexure-EE

UNDERTAKING BY VENDOR ON SUBMISSION OF ELECTRICAL LICENSE
(IF APPLICABLE)

To,
The Oil India Limited
Materials/Contracts Department
Duliajan – 786 602
Assam

I/We _____ M/s _____ are hereby undertake that we have a valid electrical license issued from _____ However, we do not have a valid electrical contractor’s license issued by Electrical Licensing Board, Govt. of Assam at this moment. In this regard, we hereby undertake that, on award of contract, a valid Electrical Contractor’s License issued by Electrical Licensing Board, Government of Assam in the name of our firm will be collected or get the present Electrical Contractors License recognized / endorsed by Electrical Licensing Board, Government of Assam for executing the job at Assam and the same will be subsequently renewed till the completion of contract. A copy of the same will be submitted to Oil India Limited within 60 days from the date of award of Contract.

In case of engagement of any Electrical firm having valid Electrical Contractor’s License issued by Electrical Licensing Board, Government of Assam, we hereby undertake that we will furnish a copy of MoU entered into with the firm towards providing the requisite service as per the terms of the contract within 60 days from the date of award of contract.

Authorised Signature _____
Name _____
Vendor Code _____
Email ID _____
Mobile No _____
Encl: Original performance bank guarantee
Mobile No _____
Encl: Original performance bank guarantee

.....

PART-III SECTION -I

GENERAL CONDITIONS OF CONTRACT (GCC)

OIL INDIA LIMITED

(A Government of India Enterprise)

CONTRACTS SECTION, PHQ

P.O. Udayan Vihar – 781171, Guwahati, ASSAM

DESCRIPTION OF WORK/SERVICES:-

Construction of 02 Nos. of G+6 Storied Residential Buildings including Electrification works, lifts, Sanitary works, Site Development etc. all complete inside Pipeline Headquarters Township, Oil India Limited (OIL), Guwahati, Assam.

GENERAL CONDITIONS OF CONTRACT

1.0 APPLICABILITY, DEFINITION & INTERPRETATION

1.1 Applicability

All clauses in the General Conditions of Contract [GCC] shall apply to all transactions except as otherwise stated in the Special Conditions of Contract [SCC] and/or BEC/BRC. Furthermore, in the event if there is any conflict between the Principal text of the Agreement and the Appendixes, the Principal text will prevail.

1.2 Definition & Interpretation

In the contract (as hereinafter defined) the following words and expressions shall have the meaning hereby assigned to them except where the context otherwise requires:

1.2.1 COMPANY/OIL/Operator:

Shall mean OIL INDIA LIMITED [OIL] a public sector undertaking, incorporated under COMPANY's Act 1956 having its registered office at Duliajan-786602, Assam, India and includes its successor and permitted assigns.

1.2.2 CONTRACTOR:

Shall mean the person or persons, firm or COMPANY or corporation incorporated in India or abroad, who has been awarded with the contract and includes contractor's legal representatives, his successors and permitted assigns.

1.2.3 Contract:

Shall mean a written agreement between the COMPANY and the CONTRACTOR for execution of the services/works including all contract documents and subsequent amendments, if any.

1.2.4 Site:

Shall mean the place in which the operations/services are to be carried out or places approved by OIL for the purposes of the CONTRACT together with any other places designated in the CONTRACT as forming part of the site.

1.2.5 COMPANY's Site Representative/Engineer:

Shall mean the person or the persons appointed by the COMPANY from time to time to act on its behalf at the site for overall co-ordination, supervision and project management at site.

1.2.6 Sub-Contract:

Shall mean order/contract placed by the CONTRACTOR for any portion of the CONTRACT or work sublet with necessary written consent of COMPANY on third party. Such sub-letting shall not relieve the CONTRACTOR from any obligation, duty or responsibility under the CONTRACT.

1.2.7 Sub-Contractor:

Shall mean any person or firm or COMPANY (other than CONTRACTOR) to whom any part of the work has been entrusted by CONTRACTOR, with written consent of OIL or the persons appointed by OIL, successors and permitted assigns of such persons, firm or COMPANY).

1.2.8 Contractor's Representative:

Shall mean such person/or persons duly appointed representative at the site and base as the CONTRACTOR may designate in writing to the COMPANY as having authority to act for the CONTRACTOR in matters affecting the work and to provide the requisite services.

1.2.9 Contract Price/Value:

Shall mean the sum accepted or the sum calculated in accordance with the rates accepted in tender and/or the contract rates as payable to the CONTRACTOR for the entire execution and completion of the services/works, including amendments/modification/change order issued by the COMPANY.

1.2.10 Firm price:

The prices will remain unchanged, except for statutory changes, during currency of the CONTRACT unless specifically agreed to in writing by COMPANY.

1.2.11 Service/Works/Operations:

Shall mean and include all items and things to be supplied/done and all work/Service to be performed by the CONTRACTOR as specified in the Scope of Work under this CONTRACT and shall also include all extra, additional, altered or substituted works/services as required for the purpose of successful execution of the Contract.

1.2.12 Equipment/Materials/Goods:

Shall mean and include any equipment, machinery, instruments, stores, goods which CONTRACTOR is required to provide to the COMPANY for/under the CONTRACT and amendments thereto.

- 1.2.13 Drawings:**
Shall mean and include all Engineering sketches, general arrangements/ layout drawings, sectional plans, all elevations, photographs, etc. related to the CONTRACT together with modification and revision thereto.
- 1.2.14 Specifications:**
Means and includes all technical specifications, provision attached and referred to in the tender/contract document regarding method and manner of performing the services and qualities of the service/materials to be provided under the contract and also as modified by the COMPANY/its site representative during the execution of contract in the best interest of service.
- 1.2.15 Engineer In-charge (EIC):**
Shall mean the person designated from time to time by the COMPANY and shall include those who are expressly authorized by the COMPANY to act for and on its behalf for operation of the contract.
- 1.2.16 Inspectors:**
Shall mean any person or outside Agency nominated by COMPANY to inspect equipment, materials and services, if any, in the CONTRACT (stage wise as well as final) as per the terms of the CONTRACT.
- 1.2.17 Tests:**
Shall mean such process or processes to be carried out by the CONTRACTOR as are prescribed in the CONTRACT, considered necessary by the COMPANY or their representative to ascertain quality, workmanship, performance and efficiency of equipment or services thereof.
- 1.2.18 Approval:**
Shall mean and include the written consent duly signed by COMPANY or their authorized official in respect of all documents, drawings or other particulars in relation to the CONTRACT.
- 1.2.19 Day:**
Shall mean a calendar day of twenty –four (24) consecutive hours beginning at 00:00 hours with reference to local time at the site.
- 1.2.20 Month:**
Shall mean a calendar month as per Gregorian calendar.
- 1.2.21 Year:**
Shall mean calendar year as per Gregorian calendar.
- 1.2.22 Working day:**
Means any day which is not declared to be holiday by the COMPANY.

- 1.2.23 Bid/offer:**
Shall mean the proposal/Offer along with supporting documents submitted by the bidder in response to the tender or enquiry in accordance with the terms of Tender or Enquiry, for consideration by COMPANY, prior to award of contract.
- 1.2.24 Guarantee:**
Shall mean the period and other conditions governing the warranty/guarantee of the services as provided in the CONTRACT.
- 1.2.25 Mobilization:**
Shall mean rendering the equipment fully manned and equipped as per CONTRACT and ready to begin work at site designated by the COMPANY and accepted by the COMPANY after inspection.
- 1.2.26 De-mobilization:**
Shall mean the removal of all items forming part of the mobilization from the site of the COMPANY and inspection and acceptance thereafter by the COMPANY including compliance of requirement in relation to re-export of imported equipment/materials under concessional duty scheme in accordance with relevant notification from Customs Authorities.
- 1.2.27 Willful Misconduct:**
Shall mean intentional disregard of good and prudent standards of performance or proper conduct under the Contract with knowledge that it is likely to result in any injury to any person or persons or loss or damage of property of the Company or Third Party.
- 1.2.28 Gross Negligence:**
Shall mean any act or failure to act (whether sole, joint or concurrent) by a person or entity which was intended to cause, or which was in reckless disregard of or unjustifiable indifference to, avoidable and harmful consequences such person or entity knew, or should have known, would result from such act or failure to act. Notwithstanding the foregoing, Gross negligence shall not include any action taken in good faith for the safeguard of life or property.
- 1.2.29 Criminal Negligence:**
Shall mean that the crime happened negligently, there was duty of care upon the Person but inadvertently due to his negligence, the duty was breached, which causes harm to the people in the form of death or serious injury.
- 1.2.30 GST Legislations:**
'GST legislations' means 'any or all of the following legislations as may be applicable to the CONTRACTOR and OIL:
- (A) The Central Goods & Services Tax Act, 2017;
 - (B) The Integrated Goods & Services Act, 2017;
 - (C) The Union Territory Goods & Services Tax Act, 2017;

- (D) The respective State Goods & Service Tax Acts'
- (E) The Goods and Services (Compensation to States) Act, 2017
- (F) The Customs Act and the Customs Tariff Act.
- (G) Any other applicable Act related to GST

2.0 CONTRACT DOCUMENT:

2.1 Governing language: The governing language for the CONTRACT shall be English. All CONTRACT documents and all correspondence and communication to be given and all other documentation to be prepared and supplied under the CONTRACT shall be written in English and the CONTRACT shall be construed and interpreted in accordance with English language.

2.2 Entire Agreement: The CONTRACT constitutes the entire agreement between OIL and the CONTRACTOR with respect to the subject matter of the CONTRACT and supersedes all communication, negotiations and agreement (whether written or oral) of the parties with respect thereto made prior to the date of this agreement, unless such communication(s) expressly forms part of the contract or included by reference.

2.3 Amendment in CONTRACT: No Amendment of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto. OIL shall not be bound by any printed conditions, provisions in the CONTRACTOR's BID, forms of acknowledgement of CONTRACT, invoice and other documents which purport to impose any condition at variance with or supplement to CONTRACT.

3.0 WAIVERS AND AMENDMENTS:

3.1 Waivers: It is fully understood and agreed that none of the terms and conditions of this contract shall be deemed waived by either party unless such waiver is executed in writing only by the duly authorized representatives of both the parties. The failure of either party to execute any right shall not act as a waiver of such right by such party.

3.2 Change Program: It is agreed that CONTRACTOR shall carry out work in accordance with the completion program (e.g. Drilling Programme) to be furnished by the COMPANY, which may be changed from time to time by reasonable modifications in the program as COMPANY sees fit. COMPANY's instruction in this regard shall be final and binding.

4.0 CONTRACT TIMELINE:

4.1 Effective Date of Contract:

The contract shall become effective as of the date COMPANY notifies the CONTRACTOR in writing that it has been awarded the contract. This date of issuance of Letter of Award (LOA) by the COMPANY will be the effective date of contract. All terms and conditions of the contract shall come into force with the date of issuance of LOA.

4.2 Date of Commencement of Operation:

The date on which the mobilization is completed in all respects and CONTRACTOR is ready to commence operation as per the contract provision [Certified by the COMPANY's representative] will be treated as the date of Commencement of Operation.

4.3 Duration of the contract:

The contract shall be valid for a period as defined in the LOA and Special Conditions of Contract [SCC].

5.0 SCOPE OF WORK/CONTRACT:

Scope of the CONTRACT shall be as defined in the CONTRACT, specifications, drawings and Appendices.

6.0 GENERAL OBLIGATION OF CONTRACTOR:

CONTRACTOR shall, in accordance with and subject to the terms and conditions of this Contract:

6.1 Perform the work described in the Terms of Reference/Scope of Work. The CONTRACTOR shall execute the work with professional competence and in an efficient and workman like manner.

6.2 Except as otherwise provided in the Terms of Reference and the special Conditions of the contract, employ all labours/personnel as required to perform the work.

6.3 Perform all other obligations, work and services which are required by the terms of this contract or which reasonably can be implied from such terms as being necessary for the successful and timely completion of the work.

6.4 Comply with all applicable statutory obligations specified in the contract.

6.5 CONTRACTOR shall be deemed to have satisfied himself before submitting their bid as to the correctness and sufficiency of its bid for the services required and of the rates and prices quoted, which rates and prices shall, except insofar as otherwise provided, cover all its obligations under the contract.

6.6 CONTRACTOR shall be deemed, prior to submitting their bids, to have satisfied themselves about the weather conditions, working culture in the area, socio-political environment, safety & security aspects, law & order situation and law of the land, and obtain for themselves all necessary information as to the risks, contingencies and all other circumstances, which may influence or affect the various obligations under the Contract.

6.7 CONTRACTOR shall give or provide all necessary supervision during the performance of the services and as long thereafter within the warranty period as COMPANY may consider necessary for the proper fulfilling of CONTRACTOR's obligations under the contract.

7.0 GENERAL OBLIGATION OF COMPANY:

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

7.1 Pay CONTRACTOR in accordance with terms and conditions of the contract.

7.2 Allow CONTRACTOR access, subject to normal security and safety procedures, to all areas as required for orderly performance of the work as specified in the Scope of Works of the contract or work connected therewith.

7.3 Perform all other obligations required of COMPANY by the terms of this contract.

8.0 DUTIES AND POWER/AUTHORITY:

8.1 OIL's site representative/engineer:

The duties and authorities of OIL's site representative/engineer are to act on behalf of OIL for:

- (a) Overall supervision, co-ordination and Project Management at site.
- (b) Proper and optimum utilization of equipment and services.
- (c) Monitoring of performance and progress
- (d) Commenting/countersigning on reports made by the CONTRACTOR's representative at site in respect of works, receipts, consumption etc. after satisfying himself with the facts of the respective cases.
- (e) He shall have the authority, but not obligation at all times and any time to inspect/test/examine/verify any equipment machinery, instruments, tools, materials, personnel, procedures and reports etc. directly or indirectly pertaining to the execution of the work. However this shall not construe to imply an acceptance by the inspector. Hence, the overall responsibility of quality of work shall rest solely with the CONTRACTOR.
- (f) Each and every document emerging from site in support of any claim by the CONTRACTOR has to have the countersignature/comments of the OIL's representative/engineer without which no claim shall be entertained by the OIL.

8.2 CONTRACTOR's representative:

- (a) The CONTRACTOR's representative shall have all the powers requisite for the performance of the Service/Works, subject to holding due authorization from the CONTRACTOR.
- (b) Representative(s) shall liaise with OIL's representative/engineer for the proper co-ordination and timely completion of the works and on any matter pertaining to the works.

- (c) Representative(s) shall extend full co-operation to OIL's representative/inspector/engineer in the manner required by them for supervision/inspection/observation of equipment, material, procedures, performance, reports and records pertaining to works.
- (d) To have complete charge of CONTRACTOR's personnel engaged in the performance of the work and to ensure compliance of rules and regulations and safety practice.

9.0 Personnel to be deployed by contractor:

CONTRACTOR warrants that it shall provide competent, qualified and sufficiently experienced personnel to perform the work correctly and efficiently.

9.1 The CONTRACTOR should ensure that their personnel observe all statutory safety requirement including those prescribed by the COMPANY. Upon COMPANY's written request, CONTRACTOR, entirely at its own expense, shall remove immediately any personnel of the CONTRACTOR determined by the COMPANY to be unsuitable and shall promptly replace such personnel with personnel acceptable to the COMPANY. Replacement personnel should be mobilized within 15 days from the date of issuance of notice without affecting the operation of the COMPANY.

9.2 The CONTRACTOR shall be solely responsible throughout the period of the contract for providing all requirements of their personnel including but not limited to, their transportation to & fro from Guwahati /field site, enroute/ local boarding, lodging, personal protective gear & medical attention etc. COMPANY shall have no responsibility or liability in this regard.

9.3 However, COMPANY shall provide available medical assistance/facilities to CONTRACTOR's Personnel in case of emergency at its own establishment on chargeable basis.

9.4 CONTRACTOR's key personnel shall be fluent in English language (both writing and speaking).

10.0 PERFORMANCE SECURITY:

10.1 On receipt of notification of award from the COMPANY, the CONTRACTOR shall furnish the Performance Security to COMPANY within 15 (fifteen) days from the date of issue of LOA for an amount specified in the Forwarding Letter and Letter of Award (LOA) as per Proforma-Form and must be in the form of a Bank Draft/Cashier's cheque/Banker's cheque*/ NEFT/RTGS/Electronic fund transfer to designated account of OIL[#] or Fixed Deposit Receipt (account OIL INDIA LIMITED) or irrevocable Bank Guarantee or irrevocable Letter of Credit (LC) from:

10.2 Any schedule Indian Bank or Any Branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in case of domestic CONTRACTOR/service provider, or

10.3 In case of foreign CONTRACTOR/service provider, the bank guarantee can be accepted from any scheduled bank in India or from International bank who has its branch in India registered with Reserve Bank of India.

Any foreign Bank which is not a Scheduled Bank in India, provided the Bank Guarantee issued by such Bank is counter-guaranteed by any Branch situated in India of any Scheduled Bank incorporated in India.

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

10.4 Bank Guarantee issued by a Bank, amongst others, must contain the following particulars of such bank:

Full address.

Branch Code.

Code Nos. of the authorized signatory with full name and designation.

Phone Nos., Fax Nos., E-mail address.

10.5 The domestic CONTRACTOR/service provider(s) will have to submit the Bank Guarantee from any of the scheduled banks and on non-judicial stamp paper of requisite value as per the Indian Stamp Act, purchased in the name of the issuing banker.

10.6 The foreign CONTRACTOR/service provider(s) will submit the Bank Guarantee from Banks of Indian origin situated in their country. In case no such bank of Indian origin is situated in their country, the Bank Guarantee may be submitted from the bankers as specified above.

10.7 The Performance Security shall be denominated in the currency of the contract.

10.8 The Performance Security specified above must be valid for the entire duration of the Contract and claim period should be valid for a minimum of 03 (three) months beyond the contract period. The Performance Security will be discharged by COMPANY not later than 30 days following its expiry of claim period. In the event of any extension of the Contract period, Bank Guarantee should be extended by CONTRACTOR by the period equivalent to the extended period.

10.9 The Performance Security shall be encashed by COMPANY on account of CONTRACTOR's failure to fulfil its obligations under the Contract and/or non-performance/un-satisfactory of the Contractor. Company shall not be required to proof any loss or damage on account of Contractor's non-performance/un-satisfactory performance.

10.10 The Performance Security will not accrue any interest during its period of validity or extended validity.

- 10.11** Failure of the successful Bidder to comply with the requirements of clause 10.0 shall constitute sufficient grounds for annulment of the award and forfeiture of the Bid Security. In such an eventuality, action will be initiated as per the Banning Policy of OIL in vogue.

#Subject to credit in OIL's account within prescribed time

*The validity of Bank Draft/Cashier's/Banker's cheque (as applicable) should not be less than 3 months.

In the event CONTRACTOR fails to honour any of the commitments entered into under this agreement, and/or in the event of termination of the contract under provisions of Integrity Pact and/or in respect of any amount due from the CONTRACTOR to OIL, OIL shall have unconditional option under the guarantee to invoke the above bank guarantee and claim the amount from the bank. The bank shall be obliged to pay the amount to OIL on demand.

11.0 SIGNING OF CONTRACT:

- 11.1** The successful bidder is required to sign a formal detailed contract with OIL within a maximum period of 60 days of date of LOA. Until the contract is signed, the LOA as well as GCC & SCC as prescribed in the Tender, shall remain binding amongst the two parties. In the event of failure on the part of the successful Bidder to sign the contract, OIL reserves the right to terminate the LOA issued to the successful Bidder and invoke the Bid Security or the Performance Security if submitted by the successful Bidder. Such CONTRACTOR shall be put on holiday as per the Banning Policy of OIL [available at www.oil-india.in].

12.0 CLAIMS, TAXES & DUTIES:

12.1 Claims:

CONTRACTOR agrees to pay all claims, taxes and fees for equipment, labour, materials, services and supplies to be furnished by it hereunder and agrees to allow no lien or charge resulting from such claims to be fixed upon any property of COMPANY. COMPANY may, at its option, pay and discharge any liens or overdue charges for CONTRACTOR's equipment, labour, materials, services and supplies under this CONTRACT and may thereupon deduct the amount or amounts so paid from any sum due, or thereafter become due, to CONTRACTOR hereunder.

12.2 Notice of claims:

CONTRACTOR or COMPANY, as the case may be, shall promptly give the other, notice in writing of any claim made or proceeding commenced for which that party is entitled to indemnification under the CONTRACT. Each party shall confer with the other concerning the defense of any such claims or proceeding, shall permit the other to be represented by counsel in defense thereof, and shall not affect settlement of or compromise any such claim or proceeding without the other's written consent.

12.3 Taxes:

- 12.3.1** CONTRACTOR, unless specified otherwise in the CONTRACT, shall bear all tax liabilities, duties, Govt. levies etc. including GST and customs duty, Corporate and personnel taxes levied or imposed on the CONTRACTOR on account of payments received by it from the COMPANY for the work done under this CONTRACT. It shall be the responsibility of CONTRACTOR to submit to the concerned Indian authorities, the returns and all other concerned documents required for this purpose and to comply in all respects with the requirements of the laws in this regard, in time.
- 12.3.2** Tax levied on CONTRACTOR 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.
- 12.3.3** CONTRACTOR shall be responsible for payment of personal taxes, if any, for all the personnel deployed in India by CONTRACTOR.
- 12.3.4** The CONTRACTOR shall furnish to the COMPANY, if and when called upon to do so, relevant statement of accounts or any other information pertaining to work done under the contract for submitting the same to the Tax authorities, on specific request from them in accordance with provisions under the law. CONTRACTOR shall be responsible for preparing and filing the return of income etc. within the prescribed time limit to the appropriate authority.
- 12.3.5** Prior to start of operations under the contract, the CONTRACTOR shall furnish the COMPANY with the necessary documents, as asked for by the COMPANY and/or any other information pertaining to the contract, which may be required to be submitted to the Income Tax authorities at the time of obtaining "No Objection Certificate" for releasing payments to the CONTRACTOR.
- 12.3.6** Corporate income tax will be deducted at source from the invoice at the specified rate of income tax as per the provisions of Indian Income Tax Act as may be in force from time to time and COMPANY will issue TDS Certificate to the CONTRACTOR as per the provisions of Income Tax Act.
- 12.3.7** Corporate and personnel taxes on CONTRACTOR shall be the liability of the CONTRACTOR and the COMPANY shall not assume any responsibility on this account.
- 12.3.8** All local taxes, levies and duties, sales tax, octroi, etc. on purchases and sales made by CONTRACTOR shall be borne by the CONTRACTOR.
- 12.3.9** CONTRACTOR shall provide all the necessary compliances/invoice/ documents for enabling OIL to avail Input tax credit benefits in respect of the payments of GST which are payable against the CONTRACT. The CONTRACTOR should provide tax invoice issued under GST legislations for the goods and Services (indicating GST). Payment

towards the components of GST shall be released by OIL only against appropriate documents i.e.: Tax Invoice/Bill of entry for availing input tax credit (as applicable).

12.3.10 The tax invoices as per above provisions should contain all the particulars as required under the invoicing rules under the GST legislations, including, but not limited to the following:

- (i) Name, Address and the GST Registration Number (under the relevant Tax Rules) of the Service Provider (CONTRACTOR).
- (ii) Name and Address and GST Registration Number of the Service Receiver (Address of OIL).
- (iii) Description, Classification and Value of taxable service/goods and the amount of applicable tax (CGST, SGST, IGST, UTGST and cess).

12.3.11 In case of imported goods, CONTRACTOR/supplier is required to provide original Bill of Entry or copy of Bill of Entry duly attested by Custom authority.

12.3.12 The CONTRACTOR should mention the Place of supply in the invoice raised under GST Law.

12.3.13 OIL would not accept any invoice without its GSTIN mentioned on the invoice

Note: CONTRACTOR who is under composition levy of the GST legislation would raise Bill of supply instead of Tax invoice, which will have GSTIN of supplier as well as OIL.

12.4 Goods and Services Tax:

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

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

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

12.4.3 Where the OIL is not entitled to avail/take the full input tax credit of GST:

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

- 12.4.4 The CONTRACTOR will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the CONTRACTOR shall avail and pass on benefits of all exemptions/concessions available under tax laws. Any error of interpretation of applicability of taxes/duties by the CONTRACTOR shall be to CONTRACTOR's account.
- 12.4.5 In case of statutory variation in GST, other than due to change in turnover, payable on the contract value during contract period, the Supplier of Goods/Services (Service Provider) shall submit a copy of the 'Government Notification' to evidence the rate as applicable on the Bid due date and on the date of revision.
- 12.4.6 Beyond the contract period, in case OIL is not entitled for input tax credit of GST, then any increase in the rate of GST beyond the contractual delivery period shall be to Service provider's account whereas any decrease in the rate GST shall be passed on to the OIL.
- 12.4.7 Beyond the contract period, in case OIL is entitled for input tax credit of GST, then statutory variation in applicable GST on supply and on incidental services, shall be to OIL's account.
- 12.4.8 Claim for payment of GST/Statutory variation, should be raised within two [02] months from the date of issue of 'Government Notification' for payment of differential (in %) GST, otherwise claim in respect of above shall not be entertained for payment of arrears.
- 12.4.9 The base date for the purpose of applying statutory variation shall be the Bid Opening Date.
- 12.4.10 The CONTRACTOR will be liable to ensure to have registered with the respective tax authorities, wherever applicable and to submit self-attested copy of such registration certificate(s) and the CONTRACTOR will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/E-way Bill, if applicable etc.

12.5 Anti-profiteering clause

- 12.5.1 As per Clause 171 of GST Act it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices.
- 12.5.2 In case rating of Contractor is negative/black listed after award of work for supply of goods/services, then OIL shall not be obligated or liable to pay or reimburse GST to

such vendor/Contractor and shall also be entitled to deduct/recover such GST along with all penalties/interest, if any, incurred by OIL.

13.0 CUSTOMS DUTY, IF APPLICABLE:

13.1.1 CONTRACTOR shall be responsible to import the equipment/tools/spares/consumables etc. required for execution of the contract. The CONTRACTOR shall undertake to complete all the formalities as required under the Customs Act/Foreign Trade Policy (FTP) and indemnify OIL from all the liabilities of Customs in this regard.

13.1.2 CONTRACTOR will be solely responsible for payment of all applicable Customs Duty and to comply all Rules and Regulations. Total Contract Price/Value is inclusive of all Customs Duty, if not mentioned otherwise elsewhere in the Contract.

13.1.3 Above clause is to be read with Customs Duty Clause in SCC, if any.

14.0 INSURANCE:

14.1 CONTRACTOR shall at his own expense arrange secure and maintain insurance with reputed insurance companies to the satisfaction of the Company as follows:

Contractor at his cost shall arrange, secure and maintain insurance as may be necessary and to its full value for all such amounts to protect the works in progress from time to time and the interest of Company against all risks as detailed herein. The form and the limit of such insurance, as defined here in together with the under works thereof in each case should be as acceptable to the Company. However, irrespective of work acceptance the responsibility to maintain adequate insurance coverage at all times during the period of Contract shall be that of Contractor alone. Contractor's failure in this regard shall not relieve him of any of his responsibilities & obligations under Contract. All costs on account of insurance liabilities covered under Contract will be to Contractor's account and will be included in Value of Contract. However, the Company may from time to time, during the currency of the Contract, ask the Contractor in writing to limit the insurance coverage risk and in such a case, the parties to the Contract will agree for a mutual settlement, for reduction in value of Contract to the extent of reduced premium amounts. Contractor shall cover insurance with Indian Insurance Companies.

14.2 Any deductible set forth in any of the above insurance shall be borne by Contractor.

14.3 CONTRACTOR shall require all of his sub-Contractor to provide such of the foregoing insurance coverage as Contractor is obliged to provide under this Contract and inform the Company about the coverage prior to the commencement of agreements with its sub-Contractors.

14.4 All insurance taken out by Contractor or their sub-contractor shall be endorsed to provide that the underwriters waive their rights of recourse on the Company and to the extent of the liabilities assumed by Contractor under this Contract.

14.5 Certificate of Insurance:

Before commencing performance of the CONTRACT, CONTRACTOR shall furnish OIL with certificates of insurance indicating:

- a) Kinds and amounts of insurance as required herein
- b) Details of coverage
- c) Insurance corporation or companies carrying the aforesaid coverage
- d) Effective and expiry dates of policies
- e) That OIL shall be given thirty (30) days written advance notice of any material change in the policy
- f) Waiver of subrogation endorsement has been attached to all policies and
- g) The territorial limits of all policies.

14.6 Contractor shall also inform the Company at least 60 days in advance regarding the expiry cancellation and/or changes in any of such documents & ensure revalidation/renewal, etc., as may be necessary well in time.

14.7 If any of the above policy expire or/are cancelled during the term of this CONTRACT and CONTRACTOR fails for any reason to renew such policies, OIL in no case shall be liable for any loss/damage occurred during the term when the policy is not effective. Furthermore, a penal interest @1% of the Total contract value shall be charged towards not fulfilling of the contractual obligations. Notwithstanding above, should there be a lapse in any insurance required to be taken by the Contractor for any reason whatsoever, loss/damage claims resulting therefrom shall be to the sole account of Contractor.

14.8 Contractor on demand from Company shall furnish the Insurance Policy having detail terms and conditions, with respect to any Certificate of Insurance submitted to the Company.

CONTRACTOR shall, at his own expense, arrange appropriate comprehensive insurance to cover all risks assumed by the CONTRACTOR under this CONTRACT in respect of CONTRACTOR's equipment, tools and any other belongings of the CONTRACTOR and its personnel as well deputed under this CONTRACT during the entire period of their engagement in connection with this CONTRACT including extensions if any. The CONTRACTOR shall also carry adequate insurance cover against damage/loss to third party person/property. OIL will have no liability on this account.

14.9 Principal Assured

The following are to be included as Principal Assured(s) in the Insurance Policies (except in case of Workmen's Compensation/Employer's Liability insurance):
"OIL INDIA LIMITED , and CONTRACTOR's name (as appearing in the Contract /LOA)".

14.10 Waiver of subrogation:

All insurance policies of the CONTRACTOR with respect to the operations conducted hereunder as set forth in clauses hereof, shall be endorsed by the underwriter in accordance with the following policy wording:

“The insurers hereby waive their rights of subrogation against OIL INDIA LIMITED or any of their employees or their affiliates and assignees”.

14.11 Deductible:

The CONTRACTOR shall take policy with minimum deductible as per IRDA prescribed for the policy(ies). That portion of any loss not covered by insurance provided for in this article solely by reason of deductible provision in such insurance policies shall be to the account of the CONTRACTOR.

14.12 Compliance with Sec 25(1), of “The General Insurance Business (Nationalization) Act 1972”

Section 25(1) of “The General Insurance Business (Nationalization) Act 1972” is reproduced below:

“No person shall take out or renew any policy of insurance in respect of any property in India or any ship or other vessel or aircraft registered in India with an insurer whose principal place of business is outside India save with the prior permission of the Central Government”.

The above requirement of aforesaid Act needs to be complied with by the CONTRACTOR wherever the aforesaid provisions of Act apply, and compliance confirmations submitted.

14.13 Loss Payee Clause:

The Insurance Policies should mention the following in Loss Payee Clause:

“In respect of Insurance claims in which OIL’s interest is involved, written consent of OIL will be required”.

14.14 On account payment to OIL in case of claim

In case any loss or damage happen and where OIL’s interest is involved, OIL reserves the right to recover the loss amount from the CONTRACTOR prior to final settlement of the claim.

14.15 CONTRACTOR shall require all of its SUB-CONTRACTORS to provide such of the foregoing insurance cover as the CONTRACTOR is obligated to provide under this CONTRACT.

14.16 CONTRACTOR shall at all time during the currency of the contract provide, pay for and maintain the following insurance amongst others:

- i) **Workman Compensation and/Employers’ Liability Insurance:**
Workmen's compensation and employer's liability insurance as required by the laws of the country of origin of the employee.

- ii) **Commercial General Liability Insurance:** Commercial General Public Liability Insurance covering liabilities including contractual liability for bodily injury, including death of persons, and liabilities for damage of property. This insurance must cover all operations of CONTRACTOR required to fulfil the provisions under this Contract.
- iii) **Comprehensive General Automotive Liability:** Automobile Public Liability Insurance covering owned, non-owned and hired automobiles used in the performance of the work hereunder, with bodily injury limits and property damage limits shall be governed by Indian Insurance Regulations.
- iv) **Carrier's Legal Liability Insurance:** Carrier's Legal Liability Insurance in respect of all CONTRACTOR's items to be transported by the CONTRACTOR to the site of work, for physical loss or destruction of or damage to goods or merchandise, while in transit.
- v) **Public Liability Act Policy:** Public Liability Act Policy covering the statutory liability arising out of accidents occurring during the currency of the contract due to handling hazardous substances as provided in the Public Liability Insurance Act 1991 and the Rules framed there under.
- vi) **Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY):** CONTRACTOR shall, ensure that all his/its personnel deployed under this contract have obtained additional insurance coverage under the Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) through the participating banks and submit the proof of such insurance coverage to the satisfaction of OIL.
- vii) CONTRACTOR's equipment used for execution of the work hereunder shall have an insurance cover with a suitable limit (as per international standards).
- viii) **Any other insurance policy set forth in the SCC**

Note: An undertaking by the service provider has to be mandatorily provided during the Mobilization time that they have taken all the Insurance provisions as per the contract and as the Law and Insurance Regulation.

15.0 LIABILITY:

15.1 Except as otherwise expressly provided herein, 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.

- 15.2** 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. 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.
- 15.3** The CONTRACTOR hereby agrees to waive its right of recourse and further 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 loss or damage to the equipment of the CONTRACTOR and/or its sub-CONTRACTORS and/or their employees when such loss or damage or liabilities arises out of or in connection with the performance of the contract limited to the CONTRACTOR's liabilities agreed to under this Contract.
- 15.4** 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 limited to the CONTRACTOR's liabilities agreed to under this Contract.
- 15.5** Except as otherwise expressly provided herein, 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 there from.
- 15.6** Except as otherwise expressly provided herein, neither CONTRACTOR nor its servants, agents, nominees, assignees, CONTRACTORS, sub-CONTRACTORS shall have any liability or responsibility whatsoever to whomsoever for 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.

15.7 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.

15.8 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.

16.0 LIMITATION OF LIABILITY:

- a) Notwithstanding any other provisions herein to the contrary, except only in cases of willful misconduct and/or criminal acts and/or criminal negligence, neither the CONTRACTOR nor the COMPANY (OIL) shall be liable to the other, whether in Contract, tort, or otherwise, for any consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided however that this exclusion shall not apply to any obligation of the CONTRACTOR to pay Liquidated Damages to the COMPANY and/or COMPANY's right to forfeit the Performance Bank Guarantee(s) in terms of the contract.
- b) Notwithstanding any other provisions incorporated elsewhere in the contract, the aggregate liability of the CONTRACTOR in respect of this contract, whether under Contract, in tort or otherwise, shall not exceed 100% of the Contract Price (if not specified otherwise in SCC), provided however that this limitation shall not apply to the cost of repairing or replacing defective equipment by the CONTRACTOR, or to any obligation of the CONTRACTOR to indemnify the COMPANY with respect to Intellectual Property Rights.
- c) COMPANY shall indemnify and keep indemnified CONTRACTOR harmless from and against any and all claims, costs, losses and liabilities in excess of the aggregate liability amount in terms of clause (b) above.

17.0 LIABILITY OF UNION GOVERNMENT OF INDIA:

It is expressly understood and agreed upon by and between CONTRACTOR and OIL INDIA LIMITED, and that OIL INDIA LIMITED is entering into this agreement

solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that Union of India is not a party to this agreement and has no liabilities, obligations or rights, whatsoever hereunder. It is expressly understood and agreed that OIL INDIA LIMITED is an independent legal entity with power and authority to enter into contracts solely on its own behalf under the applicable laws of India and general principles of the Contract law. The bidder/CONTRACTOR expressly agrees, acknowledges and understands that OIL INDIA LIMITED is not an agent, representative or delegate of the Union of India. It is further understood and agreed that Union of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the contract. Accordingly, bidder/ CONTRACTOR hereby expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Union of India arising out of this contract and covenants not to sue the Union of India as to any manner, claim, cause of action or thing whatsoever arising of or under this agreement.

18.0 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.

19.0 RISK PURCHASE:

In the event, CONTRACTOR's failure to provide the services as per the Contractual scope, terms and conditions, COMPANY (OIL) reserves the right to hire the services from any other source at the CONTRACTOR's risk & cost and the difference in cost shall be borne by the CONTRACTOR. Further, OIL shall retain the right of forfeiture of Performance Bank Guarantee and any other action as deemed fit. In certain operational situations OIL reserves the right to take over the site including the service equipment at the risk and cost of the CONTRACTOR.

20.0 INDEMNITY AGREEMENT:

20.1 Except as provided hereof CONTRACTOR agrees to protect, defend, indemnify and hold COMPANY harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of CONTRACTOR's employees, agents, CONTRACTORS and sub-CONTRACTORS or their employees or in favour of any third party(is) 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.

20.2 Except as provided hereof COMPANY agrees to protect, defend, indemnify and hold CONTRACTOR harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of COMPANY's employees, agents, CONTRACTORS and sub-CONTRACTORS or their employees or in favour of any third party(is) 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.

21.0 INDEMNITY APPLICATION:

The indemnities given herein above, whether given by COMPANY or CONTRACTOR shall be without regard to fault or to the negligence of either party even though said loss, damage, liability, claim, demand, expense, cost or cause of action may be caused, occasioned by or contributed to by the negligence, either sole or concurrent of either party.

22.0 ROYALTY PATENTS:

Each party shall hold harmless and indemnify the other from and against all claim and proceedings for or on account of any patent rights, design, trade mark or other protected rights arising from any use of materials, equipment, processes, inventions and methods, which have not been imposed on the attending party by the terms of the contract or the specifications forming part thereof.

23.0 WARRANTY AND REMEDY OF DEFECTS:

23.1 CONTRACTOR warrants that they shall perform the work in a first class, workmanlike, and professional manner and in accordance with their highest degree of quality, efficiency and current state of the art technology/industry practices and in conformity with all specifications, standards and drawings set forth or referred to in the Terms of Reference and with instructions and guidance, which COMPANY may, from time to time, furnish to the CONTRACTOR.

23.2 Should COMPANY discover at any time during the tenure of the Contract or till the Unit/equipment/tools are demobilized from site or base camp (if applicable) that the work does not conform to the foregoing warranty, CONTRACTOR shall after receipt of notice from COMPANY, promptly perform any and all corrective work required to make the services conform to the Warranty. Such corrective Work shall be performed entirely at CONTRACTOR's own expenses. If such corrective Work is not performed within a reasonable time, the COMPANY, at its option may have such remedial Work performed by others and charge the cost thereof to CONTRACTOR subject to a maximum of the contract value payable for the defective work which needs corrective action which the CONTRACTOR must pay promptly. In case CONTRACTOR fails to perform remedial work, or pay promptly in respect thereof, the performance security shall be forfeited.

24.0 SUBCONTRACTING/ASSIGNMENT:

24.1 CONTRACTOR shall not subcontract, transfer or assign the contract, or any part under this contract, to any third party(ies). Except for the main services under this contract, CONTRACTOR may sub-contract the petty support services subject to COMPANY's prior written approval. However, CONTRACTOR shall be fully responsible for complete execution and performance of the services under the Contract.

24.2 Consequent upon of placement of contract, if successful bidder(s)(other than Micro/Small Enterprise) is procuring materials/services from their sub-vendor, who is a Micro or Small Enterprise registered with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of MSME with prior consent in writing of the purchasing authority/Engineer in Charge the details like Name, Registration No., Address, Contact No., details of material and value of procurement made, etc. of such enterprises shall be furnished by the CONTRACTOR at the time of submission of invoice/bill.

25.0 RECORDS, REPORTS AND INSPECTION:

The CONTRACTOR shall, at all times during the currency of the contract, permit the COMPANY and its authorized employees and representatives to inspect all the Work performed and to witness and check all the measurements and tests made in connection with the said work. The CONTRACTOR shall keep an authentic, accurate history and logs including safety records of each service item with major items consumed, which shall be open at all reasonable times for inspection by the COMPANY's designated representatives and its authorized employees. The CONTRACTOR shall provide the COMPANY's designated representatives with a daily written report, on form prescribed by the COMPANY showing details of operations during the preceding 24 hours and any other information related to the said services requested by the COMPANY whenever so requested. The CONTRACTOR shall not, without COMPANY's written consent allow any third person(s) access to the said information or give out to any third person information in connection therewith.

26.0 CONFIDENTIALITY, USE OF CONTRACT DOCUMENTS AND INFORMATION:

26.1 CONTRACTOR shall not, without COMPANY's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing pattern, sample or information furnished by or on behalf of COMPANY in connection therewith, to any person other than a person employed by CONTRACTOR in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only, as may be necessary for purposes of such performance with prior permission from COMPANY. However, nothing hereinabove contained shall deprive the CONTRACTOR of the right to use or disclose any information which is:

- a) possessed by the CONTRACTOR, as evidenced by the CONTRACTOR's written records, before receipt thereof from the COMPANY which however the CONTRACTOR shall immediately inform to COMPANY; or
- b) required to be disclosed by the CONTRACTOR pursuant to an order of a court of competent jurisdiction or other governmental agency having the power to order such disclosure, provided the CONTRACTOR uses its best efforts to provide timely notice to COMPANY of such order to permit COMPANY an opportunity to contest such order subject to prior permission from COMPANY.

26.2 CONTRACTOR shall not, without COMPANY's prior written consent, make use of any document or information except for purposes of performing the contract.

26.3 Any document supplied to the CONTRACTOR in relation to the contract other than the Contract itself remain the property of COMPANY and shall be returned (in all copies) to COMPANY on completion of CONTRACTOR's performance under the Contract if so required by COMPANY.

26.4 During the currency of the Contract, COMPANY and its employees, agents, other CONTRACTORS, sub-CONTRACTORS (of any tier) and their employees etc. may be exposed to certain confidential information and data of the CONTRACTOR. Such information and data held by the COMPANY, its employees, agents, other CONTRACTORS, sub-CONTRACTORS (of any tier) and their employees in the strictest Confidence and shall not be disclosed to any other party except on a need to know basis.

However, the above obligation shall not extend to information which:

- i) is, at the time of disclosure, known to the public which CONTRACTOR shall immediately inform COMPANY;
- ii) is lawfully becomes at a later date known to the public through no fault of CONTRACTOR subject to CONTRACTOR's undertaking that no information has been divulged by them to the public;
- iii) is lawfully possessed by CONTRACTOR before receipt thereof from COMPANY which should be immediately informed to COMPANY;
- iv) is developed by CONTRACTOR independently of the information disclosed by COMPANY which should be shared with the COMPANY;
- v) CONTRACTOR is required to produce before competent authorities or by court order subject to prior permission from COMPANY;

27.0 REMUNERATION AND TERMS OF PAYMENT:

27.1 COMPANY shall pay to the CONTRACTOR during the term of the Contract the amount due from time to time calculated according to the rates of payment set and in accordance with other provisions hereof. No other payments shall be due from COMPANY unless specifically provided for in the Contract. All payments will be made in accordance with the terms hereinafter described.

- 27.2 Request for payment/part payment to third party i.e. other than the party on whom the contract has been awarded will not be entertained by OIL under any circumstances.
- 27.3 MANNER OF PAYMENT: All payments due by COMPANY to CONTRACTOR hereunder shall be made at CONTRACTOR's designated bank. Bank charges, if any will be on account of the CONTRACTOR.
- 27.4 Payment of any invoices shall not prejudice the right of COMPANY to question the validity of any charges therein, provided COMPANY within one year after the date of payment shall make and deliver to CONTRACTOR written notice of objection to any item or items the validity of which COMPANY questions.
- 27.5 INVOICES: Mobilization charges will be invoiced only upon completion of mobilization as certified by COMPANY representative and CONTRACTOR is ready at site for starting the services/operation. Payment of mobilization charges shall be made within 45 days following the date of receipt of undisputed invoices by COMPANY.
- 27.6 CONTRACTOR shall send invoice to COMPANY on the day following the end of each month for all daily or monthly charges due to the CONTRACTOR.
- 27.7 CONTRACTOR will submit 02 (Two) sets of all invoices duly super scribed 'Original' and 'copy' as applicable to the COMPANY for processing payment. Separate invoices for the charges payable under the contract shall be submitted by the CONTRACTOR for foreign currency and Indian currency.
- 27.8 Payment of monthly invoices, if undisputed, shall be made within 30 days following the date of receipt of invoice by COMPANY.
- 27.9 COMPANY shall within 30 days of receipt of the invoice notify the CONTRACTOR of any item under dispute, specifying the reasons thereof, in which event, payment of the disputed amount may be withheld until settlement of the dispute, but payment shall be made of any undisputed portion on or before the due date. This will not prejudice the COMPANY's right to question the validity of the payment at a later date as envisaged in clause no. 27.4 above.
- 27.10 The acceptance by CONTRACTOR of part payment on any billing not paid on or before the due date shall not be deemed a waiver of CONTRACTOR's rights in any other billing, the payment of which may then or thereafter be due.
- 27.11 Payment of Final demobilization charges shall be made if applicable within 45 days on receipt of invoice by COMPANY accompanied by the following documents from the CONTRACTOR:
- a) Audited account up to completion of the Contract.
 - b) Tax audit report for the above period as required under the Indian Tax Laws.
 - c) Documentary evidence regarding the submission of returns and payment to taxes for the expatriate personnel engaged by the CONTRACTOR or by its

sub-CONTRACTOR.

- d) Proof of re-export of all items including the unutilized spares and consumables (excepting consumables consumed during the contract period) and also cancellation of re-export bond if any.
- e) Any other documents as required by applicable Indian Laws.

In case, no demobilization charges are payable, the documents mentioned above will have to be submitted by the CONTRACTOR before release of the final payment by the COMPANY. A certificate from Chartered Accountant on (a), (b) & (c) above will suffice.

27.12 CONTRACTOR shall maintain complete and correct records of all information on which CONTRACTOR's invoice are based upto 02 (two) years from the date of last invoice. Such records shall be required for making appropriate adjustments or payments by either party in case of subsequent audit query/objection.

28.0 PAYMENT OF COMMISSION/FEE/REMUNERATION OF INDIAN AGENT /CONSULTANT/REPRESENTATIVE/RETAINER/ASSOCIATE OF FOREIGN PRINCIPAL (APPLICABLE IN ICB TENDERS ONLY):

The Commission/fee/remuneration of the Indian agent/ consultant/ associate/ representative/retainer, if any, will be paid within 30 days of the payment of invoice made to the CONTRACTOR, The amount of commission/ fee/remuneration as a percentage of invoice value as per contract provisions will be deducted by COMPANY/OIL from the monthly invoices of the CONTRACTOR and paid to the Indian agent/ consultant/ representative/retainer/associate.

29.0 DETAILS OF STATUTORY PAYMENTS LIKE EPF AND ESI ETC.

Wherever applicable, the CONTRACTOR (including those engaging 'International Workers') shall have itself registered under Employees' Provident Fund and Miscellaneous Provisions Act, 1952 and Employees' State Insurance Act, 1948 and follow the relevant statutory provisions including Rules made there-under concerning contractual workers.

The CONTRACTOR shall be required to submit the following documents/details to the Corporation:

- (i) Copy of PF-ECR duly stamped by the designated Bank, alongwith a print of the digitally signed PDF data sheet of the ECR, as proof of payment, each month, details of this PDF data sheet shall be verified by the appropriate authority (i.e. Payment Making Authority) in the COMPANY from the official website of EPFO (<http://www.epfindia.gov.in>).

- (a) Copy of the online challan endorsed/stamped by the designated bank as proof of receipt of payment towards monthly contribution of ESI contribution.

- (b) Copy of Return of contribution in respect of ESI for each contribution period of the six months i.e. for the contribution period ended 30th Sept and the contribution period ended 31st March.
- (iii) As an Annexure to each EPF-ECR and ESI Challan(s), CONTRACTOR shall also furnish the following Certificates:
- 1) The furnished information is correct to the best of his knowledge.
 - 2) In case any discrepancies or irregularities is/are noticed in this undertaking, then OIL is free to inform the PF/ESIC Authorities.
 - 3) Before the completion of contract, CONTRACTOR shall serve one-month notice to all his contractual workers, informing that their services will be terminated.
 - 4) Within one month on completion/expiry of the contract, CONTRACTOR shall pay all the dues/terminal dues such as leave with wages, bonus (if applicable), Gratuity (if applicable), to all his contractual workmen, failing which CONTRACTOR's Bank Guarantee/Security Deposit may be withheld by OIL.

COMPANY may verify the deposit of statutory contribution made by the CONTRACTORs with the EPFO/ESI authorities, where deemed necessary. However, before making payment of the last bill/invoice of the CONTRACTOR, the COMPANY may verify the details/status of the payment towards EPF/ESI made by the CONTRACTOR from the authorities/official website of EPF/ESI (i.e. <http://www.epfindia.gov.in> and <http://www.esic.in>). In case the information furnished by the CONTRACTOR is found to be incorrect the COMPANY shall take appropriate action against the CONTRACTOR in accordance with law.

The CONTRACTOR agrees and undertakes to indemnify OIL for any liabilities arising out of declarations made by him in future on violation or provisions of the EPF Act 1952 and ESI Act 1948.

30.0 TIMELY MOBILISATION AND LIQUIDATED DAMAGES:

- a) Time is the essence of this Contract. If the CONTRACTOR fails to mobilize and deploy the required manpower/equipment and/or fails to commence the operation within the period specified as specified under mobilization clause under SCC, OIL shall have, without prejudice to any other right or remedy in law or contract including sub clause (b) below, the right to terminate the contract.
- b) If the contractor is unable to mobilize/deploy and commence the operation within the period specified in sub clause (a) above, it may request OIL for extension of the time with unconditionally agreeing for levy and recovery of LD. Upon receipt of such a request, OIL may at its discretion, extend the period of mobilization and shall recover from the CONTRACTOR, as an ascertained and agreed Liquidated Damages, a sum equivalent to @ 0.5% of

contract value including mobilization cost, per week or part thereof of delay subject to maximum of 7.5% of the Contract Price.

- c) The parties agree that the sum specified above is not a penalty but a genuine pre-estimate of the loss/damage which will be suffered by OIL on account of delay on the part of the CONTRACTOR and the said amount will be payable without proof of actual loss or damage caused by such delay.
- d) LD will be calculated on the basis of Total Contract value **[(if not specified otherwise in SCC)]** excluding duties and taxes, where such duties/taxes have been shown separately in the contract. However, the applicable GST on the LD shall have to be borne by the CONTRACTOR. Accordingly, the liquidated damages shall be recovered from the CONTRACTOR along with applicable GST.

31.0 FORCE MAJEURE:

In the event of either party being rendered unable by 'Force Majeure' to perform any obligation required to be performed by them under the contract, the relative obligation of the party affected by such 'Force Majeure' will stand suspended as provided herein. The term force majeure as employed herein shall mean Acts of God such as earthquake, hurricane, typhoon, flood, volcanic activity etc.; war (declared/undeclared); riot, revolts, rebellion, terrorism, sabotage by persons other than the CONTRACTOR's Personnel; fires, explosions, ionising radiation or contamination by radio-activity or noxious gas, if not caused by CONTRACTOR's fault; declared epidemic or disaster; acts and regulations of respective Govt. of the two parties, namely the COMPANY and the CONTRACTOR and civil commotions, lockout not attributable to the CONTRACTOR.

Upon occurrence of such cause, the party claiming that it has been rendered unable as aforesaid thereby, shall notify the other party in writing within 72 (Seventy Two) hours of the alleged beginning and ending thereof, giving full particulars and satisfactory evidence in support of its claim.

Should 'force majeure' condition as stated above occurs and should the same be notified within 72 (Seventy two) hours after its occurrence the 'force majeure' rate (if specified in the SCC of the Contract) shall apply for the first 15 (fifteen) days for each such occasion.

Either party shall have the right to terminate the Contract if such 'force majeure' conditions continue beyond successive 60 (Sixty) days [or exclusively mentioned in the SCC of the Contract] with prior written notice of 15 days, provided termination of the Contract does not result into safety hazard to the life and property on account of withdrawal of operations or the operation is at critical stage. COMPANY shall have the absolute right to decide whether any safety hazard exists or operation is at critical position and decision of the COMPANY shall binding upon the CONTRACTOR.

Should either party decide not to terminate the Contract even under such condition, no payment would apply after expiry of fifteen (15) days force majeure period. [or exclusively mentioned in the SCC of the Contract]

Time for performance of the relative obligation suspended by Force Majeure shall then stand extended by the period for which such cause lasts.

If however, relative obligation of the party affected by such 'Force Majeure' is limited to part of the obligation(s), the contract shall not be terminated and the parties shall continue to perform their respective obligations, which are not affected by the 'force majeure' condition, provided the obligations affected by the 'force majeure' do not preclude the parties in performing the obligations not affected by such conditions.

32.0 SET-OFF:

Any sum of money due and payable to the CONTRACTOR (including Performance Security refundable to them) under this or any other Contract, whether in progress or in future, may be appropriated by OIL and set-off against any claim of OIL (or such other person or persons contracting through OIL) for payment of a sum of money arising out of this contract or under any other contract made by the CONTRACTOR with OIL (or such other person or persons contracting through OIL).

33.0 WITHHOLDING:

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

- 33.1** For non-completion of jobs assigned as per Scope of Work/Terms of Reference.
- 33.2** Defective work not remedied by CONTRACTOR.
- 33.3** Claims by COMPANY's recognized sub-CONTRACTOR of CONTRACTOR or others filed or on the basis of reasonable evidence indicating probable filing of such claims against CONTRACTOR.
- 33.4** Failure of CONTRACTOR to pay or provide for the payment of salaries/ wages, contributions, taxes or enforced savings with-held from wages etc. with respect to personnel engaged by the CONTRACTOR.
- 33.5** Failure of CONTRACTOR to pay the cost of removal of unnecessary debris, materials, tools, or machinery.
- 33.6** Any failure by CONTRACTOR to fully reimburse COMPANY under any of the indemnification provisions of this Contract. If, during the progress of the work CONTRACTOR shall allow any indebtedness to accrue for which CONTRACTOR, under any circumstances in the opinion of COMPANY, may be primarily or

contingently liable or ultimately responsible and CONTRACTOR shall, within five days after demand is made by COMPANY, fail to pay and discharge such indebtedness, then COMPANY may during the period for which such indebtedness shall remain unpaid, with-hold from the amounts due to CONTRACTOR, a sum equal to the amount of such unpaid indebtedness.

33.7 Withholding will also be effected on account of the following:

- i) Order issued by a Court of Law or statutory authority in India.
- ii) Income-tax deductible at source according to law prevalent from time to time in the country.
- iii) Any obligation of CONTRACTOR which by any law prevalent from time to time to be discharged by COMPANY in the event of CONTRACTOR's failure to adhere to such laws.
- iv) Any payment due from CONTRACTOR in respect of unauthorised imports.

When all the above grounds for withholding payments are removed, payment shall thereafter be made for amounts so with-held.

33.8 COMPANY reserves the right to disburse or deposit the amount so withheld to the concerned person(s) or agency or government authority, as the case may be, besides nullifying such amount on account of loss suffered by the COMPANY against 33.2, 33.3, 33.6 & 33.7 above.

34.0 APPLICABLE LAWS:

The 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 sole and exclusive jurisdiction of Courts situated in Guwahati, (or the Place where the contract is executed) and Principal Bench of Guwahati High Court (or the High Court under whose territorial jurisdiction, the place of execution of contract falls).

This Agreement including all matter connected with this Agreement, shall be governed by the laws of India (both substantive and procedural) for the time being in force and shall be subject to exclusive jurisdiction of Courts, mentioned hereinabove. Foreign companies, operating in India or entering into Joint ventures in India, shall also be governed by the laws of India and shall be subject to sole and exclusive jurisdiction of above Courts.

The CONTRACTOR shall ensure full compliance of various Indian Laws and Statutory Regulations, as stated below, to the extent applicable, as stated below, but not limited to, in force from time to time and obtain necessary permits/licenses etc. from appropriate authorities for conducting operations under the Contract:

- a) The Mines Act 1952
- b) The Oil Mines Regulations, 1984
- c) The Employees' Compensation Act, 1923
- d) The Code of Wages, 2019
- e) The Contract Labour (Regulation & Abolition) Act, 1970 and the rules framed there under

- f) The Employees Pension Scheme, 1995
- g) The Interstate Migrant Workmen Act., 1979 (Regulation of employment and conditions of service).
- h) The Employees Provident Fund and Miscellaneous Provisions Act, 1952
- i) Goods and Service Tax Act
- j) Customs & Excise Act & Rules
- k) Factories Act, 1948
- l) Industrial Disputes Act, 1947
- m) Payment of Gratuity Act, 1972
- n) Environmental Protection Act, 1986 & other pollution control Acts.

Note: The above Acts are only indicative and not exhaustive. The Acts shall include the rules and regulations framed thereunder.

35.0 LABOUR LAWS:

- i) CONTRACTOR shall comply with the provisions of various labour related laws, including but not limited to the Code of Wages, 2019, Employee Provident Fund and Miscellaneous Provisions Act 1952, COMPANY's Liability Act 1938, Employees' Compensation Act 1923, Industrial Disputes Act 1947, the Maternity Benefit Act 1961 and Contract Labour (Regulation and Abolition) Act 1970, Employment of Children Act 1938, Employees' State Insurance Act, 1948 or any modifications/amendment thereof or any other law relating thereto and rules made there under from time to time.
- ii) No Labour below the age of eighteen [18] years shall be employed on the work.
- iii) CONTRACTOR shall not pay less than what is provided under law to labourers engaged by him on the work.
- iv) CONTRACTOR shall at his expense comply with all labour laws and keep the COMPANY indemnified in respect thereof.
- v) CONTRACTOR shall pay equal wages for men and women in accordance with applicable Labour laws.
- vi) If the CONTRACTOR is covered under the Contract Labour (Regulation and Abolition) Act, he shall obtain a license from licensing authority [i.e. office of the Labour Commissioner] by payment of necessary prescribed fee and the deposit, if any, before starting the work under the Contract. Such fee/deposit shall be borne by the CONTRACTOR.
- vii) CONTRACTOR must obtain the PF Code from the concerned PF Authority under Employees Provident Fund and Miscellaneous Provisions Act, 1952. Similarly, CONTRACTOR must obtain ESI Code under Employees State Insurance Act.

viii) CONTRACTOR being the employer of the labours/personnel to be engaged under the contract shall be liable to pay gratuity to the labours/personnel as per the provision of the Payment of Gratuity Act, 1972 and accordingly, shall keep the COMPANY indemnified in respect thereof. If however, COMPANY requires to pay gratuity to such labour(s) as per the direction of the competent authority under the Act, COMPANY shall recover such amount from the outstanding dues payable to the CONTRACTOR under the contract or any other contract(s).

ix) CONTRACTOR shall furnish to Engineer in Charge the distribution return of the number & description, by trades of the work people employed on the works. CONTRACTOR shall also submit on the 4th & 19th of every month to Engineer in Charge a true statement showing in respect of the 2nd half of the preceding month & the 1st half of the current month (1) the accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (2) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act 1961 on Rules made there under and the amount paid to them.

x) Engineer in Charge shall on a report having been made by an inspecting officer as defined in Contract Labour (Regulation and Abolition) Act 1970 have the power to deduct from the money due to the CONTRACTOR any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the Contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said regulations.

xi) The CONTRACTOR shall indemnify the COMPANY against any payments to be made under and for the observance of the provisions of the aforesaid acts without prejudice to his right to obtain indemnity from his sub-CONTRACTOR.

36.0 STATUTORY REQUIREMENTS:

During the tenure of this CONTRACT nothing shall be done by the CONTRACTOR in contravention of any law, act and/or rules/regulations, thereunder or any amendment.

37.0 GENERAL HEALTH, SAFETY & ENVIRONMENT (HSE) GUIDELINES:

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

37.2 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.

37.3 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.

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

37.5 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 shall have the right to direct the contractor to cease work until the non-compliance is corrected.

38.0 POLLUTION AND CONTAMINATION:

The CONTRACTOR shall be liable for all surface and sub-surface pollution to the extent caused by CONTRACTOR and resulting from CONTRACTOR's operation/service or spillage or dumping of solvents/additive substances or pollutants, which the CONTRACTOR brings to the Site for use in connection with Work to be performed under this Contract.

Notwithstanding anything to the contrary contained herein, it is agreed that except on the ground of wilful misconduct or criminal misconduct, COMPANY shall release, indemnify and hold CONTRACTOR and its sub-CONTRACTORS harmless from any and all claims, judgments, losses, expenses and any costs related thereto (including but not limited to Court costs and "Attorney's fees") for:

- a) Damage to or loss of any reservoir or producing formation; and/ or
- b) Damage to or loss of any well; and/or
- c) Any other subsurface damage or loss; and/ or
- d) Any property damage or loss or personal injury or death arising out of or in connection with a blowout, fire explosion and loss of well control regardless of cause.

39.0 STATUTORY VARIATION/NEWLY ENACTED LAW:

39.1 All duties, taxes except otherwise specified in the Contract as applicable on the closing date of bid submission as per relevant acts and rules shall be in CONTRACTOR's account. Variation in case of custom duty on CIF value declared by the bidder shall be to COMPANY account.

39.2 In the event of introduction of any new legislation or any amendment or enforcement of any Act or Law, rules or regulations of Government of India or State Government(s) or Public Body, which becomes effective after the date of submission of Price Bid or revised price bid, if any, for this CONTRACT and which results in increased/decreased cost of the works under the CONTRACT through increased/decreased liability of taxes and/or duties, required to be paid by the CONTRACTOR, (other than personnel and

Corporate taxes), the Parties shall agree to a revision in pricing to reflect such change subject to the production of documentary proof to the satisfaction of the COMPANY/CONTRACTOR as applicable to the extent which directly is attributable to such introduction of new legislation or change or amendment as mentioned above and adjudication by the competent authority (applicable when disputed by COMPANY) & the courts wherever levy of such taxes/duties are disputed by COMPANY/CONTRACTOR.

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

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

39.5 Notwithstanding the provision contained in Clause-39.1 to 39.4 above, the COMPANY shall not bear any liability in respect of:

- i. Personal taxes on the personnel deployed by CONTRACTOR, his sub-CONTRACTOR/sub-sub-CONTRACTORS and Agents etc.
- ii. Corporate taxes and Fringe benefit tax in respect of CONTRACTOR and all of their sub-CONTRACTORS, agents etc.
- iii. Other taxes & duties including Customs Duty and GST in addition to new taxes etc. in respect of sub-CONTRACTORS, vendors, agents etc. of the CONTRACTOR.
- iv. Any liability on the CONTRACTOR, which was accrued under the old law or contract, which the CONTRACTOR is obligated to pay either to the COMPANY or to the Government Authority.

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

- i. Details of each of the input services used in relation to providing service to COMPANY including estimated monthly value of input service and GST tax amount.

- ii. Details of Inputs (material/consumable) used/required for providing service to COMPANY including estimated monthly value of input and GST paid/payable on purchase of inputs.

39.7 The above provisions would be applicable only in case of variation in rate of taxes and duties on supply of services to OIL and not applicable on taxes and duties on input (goods and services) towards such services.

39.8 Any claim or reduction on account of change in law shall be accompanied with undertaking that the provisions of anti-profiteering clause under GST Act have been complied with.

40.0 SEVERABILITY:

Should any provision of this agreement be found to be invalid, illegal or otherwise not enforceable by any court of law, such finding shall not affect the remaining provisions hereto and they shall remain binding on the parties hereto.

41.0 Commission of misconduct/submission of fraudulent document by the bidder/contractor and Banning thereof:

The information and documents furnished by the bidder/CONTRACTOR in respect of the tender/contract are accepted by COMPANY to be true and genuine. However, if it comes to the notice of the COMPANY anytime either during the pendency of the tender or after award of the contract or after completion the contract that a Bidder/CONTRACTOR furnished fraudulent document/false information in relation to the subject tender/contract or committed any misconduct, appropriate action shall be taken against the Bidder/CONTRACTOR for debarment/banning of the bidder/CONTRACTOR from participating in any future tender of the COMPANY in terms of the COMPANY's Banning Policy, 2017 besides making the CONTRACTOR liable for other penal action including termination of ongoing contract(s) at his/her risk and peril. In such event, the Bid Security/Performance Security in respect of ongoing contract(s) shall be forfeited by the COMPANY.

42.0 SETTLEMENT OF DISPUTES:

42.1 Arbitration (Applicable for Suppliers/CONTRACTORS other than PSU and MSME):

1. Except as otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the contract or breach thereof which parties are unable to settle mutually, the same shall be referred to Arbitration as provided hereunder:
2. A party wishing to commence arbitration proceeding shall invoke Arbitration Clause by giving 30 days notice to the other party. The notice invoking

arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter. If the claim is in foreign currency, the claimant shall indicate its value in Indian Rupee for the purpose of constitution of the arbitral tribunal.

3. It is agreed and undertaken by the Parties that irrespective of country of origin of the CONTRACTOR, the arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996 and under no circumstances, the proceedings shall be construed as International Arbitration.
4. The number of arbitrators and the appointing authority will be as under:

Claim amount (excluding claim for interest and counter claim, if any)	Number of Arbitrator	Appointing Authority
Upto Rs.25.00 Lakh	Not applicable	Not applicable
Above Rs.25.00 Lakh Upto Rs.25 Crore	Sole Arbitrator	OIL
Above Rs. 25 Crore	3 Arbitrators	One Arbitrator by each party and the 3 rd Arbitrator, who shall be the presiding Arbitrator, by the two Arbitrators.

5. The parties agree that they shall appoint only those persons as arbitrators who accept the conditions of the arbitration clause. No person shall be appointed as Arbitrator or Presiding Arbitrator who does not accept the conditions of the arbitration clause.
6. If any of the Arbitrators so appointed dies, resigns, becomes incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/arbitrators to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall proceed de novo.
7. Parties agree and undertake that neither shall be entitled for any pre-reference or pendent-lite interest on its claims. Parties agree that any claim for such interest made by any party shall be void.

8. The arbitral tribunal shall complete the proceedings, make and publish the award within time stipulated in the Arbitration and Conciliation Act, 1996(as amended).
9. If after commencement of the arbitration proceedings, the parties agree to settle the dispute mutually or refer the dispute to conciliation, the arbitrators shall put the proceedings in abeyance until such period as requested by the parties. Where the proceedings are put in abeyance or terminated on account of mutual settlement of dispute by the parties, the fees payable to the arbitrators shall be determined as under:
 - (i) 20% of the fees if the claimant has not submitted statement of claim.
 - (ii) 40% of the fees if the pleadings are complete
 - (iii) 60% of the fees if the hearing has commenced.
 - (iv) 80% of the fees if the hearing is concluded but the award is yet to be passed.
10. Each party shall be responsible to make arrangements for the travel and stay etc. of the arbitrator appointed by it. Claimant shall also be responsible for making arrangements for travel/stay arrangements of the Presiding Arbitrator and the expenses incurred shall be shared equally by the parties.

In case of sole arbitrator, both parties shall equally share all expenditures that may be required to be incurred.
11. The fees and other administrative/secretarial expenses of the arbitrator(s) shall not exceed the model fee as stipulated in Schedule--- of the Act and such expenses shall be equally borne by the parties.
12. The Place/Seat of Arbitration shall be Guwahati or the place where the contract is executed. The venue of the arbitration shall be decided by the Arbitrator(s) in discussion with the parties. The cost of arbitration sittings shall be equally borne by the parties.
13. The Arbitrator(s) shall give reasoned and speaking award and it shall be final and binding on the parties.
14. Subject to aforesaid, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof shall apply to the arbitration proceedings under this clause.

42.2 Arbitration (applicable in case of Contract awarded on Public Sector Enterprise):

- a) In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract (s) between Central Public Sector Enterprises (CPSEs) and also between CPSEs and Government Departments/Organizations (excluding disputes -concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken

up by either party for resolution through AMRCD as mentioned in OPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018.

- b) A party wishing to commence arbitration proceeding shall invoke Arbitration Clause and refer the dispute(s) to AMRCD with a copy to the other party. The notice invoking arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter.
- c) Upon such reference, the dispute shall be decided by the Competent Authority appointed under the AMRCD, whose decision shall bind the parties finally and conclusively. The parties in the dispute will share equally the cost of the arbitration as intimated by the Arbitrator.

42.3 Arbitration (Applicable to Micro, Small and Medium Enterprise)

In the event of any dispute or difference relating to, arising from or connected with the Contract, efforts shall be made to resolve the dispute(s) amicably by mutual consultation and in case such dispute(s) cannot be resolved through mutual consultation, then same shall be resolved through the procedure as prescribed in Section-18 of the Micro, Small and Medium Enterprises Development Act, 2006.

42.4 Resolution of disputes through conciliation by OEC

(Not Applicable in cases where value of dispute is less than Rs. 25 Lakhs and more than 2 Crore)

If any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the contract or breach thereof which parties are unable to settle mutually, Company at its discretion, on its own or on the request of the CONTRACTOR, may refer the dispute to Outside Expert Committee (“OEC”) to be constituted by Corporate Business Committee (CBC), OIL as provided hereunder:

- a) The party desirous of resorting to conciliation shall send a notice of 30 (thirty) days to the other party of its intention of referring the dispute for resolution through OEC. The notice invoking conciliation shall specify all the points of disputes with details of the amount claimed to be referred to OEC and the party concerned shall not raise any new issue thereafter.
- b) OIL shall nominate three outside experts, one each from Financial/commercial, Technical and Legal fields from the Panel of Outside Experts maintained by OIL who shall together be referred to as OEC (Outside Experts Committee).
- c) Parties shall not claim any interest on claims/counterclaims from the date of notice invoking conciliation till execution of settlement agreement, if so arrived at. In case, parties are unable to reach a settlement, no interest shall be claimed

by either party for the period from the date of notice invoking conciliation till the date of OEC recommendations in any further proceeding.

- d) The Proceedings of the OEC shall be broadly governed by Part III of the Arbitration and Conciliation Act, 1996 including any modifications thereof. Notwithstanding above, the proceedings shall be summary in nature and Parties agree to rely only upon documentary evidence in support of their claims and not to bring any oral evidence in the OEC proceedings.
- e) OEC shall hear both the parties and recommend possible terms of settlement between the parties. The recommendations of OEC shall be non-binding and the parties may decide to accept or not to accept the same. Parties shall be at liberty to accept the OEC recommendation with any modification they may deem fit.
- f) Where recommendations are acceptable to both the parties, a settlement agreement will be drawn up in terms of the OEC recommendations or with such modifications as may be agreed upon by the parties. The settlement agreement shall be signed by both the parties and authenticated by all the OEC members either in person or through circulation. This settlement agreement shall have the same legal status and effect as that of an arbitration award on agreed terms on the substance of the dispute rendered by an arbitral tribunal under Section 30 of the Arbitration and Conciliation Act, 1996.
- g) OIL will share all other guidelines regarding reconciliation through OEC with the CONTRACTOR when it resorts to settlement through OEC. Both parties agree to adhere to these guidelines.
- h) All the expenditure incurred in the OEC proceedings shall be shared by the parties in equal proportion. The parties shall maintain account of expenditure and present to the other for the purpose of sharing on conclusion of the OEC proceedings.
- i) The OEC proceedings must be completed within a period of 3(three) months from the date of constitution of the OEC with a provision of extension of one months, subject to mutual agreement. The Place of OEC shall be either at New Delhi or Guwahati.
- j) If the parties are not able to resolve the dispute through OEC or do not opt for conciliation through OEC, the party may invoke arbitration clause as provided in the contract.
- k) The parties shall be represented by their in-house employees/executives. No party shall bring any advocate or outside consultant/advisor/agent. Ex-officers of OIL who have handled the matter in any capacity directly or indirectly shall not be allowed to attend and present the case before OEC on behalf of Contractor. However, ex- employees of parties may represent their respective organizations.

- l) Solicitation or any attempt to bring influence of any kind on either OEC Members or OIL is completely prohibited in conciliation proceedings and OIL reserves the absolute right to close the conciliation proceedings at its sole discretion if it apprehends any kind of such attempt made by the Contractor or its representatives.

42.5 Exclusions

Parties agree that following matters shall not be referred to conciliation or arbitration:

- i) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision to initiate any proceedings for suspension or debarment or banning, or decision to suspend or to ban or to debar business dealings with the bidder/CONTRACTOR and/or with any other person involved or connected or dealing with bid/contract/bidder/CONTRACTOR.
- ii) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision under the provisions of Integrity Pact executed between OIL and the Bidder/CONTRACTOR.
- iii) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision to comply with any order or directive of any statutory or government authority.
- iv) Any claim which is less than Rs. 25 Lakh.

43.0 COMPLETION OF CONTRACT:

Unless otherwise terminated under the provisions of any other relevant Clause or extended through written communication, this Contract shall be deemed to have been completed at the expiry of the Period specified in the contract or period of defect liability, as provided for under the Contract, whichever is later.

44.0 TERMINATION:

44.1 Termination on expiry of the contract: This Agreement shall be deemed to have been automatically terminated on the expiry of the contract period unless OIL has exercised its option to extend this contract in accordance with the provisions, if any, of this contract.

44.2 Termination of contract for death: If the CONTRACTOR is an individual or a proprietary concern and the individual or the proprietor dies or if the CONTRACTOR is a partnership concern and one of the partners dies then unless, the COMPANY is satisfied that the legal heir of the individual or the proprietary concern or the surviving partners are capable of carrying out and completing Contract, the COMPANY is entitled to cancel the Contract for the uncompleted part without being in any way liable for any compensation payment to the estate of the deceased CONTRACTOR and/or to

the surviving partners of the CONTRACTOR's firm on account of the cancellation of Contract. The decision of the COMPANY in such assessment shall be final & binding on the parties. In the event of such cancellation, the COMPANY shall not hold the estate of the deceased CONTRACTOR and/or the surviving partners of CONTRACTOR's firm liable for any damages for non-completion of the Contract.

44.3 Termination on account of Force Majeure: Unless the contract provides otherwise, either party shall have the right to terminate this Contract on account of Force Majeure as set forth in Article-31.0 above.

44.4 Termination on account of insolvency: In the event that the CONTRACTOR or its collaborator or its guarantor at any time during the term of the Contract, becomes insolvent or makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt or under the process of insolvency or liquidation, then the COMPANY shall, by a notice in writing have the right to terminate the Contract and all the CONTRACTOR's rights and privileges hereunder, shall stand terminated forthwith.

However, COMPANY shall be at liberty to give the Receiver or Liquidator or Insolvency Professional Manager, as appointed by the Competent Court/Tribunal, the option of carrying out the Contract subject to its technical & financial competence and his providing a guarantee for due and faithful performance of the Contract.

44.5 Termination for Unsatisfactory Performance: If the COMPANY considers that, the performance of the CONTRACTOR is unsatisfactory, or not as per the provision of the Contract, the COMPANY shall notify the CONTRACTOR in writing and specify in details the cause of dissatisfaction. The COMPANY shall have the option to terminate the Contract by giving 15 days notice in writing to the CONTRACTOR, if CONTRACTOR fails to comply with the requisitions contained in the said written notice issued by the COMPANY. In the event CONTRACTOR rectifies its non-performance to the satisfaction of the COMPANY, the option of termination may not be exercised by the COMPANY. If however CONTRACTOR repeats non-performance subsequently, COMPANY shall exercise the option to terminate contract by giving 07 days notice. Such CONTRACTOR shall be put on holiday as per the Banning Policy of OIL [available at www.oil-india.in].

44.6 Termination due to change of ownership and Assignment: In case the CONTRACTOR's rights and/or obligations under this Contract and/or the CONTRACTOR's rights, title and interest to the equipment/ material, are transferred or assigned without the COMPANY's written consent, the COMPANY may at its option, terminate this Contract. COMPANY shall not be however under any obligation to accord consent to the CONTRACTOR for change of ownership & assignment of the contract.

44.7 If at any time during the term of this Contract, breakdown of CONTRACTOR's equipment results in CONTRACTORS being unable to perform their obligations hereunder for a period of 15 successive days, COMPANY at its option, may terminate this Contract in its entirety or partially to the extent non-performance, without any further right or obligation on the part of the COMPANY, except for the payment of

money then due. No notice shall be served by the COMPANY under the condition stated above.

44.8 Termination for delay in mobilization: CONTRACTOR is required to mobilize complete equipment alongwith crew for commencement of services at the specified site within the maximum allowed number of days from the date of LOA/Notice for Mobilization as specified in the special conditions of contract. If the CONTRACTOR (successful bidder) fails to complete the mobilization as above, OIL shall have, without prejudice to any other clause of the CONTRACT, the right to terminate the contract.

44.9 Notwithstanding any provisions herein to the contrary, the Contract may be terminated at any time by the COMPANY on giving 30 (thirty) days written notice to the CONTRACTOR due to any other reason not covered under the above Article from 44.1 to 44.8 and in the event of such termination the COMPANY shall not be liable to pay any cost or damage to the CONTRACTOR except for payment of services as per the Contract upto the date of termination.

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

Upon termination of this Contract, CONTRACTOR shall return to COMPANY all of COMPANY's properties, which are at the time in CONTRACTOR's possession.

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

Demobilization charges shall not be payable by COMPANY in case of Article from 44.4 to 44.7.

45.0 TO DETERMINE THE CONTRACT:

In such an event the contract shall stand terminated and shall cease to be in force from the date of such notification by the COMPANY. Thereafter the CONTRACTOR shall stop forthwith any of the work then in progress, except those work which the COMPANY may, in writing, require to be done to safeguard any property or work, or installations from damages, and the COMPANY may take over the remaining unfinished work of the CONTRACTOR and complete the same through a fresh CONTRACTOR or by other means, at the risk and cost of the CONTRACTOR, and any of its sureties if any, shall be liable to the COMPANY for any excess cost occasioned by such work having to be so taken over and completed by the COMPANY over and above the cost at the rate/cost specified in the schedule of quantities and rates/prices.

46.0 WITHOUT DETERMINING THE CONTRACT:

To take over the work of the CONTRACTOR or any part thereof and complete the same through a fresh CONTRACTOR or by other means, at the risk and cost of the CONTRACTOR. The CONTRACTOR and any of its sureties are liable to the COMPANY for any excess cost over and above the cost at the rates specified in the schedule of quantities and rates/prices, occasioned by such work having been taken over and completed by the COMPANY.

47.0 ERRING/DEFAULTING AGENCIES:

Erring and defaulting agencies like bidder, CONTRACTOR, supplier, vendor, service provider will be dealt as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website: www.oil-india.com. Moreover, OIL reserves the right to take legal or any other action on the basis of merit of the case.

48.0 MISCELLANEOUS PROVISIONS:

CONTRACTOR shall give notices and pay all fees at their own cost required to be given or paid by any National or State Statute, Ordinance, or other Law or any regulation, or bye-law of any local or other duly constituted authority as may be in force from time to time in India, in relation to the performance of the services and by the rules & regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the services.

CONTRACTOR shall conform in all respects with the provisions of any Statute, Ordinance of Law as aforesaid 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 COMPANY indemnified against all penalties and liability of every kind for breach of any such Statute, Ordinance or Law, regulation or bye-law.

During the tenure of the Contract, CONTRACTOR shall keep the site where the services are being performed reasonably free from all unnecessary obstruction and shall store or dispose of any equipment and surplus materials and clear away and remove from the site any wreckage, rubbish or temporary works no longer required. On the completion of the services, CONTRACTOR shall clear away and remove from the site any surplus materials; rubbish or temporary works of every kind and leave the whole of the site clean and in workmanlike condition to the satisfaction of the COMPANY.

Key personnel cannot be changed during the tenure of the Contract except due to sickness/death/resignation of the personnel or any other justified situation in which case the replaced person should have equal experience and qualification, which will be again subject to prior approval, by the COMPANY.

49.0 GOODS AND SERVICES TAX

49.1 GENERAL REMARKS ON TAXES & DUTIES:

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

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

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

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

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

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

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

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

49.6 **Where the OIL is not entitled to avail/take the full input tax credit of GST:**

- 49.6.1** OIL will reimburse **GST** to the Supplier of Goods / Services (Service Provider) at actuals against submission of Invoices as per format specified in rules/ regulation of **GST** subject to the ceiling amount of **GST** as quoted by the bidder. In case of any variation in the executed quantities (If directed and/or certified by the In-Charge) the ceiling amount on which **GST** is applicable will be modified on pro-rata basis.
- 49.6.2** The bids will be evaluated based on total price including **GST**.
- 49.7** Payments to Service Provider for claiming **GST** amount will be made provided the above formalities are fulfilled. Further, OIL may seek copies of challan and certificate from Chartered Accountant for deposit of **GST** collected from OIL.
- 49.8 Contractor/vendor shall be required to issue tax invoice in accordance with GST Act and/or Rules so that input credit can be availed by OIL.** In the event that the contractor / vendor fails to provide the invoice in the form and manner prescribed under the **GST Act read with GST Invoicing Rules** thereunder, OIL shall not be liable to make any payment on account of **GST** against such invoice.
- 49.9 GST** shall be paid against receipt of tax invoice and proof of payment of **GST** to government. In case of non-receipt of tax invoice or non-payment of **GST** by the contractor/vendor, OIL shall withhold the payment of **GST**.
- 49.10 GST payable under reverse charge mechanism for specified services or goods under GST act or rules, if any, shall not be paid to the contractor/vendor but will be directly deposited to the government by OIL.**
- 49.11** Where OIL has the obligation to discharge **GST** liability under reverse charge mechanism and OIL has paid or is /liable to pay **GST** to the Government on which interest or penalties becomes payable as per GST laws for any reason which is not attributable to OIL or ITC with respect to such payments is not available to OIL for any reason which is not attributable to OIL, then OIL shall be entitled to deduct/ setoff / recover such amounts against any amounts paid or payable by OIL to Contractor / Supplier.
- 49.12** Notwithstanding anything contained anywhere in the Agreement, in the event that the input tax credit of the **GST** charged by the Contractor / Vendor is denied by the tax authorities to OIL for reasons attributable to Contractor / Vendor, OIL shall be entitled to recover such amount from the Contractor / Vendor by way of adjustment from the next invoice. In addition to the amount of **GST**, OIL shall also be entitled to recover interest at the rate prescribed under GST Act and penalty, in case any penalty is imposed by the tax authorities on OIL.
- 49.13** TDS under GST, if applicable, shall be deducted from contractor's/vendor's bill at applicable rate and a certificate as per rules for tax so deducted shall be provided to the contractor/vendor.
- 49.14** The Contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the Contractor shall avail and pass on benefits of all

exemptions/concessions available under tax laws. Any error of interpretation of applicability of taxes/ duties by the contractor shall be to contractor's account.

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

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

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

49.18 Further, it is the responsibility of the bidders to make all possible efforts to make their accounting / IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to OIL INDIA LIMITED .

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

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

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

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

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

49.21 The contractor will be liable to ensure to have registered with the respective tax authorities, wherever applicable and to submit self-attested copy of such registration certificate(s) and

the Contractor will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/ E-way Bill, if applicable etc.

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

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

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

49.25 Documentation requirement for GST

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

Any invoice issued shall contain the following particulars:

- a) Name, address and GSTIN of the supplier;
- b) Serial number of the invoice;
- c) Date of issue;
- d) Name, address and GSTIN or UIN, if registered of the recipient;
- e) Name and address of the recipient and the address of the delivery, along with the State and its code,
- f) HSN code of goods or Accounting Code of services[SAC];
- g) Description of goods or services;
- h) Quantity in case of goods and unit or Unique Quantity Code thereof;
- i) Total value of supply of goods or services or both;
- j) Taxable value of supply of goods or services or both taking into discount or abatement if any;
- k) Rate of tax (IGST,CGST, SGST/ UTGST, cess);

- l) Amount of tax charged in respect of taxable goods or services (IGST,CGST, SGST/UTGST, cess);
- m) Place of supply along with the name of State, in case of supply in the course of interstate trade or commerce;
- n) Address of the delivery where the same is different from the place of supply and
- o) Signature or digital signature of the supplier or his authorised representative.

GST invoice shall be prepared in triplicate, in case of supply of goods, in the following manner:

- a) The original copy being marked as ORIGINAL FOR RECIPIENT;
- b) The duplicate copy being marked as DUPLICATE FOR TRANSPORTER and
- c) The triplicate copy being marked as TRIPLICATE FOR SUPPLIER.

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

49.26 Anti-profiteering clause

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

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

50.0 MOBILIZATION ADVANCE:

No mobilization advance shall be admissible for carrying out work.

51 FIRE FIGHTING AND SAFETY EQUIPMENT / SERVICES:

(As per API wherever applicable)

Safety: Contractor shall observe such safety regulations in accordance with acceptable oilfield practice and applicable Indian Laws. Contractor shall take all measures reasonably necessary to provide safe working conditions and shall exercise due care and caution in preventing fire, explosion etc. Contractor shall conduct such safety drills etc. as may be required by Company at prescribed intervals.

- i) Contractor shall provide all necessary PPE as required.
- ii) Fire protection at site shall be the responsibility of the Contractor. Necessary action shall be taken and prior arrangements to be made for providing competent persons trained in the field of fire fighting at the site.
- iii) Documentation, record keeping of all safety practices should be conducted as per international / Indian applicable laws, act, regulations etc, as per standard Oilfield practice and these records should be made available for inspection at any point of time. The H.S.E (Hygiene

Safety and Environment) policy as well as emergency procedure manual should be kept at site. Compliance of these shall be the sole responsibility of the Contractor.

52.0 SECURITY SERVICES:

Contractor shall be wholly responsible for complete Security of their personnel, their Rig packages, Base Camp, operation, transit etc. and arrange suitable, complete and best Security services accordingly on round the clock basis for their personnel and equipment through out the tenure of the contract. All security related issues shall be dealt by the Contractor on their own including dealing with Government agencies. Company in no case will be involved in security related issues, relating to Contractor's personnel and material. Contractor shall also be responsible for the safety and security of Company's personnel/ equipment/ tools/materials etc. in the site and camp site and shall provide best security services to them during the tenure of the contract.

i) Set-Off :

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

ii) Subsequently Enacted Laws :

Subsequent to the date of issue of letter of intent 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.

iii) Pollution and Contamination:

Notwithstanding anything to the contrary contained herein, it is agreed that the responsibility and liability for pollution or contamination shall be as follows:

a) Contractor shall assume all responsibility and liability for cleaning up and removal of pollution or contamination which originates above the surface from spills of fuels, lubricants, motor oils, pipe dope, paints, solvents and garbage wholly in Contractor's possession and control and/or directly associated with Contractor's equipment and facilities, caused, and that originating from normal water base drilling fluid and drill cuttings.

b) Contractor shall assume all responsibility and liability for all other pollution or contamination, howsoever caused including control and removal of same, which may occur during the term of or arising out of this contract and shall indemnify Company from and against all claims, demands and causes of action of every kind and character arising from said pollution or contamination, including but not limited to that which may result from fire, cratering seepage or any other uncontrolled flow of oil, gas, water or other substance, as well as the use or disposal of oil base drilling fluids.

c) In the event a third party commits an act of omission which results in pollution or contamination for which either the Contractor or Company, by whom such party is performing work is held to be legally liable, the responsibility shall be considered as between Contractor and Company, regardless of the party for whom the job was performed and liability as set forth in (a) and (b) above would be specifically applied.

d) Contractor shall be responsible for any sound/noise pollution arising out of the Rig package or other items used by Contractor at site. Contractor shall sort out the noise/sound pollution with the third party either by minimizing the sound/noise pollution with technological means or by compensating the affected people practicing the system and procedure followed by OIL. Contractor must ensure that there is no disruption of operation due to sound/noise pollutions.

53.0 DISCIPLINE :

The Contractor shall maintain strict discipline and good order among their respective employees and their respective Sub-contractors, if any, and shall abide by and conform to all rules and regulations promulgated by the Company and Contractor governing the operations at the assigned worksites. Should the Company feel with just cause that the conduct of any of the Contractor's personnel is detrimental to Company's interests; the Company shall notify Contractor in writing the reasons for requesting removal of such personnel. The Contractor shall remove and replace such employees at their expense within 7 days from the time of such instruction given by the Company.

54.0 WATER MANAGEMENT:

- i. Strict control has to be made in on the use of water. Wastage of water increases the effluent volume in the pit and may aggravate pollution problems.
- ii. The valves, glands, hoses etc. are to be checked for any leakage and the same to be informed immediately to the concerned for rectification.
- iii. Arrangements have to be made for pumping effluents into the nearest dry pit in case of emergency.

55.0 EFFLUENT PIT BUNDS:

- i. Regular checks are to be made to ensure that there are no leakage/ seepage/ overflow of effluents from the pit into the surrounding areas.
- ii. The bunds / walls of the effluent pit are to be checked by Contractor for any breaches during the operation. Any imminent breach of effluent bunds and walls shall be immediately attended by Contractor to restrict pollution.

56.0 COLLECTION OF USED / BURNT LUBE OIL:

The used lube oils are to be collected separately in drums. Floating burnt oil, if any, in the effluent pit has to be lifted and collected into drums immediately.

57.0 COMPREHENSIVE 'HSE' GUIDELINES:

A) 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.

B) Every person deployed by the Contractor 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 standard 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 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.

C) 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.

D) 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.

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

F) 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.

G) All persons deployed by the Contractor for working 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.

H) The Contractor shall submit statutory returns as required as 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

I) 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.

J) 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.

K) 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.

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

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

- N) 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.
- O). 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.
- P) 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.
- Q) To arrange daily tool box meeting and regular site safety meetings and maintain records.
- R) Records of daily attendance, accident report etc. are to be maintained by the Contractor.
- S) 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.
- T) 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.
- U) Contractor's arrangements for health and safety management shall be consistent with those for the mine owner.
- V) 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.
- W) 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.
- X) The Contractor should prevent the frequent change of his contractual employees as far as practicable.
- Y) The Contractor should frame a mutually agreed bridging document between OIL & the Contractor with roles and responsibilities clearly defined.
- Z) 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.

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

SIGNED AND DELIVERED FOR AND ON
BEHALF OF CONTRACTOR

(Signature of Contractor or his legal
Attorney)

_____ by
the hand of _____ its
Partner/Legal Attorney

(Signature of Acceptor)
Designation: _____

And in presence of

Date: _____

SIGNED & DELIVERED FOR & ON
BEHALF OF OIL INDIA LIMITED

Date: _____

(Full Name of Signatory)

(Seal of Contractor's Firm)

(Signature of (Witness)

(Full name of Signatory)

Address:

PART -III, SECTION -II

SPECIAL CONDITIONS OF THE CONTRACT:

GENERAL

The following special conditions shall be read in conjunction with General Conditions of contract, if there are any provisions in these Special Conditions, which are at variance with the provisions of General Conditions of Contract, the provisions in these special Conditions shall prevail.

- (1) The work in general shall be carried out as per OIL/CPWD/MOST specification updated with correction slips issued up to last date of submission of tender.
- (2) For items not covered under OIL/CPWD/MOST Specification, as above, the work shall be done as per latest relevant ISI /BIS Codes of practice.

1.0 The Contract means the documents forming the tender and acceptance thereof and the agreement executed between the competent person on behalf of OIL INDIA LIMITED and the contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in-Charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.

1.1 The work will be executed as per drawings "GOOD FOR CONSTRUCTION" to be released by NPCC (PMC) for the work unless otherwise specified elsewhere in the tender documents.

1.2 In the contract, the following expressions shall, unless the context otherwise requires, have the meaning, hereby respectively assigned to them.

1.3 DEFINITIONS

- a) **ENGINEER-IN-CHARGE:** NPCC (PMC) shall be "ENGINEER-IN-CHARGE" for this work. You are requested to contact him immediately for further instructions regarding execution of this work/contract.
- b) **DRAWINGS** mean the drawings referred to in the Bill of Quantities, specifications and any modifications of such drawings or such other drawings as may from time to time be furnished or approved by NPCC (PMC).
- c) **APPROVAL** means approved in writing including subsequent written confirmation of previous verbal approval.
- d) **WRITING** means any manuscript typed written or printed statement under or over signature and

e)MONTH means English Calendar month 'Day' means a Calendar day of 24 Hrs each.

f)LANGUAGE: All documents & correspondence in respect of this contract shall be in English Language.

g)BILL OF QUANTITIES or SCHEDULE OF QUANTITIES means the priced and completed Bill of Quantities or Schedule of Quantities forming part of the tender.

h)PMC (Project Management Consultant): National Projects Construction Corporation (NPCC), A Company incorporated in India and having its registered office in Raja House, 30-31, Nehru Place, New Delhi-110019 is the Project management Consultant for this project.

i)OWNER means OIL INDIA LIMITED

j)TENDER means the Contractor's priced offer to OIL INDIA LIMITED for the execution and completion of the work and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Intent or Award letter. The word TENDER is synonymous with Bid and the word TENDER DOCUMENTS with "Bidding Documents" or "offer documents".

The headings in the clauses/ conditions of tender documents are for convenience only and shall not be used for interpretation of the clause/ condition.

Words imparting the singular meaning only also include the plurals and vice versa where the context requires. Words imparting persons or parties shall include firms, companies and other organizations having legal capacities.

2.1 LOCATION/APPROACH TO SITE

The proposed site is in within the OIL INDIA LIMITED PIPELINE HEADQUARTERS, GUWAHATI, ASSAM and at a distance of around 45 km from the airport at Guwahati and 9.00KM from Guwahati railway station.

2.2 PRE-BID MEETING:

There will be no pre-bid meeting for this tender. However, prospective bidders can send their queries through email or by post to the contact emails and addresses mentioned in the tender document within 10 days from the date of publishing of the tender. Accordingly, Oil India Limited will reply to all the queries through email or by post.

3.0 SITE VISIT AND COLLECTING LOCAL INFORMATION

Before tendering, the tenderer is advised to visit the site, its surrounding, access and satisfy themselves about the local conditions such as approach roads to the site, availability of water & power supply, application of taxes, duties and levies as applicable, nature of ground, soil and sub-soil condition, underground water table level, accommodations they may require etc., river regime, river water levels, other details of river, streams & any

other relevant information required by them to execute complete scope of work. The tenderer may obtain all necessary information as to risks, contingencies & other circumstances (insurgencies etc.) which may influence or affect their tender. Tenderer shall be deemed to have considered site conditions whether he has inspected it or not and to have to be satisfied himself in all respect before quoting his rates and no claim or extra charges whatsoever in this regard shall be entertained / payable by the OIL INDIA LIMITED at a later date.

3.1 ACCESS BY ROAD

Contractor, if necessary, shall build temporary access roads to the actual site of construction for the works at his own cost to make the site accessible. The Contractor shall maintain the same in motor able condition at all the times as directed by Engineer- in-Charge at his own cost. The contractor shall be required to permit the use of any roads so constructed by him for vehicles of OIL INDIA LIMITED or any other agencies/ contractors who may be engaged on the project site, free of cost. Non-availability of access roads or approach to site, for the use of the contractor shall in no case condone any delay in the execution of work nor be the cause for any claim for compensation.

As the project site is within protected area of Oil India Limited, the contractor shall be required to arrange entry gate pass from the CISF/ OIL for all his engaged manpower and vehicles deployed in this project.

3.2 HANDING OVER & CLEARING OF SITE

3.2.1 The Contractor should note that area for construction may be made available in phases as per availability and in conjunction with pace of actual progress of work at site. The work may be required to be carried out in constrained situations. The work is to be carried out in such a way that the traffic, people movement, if any, is kept operative and nothing extra shall be payable to the contractor due to this phasing / sequencing of the work. The contractor is required to arrange the resources to complete the entire project within total stipulated time. Traffic diversion, if required, is to be done and maintained as per specification by the contractor at his own cost and the contractor shall not be entitled for any extra payment, whatsoever, in this regard.

3.2.2 The efforts will be made by the OIL INDIA LIMITED to handover the site to the Contractor free of encumbrances. However, in case of any delay in handing over of the site to the Contractor, the OIL INDIA LIMITED shall only consider suitable extension of time for the execution of the work. It should be clearly understood that OIL INDIA LIMITED shall not consider any revision in contract price or any other compensation whatsoever viz. towards idleness of Contractor's labour, equipment etc.

3.2.3 The Contractor shall be responsible for removal or diversion of all over-ground and under-ground structures (permanent, semi-permanent and

temporary) and constructions from the site as per specific direction of OIL and NPCC (PMC). The cost to be incurred in this regard shall be deemed to be included in the quoted rate of Bill of Quantities items and contractor shall not be entitled for any extra payment whatsoever, in this regard. The contractor, if required, shall demolish old structures on the proposed site, properly. The useful material obtained from demolition of structures & services shall be the property of the owner/OIL INDIA LIMITED and these materials shall be stacked in workmanship like at the place specified by the Engineer- in-charge.

3.2.4 If required, the contractor has to do site clearance, enabling work, barricading, diversion of Roads, shifting/ realignment of existing utility services, drains, nallahs etc. at his own cost as per direction of Engineer-in-charge and the contractor shall not be entitled for any extra payment whatsoever in this regard.

3.2.5 Necessary arrangements including its maintenance are to be made by the contractor for temporary diversion of flow of existing drain and road, as the case may be. The existing drain, road would be demolished, wherever required, with the progress of work under the scope of proposed project. The existing Road and Drain, which are not in the alignment of the said project but are affected and/ or need to be demolished during execution for smooth progress of the project, shall be rehabilitated to its original status and condition (including black topping) by the contractor at his own cost. The cost to be incurred by contractor in these regards shall be deemed to be included in the quoted rates of the Bill of Quantities items and contractor shall not be entitled for any extra payment whatsoever, in these regards.

However, the contractor is eligible for payment for dismantling of 20 (Twenty) Nos. of old quarters present in the project site and stacking of materials as directed from OIL/EIC.

3.2.6 The Contractor shall be responsible to co-ordinate with service provider/ concerned authorities for cutting of trees, shifting of utilities and removal of encroachments etc. and making the site un-encumbered from the project construction area required for completion of work. This shall include initial and frequent follow up meetings/ actions/ discussions with each involved service provider/ concerned authorities. The contractor shall not be entitled for any additional compensation for delay in cutting of trees, shifting of utilities and removal of encroachments by the service provider/ concerned authorities.

3.2.7 The information about the public utilities (whether over ground or underground) like electrical/ telephone/ water supply lines, OFC Cables, open drain etc. is the responsibility of contractor to ascertain the utilities that are to be affected by the works through the site investigation and collection of information from the concerned utility owners.

3.2.8 The contractor shall be responsible to obtain necessary approval from the respective authorities for shifting/ re-alignment of existing public utilities. OIL INDIA LIMITED shall only assist the contractor for liasoning in obtaining the approval from the concerned authorities. Take all measures reasonably required by the various bodies to protect their services and

property during the progress of works. It shall be deemed to be the part of the contract and no extra payment shall be made to the contractor for the same. Shifting/ re- alignment of public utilities should be done without disturbing the existing one. New service lines should be laid and connected before dismantling the existing one.

3.2.9 Shifting/ re-alignment of existing public utilities shall be done by the contractor as per technical requirement of respective bodies or as per direction of Engineer-in-Charge/OIL.

3.2.10 Contractor is responsible to maintain a dust free environment in and around the construction site. He/she has to provide sufficient watering over the area as well as on the roads or as per the direction of EIC/PMC and OIL. The contractor is also responsible to clean the roads inside PHQ campus by proper brooming for atleast 02 (two) times per day or as per the direction of EIC/OIL. The contractor is liable to execute all the construction activities with minimum noise pollution considering the residential quarters in vicinity. He/she is also responsible for proper barricading of atleast 2.5 Meters height at the periphery of construction area for proper isolation of the construction site. No extra payment for the aforesaid works will be made to the contractor.

3.2.11 The contractor has to submit a site plan for setting up elements of the work site viz; offices, laboratory, godowns, labour camps, steel yard, machinery area etc. to EIC/PMC and duly approved from OIL before start of construction activities.

4.0 SCOPE OF WORK

4.1 The scope of work covered in this tender shall be as per the Bill of Quantities, specifications, drawings, instructions, orders issued to the contractor from time to time during the work. The drawings for this work, which may be referred for tendering, provide general idea only about the work to be performed under the scope of this contract. These may not be the final drawings and may not indicate the full range of the work under the scope of this contract. Drawings released as "GOOD FOR CONSTRUCTION" from time to time by the Engineer-in-charge and to be executed according to any additions/ modifications/ alterations/ deletions made from time to time, as required by any other drawings that would be issued to the contractor progressively during execution of work. It shall be the responsibility of the contractor to incorporate the changes that may be in this scope of work, envisaged at the time of tendering and as actually required to be executed.

4.2 The quantities of various items as entered in the "BILL OF QUANTITIES" are indicative only and may vary depending upon the actual requirement. The contractor shall be bound to carry out and complete the stipulated work irrespective of the variation in individual items specified in the bill of quantities.

5.0 ACCEPTANCE OF TENDER

5.1 Once the tenderer has given an unconditional acceptance to the tender conditions in its entirety, he is not permitted to put any remark(s)/conditions(s) in/ along-with the tender.

5.2 In case the condition 5.1 mentioned above is found violated at any time after opening of tender, the tender shall be summarily rejected.

5.3 OIL INDIA LIMITED reserves to itself the authority to reject any or all the tenders received without assigning any reason. The acceptance of a tender shall be effective w.e.f. the last date of submission of bids.

6.0 TRANSFER OF BID DOCUMENTS

Transfer of bid documents purchased by one intending bidder to another is not permissible.

7.0 The OIL INDIA LIMITED reserves the right to award the work to a single party or to split the work amongst two or more parties as deemed necessary without assigning any reason whatsoever.

8.0 MOBILISATION OF MEN, MATERIALS AND MACHINERY:

8.1 All expenses towards mobilization at site and de-mobilization including bringing in equipment, work force, materials, dismantling the equipment, clearing the site etc. shall be deemed to be included in prices quoted and no separate payment on account of such expenses shall be entertained.

8.2 It shall be the responsibility of the Contractor to provide, operate and maintain all necessary construction equipment, scaffoldings and safety, gadget, lifting tackles, tools and appliances to perform the work in a workman like and efficient manner and complete all jobs as per the specifications and within the schedule time of completion of work. Further, contractor shall also be responsible for obtaining temporary electric and water connection for all purposes. The contractor shall also make standby arrangement for water & electricity to ensure un-interrupted supply.

8.3 It shall be the responsibility of the contractor to obtain the approval for any revision and/ or modification of work desired by him from OIL INDIA LIMITED before implementation. Also such revisions and/or modifications if accepted / approved by the OIL INDIA LIMITED shall be carried at no extra cost to OIL INDIA LIMITED.

8.4 The procurement and supply in sequence and at the appropriate time of all materials and consumable shall be entirely the contractor's responsibilities and his rates for execution of work shall be inclusive of supply of all these items.

8.5 It is mandatory for the contractor to provide safety equipment and gadgets to its all workers, supervisory and Technical staff engaged in the execution of the work while working. The cost of the above equipment/gadgets is deemed to be included in the rates quoted by the contractor for

the items & works as per Bill of Quantities and contractor shall not be entitled for any extra cost in these regard. The above norm is to be strictly complied with at site. In case the contractor is found to be deficient in providing Safety Equipment/ Gadgets in the opinion of Engineer-in-charge, the Engineer-in-charge at his option can procure the same at the risk & cost of contractor and provide the same for the use of worksite and shall make the recoveries from the bills of the contractor for the same. The decision of the Engineer-in-charge shall be final and binding on contractor in this regard.

8.6 All designs, drawings, bill of quantities, etc., shall be supplied to the contractor for works by PMC or OIL INDIA LIMITED in phased manner as the works progress. However, it shall be the duty and responsibility of the contractor to bring to the notice of the PMC or OIL INDIA LIMITED in writing as to any variation, discrepancy or any other changes required and to obtain revised drawings and designs and / or approval of the OIL INDIA LIMITED in writing for the same.

8.7 One copy of contract documents including drawings furnished to the contractor shall be kept at the site and the same shall at all reasonable times be available for inspection.

8.8 All materials, construction plants and equipment etc. once brought by the contractor within the project area, will not be allowed to be removed from the premises without the written permission of the OIL INDIA LIMITED. Similarly, all enabling works built by the contractor for the main construction undertaken by him, shall not be dismantled and removed without the written authority of the OIL INDIA LIMITED.

9.0 INCOME TAX DEDUCTION

Income tax deductions shall be made from all payments made to the contractor including advances against work done, as per the rules and regulations in force, in accordance with the Income Tax Act prevailing from time to time.

10.0 Not applicable.

11.0 RATES TO BE FIRM

11.1 The Percentage / Item rates quoted by the tenderer shall be firm and fixed for the entire period of completion and till handing over of the work. No revision to Percentage /Item rates or any escalation shall be allowed on account of any increase in prices of materials, labour, POL and Overheads etc or any other statutory increase during the entire contract period or extended contract period.

11.2 The contractor shall be deemed to have inspected the site, it's surrounding and acquainted with the nature of the ground, accessibility of the site and full extent and nature of all operations necessary for the full and proper execution of the contract, space for storage of materials, constructional plant, temporary works, restrictions on the plying of heavy

vehicles in area, supply and use of labour, materials, plant, equipment and laws, rules and regulations, if any, imposed by the local authorities.

11.3 The rates and prices given in the bill of quantities are for completed and finished items of works and complete in all respects. It will be deemed to include all constructional plant, labour, supervision, materials, transport, all temporary works, erection, maintenance, contractor's profit and establishment/ overheads, together with preparation of designs & drawings pertaining to casting yard, shop drawing, fabrication drawing (if required), staging form work, stacking yard, etc. all general risk, taxes excluding GST (if any), royalty, duties, cess, octroi and other levies, insurance liabilities and obligations set out or implied in the tender documents and contract.

11.4 Unless otherwise specified in the Bill of Quantities (BOQ), the contractor has to make his own arrangement for dewatering/ bailing out of water, effluent including strutting, shoring etc at every stage of work wherever required including working under foul condition as per direction of Engineer-in-Charge at his own cost and the contractor shall not be entitled for any extra payment, whatsoever, in this regard.

11.5 If required to make work site suitable for execution, contractor shall have to clear jungle including of rank vegetation, grass, trees etc., clear & clean existing drains/ canals (including strutting, shoring and packing cavities) and dispose them out of the site up-to any lead and lift as per direction of Engineer-in-charge/OIL. The contractor should inspect the site of work from this point of view. Unless otherwise specified in the Bill of Quantities, the cost to be incurred in this regard shall be deemed to be included in his quoted rates of BOQ items and the contractor shall not be entitled for any extra payment in this regard.

11.6 If any temporary/ permanent structure is encountered or safety of such structure in the vicinity is endangered due to execution of the project, the contractor has to protect the structures by any means as per the directions of the Engineer - in - Charge/OIL. If any damage caused to any temporary or permanent structure(s) in the vicinity is caused due to execution of the project, the contractor has to make good the same by any means as per directions of the Engineer - in - Charge/OIL. The contractor should inspect the site of work from this point of view. The cost to be incurred in this regard shall be deemed to be included in his quoted rates of BOQ items and the contractor shall not be entitled for any extra payment in this regard.

11.7 FOREST ROYALTY:

The forest royalty for this project is to be paid by Oil India Limited in advance to Govt of Assam. Hence, the same will be deducted @2% from each RA bill of the contractor until it reaches the amount to be paid to Govt. of Assam. However, any variation between the "amount paid as Forest Royalty to Govt of Assam" and the "amount deducted from RA bill of contractor", the difference in amount will be adjusted from the payables of contractor during finalization of work.

12.0 ESCALATION/ PRICE VARIATION

No claim on account of any price variation / Escalation on whatsoever ground shall be entertained at any stage of works. All Percentage / item rates as per Bill of Quantities (BOQ) quoted by Contractor shall be firm and fixed for entire contract period as well as extended period for completion of the works. No escalation/price variation clause shall be applicable on this contract.

The rates and prices to be tendered in the bill of quantities are for completed and finished items of works and complete in all respects. It will be deemed to include all constructional plant, labour, supervision, materials, transport, all temporary works, erection, maintenance, contractor's profit and establishment / overheads, together with preparation of designs drawings pertaining to casting yard (if required). Staging form work, stacking yard, etc, all general risk, insurance liabilities and obligations set out or implied in the tender documents and contract.

13.0 INSURANCE OF WORKS ETC.

Contractor is required to take contractor's all risk policy from an approved insurance and bear all costs towards the same for the full period of execution of works including the defect liability period for the full amount of contract against all loss of damage from whatever cause arising other than excepted risks for which he is responsible under the terms of the contract and in such manner that the contractor is covered during the period of construction of works and/or also covered during the period of defect liability for loss or damage: In case of contractual time extension, the insurance cover has to be suitably extended to cover the extended period.

- a. The work and the temporary works to the full value of such works.
- b. The materials, constructional plant, centring, shuttering and scaffolding materials and other things brought to the site for their full value.

Work order will not be issued until the submission of Insurance policy proof to OIL. Further, whenever required by OIL INDIA LIMITED, the contractor shall produce the policy or the policies of insurance and the receipts for payment of the current premiums.

14.0 INSURANCE UNDER WORKMEN COMPENSATION ACT

Contractor is required to take insurance cover under the Workman Compensation Act, 1923 amended from time to time from an approved insurance company and pay premium charges thereof. Wherever required by OIL INDIA LIMITED the contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums. In case of contractual time extension, the insurance cover has to be suitably extended to cover the extended period.

15.0 THIRD PARTY INSURANCE

Contractor is required to take third party insurance cover for an amount of 5% (five percent) of contract value from an approved insurance company for insurance against any damage, injury or loss which may occur to any person or property including that of OIL INDIA LIMITED, arising out of the execution of the works or temporary works. Work order will not be issued until the submission of Insurance policy proof to OIL. Wherever required by OIL INDIA LIMITED the contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums. In case of failure of the contractor to payment or renew contractors all risk policy, insurance under workmancompensation act and thirdparty insurance as described above within one month prior the date of expiry, running account payments of the contractor shall be withheld till such time the contractor renews the aforesaid insurance covers.

If the Contractor could not effect a comprehensive insurance cover against risks which he may be required to effect under the terms of the contract, then he shall give his attention to get the best insurance cover available and even in case of effecting a wider insurance cover than the one which the subsidiary of the General Insurance Company could offer, such an insurance is ought to be done after the Engineer-In-Charge's approval, by or through the subsidiary of the General Insurance Company.

The contractor has to obtain any insurance other than mentioned above and in the relevant clauses of the contract as applicable for the subject work.

16.0 LABOUR LAWS TO BE COMPLIED BY THE CONTRACTOR

The contractor shall obtain a valid license under the contract labour (R & A) Act 1970 and the contract labour Act (R&A) Central Rules 1971 and amended from time to time, and continue to have a valid license until the completion of the work including defect liability period. The contractor shall also abide by the provision of the child labour (Prohibition and Regulation) Act-1986 and amended from time to time. Any failure to fulfil this requirement shall attract the penal provisions of this contract arising out the resultant for non-execution of the work before the commencement of work.

16.1 Labour Clearance Certificate (LCA) and Release of Security Deposit after Labour Officer clearance

The contractor shall obtain and submit Labour Clearance advice (LCA)/ Labour Clearance Certificate (LCC) within 14 days of signing the contract agreement. If the contractor fails to submit the LCA/LCC within 14 days of signing of the contract, the period of delay in submission of LCA/LCC shall be deducted from the contractual period while issuing the work order. In such cases, the time period mentioned in the GCC shall not be applicable

and the contractor must complete the work within the reduced time period allotted to the contractor as per the work order issued.

However, if submission of LCA/LCC is delayed, under some exceptional circumstances, for any reason not attributable to the contractor, the same should be recorded by the contractor with documentary proof. In such cases, the decision as to whether the reason of delay attributable to the contractor or not shall be taken by the head of indenting department and the work order will be issued accordingly.

Security Deposit of the work shall not be refunded till the Contractor produces a clearance certificate from the Labour Officer. As soon as the work is virtually complete the Contractor shall apply for the clearance certificate to the Labour Officer under intimation to the Engineer-in-Charge. The Engineer-in-Charge, on receipt of the said communication, shall write to the Labour Officer to intimate if any complaint is pending against the Contractor in respect of the work. If no complaint is pending, on record till after 3 months after completion of the work and/or no communication is received from the Labour Officer to this effect till six months after the date of completion, it will be deemed to have received the clearance certificate and the Security Deposit will be released if otherwise due.

17.1 No labour below the age of 18 years shall be employed on the work.

18.0 LABOUR SAFETY PROVISION

The contractor shall be fully responsible to observe the labour safety provisions.

19.0 OBSERVANCE OF LABOUR LAWS

19.1 The contractor shall be fully responsible for observance of all labour laws applicable including local laws and other laws applicable in this matter and shall indemnify and keep indemnified OIL INDIA LIMITED against effect or non-observance of any such laws. The contractor shall be liable to make payment to all its employees, workers and sub-contractors and make compliance with labour laws. If OIL INDIA LIMITED is held liable as "Principal Employer" to pay contributions etc. under legislation of Govt. or Court decision in respect of the employees of the contractor, then the contractor would reimburse the amount of such payments, contribution etc. to OIL INDIA LIMITED and/ or same shall be deducted from the payments, security deposit etc. of the contractor.

19.2 The Contractor shall submit proof of having valid EPF registration certificate. In absence of the expire of the certificate, a payment to the extent of 4.70% (four point seventy percent) of the value of the Running Account bill may be withheld by OIL INDIA LIMITED and shall be released only after the production of the valid EPF registration certificate from the concerned authorities. If it is incumbent upon OIL INDIA LIMITED to deposit withhold amount with EPF authorities, the withhold amount shall be deposited by OIL INDIA LIMITED with EPF authorities. In such a case OIL INDIA

LIMITED shall not refund this withhold amount to the contractor even after the production of EPF registration certificate.

19.3 BUILDING AND OTHER CONSTRUCTION WORKER'S ACT

In order to govern welfare and working conditions of labourers engaged in construction activities, the Building and other Construction Workers' (Regulation of Employment and conditions of Service "RE&CS") Act,1996 came into force. RE&CS Act'1996 as applicable in respect of building and other construction work. Wherever applicable, The CONTRACTOR shall strictly comply with the following provisions pertaining to RE & CS Act' 1996.

- a. The CONTRACTOR must be registered with the concerned authorities under the Building and Other Construction Workers' (RE & CS) Act, 1996, or in case of non—registration; the CONTRACTOR should obtain registration within one month of the award of contract.
- b. The CONTRACTOR shall be responsible to comply with all provisions of the Building and Other Construction Workers' (RE &CS) Act,1996, the Building and Other Construction Workers' Welfare Cess Act,1996, the Building and other Construction Workers' (RE & CS) Rules,1998 and Building and other Construction Workers Welfare Cess Rules,1998.
- c. Cess as per the prevailing rate, shall be deducted at source from bills of the CONTRACTOR by the Engineer-in-charge of the contract and remitted or adjusted to the payables of "Secretary, Building and Other Construction Workers Welfare Board" of the Assam. The CONTRACTOR shall be responsible to submit final assessment return of the cess amount to the assessing officer after adjusting the cess deducted at source.

20.0 LAW GOVERNING THE CONTRACT

The Indian Laws shall govern this contract for the time being in force.

21.0 LAWS, BY LAWS RELATING TO THE WORK

The contractor shall strictly abide by the provisions, for the time being in force, of law relating to works or any regulations and bylaws made by any local authority or any water & lighting agencies or any undertakings within the limits of the jurisdiction of which the work is proposed to be executed. The contractor shall be bound to give to the authorities concerned such notices and take all approvals as may be provided in the law, regulations or bylaws as aforesaid, and to pay all fees and taxes payable to such authorities in respect thereof.

22.0 TECHNICAL STAFF FOR WORK

22.1 The contractor shall employ at his cost the adequate number of technical staff during the execution of this work depending upon the requirement of work. For this purpose, the numbers to be deployed, their qualification, experience as decided by PMC/OIL INDIA LIMITED shall be final and binding on contractor. The contractor shall not be entitled for any extra payment in this regard. The technical staff should be available at site, whenever required by PMC/OIL INDIA LIMITED to take instructions.

22.2 Within 15 days of letter of intent, the contractor shall submit a site organizational chart and Resume/CVs including details of experience of the Project-in-Charge and other staff proposed by him and shall depute them on the Project after getting approval from Engineer-in-Charge/OIL. If desired by the contractor at a later date, the Project-in-Charge and other staff whose resume is approved by OIL INDIA LIMITED can be replaced with prior written approval of OIL INDIA LIMITED and replacement shall be with equivalent or superior candidate only. Decision of OIL shall be final and binding on the contractor. Even after approving the site organizational chart, the Engineer-in-Charge, due to nature and exigency of work, can direct the contractor to depute additional staff as per the requirement.

The removal of such additional staff from the site shall only be with the prior written approval of Engineer-in-Charge/OIL. The contractor shall not be paid anything extra whatsoever on account of deployment of additional staff and decision of the Engineer- in-Charge/OIL shall be final and binding on the contractor.

The desired numbers of personnel for the project are as follows:

Graduate Engineers Civil	Graduate Engineers Electrical	Diploma Engineers Civil	Diploma Engineers Mechanical/ Electrical
3 Nos.	2 Nos.	3 Nos.	2 Nos.
(atleast 05 years of experience)	(atleast 05 years of experience)	(atleast 08 years of experience)	(atleast 08 years of experience)

22.3 In case the contractor fails to employ the staff as aforesaid he shall be liable to pay a reasonable amount not exceeding a sum of Rs. 50,000/- (Rupees fifty Thousand only) for each month of default in the case of each Graduate Engineer and Rs. 30,000/- (Rupees Thrity Thousand only) in the case of each Diploma Engineer. The decision of the Engineer-in-charge as to the number of Technical Staff to be adequate for the project and the period for which the required technical staff was not employed by the contractor and as to the reasonableness of the amount to be deducted on this account shall be final and binding on the contractor.

23.0 LAND FOR LABOUR HUTS/ SITE OFFICE AND STORAGE ACCOMMODATION

23.1 The contractor shall arrange the land for temporary office, storage accommodation and labour huts at his own cost and get the clearance of local authorities for setting up of labour camp and same is deemed to be included in the rates quoted by the contractor for the works. The contractor shall ensure that the area of labour huts is kept clean and sanitary conditions are maintained as laid down by the local authorities controlling the area. The labour huts shall be so placed that it does not hinder the progress of work or access to the worksite. Contractor shall give the vacant possession of the land utilised for this purpose back after completion of the work. The security deposit of the contractor shall be released only after contractor demolishes all structures including foundations and gives back clear vacant possession of this land.

23.2 In the event the contractor has to shift his labour campus at any time during execution of the work on the Instructions of local authorities or as per the requirement of the work progress or as may be required by OIL INDIA LIMITED, he shall comply with such instructions at his risk & cost and no claim whatsoever shall be entertained on this account.

23.3 FURNISHED OFFICE ACCOMMODATION & MOBILITY AND COMMUNICATION TO BE PROVIDED BY CONTRACTOR TO OIL INDIA LIMITED

The Contractor has to provide furnished Project office equipped with all facilities such as telephone, fax, internet, photocopier, computer/ laptop & printer along with operator, regular electric & purified drinking water supply and inspection vehicle etc. as per the requirement of the project. If the contractor fails to provide as above as per the satisfaction of E-I-C/ OIL an amount equal to 1 % of gross bill from all running account & final bill will be recovered.

The contractor shall also make sufficient arrangement for Photography/ Videography preferably by maintaining a camera/video camera at site so that video photographs can be taken of a specific activity at any point of time. The contractor shall also provide software like MS Project etc. for the purpose of preparing progress report etc.

The Contractor has to keep a vehicle of atleast 5 seating capacity with driver and sufficient fuel on standby mode for 24x7 to counter any emergency situation/ mishape for immediate response.

23.4 The contractor shall make all arrangements for ground breaking ceremony/ inaugural function etc for the project as required and the cost towards it deemed to be included in his rates/offer.

24.0 WATCHING AND LIGHTING

The contractor shall at his own cost take all precautions to ensure safety of life and property by providing necessary barriers, lights, watchmen etc. during the progress of work as directed by Engineer-in-Charge/OIL.

25.0 HEALTH & SANITARY ARRANGEMENTS

In case of all labour directly or indirectly employed in work for the performance on the contractor's part of this contract, the contractor shall comply with all rules framed by Govt. from time to time for the protection of health and sanitary arrangements for workers. Please refer to Annexure - HSE.

26.0 WORKMEN'S COMPENSATION ACT

The contractor shall at all times indemnify OIL INDIA LIMITED and Owner against all claims for compensation under the provision of workmen's compensation Act or any other law in force, for any workmen employed by the contractor or his sub-contractor in carrying out the contract and against all costs and expenses incurred by the OIL INDIA LIMITED therewith.

27.0 MINIMUM WAGES ACT

The contractor shall comply with all the provisions of the minimum wages Act, 1948, contract labour Act (R&A) 1970, and rules framed there under and other labour laws/local laws affecting contract labour that may be brought into force from time to time.

28.0 LABOUR RECORDS

The contractor shall submit by the 4th & 19th of every month to the Engineer-in-Charge a true statement, showing in respect of the second half of the proceeding month and the first half of the current month, respectively, of the following data: -

- a) The number of the labour employed by him (category-wise).
- b) Their working hours.
- c) The wages paid to them.
- d) The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused.
- e) The number of female workers who have been allowed Maternity Benefits and the amount paid to them.
- f) Any other information required by Engineer-in-Charge.

29.0 RELEASE OF SECURITY DEPOSIT AFTER LABOUR CLEARANCE

Security Deposit of the work shall not be refunded till the contractor produces a clearance certificate from the Labour Officer. As soon as the work is virtually complete, the contractor shall apply for the clearance certificate to the Labour Officer under intimation to the Engineer-in-

Charge/OIL. The Engineer-in-Charge/OIL, on receipt of the said communication, shall write to the Labour Officer to intimate if any complaint is pending against the contractor in respect of the work. If no complaint is pending, on record till after 3 months after completion of the work and/or no communication is received from the Labour Officer to this effect till six months after the date of completion, it will be deemed to have received the clearance certificate and the Security deposit will be released if otherwise due.

No interest shall be payable by the OIL INDIA LIMITED on the said amount covered under PBG/SD/ Other security deposits/ amount hold due to any other reason.

30.0 MEASUREMENTS OF WORKS

Unless otherwise mentioned in the bill of quantities the measurements of works shall be done as per MOST/ CPWD specifications (as specified in Technical Specification of the Tender) and if the same is not given in the CPWD / MOST Specifications, the same shall be measured as per latest relevant BIS codes in force. The quantity of steel reinforcement and the structural steel sections incorporated in the work shall be measured & paid on the basis of standard coefficients of sections as per BIS Codes of practice.

31.0 PAYMENTS

31.1 The bill shall be submitted by contractor each month on or before the date fixed by the Engineer-in-Charge for all works executed in previous months. The contractor shall prepare computerized bills using the program as approved by Engineer-in-Charge as per prescribed format/ pro-forma. The Contractor shall submit five numbers of hard copies and one soft copy of CD / pendrive for all bills.

31.2 All running payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed and / or accepted by PMC/OIL INDIA LIMITED and shall not preclude the recovery for unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the Contract, or any part thereof, in this respect, or the accruing of any claim, nor shall it conclude, determine or affect in any way the powers of the OIL INDIA LIMITED under these conditions or any of them as to the final settlement and adjustments of the accounts or otherwise, or in any other way vary/ affect the contract. The contractor shall submit the final bill within three months of the completion of work, otherwise OIL INDIA LIMITED's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on contractor.

Each Running Bills should be accompanied by two sets of at-least 20 (twenty) photographs as per direction of Engineer-in-charge taken from various points depicting status of work as on Report/ Bill date along with

Monthly Progress Report for the concerned month in the pro-forma to be given/ approved by Engineer-in-Charge. Intermittent progress Photographs as and when required shall also be provided by the Contractor at his own cost as per direction of Engineer-in-Charge. No payment of running account bill shall be released unless it is accompanied by progress photographs and Monthly Progress Report as above.

31.3 It is clearly agreed and understood by the Contractor that notwithstanding anything to the contrary that may be stated in the agreement between OIL INDIA LIMITED and the contractor; the contractor shall become entitled to payment for the bills submitted. Any delay in the release of payment by the OIL INDIA LIMITED to the contractor shall not entitle the contractor to any compensation/ interest from OIL INDIA LIMITED.

31.4 VIM Portal payment system: Contractor has to submit an e-invoice through VIM portal for processing of payment.

31.5 Final Bill: The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or handed over of the project whichever is later. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Final bill should be accompanied by labour clearance certificate, No claim certificate from contractor, test certificates, Insurance policies and all other documents as desired from EIC/ OIL.

32.0 WORK ON SUNDAYS, HOLIDAYS AND DURING NIGHT

For carrying out work on Sunday and Holidays or during night, the contractor will approach the Engineer-in-Charge or his representative at least 03 (three) working days in advance and obtain his permission. The Engineer-in-Charge at his discretion can refuse such permission. The contractor shall have no claim on this account whatsoever. If work demand, the contractor shall make arrangements to carry out the work on Sundays, Holidays and in two, three shifts with the approval of Engineer-in-Charge at no extra cost to OIL INDIA LIMITED.

33.0 NO IDLE CHARGES TOWARDS LABOUR OR P&M ETC.

No idle charges or compensation shall be paid for idling of the contractor's labour, staff or P&M etc. on any ground or due to any reason whatsoever. OIL INDIA LIMITED will not entertain any claim in this respect.

34.0 WORK TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS, DRAWINGS AND ORDERS ETC.

The contractor shall execute the whole and every part of the work in the most substantial and workman like manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work assigned by the Engineer-in-Charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings.

The contractor shall comply with the provisions of the contract and execute the works with care and diligence and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these is specified or is reasonably inferred from the contract. The contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

35.0 DIRECTION FOR WORKS

35.1 All works to be executed under the contract shall be executed under the directions and subject to approval in all respects of the Engineer-in-Charge / OIL INDIA LIMITED who shall be entitled to direct at what point or points and in what manner the works are to be commenced and executed.

35.2 The Engineer-in-Charge and his representative shall communicate or confirm their instructions to the contractor in respect of the execution of work during their site inspection in a 'Works Site Order Book' maintained at the site office of Engineer-in-Charge. The contractor or his authorized representative shall confirm receipt of such instructions by signing against the relevant orders in the book.

36.0 ORDER OF PRECEDENCE OF DOCUMENTS

In case of difference, contradiction, discrepancy, dispute with regard to Conditions of Contract, specifications, Drawings, Bill of quantities and rates quoted by the Contractor and other documents forming part of the contract, the following shall prevail in order of precedence.

- i) Letter of Intent, Letter of Award, Work Order, Agreement along with statement of agreed variations and its enclosures.
- ii) Bill of Quantity / Schedule of Quantities
- iii) Special Condition of Contract.
- iv) Technical specifications (General, Additional and Technical Specification) as give in Tender documents.
- iv) General Conditions of Contract.
- v) Oil contracts Manual.
- v) Drawings.

- vi) CPWD specifications (as specified in Technical Specification of the Tender) update with correction slips issued up to last date of receipt of tenders.
- vii) Relevant B.I.S. Codes.

37.0 TIME SCHEDULE & PROGRESS

37.1 Time allowed for carrying out all the works as entered in the tender shall be as mentioned in the Tender conditions. The Date of start of work shall be reckoned from the date mentioned in the work order through post/FAX/E-mail. Time shall be the essence of the contract and contractor shall ensure the completion of the entire work within the stipulated time of completion.

37.2 The contractor shall also furnish within 10 days of date of receipt of letter of Intent, a CPM network/ PERT chart/ Bar Chart along with quarterly milestones and resources plan for man, material & machinery to achieve the milestones for completion of work within stipulated time. This will be duly got approved from EIC/OIL INDIA LIMITED. This approved Network/ PERT Chart shall form a part of the agreement. Achievement of milestones as well as total completion has to be within the time period allowed.

37.3 Contractor shall mobilize and employ sufficient resources for completion of all the works as indicated in the agreed BAR CHART/Network. No additional payment will be made to the contractor for any multiple shift work or other incentive methods contemplated by him in his work schedule even though the time schedule is approved by the Engineer-in- Charge.

37.4 During the currency of the work the contractor is expected to adhere to the time schedule on miles stone and total completion and this adherence will be a part of Contractor's performance under the contract. During the execution of the work contractor is expected to participate in the review and updating of the Network/ BAR CHART undertaken by the OIL INDIA LIMITED. These reviews may be undertaken at the discretion of PMC/OIL INDIA LIMITED either as a periodical appraisal measure or when the quantum of work order on the contractor is substantially changed through deviation orders or amendments. The review shall be held at site or any of the offices of NPCC (PMC)/ OIL INDIA LIMITED at the sole discretion of OIL INDIA LIMITED. The contractor will adhere to the revised schedule thereafter. The approval to the revised schedule resulting in a completion date beyond the stipulated date of completion shall not automatically amount to a grant of extension of time to the contractor.

37.5 Contractor shall submit fortnightly/ Monthly (as directed by Engineer-in-Charge) progress reports (5 copies) on a computer based program (program and software to be approved by Engineer-in-Charge) highlighting status of various activities and physical completion of work.

37.6 The contractor shall send completion report with as built drawings and maintenance schedule to the Engineer-in-Charge/ OIL INDIA LIMITED in writing within a period of 30 days of completion of work.

38.0 WATER AND ELECTRICITY

The contractor shall make his own arrangement for Water & Electrical power for construction and other purposes at his own cost and pay requisite electricity and water charges. The contractor shall also make standby arrangement for water & electricity to ensure un-interrupted supply. However, the contractor will be required to take prior permission in this regard from OIL (if required).

39.0 MATERIALS TO BE PROVIDED BY THE CONTRACTOR

The contractor shall, at his own expense, provide all materials, required including Cement & Steel for the works. The contractor shall at his own expense and without delay; supply to the Engineer-in- Charge samples of materials to be used on the work and shall get the same approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if required by the Engineer-in- Charge furnish proof, to the satisfaction of the Engineer-in- Charge that the materials so comply.

The materials products used on the works shall be one of the approved makes/brands out of list of manufacturers / brands /makes given in the tender documents. The contractor shall submit samples /specimens out of approved makes of materials/products to the Engineer-in-charge for prior approval. In exceptional circumstances Engineer-in-charge may allow alternate equivalent makes / brands of products / materials at his sole discretion. The final choice of brand / make shall remain with the engineer in charge, whose decision in the matter shall be final and binding and nothing extra on this account shall be payable to the contractor.

Incase single brand/ make are mentioned, other equivalent makes brands may be considered by the engineer in charge with prior approval. In case of variance in CPWD's specification from approved products makes specification the specification of approved products make shall prevail for which nothing shall be paid extra to the contractor.

The contractor shall at his cost, submit the samples of materials to be tested or analyzed and bear all charges and cost of testing unless specifically provided or otherwise elsewhere in the contract or specifications. The Engineer-in-Charge or his authorized representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility

and every assistance and cost in obtaining the right and visit to such access.

The Engineer-in-Charge/OIL shall have full powers to require the removal from the premises of all materials, which in his opinion are not in accordance with the specifications and in case of default, the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full power to require other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge may cause the same to the supplies and all costs which may require such removal and substitution shall be borne by the contractor.

40.1 CEMENT AND CEMENT GODOWN

Cement shall be procured by Contractor confirming to BIS: 8112 Specification latest edition or higher Grade as directed by the Engineer-in-Charge/OIL. The cement shall be procured directly from the reputed manufacturers/ stockiest(s), which will have to be got approved from Engineer-in charge in advance. Relevant vouchers and test certificates will be produced as and when required. The cement shall be stored by the contractor in such suitable covered and lockable stores, well protected from climate and atmospheric affect. The cement godown shall be constructed by the contractor as per CPWD specifications at his own cost. The cement in bags shall be stored in godowns in easy countable position. Cement bags shall be used on first in first out basis. Cement stored for beyond 90 days will be required to be tested at contractors cost, before use in works.

40.2 STEEL & STEEL STOCKYARD

Steel confirming to BIS specifications (latest edition) shall be procured by the contractor directly from reputed manufacturers/producers as per approved list. The manufacturer has to give a certificate that the material supplied is not a re-rolled product. The contractor will produce relevant vouchers & test certificates. Re-rolled sections will not be allowed.

Reinforcement steel, structural steel shall be stored and stacked in such manner so as to facilitate easy identification, removal etc. The contractor shall take proper care to prevent direct contact between the steel and the ground/ water for which he shall provide necessary arrangement at his own cost including ensuring proper drainage of area to prevent water logging as per directions of the Engineer-in-Charge. Steel shall also be protected, by applying a coat of neat cement slurry over the bars for which no extra payment shall be made.

Test certificates for each consignment of steel shall be furnished and tests to be got carried out from the authorized laboratory as per the directions of Engineer-in-Charge, before incorporating the materials in the work.

41.0 SCHEDULE OF QUANTITIES / BILL OF QUANTITIES/ QUANTITY VARIATION

41.1 The work under this contract shall be carried out as per BOQ cum rate schedule. In case the description /specification as per BOQ are found to be incomplete OIL/CPWD/MOST specifications shall be followed. Quantities mentioned in the rate schedule are approx. only and liable for variation due to change of scope of work/variation in schedule of quantities, changes in design etc. The tenderers shall under take to execute actual quantities as per advise of Engineer-In -Charge/OIL and accordingly the final contract price shall be worked out on the basis of quantities actually executed at site in payments will also be regulated for the same. The quantities indicated against each item may vary to any extent and no compensation will be payable in variation of individual quantity to the extent sanction is available.

41.2 All items of work in the bill of quantities/ schedule of quantities shall be carried out as per the OIL/CPWD/MOST specifications, drawings and instructions of the Engineer-in-Charge and the rates shall include for supply of required materials including proper storage, consumables, skilled & unskilled labour, supervision and tools, tackles, plant & machinery complete as called for in the detailed specifications and conditions of the contract. The Contractor without the approval of the Engineer-in-Charge/OIL shall execute no item, which is not covered in the bill of quantities. In case any Extra/Substituted item is carried out without specific-approval, the same will not be paid.

42.0 ANTI-TERMITE TREATMENT & WATER PROOF TREATMENT

42.1 Pre-construction treatment shall be carried out in co-ordination with the building work and shall be executed in such a manner that the civil works are not hampered or delayed by the anti-termite treatment. The treatment shall be carried out as detailed in BIS: 6313 (Part-II) latest revision. The waterproof treatment shall be of type and specifications as given in the schedule of quantities.

42.2

42.3 Re-treatment if required shall be attended to and carried out by the Contractor within seven days of the notice from Engineer-in-Charge.

42.4 Engineer-in-Charge reserves the right to get the quality of treatment checked in accordance with recognized test methods and in case it is found that the chemicals with the required concentration and rate of

application have not been applied, or the water proof treatment is not done as per specifications, the contractor will be required to do the re- treatment in accordance with the required concentration & specifications at no extra cost failing which no payment for such work will be made. The extent of work thus rejected shall be determined by Engineer-in-Charge.

42.5 Water proofing and anti-termite treatment shall be got done through approved / specialized agencies only with prior approval of Engineer-in-Charge.

42.5 a. The contractor shall make such arrangement as may be necessary to safe guard the workers and residents of the building against any poisonous effect of the chemicals used during the execution of the work.

42.6 During the execution of work, if any damage shall occur to the treatment already done, either due to rain or any other circumstances, the same shall be rectified and made good to the entire satisfaction of Engineer-In-Charge by the contractor at his costs and risks.

42.7 The contractor shall make his own arrangement for all equipment required for the execution of the job.

42.8 The contractor whose tender is accepted shall execute Guarantee Bond in the prescribed form as appended for guaranteeing the anti-termite treatment and water proof treatment.

43.0 INDIAN STANDARDS

Wherever any reference is made to any IS in any particular specifications, drawings or bill of quantities, it means the Indian Standards editions with the amendments current at the last date of receipt of tender documents.

44.0 CENTERING & SHUTTERING

Marine plywood only or steel plates of minimum thickness as approved by Engineer-in- Charge shall be used for formwork. The shuttering plates shall be cleaned and oiled after every repetition and shall be used only after obtaining approval of Engineer-in-Charge. The number of repetitions allowed for plywood and steel shuttering shall be at the discretion of Engineer-in-Charge depending upon the condition of shuttering surface after each use and the decision of Engineer-in-Charge in this regard shall be final and binding on the contractor. No claim whatsoever on this account shall be admissible.

45.0 PROPRIETARY MATERIALS

45.1 The following proprietary materials shall be brought to site after the approval of Engineer-in-Charge

a) Water Proofing Compound

- b) Cement
- c) Steel
- d) Bitumen
- e) Primer/Paints/Varnish etc.
- f) Chemical for anti-termite treatment
- g) Any other materials as per discretion of the Engineer-in-Charge.

45.2 The quantity of proprietary materials shall be measured and recorded in the Measurement books and signed by the Contractor and the Engineer-in-Charge as a check to ensure that the required quantities as required for execution of works as per specifications have to be brought to site for incorporation in the work.

45.3 Proprietary materials brought at site shall be stored as directed by Engineer-in-Charge and those already recorded in Measurement book, shall be suitably marked for identification.

45.4 The contractor shall ensure that the proprietary materials are brought to site in original sealed containers or packing bearing manufacturer's markings and brands (except where the quantity required is a fraction of the smallest packing). Materials not complying with this requirement shall be rejected. The empty containers of such proprietary materials shall not be destroyed/ disposed-off without the permission of Engineer-in-Charge.

45.5 The contractor shall produce receipted vouchers showing quantities of the materials to satisfy Engineer-in-Charge that the materials comply with the specifications. These vouchers shall be endorsed, dated and initiated by Engineer-in-Charge giving the contract number and name of work and a certified copy of each such voucher signed both by Engineer-in-Charge and the Contractor shall be kept on record.

46.0 RECORDS OF CONSUMPTION OF MATERIALS

46.1 For the purpose of keeping a record of materials (Steel & Cement) received at site and consumed in works, the contractor shall maintain a properly bound register in the form approved by the Engineer-in-Charge, showing columns like quantity received and used in work and

balance in hand etc. This register shall be signed daily by the contractor's representative and Engineer-in-Charge.

46.2 The register of material shall be kept at site in the safe custody of Engineer-in-Charge during progress of the work. This provision will not, however, absolve the contractor from the quality of the final product.

46.3 In case cement or steel quantity consumed is lesser as compared to the theoretical requirement of the same as per MOST/CPWD (as the case may be) specifications/ norms, the work will be devalued and/ or a penal rate (i.e. double the rate at which cement/ steel purchased last) recovery for lesser consumption of cement/ steel shall be made in the rates of the work done subject to the condition that the tests results fall within the acceptable criteria as per MOST/CPWD (as the case may be) specifications otherwise the work shall have to be dismantled and redone by the contractor at no extra cost.

In case of cement, if actual consumption is less than 98% of the theoretical consumption, a recovery shall be affected from the contractor's dues at the penal rate (Prescribed under relevant clauses of BIS Code) for the actual quantity, which is lower than 98% of theoretical consumption.

47.0 MATERIALS AND SAMPLES

47.1 The materials/ products used on the works shall be one of the approved make/ brands out of list of manufacturers/ brands/ makes given in the tender documents. The contractor shall submit samples/ specimens out of approved makes of materials/ products to the Engineer-in-Charge for prior approval. In exceptional circumstances Engineer-in-Charge may allow alternate equivalent makes/ brands of products/ materials at his sole discretion. The final choice of brand/ make shall remain with the Engineer-in-Charge, whose decision in this matter shall be final and binding and nothing extra on this account shall be payable to the Contractor.

47.2 In case no make or brand of any materials, articles, fittings and accessories etc. is specified, the same shall comply with the relevant Indian Standard Specifications and shall bear the ISI/BIS mark. The Engineer-in-Charge and the Owner shall have the discretion to check quality of materials and equipment to be incorporated in the work, at source of supply or site of work and even after incorporation in the work. They shall also have the discretion to check the workmanship of various items of work to be executed in this work. The contractor shall provide the necessary facilities and assistance for this purpose.

The above provisions shall not absolve the contractor from the quality of final product and in getting the material and workmanship quality checked and approved from the Engineer-in-Charge.

47.3 The contractor shall well in advance, produce samples of all materials, articles, fittings, accessories etc. that he proposes to use and get them approved in writing by Engineer-in-Charge. The materials articles etc. as approved shall be labeled as such and shall be signed by Engineer-in-Charge and the Contractor's representative.

47.4 The approved samples shall be kept in the custody of the Engineer- in-Charge till completion of the work. Thereafter the samples except those destroyed during testing shall be returned to the contractor. No payment will be made to the contractor for the samples or samples destroyed in testing.

47.5 The brands of all materials, articles fittings etc. approved together with the names of the manufacturers and firms from which supplies have been arranged shall be recorded in the site order book.

47.6 The contractor shall set up and maintain at his cost, a field-testing laboratory for all day- to-day tests at his own cost to the satisfaction of the Engineer-in-Charge. This field- testing laboratory shall be provided with equipment and facilities to carry out all mandatory field tests as per MOST/CPWD (as the case may be) specifications. The laboratory building shall be constructed and installed with the appropriate facilities; Temperature and humidity controls shall be available wherever necessary during testing of samples.

All equipment shall be provided by the Contractor so as to be compatible with the testing requirements specified. The Contractor shall maintain all the equipment in good working condition for the duration of the contract.

The Contractor shall provide approved qualified personnel to run the laboratory for the duration of the Contract. The number of staff and equipment available must at all times be sufficient to keep pace with the sampling and testing programme as required by the Engineer-in-charge.

The Contractor shall fully service the site laboratory and shall supply everything necessary for its proper functioning, including all transport needed to move equipment and samples to and from sampling points on the site, etc. The Contractor shall re- calibrate all measuring devices whenever so required by the Engineer-in-charge and shall submit the results of such measurements without delay. All field tests shall be carried out in the presence of Engineer-in-Charge or his authorized representative. All costs towards samples, materials, collection, transport, manpower, testing etc. shall be borne by the Contractor and are deemed to be included in the rates quoted by him in the bill of quantities.

48.0 TESTS AND INSPECTION

48.1 The contractor shall carry out the various mandatory tests as per specifications and the technical documents that will be furnished to him during the performance of the work.

All the tests on materials, as recommended by CPWD, MOST and relevant Indian Standard Codes or other standard specifications (including all amendments current at the last date of submission of tender documents) shall be got carried out by the contractor at the fieldtesting laboratory. Further, all building materials or any other items as per direction of the Engineer-in-Charge shall be tested in a Govt. Engineering College before use for construction of the same or periodically as desired from the Engineer-in-Charge. All testing charges, expenses etc. shall be borne by the contractor.

All the tests, either on the field or outside laboratories concerning the execution of the work and supply of materials shall be got carried out by the contractor or Engineer-in-Charge at the cost of the Contractor.

The minimum requirements of testing facility and equipments but not limited to are as follows:

S. No.	Name of Plant & Machinery / equipment	Minimum Required site	No. at & when required	Others (As required)
A	B	C	D	
1.	Excavator			01
2.	JCB	01		
3.	Dozer			01
4.	Dumper/Tipper	04		
5.	Truck	02		
6.	Tractor with trolley	01		
7.	Water Tanker	01		
8.	Batching Plant : Capacity (50 Cum/Hr.)	01		
9.	Transit Mixer	02		
10.	Site Mixers with weigh batcher	02		
11	Skip Hoist/Tower Crane	01		
12	Dewatering / WaterPumps	02		
13	Survey Equipment:			
	a) Total Stn,			01
	b)Theodolite			
	c) Level instruments	02		
14	Details of Steel Shuttering, Staging & props materials	6000 Sqm		
15	Placer Boom/ Concrete Pump Set			01

	assembly		
16	Hand Vibrator	10	
17	Welding Machine	04	
18	DG Set 40 KVA	01	
	** Any other machinery (if required) as per site conditions shall be arranged by the contractor		

In addition to the above minimum facilities required to set up at site of the project, the contractor is liable to set up any other testing facility at site as per the direction of Engineer-in-charge at his cost.

48.2 WORKS TO BE OPEN TO INSPECTION

All works executed or under the course of execution in pursuance of this contract shall at all times be open to inspection and supervision of the Engineer-in-Charge and OIL INDIA LIMITED. The work during its progress or after its completion may also be inspected, by Chief Technical Examiner of Government of India (CTE) and/ or an inspecting authority of State Government of State in which work is executed and/or by third party checks by owner/ clients. The compliance of observations/ improvements as suggested by the Engineer-in-Charge /OIL INDIA LIMITED /CTE/ State authorities/ Owners shall be obligatory on the part of the Contractor at the cost of contractor.

49.0 BORROW AREAS

The contractor shall make his own arrangements for borrow pits and borrow disposal areas including their approaches and space for movement of man, machinery, other equipment as required for carrying out the works. The contractor shall be responsible for taking all safety measures, getting approval, making payment of royalties, charges etc. and nothing extra shall be paid to the contractor on this account and rates quoted by the contractor for various items of bill of quantities shall deemed to include the same.

50.0 CARE OF WORKS

From the commencement to the completion of works and handing over, the contractor shall take full responsibility for care thereof all the works and in case of any damage/loss to the works or to any part thereof or to any temporary works due to lack of Precautions or due to negligence on part of Contractor, the same shall be made good by the Contractor.

51.0 WORK IN MONSOON AND DEWATERING

The execution of the work may entail working in the monsoon also. The contractor must maintain labour force as may be required for the job and plan and execute the construction and erection according to the prescribed schedule. No special/ extra rate will be considered for such work in

monsoon. The contractor's rate shall be considered inclusive of cost of dewatering required if any and no extra rate shall be payable on this account.

52.0 NO COMPENSATION FOR CANCELLATION/ REDUCTION OF WORKS

If at any time after the commencement of the work OIL INDIA LIMITED for any reason whatsoever is required to abandon the work or is not require the whole work thereof as specified in the tender to be carried out, the Engineer-in-Charge shall give notice in writing of the fact to the contractor, who shall have no claim to any payment of compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out or fore-closure, neither shall he have any claim for compensation by reason of any alterations having been made in the original specifications, drawings, designs and instructions which shall involve any curtailment of the work as originally contemplated. Provided that the contractor shall be paid the charges on the cartage only of materials actually and bonafide brought to the site of the work by the contractor and rendered surplus as a result of the abandonment or curtailment of the work or any portion thereof and then taken back by the contractor, provided however, that the Engineer-in-Charge shall have in all such cases the option of taking over all or any such materials at their purchase price or at local current rates whichever may be less.

53.0 RESTRICTION ON SUBLETTING

The contractor shall not sublet or assign the whole or part of the works except where otherwise provided, by the contract and even then only with the prior written consent of the Engineer-in-Charge and OIL INDIA LIMITED and such consent if given shall not relieve the contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults or neglects of any sub-contractor, his agents, servants or workman as full as if they were the acts, defaults or neglects of the contractor, his agent, servants or workman provided always that the provision of labour on piece work basis shall not be deemed to be a subletting under this clause.

54.0 The contractor may entrust specialized items of works to the agencies specialized in the specific trade. The contractor shall give the names and details of such firm whom it is going to employ for approval of Engineer-in-Charge/OIL. These details shall include the expertise, financial status, technical manpower, equipment, and resources and list of works executed and on hand of the specialist agency.

55.0 PROHIBITION OF UNAUTHORISED CONSTRUCTION & OCCUPATION

No unauthorized buildings, construction of structures should be put up by the contractor anywhere on the project site, neither any building built by him shall be un-authorized occupied by him or his staff.

56.0 CO-ORDINATION WITH OTHER AGENCIES

Work shall be carried out in such a manner that the work of other Agencies operating at the site is not hampered due to any action of the Contractor. Proper Co-ordination with other Agencies will be Contractor's responsibility. In case of any dispute the decision of Engineer-in-Charge shall be final and binding on the contractor. No claim whatsoever shall be admissible on this account.

57.0 SETTING OUT OF THE 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. If at any time during the progress of works, shall any error appear or arise in the position, levels, dimensions or alignment of any part of the works, the contractor shall at his own expenses rectify such error to the satisfaction of Engineer-in-charge. The checking of any setting out or of any line or level by the Engineer-in-Charge shall not in any way relieve the contractor of his responsibility for the correctness.

58.0 NOTICE BEFORE COVERING UP THE WORK

The contractor shall give not less than seven days notice before covering up or otherwise placing beyond the reach of measurement any work, to the Engineer-in-charge in order that the same may be inspected and measured. If any work is covered up or placed beyond the reach of Inspection/measurement without such notice or his consent being obtained the same shall be uncovered at the contractor's expenses and he shall have to make it good at his own expenses.

59.0 SITE CLEARANCE

The contractor shall ensure that the working site is kept clean and free of obstructions for easy access to job site and also from safety point of view. Before handing over the work to the Engineer-in-Charge and OIL INDIA LIMITED the contractor shall remove all temporary structures like the site offices, cement godown, stores, labour hutments etc., scaffolding rubbish, left over materials tools and plants, equipments etc., clean and grade the site to the entire satisfaction of the Engineer-in-charge. If this is not done the same will be got done by Engineer-in-Charge and OIL INDIA LIMITED at his risk and cost.

The contractor shall clean all floors, remove cement/ lime/ paint drops and deposits, clean joinery, glass panes etc., touching all painter's works and carry out all other necessary items of works to make the premises clean and tidy before handing over the building, and the Percentage rates quoted by the contractor shall be deemed to have included the same.

60.0 VALUABLE ARTICLES FOUND AT SITE

All gold, silver and other minerals of any description and all precious stones, coins, treasure, relics, antiques and all other similar things which shall be found in, under or upon the site, shall be the property of the owner/ Government and the contractor shall duly preserve the same to the satisfaction of Engineer-in-charge and shall from time to time deliver the same to such person or persons indicated by the OIL INDIA LIMITED.

61.0 MATERIALS OBTAINED FROM DISMANTLEMENT TO BE OWNER'S PROPERTY

All materials like stone, boulders and other materials obtained in the work of dismantling, excavation etc. will be considered owner/ government property and may be issued to the contractor by the owner/ OIL INDIA LIMITED, if required for use in this work at rates approved by Engineer-in-Charge and OIL INDIA LIMITED or the contractor may be asked to dispose these items at his cost.

62.0 SET-OFF OF CONTRACTOR'S LIABILITIES

Engineer-in-Charge shall have the right to deduct or set off the expenses incurred or likely to be incurred by it in rectifying the defects and/or any claim under this agreement against the Contractor from any or against any amount payable to the contractor under this agreement including security deposit and proceeds of performance guarantee.

63.0 MATERIALS PROCURED WITH THE ASSISTANCE OF OIL INDIA LIMITED

If any material for the execution of this contract is procured with the assistance of OIL INDIA LIMITED either by issue from its stores or purchase made under orders or permits or licenses obtained by OIL INDIA LIMITED, the contractor shall hold and use the said materials economically and solely for the purpose of this contract and shall not dispose them without the permission of Engineer-in-charge. The contractor, if required by the OIL INDIA LIMITED, shall return all such surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination on whatsoever reason, on being paid or credited such price as the OIL INDIA LIMITED shall determine having due regard to the conditions of materials.

64.0 ALTERATION IN SPECIFICATION, DESIGN & DRAWING

64.1 The Engineer-in-Charge shall have power to make any alterations in, omissions from, additions to or substitutions for, the original specifications, drawings, designs and instructions that may appear to him to be necessary during the progress of the work, and the contractor shall carry out the work in accordance with any instructions which may be given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions, or substitutions shall not invalidate the contract and any altered, additional or substituted work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work.

If any alteration, amendment or modification of the Specifications shall necessitate any additional, altered or substituted items of Work that are not covered in the Price Schedule, the remuneration for such additional, altered or substituted items of Work that are not covered in the Price Schedule shall be determined by the Engineer-in-Charge in the following manner:

(i) If it is possible to derive the rate(s) for such additional altered or substituted items of Work from any of the items of Work covered in the Price Schedule, the rate(s) for such additional altered or substituted items of Work shall be the rate(s) arrived at on the basis of such derivation. The opinion of the Engineer-in-Charge as to whether the rate(s) for the additional altered or substituted items of Work can be derived from the rate(s) of items already covered in the Price Schedule shall be final and binding on the Contractor.

(ii) If, in the opinion of the Engineer-in-Charge, it is not possible to derive the rate(s) for the additional altered or substituted items of Work from any of the items of the Work covered in the Price Schedule, then the rate(s) for such items of Work shall be determined by taking:

- (a) The issue rate(s) of materials supplied by Owner, if applicable;
- (b) Materials supplied by the Contractor and incorporated in the Permanent Works at the rate(s), if any, specified in the Price Schedule;
- (c) Labour cost at rate(s) for labour, if any, specified in the Price Schedule;
- (d) If the additional altered or substituted items of Work involve the use of any material or labour not covered in the Price Schedule, for the purpose of determining the rates under sub-paragraph (b) and/or (c) above, the prevailing market rate(s) shall be taken into account for determining the rate(s) of such materials and/or labour and an additional 15% (fifteen percent) shall be added to the market rate(s) to cover the Contractor's, supervisions, overheads and profits.
- (e) The opinion of the Engineer-in-Charge as to the quantity or quality of materials and/or labour involved in executing the additional altered or substituted items of Work or as to whether the additional altered or

substituted items of Work involve the use of materials and/or labour that are not covered in the Price Schedule and if not, as to the market rate(s) that shall be applicable shall be final and binding on the Contractor.

64.2 Abnormally High Rated Items (AHR Items):

In item rates contract where the quoted rates for the items exceed 50% of the owners/ estimated rates, such items will be considered as Abnormally High Rated (AHR) items and payment of AHR items beyond the SOR stipulated quantities shall be made at the least of the following rates:

- (i) Rates as per SOR, quoted by the contractor.
- (ii) Rates of the item which shall be derived as follows:
 - a. Based on rates of machine and labour as available from the contract (which includes contractor's supervision, profit, overhead and other expenses).
 - b. In case rates are not available in the contract, rates will be calculated based on prevailing market rates of machine, material and labour plus 15% to cover contractor's supervision, profit, overhead & other expenses.

Against tender for item-rate contracts where the quoted rate is above (+)/below (-) 50% (Fifty Percent) of Company's estimated rate, such items quoted by the successful bidder shall be considered as Abnormally High Rate/Abnormally Low Rate (AHR/ALR) items. Company reserves the right to negotiate rates of all such AHR items, in addition to any other items of the tender as may be considered appropriate, before award of contract. Also, the successful bidder shall provide the analysis of rates quoted for AHR/ALR items to justify the reasonability, if requested by Company. Bidder shall confirm acceptance to the reduced item rates agreed during negotiation and payment shall be based on the agreed rates. The Contractor shall obtain prior permission from Company's Engineer in charge (PMC)/Project Manager (Company's designated officer for job supervision during execution) before executing any quantity in excess, in case the quantities against such AHR items exceed the specified quantities provisioned in the Scheduled of Rate (SOR)/Bill of Quantity (BOQ). Payment of AHR items in excess of quantities stipulated in SOR/BOQ shall be made at the least/lowest of the following rates:

- (a) Rates as per SOR (quoted/agreed by the contractor)
- (b) Rate of the item which shall be derived as follows:
 - (i) Based on rates of machine and labour as available from the contract (which includes contractor's supervision, profit, overheads and other expenses).
 - (ii) In case above rates are not available in the contract, rates will be calculated based on prevailing market rates of machine, materials and labour plus 15% (max) to cover contractor's supervision, profit, overhead & other expenses."

65.0 ACTION AND COMPENSATION PAYABLE IN CASE OF INFERIOR QUALITY WORK

If it shall appear to the Engineer-in-Charge or his authorized subordinate in charge of the work or to the Chief Technical Examiner or to any other inspecting agency of Government/ State Government/ Owner where the work is being executed, that any work has been executed with unsound, imperfect, or unskilful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the contractor shall on demand in writing which shall be made within six months of the completion of the work from the Engineer- in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, Certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own proper charge and cost, and in the event of his failing to do so within a period to be specified by the Engineer-in-Charge in his demand aforesaid, then the Contractor shall be liable to pay compensation at the rate of 0.1% (point one per-cent) of the estimated amount put to tender for every day not exceeding ten days, while his failure to do so shall continue and in the case of any such failure, the Engineer- in-Charge may rectify or remove and re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and expense in all respects of the contractor.

66.0 POSSESSION PRIOR TO COMPLETION

66.1 OIL INDIA LIMITED shall have the right to take possession of or use any completed or partially completed work or part of the work. Such possession or use shall not be deemed to be any acceptance of any work not completed in accordance with the contract agreement.

If such prior possession or use by OIL INDIA LIMITED delays the progress of work an equitable adjustment in the time of completion will be made and the contract agreement shall be deemed to be modified accordingly. The decision of OIL INDIA LIMITED in this case shall be final binding and conclusive.

66.2 When the whole of the works or the items or the groups of items of work for which separate periods of completion have been specified have been completed the contractor will give a notice to that effect to the Engineer-in-Charge in writing. The Engineer in- Charge shall within 7 days of the date of receipt of such notice inspect the works and either the Engineer-in-Charge issues to the contractor a completion certificate stating the date on which in

his opinion the works were completed in accordance with the contract or gives instructions in writing to the contractor specifying the balance items of work which are required to be done by the contractor before completion certificate could be issued. The Engineer-in-Charge shall also notify the contractor of any defect in the works affecting completion.

66.3 The contractor shall during the course of execution prepare and keep updated a complete set of 'as built' drawings to show each and every change from the contract drawings, changes recorded shall be countersigned by the Engineer-in-Charge and the contractor. Four copies of 'as built' drawings shall be supplied to Engineer-in-Charge & OIL INDIA LIMITED by the contractor within 30 days of the completion. All costs incurred in this respect shall be borne by the contractor only.

67.0 TIME ESSENCE OF CONTRACT & EXTENSION FOR DELAY

The time allowed for execution of the Works as specified in the terms of contract or the extended time in accordance with these conditions shall be the essence of the contract. The execution of the works shall commence from the 10th Day or such time period as mentioned in Work order after the date on which the OIL INDIA LIMITED issues written orders to commence the work. If the Contractor commits default in commencing the execution of the work as aforesaid, the Executing Agency shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money absolutely.

67.1 Within 10 (Ten) days of Letter of Intent/ award, the Contractor shall submit a Time and Progress Chart (CPM/ PERT/ Quantified Bar Chart) along with quarterly milestones and resources plan for man, material & machinery to achieve the milestones and get it approved by the Engineer-in-Charge. The Chart shall be prepared in direct relation to the time stated in the contract documents for completion of items of the works. It shall indicate the forecast (mile-stones) of the dates of commencement and completion of various items, trades, sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge/OIL INDIA LIMITED and the Contractor within the limitations of time stipulated in the Contract documents, and further to ensure good progress during the execution of the work.

67.2 If the work(s) is delayed by:

- i) Force-majeure or
- ii) Abnormally bad weather, or
- iii) Serious loss or damage by fire, or

(iv) Civil commotion of workmen, strike or lockout/lockdown, affecting any of the trades employed on the work, is beyond the Contractor's control, then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

67.3 Request for extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form (Attached as Annexure-Format for Extension of Time).

The Contractor will indicate in such a request the period for which extension is desired. In any such case Engineer-in-Charge & OIL INDIA LIMITED may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 01months of the date of receipt of such request

68.0 WITHHOLDING AND LIEN IN RESPECT OF SUMS DUE FROM CONTRACTOR

68.1 Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the contractor, OIL INDIA LIMITED shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any, deposited by the contractor and for the purpose aforesaid, OIL INDIA LIMITED shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, OIL INDIA LIMITED shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with OIL INDIA LIMITED pending finalization or adjudication of any such claim.

68.2 It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge and OIL INDIA LIMITED will be kept withheld or retained as such by the Engineer-in-Charge and OIL INDIA LIMITED till the claim arising out of or under the contract is determined by the competent court and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this

clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge and OIL INDIA LIMITED shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company, as the case may be whether in his individual capacity or otherwise.

68.3 LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS:

Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge and OIL INDIA LIMITED against any claim of the Engineer-in-Charge and OIL INDIA LIMITED in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge and OIL INDIA LIMITED . It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge and OIL INDIA LIMITED will be kept withheld or retained as such by the Engineer-in-Charge and OIL INDIA LIMITED or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be, and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

69.1 DEFECTS LIABILITY PERIOD

The overall defect liability period for the work is 12 (Twelve) Months from the date of completion or handed over of the project whichever is later. However, for major structural works, the overall defect liability period is 24 (Twenty Four) Months from the date of completion or handed over of the project whichever is later. The contractor shall be responsible for the rectification of defects in the building works for a period of twelve months from the date of taking over of the works by the Owner/ Client. Any defects discovered and brought to the notice of the contractor forthwith shall be attended to and rectified by him at his own cost and expense. In case the contractor fails to carry out these rectifications, the same may without prejudice to any other right or remedy available, be got rectified by Engineer-in- Charge and OIL INDIA LIMITED at the cost and expense of the contractor.

In addition to the above, the treatment against water-proofing of basement, roofs, water retaining areas and termite infestation shall be and remain fully effective for a period of not less than 10 (Ten) years to be reckoned from the date of expiring of the Defect Liability period, prescribed in the contract. At any time during the said guarantee period if OIL INDIA LIMITED finds any defects in the aforesaid works treatment or any evidence of re-infestation,

dampness, leakage in any part of buildings or structure and notifies the contractor of the same, the contractor shall be liable to rectify the defect or give re-treatment and shall commence the work or such rectification or re-treatment within seven days from the date of issue of such letter to him.

Further, for the work of supply and installation of lift works the defect liability period along with maintenance period will be of 24 (Twenty Four) Months. Quoted rates shall be deemed to be inclusive of, free comprehensive maintenance (including spares) of lifts for a period of Two years from the accepted date of completion of the project. If any defects or failure is noticed in the work within the specified DLP the same will be notified to the contractor and he will be liable to rectify/re-execute the work at his own expenses within 01 (One Month) time.

If the contractor fails to commence aforesaid works within the stipulated period, OIL INDIA LIMITED may get the same done by another agency at the Contractor's cost and risk and the decision of the Engineer-in-Charge for the cost payable by the contractor shall be final and binding upon him.

69.2 Performance Guarantee:

Performance guarantee shall be 10% of the contract value for which Contractor shall submit a Performance Security amounting to 2.5% of the contract value at the time of award of contract and remaining 7.5% shall be deducted from their running bill(s).

Performance security of 2.5% of the contract value shall be valid upto 15 (Fifteen) Months from the date of completion of the project. It will be released to the Contractor only after completion of 15 (Fifteen) Months from the date of completion or completion of initial overall defect liability period of 12 (Twelve) Months from the time of completion whichever is later. The contractor has to obtain a NOC from OIL after completion of initial DLP of 12 (Twelve) Months.

The remaining 7.5% retention money/security deposit shall be released to the contractor only after successful completion of DLP of 24 (Twenty Four) Months for all the major structural elements and 04 (Four) Nos. of lifts subsequent to the receipt of NOC from OIL in this regard.

70.0 SUSPENSION OF WORKS

(a) The contractor shall, on receipt of the order in writing of the Engineer-in-charge, suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-charge may consider necessary for any of the following reasons:

- i) On account of any default on part of the contractor, or
- ii) For proper execution of the works or part thereof for reason other than the default of the contractor, or

iii) For safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the work to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-charge.

(b) If the suspension is ordered for reasons (ii) and (iii) in sub-para (a) above.

i) If reason for such suspension of work is not attributable to the Contractor, then he/she shall be entitled to an extension of the time equal to the period of every such suspension plus 25%. No adjustment of contract price will be allowed for reasons of such suspension.

ii) In the event of the Contractor treating the suspension as an abandonment of the Contract by OIL INDIA LIMITED, he shall have no claim to payment of any compensation on account of any profit or advantage which he may have derived from the execution of the work in full.

71.0 TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR

Without prejudice to any of the right or remedies under this contract if the contractor dies, the Engineer-in-charge & OIL INDIA LIMITED shall have the option of terminating the contract without compensation to the contractor.

72.0 CLARIFICATION AFTER TENDER SUBMISSION

Tenderer's attention is drawn to the fact that during the period, the bids are under consideration, the bidders are advised to refrain from contacting by any means, OIL INDIA LIMITED and/or his employees/ representatives on matters related to the bid under consideration and that if necessary, OIL INDIA LIMITED will obtain clarifications in writing or as may be necessary. Duly authorized Tender Scrutiny Committee does the tender evaluation and process of award of works and this committee is authorized to discuss and get clarification from the tenderers.

73.0 ADDENDA/ CORRIGENDA

Addenda/Corrigenda to the tender documents may be issued prior to the date of opening of the tender to clarify or effect modification in specification and/or contract terms included in various tender documents. The tenderer shall suitably take into consideration such Addenda/Corrigenda while submitting his tender. The tenderer shall return such Addenda/ Corrigenda duly signed and stamped as confirmation of its receipt and submit along with the tender document. All addenda/ Corrigenda shall be signed and stamped on each page by the tenderer and shall become part of the tender and contract documents.

74.0 QUALITY ASSURANCE PROGRAMME

To ensure that the services under the scope of this contract are in accordance with the specifications, the Contractor shall adopt Quality Assurance Programme to control such activities at the necessary points. The contractor shall prepare and finalise such Quality Assurance Programme within 10 days from letter of intent. Engineer-in- Charge/OIL shall also carryout quality audit and quality surveillance of systems and procedures of Contractor's quality control activities. A Quality Assurance Programme of Contractor shall generally cover the following:

- a) His organization structure for the management and implementation of the proposed Quality Assurance Program.
- b) Documentation control system.
- c) The procedure for purpose of materials and source inspection.
- d) System for site controls including process controls.
- e) Control of non-conforming items and systems for corrective actions.
- f) Inspection and test procedure for site activities.
- g) System for indication and appraisal of inspection status.
- h) System for maintenance of records.
- i) System for handling, storage and delivery.
- j) A quality plan detailing out quality practices and procedures, relevant standards and Acceptance levels for all types of work under the scope of this contract.

The Contractors in the formats appended hereto shall submit all the quality reports. Checklist enclosed here in this document shall be followed while carrying out Construction activities (items). If any item is not covered by the Checklist/ Formats appended hereto, the Format for the same may be developed and submitted to Engineer-in-Charge for approval and the same shall be adopted. These filled in formats shall be prepared in two copies and duly signed by representatives of contractor and Engineer-in- Charge. All the costs associate with Printing of Formats and testing of materials required as per technical specifications or by Engineer-in-charge shall be included in the Contractor's quoted rates in the Schedule/ Bill of quantities.

75.0 APPROVAL OF TEMPORARY / ENABLING WORKS

The setting and nature of all offices, labour camp, huts, access road to the work areas and all other temporary works as may be required for the proper

execution of the works shall be subject to the approval of the Engineer-in-charge.

All the equipment, labour, material including cement, reinforcement and the structural steel required for the enabling/ temporary works associated with the entire Contract- shall have to be arranged by the Contractor only. Nothing extra shall be paid to the Contractor on this account and the percentage rates quoted by the Contractor for various items in the Bill of Quantities shall be deemed to include the cost of enabling works.

76.0 CONTRACT COORDINATION PROCEDURES, COORDINATION MEETINGS AND PROGRESS REPORTING

The Contractor shall prepare and finalize in consultation with Engineer-in-Charge, a detailed contract coordination procedure within 10 days from the date of issue of Letter of Intent for the purpose of execution of the Contract. The Contractor shall have to attend all the meetings at any place in India at his own cost with OIL INDIA LIMITED/PMC during the currency of the Contract, as and when required and fully cooperate with such persons and agencies involved during these discussions. During the execution of the work, Contractor shall submit at his own cost a detailed Monthly progress report to the Engineer-in-charge/OIL by 3rd day of every month. The format of monthly progress report shall be as approved by Engineer-in-Charge/OIL.

77.1 The contractor if required shall demolish old structures on the proposed site properly. The useful material shall be the property of the Engineer-in-Charge/OIL INDIA LIMITED and these materials shall be stacked in workmanship like at the place specified by the Engineer-in-Charge/OIL.

77.2 The contractor shall provide safety equipment and gadgets to all their workers, Supervisors and technical staff engaged in the execution of the work while working. The equipment and gadgets shall also be provided to OIL INDIA LIMITED by the contractor at his own cost for use of OIL INDIA LIMITED officials and /or workforce.

77.3 The cost of the above equipments /gadgets shall be included in the rates quoted by the contractor for the items & works as per bill of Quantities and contractor shall not be entitled for any extra cost in this regard. The above norm is to be strictly complied with at site .In case the contractor is found to be deficient in providing safety equipment/ gadgets in opinion of Engineer-in- Charge, the Engineer-in- Charge at his option can procure the same at the risk & cost of contractor and provide the same for the use at work site and shall make the recoveries from the bills of the contractor for the same. The decision of the Engineer-in- Charge shall be final and binding on contractor in this regard.

78.0 If required, the contractor has to do site clearance, enabling work, barricading, shifting / realignment of existing utility services etc at his own

cost and the contractor shall not be entitled for any extra payment whatsoever in this regard.

79.0 In case of any sort of anomalies and/or typing error in the nomenclature, rates, & Description etc. of the items indicated in the Price bid / BOQ of scheduled items must be read as per respective schedule such as DSR-2021.

80.0 All drawings shall at all times be properly correlated before executing any work. However, in case of any discrepancy in the item given in the schedule of the quantities appended with the tender and architectural drawings relating to relevant item, the former shall prevail unless and otherwise given in writing by the Engineer-in- Charge.

81.0 The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rules and regulations and pay all fees and charges which he may be liable.

82.0 The rate of all items in which use of cement is involved inclusive of all charges for curing.

83.0 Third Party Quality Assurance (TPQA) in 02 (Two) times at 40% and 80% completion stage of the project during the period of Construction if Engineer-in-charge need so from IIT/NIT/GEC have to be done by Construction agency and report for the same have to submit to Engineer-in-Charge.

No extra payment will be made to the Contractor in this regard. The rate quoted by the contractor shall be deemed to be inclusive of all charges of TPQA.

84.0 The stamp duty if any on the contract agreement levied by the Government or any other statutory body shall be paid by the contractor.

85.0 It shall be the responsibility of the contractor to submit 6 sets of as built drawings, service drawings etc. to Engineer-in- Charge / OIL INDIA LIMITED after completion of work with the consultation of engaged architect by OIL INDIA LIMITED.

86.0 Contractor will be responsible for obtaining connections of water, sewerage and electricity from the concerned authority to ensure their proper commissioning so that no defects in operation of connections exist, by carrying out necessary tests etc.

87. Labour safety provisions to be followed as per **Annexure-Labour Safety Provision.**

88. Specification of works enclosed herewith separately.

89. Any changes in drawing/design if required, will be approved by the PMC in consultation with OIL INDIA LIMITED before implementing the same.

90.0 The bidders are advised to not to quote abnormally high or low rates in individual items. If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed.

91. If there is a discrepancy in the quoted rate in figures and in words, then the the rate in words will be considered. Moreover, if there is a mistake in calculating total amount, then the corrected amount calculated by multiplying quantity with quoted rates will be considered and accordingly total gross amount will be calculated.

PART -III, SECTION -III
TECHNICAL SPECIFICATIONS

Annexure- HSE

HSE Points: The following Health Safety & Environment (HSE) points to be complied by the Construction Contractor(s) for the Project and the Role of the PMC will be to ensure implementation of the same at site)-

1. Contractor to align the HSE management system in line with OIL's HSE management system. All applicable rules, regulations, standards and guidelines are to be followed. To comply with all applicable safety, health and environment standards, rules, regulations and orders issued by competent authority pertaining to the assigned activities.
2. Contractor to ensure that workforce deployed is adequately qualified, trained and in state of health to commensurate with the requirements of the job.
3. Contractor supervisors & workers need to be trained as per the applicable statutory requirement / standards and guideline. No person should be employed in any work at a workplace unless that person has received the necessary information, instruction and training so as to be able to do the work competently and safely. The documentation of such training imparted to all its employees should be maintained and produced for verification as required.
4. All contractor workers must undergo the medical examination and submit fitness certificate prior to commencement of work in the installations. The documentation of such medical examination carried out should be maintained and produced for verification as required.
5. All necessary Personal Protective Equipment (PPE) are to be provided by the contractor to its worker as per OIL's requirement.

6. Contractor to ensure that all Tools, Tackles and Machinery being used are properly tested as per Act (and record to be maintained) and are in sound working conditions.

7. Contractor shall arrange for workmen compensation insurance, third party liability insurance, registration under ESI, PF act, Building & Construction Workers Regulation etc. as applicable.

8. 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.

**TECHNICAL SPECIFICATIONS
FOR
FIRE HYDRANTS AND SPRINKLERSYSTEMS**

1.0 TECHNICAL SPECIFICATIONS FOR FIRE HYDRANTS AND SPRINKLERSYSTEMS

1.1 General

Work under this subhead is time-bound and has to be completed within the time limit set in the tender. Work shall be executed in accordance with an agreed schedule which shall be submitted by the tenderers along with offer and agreed to by owners.

1.2 Scope of Work

The scope of work in this subhead shall consist of furnishing all labour, materials, equipment and appliances necessary and required to completely do all work relating to the supply, installation, testing & commissioning of Fire Fighting Systems for **2 Nos. of G+6 residential buildings at OIL, Guwahati** as described herein after and shown on the drawings. The scope of work in general shall include the following.

- i) External & Internal Fire Hydrant System.
 - A. Other piping system ancillaries such as Suction and Delivery Headers, Air Vessel, Pressure Gauges, Pressure Switches, Pump Panel etc. as required.
 - B. 2 Way Fire Brigade Inlet Connection provide.
 - C. Internal Hydrant system where required with single headed landing valves on each floor accompanied by 1 number swinging type Hose Reel, 2 numbers RRL Hoses, 2 numbers of Branch Pipe etc. all housed in the niche. Bidder shall provide front frame with shutter for niche.
 - D. Hand appliance as per Bill of Quantities.
 - E. To obtain the approval of the relevant drawings before actual installation at site and to get the complete installation inspected and passed by the concerned authorities, as may be necessary as per local bye laws. (Any fee payable to the local bodies for such activities shall be included in the rate).

1.3 Contractor's Experience

- 1.3.1 Contractors shall engaged specialist agency only for this work of Fire Fighting systems.
- 1.3.2 The selected specialist agency must have sufficient experience in the execution of projects as specified.

1.4 Technical Information

- 1.4.1 Contractor's attention is specially invited to the special conditions and other clauses in the agreement which required the contractor to:-
 - a. Submit detailed shop drawings.
 - b. Use material of specific makes and brands.
 - c. Obtain all approvals from Fire Fighting authorities.

1.5 Exclusions: Not applicable.

1.6 Site /Locations: PHQ, OIL Guwahati.

1.7 Approvals

The contractor shall prepare all submission drawings and obtain all approvals of firefighting works from firefighting authorities.

1.8 System Description

- 1.8.1 The firefighting system comprising hydrant system & sprinkler system shall be kept pressurized at all times. The proposed Jockey Pump shall take care of the leakages in the system, pipe lines and valve glands.
- 1.8.2 Hydrant system operates in case of fire with the help of manual landing valves & hose reels.

1.8.3 The Internal Hydrant System (Wet Risers) shall be provided at points as indicated on the drawing on each floor.

1.8.4 The hydrant point shall be directly tapped from the Riser pipes, and shall be furnished with required accessories such as

- i) One no. GM single headed hydrant valves.
- ii) Two nos. RRL Hoses of size 63mm dia x 15mlong.
- iii) One no. first aid Dunlop hose reel full swinging type 20mm dia x 30mlong.
- iv) One no. GM Branch pipe.

The hydrant risers shall be terminated with air release valve at the highest points to release the trapped air in the pipe work. At each tapping from the Riser a Orifice Plate shall be located in the lower floors to reduce the pressure.

1.8.12 The entire Wet Risers shall be fed from the water supply (Static Water Tank) to be provided by the others.

1.9 GENERAL SPECIFICATIONS

1.9.1 Pipes and Fittings

Pipes for Wet Riser system shall be of Class-C, heavy duty black steel pipes. Pipes upto 100mm dia shall conform to IS-1239. Pipes with dia 200mm and above (6mm thick) shall confirm to IS- 3589. All pipes shall be I.S.I. marked. Fittings for black steel pipes shall be M.S. forged fittings with tapered screwed threads.

1.9.2 Jointing

Joint for black steel pipes and fittings shall be metal-to-metal tapered thread or welded joints. A small amount of red lead may be used for lubrication and rust prevention in threaded joints.

Joints between C.I. or black steel pipes, valves and other apparatus, pumps etc. shall be made with C.I. or M.S. flanges with appropriate number of bolts. Flanged joints shall be made with 3mm thick insertion rubbergasket.

Note: Joints for pipes and fittings upto 50mm diameter shall be threaded joints using Teflon Tape or equivalent bonding tape on the threads. Joints for pipe and fittings above 50mm diameter shall be welded joints.

1.9.3 Pipe Protection

- a) Protection of Underground Pipes:
- i. The underground steel pipes shall be protected by coating and wrapping. The coating and wrapping shall be done, in general, as per IS:10221-1982. The pipe coat primer shall have density of 0.92 gm/cc and drying time of 24 hours at RH 70% and temp. 30 C. Viscosity shall be 1000-2000cps.
 - ii. The pipe coat shall be a puncture resistant non-woven polyester mat 4mm thick of high mechanical strength. The mat shall be in 7 layers. The layers shall be so arranged as to give extra protection to high molecular high density polythene core which is the main permeable agent in the system.
 - iii. Pipecoat Primer shall be applied on the pipe in a uniform coat leaving no drops runs. The entire surface of pipe should be primed without any patch left out. Unprimed surfaces shall reprimed immediately. Any uncleaned pipe shall be scraped down to surface of pipe and reprimed Pipecoat Primer shall essentially be thin layer for quicker drying.
 - iv. The surface shall be dry at the time of applying Pipecoat Primer.
 - v. Freshly primed pipe shall be placed on clean square cut skids and shall not be allowed to come in contact with ground or any foreign matter. It shall remain on skids until lifted or cradled after coating and wrapping operation.
 - vi. All primed pipes which have excessive coat of dust accumulated over them before primer is dry or where primer has become dead, shall be reprimed. Drying time shall be minimum 24 hours. The application of Pipe coat membrane shall be taken up soon after

primer coat has dried up completely and in case within three days after priming. Otherwise fresh coat of primer shall be applied.

- vii. Membrane shall be blown under tension by means of blowtorch. In this process, the inner surface of the membrane, being 10 micron thick polyethylene layer is burnt while at the same time the polymeric mix under it is softened taking care that the center core is not over heated. This molten polymeric mix is then passed over pipe surface so that no air is entrapped or voids formed underneath.
- viii. Pipecoat Primer shall be applied with brushes after cleaning the pipe thoroughly. Pipecoat Membrane shall be wrapped as mentioned above.
- ix. No wrinkling of the wrapper shall be allowed and all overlaps shall be firmly fused to secure a firm wrapping coating shall be absolutely free from pinholes and bubbles.

1.9.4 Installation of Pipes

All pipes shall be adequately supported from ceiling or walls by structural clamps fabricated from

The underground piping shall be supported with cement concrete blocks of suitable size and strength provided at an interval of 2.5 mtrs. The pipes shall be laid at 1 mtr depth (top of the pipe) and trench excavated for sufficient width. The rate for pipe shall include the scope of excavation/refilling the trench. 1:2:4 concrete thrust blocks are also to be provided at turning of pipe. The cost of installation includes concrete pedestals etc. as required and to be included in the item rate.

1.9.5 Air Release Valve

Air Valves are to be provided on all high points in the system. These shall be 25 mm dia screwed inlet forged brass single acting air valves connected with ball valve on inlet side.

1.9.6 Valves & Other Accessories

1.9.7.1 General

Each valve body shall be marked with cast or stamped lettering giving the following information's:

- a) The manufacturer's name or trademark
- b) The size of the valve
- c) The guaranteed working pressure

Isolating valves on the water supply lines shall be full bore ball valve type for pipe diameters upto 50mm. For 65mm dia and above these shall be butterfly valves.

1.9.7 Full Way Ball Valve

The valves shall be of full bore type and of quality approved by the Consultant/Owner. The body and ball shall be of copper alloy and stem seat shall be of Teflon.

1.9.8 Butterfly Valves

The valve shall be of cast iron conforming to relevant IS:13095 of PN-16 rating. The valve shall be of quality approved by the Consultant/Owner.

1.9.9 Non-Return Valves

Non-return valves are to be IS:778-1984 of PN-16 rating manufactured from gun-metal or dezincification resistant brass.

1.9.10 Drain Valve

Drain Valves are to be provided at all low points in the system for draining the water. These shall be 50mm dia full way ball valve fixed on 50mm dia black steel pipe.

1.9.11 Pressure Switches

Pressure switches shall be differential type for operation of pump and for the various duties and settings required. Pressure switches shall be for heavy duty operation and of approved make. All pressure switches shall be factory calibrated.

1.10 Internal Landing Valves

The internal landing valves shall be SS double-headed and conforming to IS:5290. It shall be complete with hand wheel, quick coupling connection spring loaded type and blank cap.

1.11 Hose pipes, Branch Pipes and Nozzles

Hose Pipe: Hose pipe shall be rubber lined woven jacketed and 63mm in diameter. They shall conform to type-A (Reinforced rubber lined) of IS:639-1979. The hose shall be sufficiently flexible and capable of being rolled.

Each run of hose pipe shall be complete with necessary coupling at the ends to match with the landing valve or with another run hose pipe or with Branch pipe. The couplings shall be of instantaneous spring lock type.

Branch Pipe: Branch pipe shall be of GM 63mm dia and be complete with male instantaneous spring lock type coupling for connection to the hose pipe. The branch pipe shall be externally threaded to receive the nozzle.

Nozzle: The nozzle shall be of copper or SS, 20mm in internal diameter. The screw threads at the inlet connection shall match with the threading on the branch pipe, the inlet end shall have a hexagonal head to facilitate screwing of the nozzle on to the branch pipe with nozzle spanner.

End couplings, branch pipes, and nozzles shall conform to IS: 903-1985. Two hoses of 15 mtr. Lengths with couplings shall be provided with each external (yard) hydrant. One nozzle and one branch pipe with coupling shall be provided with each yard hydrant.

1.12 Internal Fire Hose Cabinet

Each internal fire hydrant valve shall be housed in a niche of size indicated on drawings. Each internal fire hose Cabinet shall hold double headed hydrant, 4 Hoses and 2 Branch pipes and 1 no. Dunlop hose reel mounted on a drum.

- A) The cabinet shutters & frames shall be fabricated from boxed steel sections and MS plate 2mm thick.
- B) The front glass of shutters shall be 5.0mm thick clear float glass and shall be held by means of rubber. Locking arrangement shall also be made with one number of mortice lock of approved make. A separate Key Box of 16 mm thick MS sheet with glass facing shall be provided.
- C) The Shutters shall be given a powder coat finish in post officer red colour.

1.13 Hose Reel

The hose reel shall be directly tapped from the riser through a 25 mm dia pipe, the drum and the reel being firmly held against the wall by use of dash fasteners. The Hose Reel shall be swinging type (180 degrees) and the entire Drum, Reel etc shall be as per IS:884. The rubber tubing shall be of approved quality and the nozzle shall be 6 mm dia shut off type.

1.14 Brigade inlet Connections

One set of 2 ways collecting head Fire Brigade connection shall be provided at the location indicated in the drawing.

The inlet to the riser shall be with 100mm dia sluice valve and non-return valve. The scope shall include providing necessary reducers, tees bends and special fittings as required. Necessary enclosure made of 2mm thick sheet metal with support shall be provided, as in the case of hose cabinets.

1.15 Testing

1.18.1 Testing on Completion of Installation

The entire system shall be tested after completion of installation as per the operating sequence specified.

Approvals It shall be the responsibility of the contractor to obtain the approval of drawings and to get the installation inspected and passed by any concerned authorities, as may be necessary as per local by-laws, any fee payable to the local bodies for such activities shall be included in therate.

Standards and Codes

1. IS – 1648–1961 Code of Practice for fire safetyof building (general) fire fighting equipment andmaintenance.
2. IS – 3844–1966 Code of practice for installation of internal fire hydrant inmulti-stores building.
3. IS – 2217–1963 Recommendation for providing first aid and fire fighting arrangement in publicbuildings.
4. IS – 2190–971 Code of practice for selection, installation and maintenance of portable first fireappliance.
5. IS-3589 Electrically WeldedSteelpipes(Medium class)
6. IS-1239 Mild steel tubes, Tubulers and other wrought steel fittings (Mediumclass)
7. IS-780 C.I. Double flanges sluicevalve.
8. IS-778 Gun MetalValves
9. IS – 909–1965 External fire hydrant(underground)
10. IS – 5290–1969 Internal LandingValve

- | | | |
|-----|----------------|----------------------------------------------------------------------|
| 11. | IS – 884–1969 | First and hose reel |
| 12. | IS – 934–1976 | Specification for portable chemical fire extinguisher soda acidtype. |
| 13. | IS – 2873–1969 | Specification for fire extinguisher for carbondioxide |
| 14. | IS – 2189&2109 | Automatic fire alarm system orBSS 3116. |
| 15. | | National BuildingCod |

1.19 LIST OF APPROVED MAKES (FOR FIRE FIGHTINGWORKS)

Engineer-in-Charge reserve the right to select the any of the brand out of the Brands listed in list of approved makes. Contractor to obtain written approval of Brand and model prior to procurement of material.

2.0.1 Internal Fire Hydrants Pipes

Specified pipes for fire hydrant system shall be measured in running metre along the centre line of the pipe lines and the rate shall include the cost of all necessary fittings, supports, clamps, cutting chases and holes in walls, floors and making necessary excavation, backfilling and disposal of surplus earth, where required. The rate shall be inclusive of the cost of necessary fittings, painting, testing and commissioning of the pipe lines, as specified.

2.0.2 Masonry, RCC Chambers for Valves, Hydrants, etc.

Chambers shall be measured in number according to type. The rates shall include-

Necessary excavation in any kind of soil backfilling and disposal of surplus earth as specified.

Protecting the excavation with all necessary shoring, strutting and keeping the excavation clear of water.

Providing and laying foundation concrete as shown on drawing and as specified.

Providing and constructing brick masonry walls in cement mortar/RCC walls including reinforcement as shown on drawing and as specified. The openings required to be left open for pipes and subsequent reinforcement grouting shall also be included in the rates.

Providing and casting RCC top slab including reinforcement as shown on drawing and as specified.

Providing fitting and fixing C.I access cover including frame as shown on drawing and as specified and/or directed at site by the Engineer-in-Charge.

Providing external cement plaster 1:4 with water proofing compound 150mm from the bottom of the top slab for the external faces of the chamber walls. All external faces of chamber in touch with soil to be painted with two coats of bitumen coatings.

Providing concrete benching, seats, etc for pipes and valves as shown in the drawing and as directed by the Engineer-in-Charge.

The rates quoted shall be net and should any variation occur either in drawings or in specifications, the rates of individual items of work quoted in civil work shall apply.

2.0.3 Accessories for Fire Fighting Systems

All accessories for fire-fighting system e.g. fire hydrants, RRL hoses, hose reels, branch pipes fire hose cabinets, air valves etc. shall be measured in numbers and shall include all items as given in the Bill of quantities.

2.0.4 Clamps, supports and fasteners:

In all types of work all supports, hangers and clamps to be fixed on RCC beam, walls, columns, slab, boundary wall and piers by means of approved galvanized expandable anchor fasteners in drilled hole of correct size and should be sufficiently strong to carry the load of pipes etc. Drilling should be done by approved power drill as recommended and approved by the manufacturers of anchor fasteners. Failure of any fastening device shall be the entire responsibilities of the contractor and he will replace such defective fasteners at his own cost. Project manager in the interest of work may use such clamps, fasteners, hangers etc. for other services also.

The project manager may modify the design and utilization of clamps, hangers, supports, fasteners contractor is not entitled to refuse such modification and no extra cost will be entitled for such modifications.

END OF FIRE FIGHTING
SPECIFICATIONS



1.0 SPECIFICATIONS FOR PHE WORKS

1.1 General

1.1.1 Scope of work

The scope of work in this subhead comprises supply, installation, commissioning and testing of water supply, sewerage and drainage, sanitary fixtures and fittings & water pumping for **02 Nos. of G+6 Residential Building at OIL, Guwahati**. The scope of work includes supply of all materials as per specifications and drawings, laying, fitting, fixing, installation and commissioning the same.

1.2 Specification for schedule items

1.2.1 All the water supply, drainage & sewerage works of schedule items shall be carried out strictly as per printed central PWD Specifications, 2009 Vol.(II) with up to date corrections.

1.2.2 All the water supply and sanitary works shall be carried out by the licensed plumbers approved by the Local Authorities and skilled workmen, experienced in the trade.

1.2.3 Only specified brand of material will be used subject to the approval of the sample.

1.2.4 All workmanship shall conform to Indian Standard Codes of Practice. The fixing and finishing shall be neat, true to level and plumb. Manufacturer's instructions shall be followed closely regarding installation and commissioning. All fixtures shall be protected throughout the progress of the work from damage. Special care shall be taken to prevent damage and scratching of fittings. Tool marks on exposed fixtures shall not be accepted. Protective paper on fixtures shall be removed with hot water only at the final completion of work.

1.2.5

SUBHEAD4.0 PREAMBLE TO THE PRICING OF BILL OF QUANTITIES FOR PHE WORKS

4.1 GENERAL

- 4.1.1 This section shall be applicable for item rate work and for variations.
- 4.1.2 This preamble covers water supply, sewerage, drainage, sanitary fittings, solar heating system, pumping systems, water treatment, RO plant & sewage treatment plant.
- 4.1.3 This preamble shall be read in conjunction with the specifications, condition of contract, drawings and all other documents accompanying the tender papers.
- 4.1.4 For all items of work the rates shall be comprehensive and all inclusive excluding GST. The rates shall include for all matters and things necessary for satisfactory completion and maintenance of the work in proper working order and to the satisfaction of the Engineer-in-Charge, including testing, making samples, etc., and all that have been indicated in the specifications or other Tender Documents either directly or indirectly, and cover for all obligation of the Contractor under the Contract. No claim for additional payment shall be allowed for any error or misunderstanding by the contractor of the work involved.
- 4.1.5 Unless otherwise mentioned in the description of the item, this Bill of Quantities shall be applicable for work in any height, position or condition.
- 4.1.6 Unless other wise stated, method of measurement as described in the latest editions of I.S.1200 with its parts corresponding to different sections of work shall be followed. In case of any dispute in this matter, the decision of Engineer-in-Charge shall be final, binding and conclusive.
- 4.1.7 The following notations have been used throughout the Bill of quantities.
- | | | |
|-----------------|---|-------------------|
| m | - | Metre |
| mm | - | Millimetre |
| m ² | - | Square Metre |
| mm ² | - | Square Millimetre |
| m ³ | - | Cubic Metre |

No.	-	Number/Numbers
Dia	-	Diameter
Kg.	-	Kilogramme/s
T	-	MetricTonne
L.S	-	Lumpsum
Pt.	-	Point/Points
Set	-	Set/Sets
C/C	-	Centre to Centre
@	-	At the rate of
V	-	Volt/Volts
A	-	Ampere/s
SWG	-	Standard Wire Gauge

4.1.8 The Contractor shall be deemed to have full knowledge of all his obligations under the Contract and shall be deemed to have made full allowance for complying with all such obligations in his offer.

4.2 TRADE PREAMBLE

4.2.1 External Water Supply Pipes

Pipe laying, excavation, bedding, de watering of the trench where necessary, jointing (include for all joints, gaskets, nuts, bolts, jointing compound) back filling in trench and disposal of surplus earth pipes shall be measured by length for an average depth as a single item but separately in accordance with type and diameter of pipe,testing necessary rectification,and sterilizing the pipe line including supplying of necessary water,chemical sand disinfectant and disposal of the water after use, should be included in this rate.

Pipe laying as per specifications shall be measured in Running Metre as actually laid measured along the centre line of the pipe line for and average depth. The bends, junctions, specials, fittings shall be included in Running Metre length of the pipe. The rates for pipe laying shall include :

- (A) Excavation of trenches in any kind of soil backfilling and disposal of surplus earth as specified.
- (B) Providing required beddings as shown in drawing and as specified.
- (C) Providing the pipes and fittings, joints, specials, etc. to the site.
- (D) Lowering the pipes, fitting, etc. into trench, jointing and fixing true

to line and level.

- (E) Providing all equipment, labour and materials, necessary to carry out the above works complete in all respects as specified and/or instructed.
- (F) Installation of valves, metres, other fittings and similar items, etc. as shown and specified.
- (G) Construction of thrust blocks as specified.
- (H) Testing, cleaning sterilisation of pipe lines including supply of required water for such work.
- (I) Filling river sand around GI pipe.
- (J) Commissioning of completed pipelines.
- (K) Backfilling to finished grade level with approved materials as shown and directed by the Engineer-in-Charge.
- (L) Removal of surplus excavated materials to an approved dumping yard.

Chambers

Valve chambers, surface boxes and similar items shall be measured by number constructed according to type.

Appurtenances

Valves, metres, taps and similar items shall be measured by number supplied. The installation shall be included in the rate for laying etc. of the pipes measured by length.

Fittings

Pipe fittings, such as tees, bends, elbows, reducers and similar items shall be measured with pipes. Installation shall be included in the linear metre rate for laying etc. of the pipe line.

4.2.2 Masonry, RCC Chambers for Valves, Hydrants, etc.

Chambers shall be measured in number according to type. The rates shall include- Necessary excavation in any kind of soil back filling and disposal of surplus earth as specified.

Protecting the excavation with all necessary shoring, strutting and keeping the excavation clear of water.

Providing and laying foundation concrete as shown on drawing and as specified.

Providing and constructing brick masonry walls in cement mortar/RCC walls including reinforcement as shown on drawing and as specified. The openings required to be left open for pipes and subsequent reinforcement grouting shall also be included in the rates.

Providing and casting RCC top slab including reinforcement as shown on drawing and as specified.

Providing fitting and fixing C.I access cover including frame as shown on drawing and as specified and/or directed at site by the Engineer-in-Charge.

Providing external cement plaster 1:4 with water proofing compound 150mm from the bottom of the top slab for the external faces of the chamber walls. All external faces of chamber in touch with soil to be painted with two coats of bitumen coatings.

Providing concrete benching, seats, etc for pipes and valves as shown in the drawing and as directed by the Engineer-in-Charge.

The rates quoted shall be net and should any variation occur either in drawings or in specifications, the rates of individual items of work quoted in civil work shall apply.

4.2.3 Valves, Meters etc.

For supply of valves, meters, taps and similar items shall be measured by number. This rate shall also include cost of installation and fitting.

4.2.4 External Drainage

- a) Specified pipes shall be measured per Running Metre for the clear length between the chambers and appurtenances for an average depth. The rate

shall be inclusive of the cost of pipes, all fittings, jointing and testing of pipes and fittings etc. as specified.

- b) Manholes and chambers shall be measured in number and shall include all works as stated in 4.3.2.
- c) Specified gully traps shall be measured by number and the rate shall include the cost of masonry chamber with cover, 150 x 150 mm C.I. grating including fixing in position with cement mortar.

4.2.5 Soil and waste Vent and Rain Water Pipes

- a) Soil, waste, vent and rain water pipes shall be measured in running metres as actually laid. The cost of all fittings, e.g. bends, junctions, off sets, terminal guards, clamps and jointing shall be included in the rate. The rate of pipes shall be inclusive of excavation, backfilling and disposal of surplus earth (where required), cutting chases , holes in walls and floors and making good and testing all complete as perspecifications.
- b) Specified floor traps shall be measured by numbers and shall include the cost of CP brass cockroach trap & grating of the required size and setting the floor traps in cement concrete with suitable extension pieces where required.

4.2.6 Internal Water Supply

- a) Specified pipes for cold and hot water supply compressed air & gas supply lines shall be measured in running metre along the centre line of the pipe lines and the rate shall include the cost of all necessary fittings, clamps, cutting chases and holes in walls, floors and making necessary excavation,back filing and disposal of surplus earth, where required.The rate shall be inclusive of the cost of necessary fittings,testing and commissioning and painting of the pipelines,as specified.
- b) Valves and taps shall be measured bynumbers.
- c) Insulation to hot water pipes shall be measured separately.

4.2.7 Sanitary Fixtures

All sanitary fixtures of specified trade mark or equivalent shall be paid by number and rate shall be included all C.P. fittings, traps,

flushing cisterns, specials, connecting pipes all fixing components, brackets, screws, etc. as stated in Bill of Quantities.

4.2.8 Mechanical Equipment

All mechanical equipment e.g Filter, Pumps & Electrical Panels etc. shall be measured in number and the rate shall include all items of work as given in specifications & Schedule of Quantities. The cost of construction of suitable foundations duly approved by the Engineer- in-Charge is also deemed to be included in the rate of the particular equipment.

END OF PHE SPECIFICATION

CIVIL WORK SPECIFICATIONS

General:

The entire works shall be done as per CPWD specifications with up to date correction. However, in the event of any discrepancy in the description of any item as given in the Schedule of quantities appended with the tender and the specifications relating to the relevant item as per CPWD specifications mentioned above the former shall prevail. If the specifications for any item are not available in the CPWD specifications cited above relevant IS specifications shall be followed. In case ISI specifications are also not available the decision of the Engineer-in-charge given in written based on acceptable sound engineering practice and local usage shall be final and binding on the contractor.

1.0 The work shall be executed and measured as per metric dimensions given in the Schedule of quantities, drawings etc. (FPS units wherever indicated are for guidance only)

2.0 The following modifications, to the above specifications and some additional specifications shall however apply:

i) All stone aggregate and stone ballast shall be of hard stone variety to be obtained from approved queries at or any other source to be got approved by the Engineer-in-charge.

ii) Sand to be used for cement concrete work mortar for masonry and plaster work shall be of standard quality. Sand shall be obtained from any source to be got approved by the Engineer-in-charge and screened as required. The same shall consist of hard silicious material. It shall be clean sand if the sand brought to site is dirty it must be washed clean in water and should conform to clause 3.1.5.1 of CPWD specifications 91-92 or latest edition for fine sand and clause 3.1.5.4 of CPWD specification 91-92 for coarse sand except for grading purposes.

3.0 Wherever any reference to any Indian standard specification occurs in the documents relating to this contract the same shall be inclusive of all amendments issued there to or revisions thereof if any upto the date of receipt of tenders.

4.0 The rates for different items of works shall be for all heights and depth of the building accept where otherwise specified in the items of work.

4.0 i) The work will be carried out in accordance with the architect drawings and structural drawings., to be issued by the Engineer-in-charge. The structural and architectural drawings shall have to be properly noticed between Architectural and structural drawings, final decision in writing of the Engineer- in-charge/OIL shall be obtained by the contractor. For items where so required sample shall be prepared before starting the particular items of work for prior approval of the Engineer-in-charge/OIL and nothing extra shall be payable on this account.

5.0 Articles manufactured by reputed firms and approved by the Engineer-in-charge/OIL shall only be used. Only articles classified as “First quality” by the manufactures shall be used unless otherwise specified. Preference shall be given to those articles which bear ISI certification marks. In case articles bearing ISI certification marks are not available the quality of samples brought by the contractor shall be judged by the standards laid down in the relevant CPWD specifications. For items not covered by CPWD specifications relevant ISI standards shall apply.

6.0 The contractor shall give a performance test of installations as per specification before the work is finally accepted and nothing extra whatsoever shall be payable to contractor on this account.

7.0 The work shall be carried out in a manner complying in all aspects with the requirements of relevant bye-laws of the GMDA/GMC and OIL. Improvement trust under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-charge and nothing extra shall be paid on this account.

8.0 If any other agencies also engage in work in the same area or nearby area, the contractor shall facilitate smooth working conditions for those agencies. The contractor shall leave necessary holes, openings etc., for laying/buying in the work pipes, cables, conduits, clamps, boxes and hooks for clamps etc. as may be required for the electric and sanitary work etc. and nothing extra over the agreement rates shall be paid for the same.

9.0 Unless otherwise specified in the schedule of quantities the rates for all items of the work shall be considered as inclusive of pumping out or balling out water if required for which no extra payment will be made. This will include water encountered from any sources such as rains, floods, subsoil water table being high due to any other cause whatsoever.

10.0 Any cement slurry added over base surface or for continuation of concerning for better bond is added to have been in built in the item (unless otherwise/explicitly stated) and nothing extra shall be payable (or) extra cement considered with consumption on its account.

11.0 The rate for all items in which the use of cement is involved is inclusive of charges for curing.

12.0 The foundation trenches shall be kept free from water while all the works below ground level are in progress.

13.0 The fineness modulus of sand to be used in different works shall be as follows

i). Course sand Fineness modulus As specified in the item like Between 2.5 to 3.5 plain concrete, RCC work, flooring work etc.

ii). Fine sand Fineness modulus as specified in the item like between 1.2 to 1.6 finishing coat of cement plaster skirting clade etc. The coarse sand to be used at site shall be of light golden colour.

14.0 BRICKWORKS

Autoclaved Aerated concrete (AAC) blocks masonry 100 mm/ 125 mm thick with Grade-I AAC blocks of density 551 to 650 kg/ cum conforming to IS: 2185 (Part 3) in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand).

The samples of AAC blocks (each sample consisting of 6 specimen) shall be chosen randomly from the lot procured and tested for various parameters specified in para 6 above. One samples shall be tested for every 100 cum or part thereof. However, minimum one sample shall be tested from each lot received at site if the quantity procured in the lot is less than 100 cum. If required, Engineer-in-Charge or his authorized representative shall inspect the factory during production of the material for this work and also collect samples (of materials used for making AAC blocks and precast AAC blocks) from the factory itself. The contractor shall consider this contingency also while placing the order with one of the approved firms. Nothing extra shall be payable on this account.

15. 0 CONCRETE WORK:

TYPE OF CONCRETE MIX: Unless otherwise noted on drawings, all

lean/plain concrete shall be of Nominal Mix type and reinforced concrete shall be of Design Mix type.

Nominal Mix Concrete: This concrete shall be made (without preliminary tests) by adopting nominal concrete mix with proportions of materials as specified in Table 9 of IS 456.

Design Mix Concrete: The mix shall be designed as per IS: 10262 in an approved laboratory to produce the grade of concrete having the required workability and characteristic strength. The target mean strength of concrete mix shall be equal to the characteristic strength plus 1.65 times the standard deviation. As long as the quality of materials does not change, a mix design done earlier but not prior to one year may be considered adequate for later work. However, in case the source & quality of materials changes or there is a break in the continuity of construction, the Engineer-In-Charge shall ask for a new design mix. Irrespective of the grade of concrete required to be produced as per characteristic strength criteria, the minimum cement content and maximum water cement ratio in the design concrete shall be strictly maintained as stipulated in Table 5 of IS 456.

Consistency: The concrete shall have a consistency such that it shall be workable in the required position and when properly vibrated it flows around reinforcing steel, all embedded fixtures, etc.

Workability: "Workability of Concrete" shall be as per clause 7 of IS 456. 5.4 Durability For achieving sufficiently durable concrete, strong, dense aggregates, low water-cement ratio and adequate cement content shall always be used. Workability of concrete shall be such that concrete can be completely compacted with the means available. Leak-proof formwork shall be used so as to ensure no loss of cement-slurry during pouring and compaction. Cover to reinforcement shall be uniform. Concrete mix design shall always take into account the type of cement, minimum cement content irrespective of the type of cement and maximum water cement ratio and minimum grade of concrete conforming to environmental exposure conditions (refer Table 3 of IS 456) as given in Table 5 of IS: 456.

CONCRETE MIXING: Ready Mixed Concrete supplied by Ready Mixed Concrete Plants or from on/off-site batching plants (IS 4926) shall be used for structural concrete. All records and charts for the batching and mixing operations shall be prepared and maintained by the contractor in accordance with IS 4926 or as per the instructions of Engineer-in-Charge. In case Ready Mixed Concrete is not available, the

mixing of concrete shall be strictly carried out in an approved type of mechanical concrete mixer. The mixer shall be fitted with water measuring devices. The mixing shall be continued until there is a uniform distribution of the material and the mass is uniform in colour and consistency. If there is segregation after unloading from the mixer, the concrete shall be remixed.

Mixer: Mechanical Mixers shall comply with IS 1791 and 12119 and shall be maintained in satisfactory operating condition. These shall be used only for producing lean/ plain concrete and/ or nominal mix concrete wherever permitted.

Vibrators 8. 1 .2. 1 Concrete shall be compacted with mechanical vibrating equipment supplemented, if necessary to obtain consolidation, by hand spreading, rodding and tamping. The vibrators shall be of immersion type with operational frequency ranging between 8,000 to 12,000 vibrations per minute. All vibrators shall comply with IS 2505.

CURING: Concrete shall be cured by keeping it continuously moist wet for the specified period of time to ensure complete hydration of cement and its hardening. Curing shall be started after 8 hours of placement of concrete in normal weather, and in hot weather after 4 hours. The water used for curing shall be of the same quality as that used for making of concrete.

Strength Test of Concrete: Samples from fresh concrete shall be taken as per IS 1199 and cubes shall be made, cured and tested at 28 days in accordance with IS 516. 15.3.2 In order to get a relatively quicker idea of the quality of concrete, optional tests on beams for modulus of rupture at 72+2 hours or at 7 days, or compressive strength tests at 7 days may be carried out in addition to 28 days compressive strength tests. For this purpose, the values shall be arrived at based on actual testing. In all cases, the 28 days compressive strength shall alone be the criterion for acceptance or rejection of the concrete.

FREQUENCY OF CONCRETE SAMPLING: The minimum frequency of sampling of concrete for each grade shall be in accordance with the Table below.

Quantity of concrete in the work (m3)	Number of samples
1-5	1 (3 cubes)
6-15	2 (6 cubes)
16-30	3 (9 cubes)
31-50	4 (12 cubes)
More than 50	4 plus one additional sample for each additional 50 m ³ or part thereof.
The number of samples mentioned in the table is for a 28 days compressive strength compliance requirement. Additional samples atleast one set (03 Nos.) of cubes shall be casted to determine the strength of 7 days or at the time of striking the formwork as per the instruction of the engineer-in-charge.	

In respect of projected balconies, projected slabs at roof level and projected verandah the payment for the RCC work shall be made under the item of RCC slabs. The payment for centering and shuttering of such items shall similarly be paid under the item of centering and shuttering of RCC slab. Nothing extra shall be paid for the side shuttering at the edges of these projected balconies and projected verandahs. All the exposed edge shall however be finished as per specifications and nothing extra shall be paid for this.

In the item of RCC walls, railings and roofs etc. nothing extra shall be paid for making designs as per patterns given by Architects or for thickness of sections.

The rates for railing are inclusive of all the labour and the materials including of the item, portion of the railing which is embedded in the masonry or RCC shall not be included for measurements.

16.0 PRE CAST RCC

The compaction of the concrete shall be done by vibrations, table or external vibrator as approved by Engineer-in-charge. The rate quoted for the item shall include the element both for form work and mechanical vibration.

The water will be tested with regard to its suitability for use in RCC work and nothing extra will be paid for on this account.

The rate of item of reinforcement in RCC work includes all operations including straightening, cutting, bending, binding with ankeled wire and placing in position at all the floors weight all leads and lifts

complete.

17. FOUNDATION TYPE:

The foundation type is pile. Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by percussion drilling using Direct mud circulation (DMC) or Bailer and chisel technique by tripod and mechanical Winch Machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured up to bottom of pile cap) are to be considered.

Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used

Vertical load testing (initial) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification and up to 50 tonne capacity pile

18.0 FORM WORK: Forms for concrete shall be of plywood conforming to IS 6461 (Part-5) or steel or as directed by the Engineer-in-Charge and shall give smooth and even surface after removal thereof. If it is desired by Engineer-In-Charge, the Contractor shall prepare, before commencement of actual work, design and drawings for formwork and get them approved by the Engineer-in-Charge. For details regarding design, detailing etc., reference may be made to IS 14687. Form work and its supports shall maintain their correct position and be to correct shape and profile so that the final concrete structure is within the limits of dimensional tolerances specified below, unless required otherwise, for functional/aesthetic reasons. The decision of the Engineer-in-Charge shall be final and binding in this regard.

19.0 REINFORCEMENT

The Contractor shall develop the bar bending schedule for all RCC structures/ structural parts at no extra cost to the Owner and shall get it reviewed by the Engineer-in-charge. Reinforcement shall be cut and bent to shape as per dimensions shown in the bar bending schedule/ drawings. If protective fusion bonded epoxy coating is required to be applied on reinforcement bars, the same shall be done as per IS 13620. All repairs to applied protective coating required due to mishandling and/ or bending of reinforcement bars shall also be done as per relevant clauses of IS 13620.

21.2 Straightening, Cutting and Bending Procedure for cutting and bending shall be as given in IS 2502. Bars shall be bent in a slow and regular movement to avoid fractures by mechanical means only. In case bars are supplied in coils, they shall be smoothly straightened without any kinks. Cold twisted deformed bars shall be bent cold. Bars larger than 25 mm in size (except cold twisted deformed bars) may be bent hot at cherry red heat to a temperature not exceeding 850°Celsius as per the instructions of the Engineer-in-Charge. The bars shall be allowed to cool gradually without quenching. Bars shall be cut & bend in a Bar Bending Machine. Bars which develops cracks or splits after bending shall be rejected. A second bending of reinforcement bars shall be avoided but when reinforcement bars are bent aside at construction joints and afterwards bent back into their original position, care should be taken to ensure that at no time is radius of the bend less than 6 times bar diameter for high strength deformed bars. Care shall also be taken when bending back the dowel bars to ensure that concrete around the bars is not damaged. All bars shall be properly tagged for easy identification.

21.3 Placing and Fixing All reinforcement shall be cleaned to ensure freedom from loose mill scale, loose rust, oil, form releasing agents, grease or any other harmful material before placing them in position. Reinforcement shall not be surrounded by concrete unless it is free from all such materials. Rough handling and dropping of reinforcement from a height shall be avoided. All reinforcement shall be fixed in the correct position and shall be properly supported to ensure that displacement will not occur when the concrete is placed and compacted. The uncoated reinforcement bars shall be tied at every intersection by two strands of 16 SWG black soft annealed binding wire. The Epoxy coated reinforcement bars shall be tied with 2 strands of PVC coated GI 18 SWG wire at every intersection. Crossing bars shall not be tack welded for assembly of reinforcement. The reinforcement bars shall be kept in position by using the following methods:

a) In case of beam and slab construction, precast cover blocks (having the same sand contents as the concrete which shall be placed) of size 40 x 40 mm and thickness equal to the specified covers shall be placed firmly in between the bars and forms so as to secure and maintain the specified covers over the reinforcement. When reinforcement bars are placed in two or more layers in beams, the vertical distance between the horizontal bars shall be maintained by introducing spacer bars at 1 to 1.2m centre to centre.

In case of thick rafts & pile caps having two or multi layers of reinforcement, the vertical distance between the horizontal bars shall be maintained by introducing suitable chairs, spacers, etc.

c) In case of columns and walls, the vertical bars shall be kept in position by means of timber templates with slots accurately cut in them. The templates shall be removed after the concreting has been done below it.

d) Exposed portions of

reinforcement bars shall not be subjected to impact or rough handling and workmen will not be permitted to climb on extending bars until the concrete has attained sufficient strength so that no movement of the bars in the concrete is possible.

Payment for plain round mild steel reinforcement bars, high strength deformed steel bars and epoxy coated reinforcing steel bar shall be on the basis of weight of bare steel irrespective of any coating applied in metric tons. The weight of the bar shall be derived from the sizes and corresponding nominal unit weight given in Table-1 of IS 1786. In case actual unit weight of the bars is less than nominal unit weight, but within permissible tolerances, the weight of reinforcement shall be calculated on the basis of actual unit weight. In case actual unit weight of the bars is more than nominal unit weight, the payment shall be made on the basis of nominal unit weight. Standard hook lengths, chairs, spacer bars and authorized laps only shall be included in the weight calculated. Binding wire shall not be weighed nor otherwise measured. Measurements for weight shall not include cutting allowance etc. 22.2.2 Rate quoted for reinforcement shall include cost of supplying, decoiling, straightening, cleaning, cutting, bending, placing, binding, welding (if required) and providing necessary cover blocks of concrete.

20.0 FLOORING

The rate of items of flooring is inclusive of providing sunk flooring in bath rooms, kitchen etc. and nothing extra on this account is admissible.

18.0 WOOD WORK:

Timber as specified to be used for wood work shall be dry seasoned in the relevant items in the schedule of quantities and shall conform to CPWD specifications 91-92 (Vol. I) or latest edition with correction slips upto date and will be of required variety obtained from approved sources.

Shutters of paneled doors shall be with dry seasoned secondary species timber frames as per relevant specification of item and with panels of 12 mm thick second class teak wood 15 mm thick deodar wood both kiln seasoned or made of phenol form old dye glue processed nova teak or equivalent particle board 12 mm thick with or without commercial ply veneer faces on both sides as indicated in relevant items. The paneled shutters shall be kiln seasoned with species as specified in items (styles and rails) as per width shown in

Architect drawings. Panels shall be embedded into frames to a minimum of 12mm with 1.5mm air gaps.

Permissible tolerance on wood work shall be as under:-

- a) Door frames of 3mm.
- b) Door shutters.
 - i) On width and height of 3mm.
 - ii) On thickness of 1.2mm

The samples of species to be used shall be deposited by the contractor before commencement of the work.

Transparent sheet glass conforming to IS 1761-1960 shall be used thickness being governed as under unless otherwise specified in the item.

Area of glazing	Thickness	Max. unsupported length	
For glazing area upto			
0.2 sqm.	3 mm		60 cm
For glazing area from			
0.2 sqm to 0.5 sqm	4 mm		120 cm
For glazing area more			
than 0.5 sqm	5.5 mm	120 cm	

Glazing for toilets and in fixed ventilators shall be of opaque type.

Factory made shutters as specified shall be obtained from factories to be approved by the Engineer-in-charge and shall conform to IS 2202 (Part-I) 1977. The contractor shall inform well in advance to the Engineer-in-charge the name and address of the factory where from the contractor intends to get the shutters manufactured. The contractor will place order for manufacture of shutters only after written approval of the Engineer-in-charge in this regard is given. The contractor is bound to abide by the decision of the Engineer-in-charge and recommended a name of another factory from the approval list, in case the factory from the approved list, in case the factory already proposed by the contractor is not found competent to manufacture quality shutters.

The contractor will also arrange stage-wise inspection of the shutters at factory of the Engineer- in-charge or his authorized representative, contractor will have no claim if the shutters brought at site are rejected by Engineer-in-charge in part or in full lot due to bad workmanship/quality. Such shutters will not be measured and paid and the contractor shall remove the same from the site of work within 7 days after the written instructions in this regard are issued by Engineer-in- charge or his authorized representative.

The rate of T/angle iron from shall include the following:

- a) MS bill/tie of 16mm dia bar shall be welded to T-iron door frames to keep the frame vertical in correct position. The bill/tie shall be embedded in floor concrete. No tie is necessary for window frames.
- b) Each T-iron frame for doors shall have 4 nos. MS lugs 15x3 mm, 10cms long welded to each vertical member of the frame.
- c) MS plate 8x25mm, 100mm long having threaded holes (no. of flats shall correspond to the no. of butt hinges to be fixed to door/window shutter) shall be welded at appropriate places at the back of the T-iron frames for fixing the required butt hinges to the frame with machine screws. MS flats 8x25mm; 50mm long with threaded holes shall be welded to the back of the T-sections to receive the butt hinges for the cleats.

The MS flat cramps 15x6mm thick for holding arrangements are to be provided and added as per site conditions. The rate is inclusive of the cost of such clamps.

All welded steel work shall be tested for quality of weld as laid down in IS 822-970 before actual erection.

19.0 WATER SUPPLY SANITARY INSTALLATION:

Sanitary fittings, paints and other materials shall be obtained from one of the firms on the list of approved manufacturers of CPWD and shall bear ISI mark. The materials shall be tested as per provision in relevant IS codes. The contractor's rates for items involving the use of the above materials shall be deemed to cover the cost of samples.

The SCI pipe and G.I. pipe wherever necessary shall be fixed to RCC columns, beams etc. with raw plugs and nothing extra shall be paid for this.

G.I. pipes if stipulated for issue in the schedule of material can be

issue in such sizes or its equivalent metric size as considered fit and the issue rate recoverable from the contractor will remain the same. The contractor will not be paid anything extra on this account and nothing will be deducted for using the size of G.I. pipes issued and the items will be paid as per agreement rate for the same item.

The contractor shall be responsible for the protection of the sanitary and water supply fittings and other fittings and fixtures against pilferage and breakage during the period of installation and there after until the building is handed over.

Water tanks, taps, pipes fittings and accessories should conform to bye-law and specification of the Municipal bodies/ OIL INDIA LTD. etc. The contractor should engage licensed plumbers for the work.

22.0 CONDITIONS:

The contractor will have to work according to the program of work decided by the Engineer- in-charge/OIL. The contractor shall also construct a sample unit complete in all respects within three months from the date of award of work and this samples unit shall be got approved from the Engineer- in-charge before mass construction is taken up. No extra claim what so ever beyond the payments due at agreement rates will be entertained from the contractor on this account.

The contractor shall take instructions from the Engineer-in-charge/OIL regarding collection and stacking of materials in any place. No excavated earth or building material shall be stacked on areas where other buildings, roads, services of compound walls are to construct.

The contractor shall make his own arrangements for obtaining electric/water connections, if required and make necessary payments directly to the Department concerned.

The contractor must take all precautions to avoid all accidents by exhibiting necessary day and night caution boards, speed limit, red flag, red lights and providing barriers. He shall be responsible for all damages and accidents caused due to negligence on this regard. No hindrance shall be caused to traffic during the execution of work.

The contractor shall maintain in perfect condition all works executed

till the completion of the entire work allotted to him. Where phased delivery is contemplated the provisions mentioned above will apply to each phase.

No compensation shall be payable to the contractor for any damage caused by rains, lightening wind, storm, floods tornados, earthquakes or other natural calamity during execution of work. He will make good all such damages at his own cost and no claim on this account will be entertained.

The contractor shall clear the site thoroughly of all scaffolding materials and rubbish etc. left out of his work and dress the site around the building to the satisfaction of the Engineer-in-charge before the work is considered as complete.

All material obtained from Govt. stores or other work shall be get checked from the Engineer-in-charge or his representative on receipt of the same at site and before they are actually used.

If as per municipal rules the huts for labour are not to be erected at the site of work by the contractors. The contractor are required to provide such accommodation as is acceptable to local bodies and nothing extra shall be paid on this account.

The Centering and shuttering required for RCC work will be brought to site by the contractor well in advance so that the progress of the upper floors is not hampered due to non-availability of the same. Nothing extra shall be paid for this.

The contractor must see the proposed site for the work and study specifications and conditions carefully before tendering. No claim of any sort shall be entertained on account of any site conditions or ignorance of specifications and conditions.

The site is available and tenderer should see the approached and conditions of the same. If any approach from main road is required at site or existing approach is to be improved and maintained for cartage and materials by the contractors the same shall be provided, improved and maintained by the contractor at his own cost.

Machine made shutters shall be got approved from the Engineer-in-charge at factory site before carting the same to the site of work. The shutter damaged during the cartage shall not allow to be used in the work and shall be removed by the contractor at his own cost and no

claim whatsoever shall be entertained in this regard.

23.0 CONDITIONS FOR ISSUE OF MATERIALS:

The size of the cement go-down indicated in the sketch on CPWD specification is only for guidance. The actual size of the go-down shall be as per site requirements and nothing extra will be paid for the same. The decision of the Engineer-in-charge regarding the capacity needed will be final.

The contractor shall be fully responsible for the safe custody of the material issued to him even if the materials are under double lock system.

The account daily receipts and issues of cement shall be maintained in a register in the prescribed Proforma to be decided by Engineer-in-Charge. signed daily by the contractor or his authorized agent in of its correctness.

The contractor shall construct suitable go-downs-yards at the site of work for storing all other materials so as to be safe against damage by sun, rain, dampness, fire theft etc. at his own cost and also employ necessary watch and ward establishment for the purpose at his cost. Materials to be charged directly to work and stipulated for issue free of cost shall also be issued to contractor as soon as they are received at site or at the stipulated place of issue the provisions of this clause will equally and fully be applicable to those items as well.

Issue of steel of diameter above 10mm will be regulated on sectional weight basis, weight being calculated with the help of the above table. However for bars MS/tor steel upto and including 10mm, the following procedure shall be adopted. The average sectional weight for each dia shall be arrived at from samples from each lot of steel to be modified to take into account the variation between the actual and the standard co-efficient given above and the contractors account will be debited by the cost of this modified quantity only. The description of the Engineer-in-charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute the single lot for this purpose.

For standard sectional weights of steel standard tables referred in para 5.3.3 in specifications for works 1991-92 volume1 to be considered for

conversion of length of various sizes of MS or tor steel bars in to weight steel bars to be issued would be only for reinforcement works in RCC & not to cover any other items.

20 24.0 TESTING OF MATERIALS:

- a) The contractor shall produce all the materials in advance so that there is sufficient time for testing of the materials and clearance of the same before use in work.
- b) Samples of various materials required for testing shall be provided free of charge by the contractor. Testing charges, if any, shall be borne by the contractor. All other expenditure required to be incurred for taking the samples, conveyance, packing etc. shall be borne by the contractor himself.
- c) In case there is any discrepancy in frequency of testing as given in list of mandatory tests and that in individual sub-heads of work as per CPWD specifications 2019 (Vol. I & II) or latest edition the higher of the two frequencies of testing shall be followed and nothing extra shall be payable to the contractor on this account.
- d) The contractor shall be responsible to arrange at his own cost all necessary tools and plants required for execution of the work.

END OF CIVIL WORK SPECIFICATIONS

ELECTRICAL SYSTEM TECHNICAL SPECIFICATION

1. GENERAL

1.1. Design Philosophy

This specification is intended to cover design, residual, engineering, manufacture, test and inspection at works, delivery to site properly packed for transportation, erection, testing, commissioning, performance demonstration at site and handing over to purchaser as indicated in the schedule of requirement as per the codes/standards and scope of work.

This report communicates the proposed Electrical engineering designs system requirements for the Proposed Construction of two numbers of multi-storied (G+6) residential building blocks inside Oil housing colony at Narangi, Guwahati, Assam.

Codes and Standards

The installation shall also be in conformity with the bylaws and requirements of the local authority in so far as these become applicable to the installation. Wherever this specification calls for, a higher standard of materials and /or workmanship than those required by any of the above regulations and standards, then this specification shall take precedence over the said regulations and standards.

Wherever drawings and specifications require something that may conflict with the regulations, the regulations shall govern. This shall be referred to the Superintendent for arbitration.

The design shall be done on the guide lines of NBC 2016 and the applicable local & International codes and standards, illustratively listed below as per the project requirements and site conditions.

Sr. no	Standards	Code Description
A		Ring Main Unit (RMU) / High voltage Switchgear (HVS)
1	IS: 13118, IEC: 56	Circuit Breakers
2	IS: 3427, IEC: 298, IEC: 694	Metal enclosed Switchgear
3	IS: 2705 IEC: 44	Current Transformers
4	IS: 3156 IEC: 186	Potential Transformers
5	IS: 5578, IS: 11353	Guide for Marking Busbars, Main Connection and auxiliary wiring
6	IS: 2544, IEC: 273	Busbar support insulators
7	IS: 13947, IS: 3427, IEC: 947	Degree of Protection
8	IS: 3231, IEC: 255	Electrical relays for Power System Protection
9	IS: 1248, IEC: 51	Electrical Indicating Instruments
10	IS: 9385, IEC: 282	High Voltage Fuses
11	IS: 722	AC Electricity Meters
12	IS: 4171, IEC: 694	Copper Busbars
13	IEC: 129	Offload isolators
14	IS: 6005	IS: 4171, IEC: 694
15	IS: 9224	HRC Fuses
B		Transformer
1	IS 2026 Part I IV	Power transformer
2	IS 3639	Fittings & accessories
3	IS 2147	Degree of protection
4	IS 2026	Tests
5	IS 2026	Tolerance on guaranteed particulars
6	IS 1271	Electrical insulation classified by Thermal stability
7	IS 335	Insulating oil

8	IS 8468	OLTC
9	IS 10028 Part II	Installation and maintenance of transformer
10	IS 6600	Guide for loading of oil immersed Transformer
C	Low Voltage Switchgear (LVS)	
1	IS 4237, IEC 947	Switchgear General Requirements
2	IS 13118, IEC 56	AC Circuit Breakers
3	IS 8623, IEC 439	Factory built assemblies of switchgear and control gear for voltages upto and including 1000V AC and 1200V DC
4	IS 13947(Part 3), IEC 947-3	Air break switches
5	IS 8828, IEC 898	Miniature circuit breakers
6	IS 9224 ,IEC-269	HRC cartridge fuses
7	IS 8187	D Type fuses
8	IS 13947(Part 4), IEC 947	Contactors
9	IS 13947(Part 4),IEC 947	Starters
10	IS 6875	Control switches / push buttons
11	IS 2705, IEC 44-1	Current transformers
12	IS 3156 , IEC 186	Voltage transformers
13	IS 3231, IEC 255	Relays
14	IS 1248 ,IEC 51	Indicating instruments
15	IS 11353 / IS 5578	Arrangement for busbars main connections and accessories
16	IS 722	AC electricity meters
17	IS 13947(Part 1), IEC 947-1	Degree of protection
18	IS 10118	Code of practice for installation and maintenance of switchgear
19	IS 6005	Code of practice for phosphating iron and steel
20	IS 5082 , IEC 114	Wrought aluminium & aluminium alloys for electrical purposes
21	IS 12021 , IEC947	Control transformer for switchgear and control gear for voltage not exceeding 1000V AC
D	Lighting	
1	IS 1913 (Pt 1): 1978	General and safety requirements for luminaries: Part-1 Tubular fluorescent Lamps (Second revision).
2	IS 2206 (Pt.1): 1984	Flameproof electric lighting fittings: Part-1 Well-glass and bulkhead types (first revision).
3	IS 3528: 1966	Waterproof electric lighting fittings
4	IS 5077: 1969	Decorative lighting outfits
5	IS 9583: 1981	Emergency lighting units.
6	IS 10322 (Pt.4): 1984	Luminaries: Part-4 Methods of tests
7	IS 10322 (Pt.5/Sec2): 1985	Luminaries: Part-5 Particular requirements, Section-2 Recessed luminaries.
8	IS 2418	Tubular fluorescent lamps

9	IS 1777: 1978	Industrial Luminaire with metal reflectors and its Amendments
10	IS 4012: 1967	Dust-proof electric lighting fittings.
11	IS 4347: 1967	Code of practice for hospital lighting
E	Cables	
1	IS: 7098-Part-1 1998, IEC:502 1983	11/6.6KV Cables
2	IS:1554 - Part - I (1988)	433 V Cables
F	UPS	
1	IS 589	Basic climatic & mechanical durability tests for Components for electronic and electrical equipment
2	IS 9000	Environmental tests for electronic & Electrical equipment
3	IS 5921	Metal clad base material for printed circuits for use in Electronic and telecommunication equipment.
4	IS 6297	Transformer and inductors (power, audio, pulse & Switching) for electronic equipment
5	IS 7405	Printed wiring boards
6	IS 6553	Environmental requirements for semiconductor Devices and integrated circuits
7	IS 4007	Terminals for electronic equipment
8	IS 8623	Factory built assemblies of switchgear and control gear for voltages upto and including 1000V AC and 1200V DC
9	IS 13947-3	Air break switches
10	IS 9224	HRC Cartridge fuses
11	IS13947-4	Contactors
12	IS 6875	Control switches / push buttons
13	IS1248	Indicating instruments
14	IS 2147	Degree of protection
15	IEC 146	Semiconductor converters
16	IS 6619	Semiconductor rectifier equipment code
17	IS 3700	Thyristors converters
18	IEEE 446	Emergency std by power systems
19	IEEE 472	Surge withstand capability test

1.1.1 Systems Proposed

1.1.3.1 HT VCB Panel:

2 No's incomer breaker 6.6KV HT VCB breaker and with one bus coupler and 6 no's O/G VCB Panel will receive power from existing in substation at present.

1.1.3.2 Transformers

6.6KV / 433V, 3 PHASE, 2 x 630KVA Distribution Transformer oil type is considered for the entire facility.

1.1.3.3 Emergency Power Supply

1 x 160kVA radiators cooled, 415V, 3ph, 1500RPM coupled with Alternator and Acoustic enclosure DG Sets are considered for power back up of critical / emergency facility.

1.1.3.4 Low Voltage Switchgear

433V, 50Hz, 3-phase, 4-wire indoor (Main LT Panel, Utility Panel) / outdoor (all feeder pillars) switchboard & shall have cable entry/exit from bottom.

1.1.3.5 Distribution Boards

Distribution boards shall be TP+N type for 415 volts, 3 phases, A.C. supply or 230V single-phase A.C. supply as required & shall be of Vertical or Horizontal type on mounting with single or double door. Distribution boards shall generally conform to IS 8878 - 1978.

1.1.3.6 Power and Control cables

Power & control cables considering of Aluminium/Copper conductor, XLPE Insulation, Armoured/Un armoured buried in ground or laid in cable tray or through conduits.

1.1.3.7 Cable Installation

Electrical installation work shall comply with all currently applicable statutes, regulation and safety codes in the state or as CPWD where the installation is to be carried out.

1.1.3.8 Lighting System

All luminaries shall be considered as LED fittings.

1.1.3.9 Earthing System

A complete earthing system comprising earthing conductors, earth electrodes and earth connections necessary for effective and permanent bonding to earth, all non-current carrying metal work and for termination of the earthing conductors of all electrical 6.6kV and 415V/230Vswitchboards, sub boards, distribution boards etc., installed for the Electricity Distribution System for this project shall be connected under this section of the specification and the associated drawings.

1.1.3.10 Lightning Protection

The Lightning Protection System shall be strictly in accordance with BIS: /IEC 62305. The lightning protection installation can consist of Mesh, down conductors, earthing and bonding. The materials of lightning conductor, down conductors, earth termination etc., are aluminium and conform to BIS/IEC 62305.

Each down conductor has an independent earth termination. All the earth termination interconnected and shall be capable of isolation for testing using test links.

Earth pits will be installed in accordance with BIS: 3043. The resistance of earthing system shall not exceed 1 ohm.

1.2. Scope of Work

The general character and the scope of work to be carried out under this contract are illustrated in Drawings, Specifications and Schedule of Quantities. The Contractor shall carry out and complete the said work under this contract in every respect in conformity with the contract documents and with the direction of and to the satisfaction of the Client's site representative. The contractor shall furnish all labor, materials and equipment (except those to be supplied by the owner) as listed under Schedule of Quantities and specified otherwise, transportation and incidental necessary for supply, installation, testing and commissioning of the complete electrical system as described in the Specifications and as shown on the drawings. This also includes any material, equipment, appliances and incidental work not specifically mentioned herein or noted on the Drawings/Documents as being furnished or installed, but which are necessary and customary to be performed under this contract. The electrical System shall comprise of following:

- a) Electrical System

- b) Other related miscellaneous items as per the tender drawing & Bill of quantities.
- c) Approval from state electricity board/CEA.
- d) Wiring & Earthing from panels to electrical, control wiring & interlocking.
- e) Cutting holes, chases & like through all types of walls /floors and finishing for all services
crossings, including sealing, frame works, fire proofing, providing sleeve, cover plates, making good structure and finishes to an approved standard.
- f) Balancing, testing & commissioning of the electrical works.
- g) Test reports, list of recommended spares, as-installed drawings, operation & maintenance manual for the entire electrical works.
- h) Training of Client's staff.

Work under this section shall be executed without any additional cost. The rates quoted in this tender shall be inclusive of the works given in this section.

Contractor shall provide all tools, equipment, metering and testing devices required for the purpose.

On award of work, Contractor shall submit a detailed proposal giving methods of testing and gauging the performance of the equipment to be supplied and installed under this contract.

All tests shall be made in the presence of the Client or his representative. At least ten working days' notice in writing shall be given to the inspecting parties before performing any test.

1.2.1. Inspection and Approval:

All materials used or unused or procured can be checked by Client or for quality and if found not as per specifications /standards or otherwise of poor quality, it shall not be used further and the already used shall be replaced.

The Owner's shall have full powers to require the materials or work to be tested by an independent agency at the Electrical Contractor's expense in order to prove their soundness and adequacy.

All material for fitting, accessories to be incorporated in this work shall be ISI marked and if Indian Standard have not been issued then it shall be as per approval of Oil India.

The Owners/ Oil India representatives may inspect the Equipment's / Materials at the works of manufacturer. The contractor shall arrange for the inspection at the works of manufacturer by the Architect / Project Director or their representative/s and all expenditure and cost for the same shall be borne by the contractor. The contractor's rates shall be deemed to include all such expenditures and cost.

The contractor shall also arrange all the test certificates and results and submit to the Oil India in original with the four set of photo copies along with catalogue and manuals.

1.2.2. Quality Assurance

Comply with the current applicable codes as specified in the Tender documents and local rules, regulations and requirements of the local authorities.

Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent shall apply.

Executive work in strict accordance with the best practices of the trades in a thorough substantial, workmanlike manner by competent workmen.

All equipment, materials and installation method shall comply with the General Specification and the current standards and regulations as described in the Tender Documents.

The Client's Site representative reserves the right to inspect and reject any part of the Works not complying. The Contractor shall replace such rejected works without cost variation and delay to the Contract.

Approval or acceptance by the Client's Site representative shall not relieve the Contractor of his responsibilities under the Contract for the quality of materials and the standard of workmanship in the Works.

No work shall be covered up or put out of view without the agreement of the Client's Site representative. The Contractor shall provide/allow the Client's Site representative full opportunity for the examination and measurement of any work which is about to be covered or put out of view. Upon request by the Client's Site representative, the Contractor shall expose Their Works and allow/provide access to the Client's Site representative to inspect any part of the Works during the course of the manufacturing or site installation/erection.

1.2.3. Bye-Laws and Regulations

The installation shall be in conformity with the Bye-laws, Regulations and Standards of the state authorities concerned, in so far as these become applicable to the installation. But if these Specifications and Drawings call for a higher standard of materials and / or workmanship than those required by any of the above regulations and standards, then these Specifications and Drawings shall take precedence over the said regulations and standards. However, if the Drawings and specifications require something which violates the Bye-laws and Regulations, then the Bye-laws and Regulations shall govern the requirement of this installation.

1.2.4. Fees and Permits/Approval

The contractor shall obtain all permits/ licenses such as CEA approval, operating a lift etc. and pay for any and all fees required for the inspection, approval and commissioning of their installation.

1.2.4.1 Any other materials required for a substation like insulating mat, safety display, first aid kit, display board etc are in the scope of the Contractor. The materials and services as mandated by CEA for CEA approval are in the scope of the contractor.

1.2.5. Drawings

The electrical Drawings listed under respective section, which may be issued with tenders, are diagrammatic only and indicate arrangement of various systems and the extent of work covered in the contract. These Drawings indicate the points of supply and of termination of services and broadly suggest the routes to be followed. Under no circumstances shall dimensions be scaled from these Drawings. The architectural/interiors drawings and details shall be examined for exact location of equipment/accessories /fixtures etc.

The contractor shall follow the tender drawings in preparation of his shop drawings, and for subsequent installation work. He shall check the drawings of other trades to verify spaces in which his work will be installed.

The contractor shall examine all architectural, structural, plumbing, electrical and other services drawings and check the as-built works before starting the work, report to the Client's site representative any discrepancies and obtain clarification. Any changes found essential to coordinate installation of his work with other services and trades, shall be made with prior approval of the Architect/Consultant/Client's site representative without additional cost to the Owner. The data given in the Drawings and Specifications is as exact as could be procured, but its accuracy is not guaranteed.

1.2.6. Shop Drawings

All the shop drawings shall be prepared on computer through AutoCAD System based on Architectural Drawings, site measurements drawings. After award of the contract, within agreed time line contractor shall furnish, for the approval of the Architect/Consultant, two sets of detailed shop drawings of all equipment and materials including all layouts/sections/elevation details /typical details as per the consultants drawing showing exact details. Electrical panels inside/outside views, power and control wiring schematics, cable trays, supports and terminations. These shop drawings shall contain all information required to complete the Project

as per specifications and as required by the Architect/Consultant/Client's site representative. These Drawings shall contain details of construction, size, arrangement, operating clearances, performance characteristics and capacity of all items of equipment, also the details of all related items of work by other contractors. Each shop drawing shall contain tabulation of all measurable items of equipment/materials/works and progressive cumulative totals from other related drawings to arrive at a variation-in-quantity statement at the completion of all shop drawings. Minimum Six sets of drawings shall be submitted after final approval along with pen drive.

Each item of equipment/material proposed shall be a standard catalogue product of an established manufacturer strictly from the manufacturers listed in respective sections and quoted by the tendered in technical data part of respective sections

When the Architect/Consultant makes any amendments in the above drawings, the contractor shall supply two fresh sets of drawings with the amendments duly incorporated along with check prints, for approval. The contractor shall submit further six sets of shop drawings to the Client's site representative for the exclusive use by the Client's site representative and all other agencies. No material or equipment may be delivered or installed at the job site until the contractor has in his possession, the approved shop drawing for the particular material/equipment/installation.

Manufacturer's drawings, catalogues, pamphlets and other documents submitted for approval shall be in four sets. Each item in each set shall be properly labeled, indicating the specific services for which material or equipment is to be used, giving reference to the governing section and clause number and clearly identifying in ink the items and the operating characteristics. Data of general nature shall not be accepted.

Samples of all materials shall be submitted to the Client's site representative prior to procurement. These will be submitted in two sets for approval and retention by Client's site representative and shall be kept in their site office for reference and verification till the completion of the Project. Wherever directed a mock up or sample installation shall be carried out for approval before proceeding for further installation.

Approval of shop drawings shall not be considered as a guarantee of measurements or of building dimensions. Where drawings are approved, said approval does not mean that the drawings supersede the contract requirements, nor does it in any way relieve the contractor of the responsibility or requirement to furnish material and perform work as required by the contract.

Where the work of the contractor has to be installed in close proximity to, or will interfere with work of other trades, he shall assist in working out space conditions to make a satisfactory adjustment. If so, directed by the Client's site representative, the contractor shall prepare composite working drawings and sections at a suitable scale, not less than as per the consultant's base drawing, clearly showing how his work is to be installed in relation to the work of other trades. If the Contractor installs his work before coordinating with other trades, or so as to cause any interference with work of other trades, he shall make all the necessary changes without extra cost to the Owner.

Within four weeks of approval of all the relevant shop drawings, the contractor shall submit four copies of a comprehensive variation in quantity statement, and itemized price list of recommended (by manufacturers) imported and local spare parts and tools, covering all equipment and materials in this contract. The Project Manager shall make recommendation to Owner for acceptance of anticipated variation in contract amounts and also advise Owner to initiate action for procurement of spare parts and tools at the completion of project.

1.2.7. As Built Drawings

The contractor shall provide as built drawings, as approved by the Client's Site representative AutoCAD DWG format in pen drive, as per the Project Documentation requirement. The drawings shall be submitted as directed by the Client's site representative, or putting into operation,

whichever is earlier. In addition, six sets of hard copies of all relevant drawings, which will be required for operation and maintenance, shall be supplied in bound book forms immediately after the commissioning of the Project.

The contractor shall supply, 6 sets of all operation and maintenance manuals in original, from the manufacturer in bound book forms, at least 2 weeks prior to commissioning of the equipment. These shall also be supplied, in computer diskettes, based on popular Microsoft window-based publishing software programmers, along with the as built drawings as mentioned above, as specified in the Project Documentation.

1.2.8. Fire and Safety Precautions

Establish from Architectural Drawings where fire and smoke barriers exist, and make adequate provision of fire and smoke barriers in and around trunking, conduits, cables, etc., where they pass through floors and fire rated walls, and where protection systems are installed pack space between wiring and sleeve full with Fire Retardant Material and seal with caulking.

The Contractor shall ensure that this work is carried out such that the integrity of any such fire barrier is properly maintained where pierced by electromechanical services.

1.2.9. Samples

The term 'samples' includes natural materials, fabricated items, equipment, devices, appliances, or parts thereof as specified and other samples as may be required to determine whether kind, quality, construction, workmanship, finish, colour and other characteristics of materials conform to requirements of the Tender Documents.

Samples shall establish kind, quality and other required characteristics of various parts of the work. Indicate details of construction, dimensions, capacities, weights and electrical performance characteristic of equipment or material.

Samples and sample board shall be prepared and identified by the manufacturer and stamped/engraved with make, type, Cat No. and size marking shall be indelible and legible.

1.2.10. Quality of Materials

Manufacturers shall provide their standard guarantees for products furnished under this Tender. However, such guarantees shall be in addition to and not in lieu of all other liabilities which manufacturers and the Contractor may have by law or by other provisions of the Tender Documents.

All materials, items of equipment and workmanship furnished under this Tender shall carry standard warranty against all defects in materials and workmanship. Any faults due to defective or improper material, equipment, workmanship which develop shall be made good, forthwith, by and at the expense of the Contractor, including all other damage done to areas, materials and other systems resulting from this failure.

Guarantee that all elements of the systems are of sufficient capacity to meet the specified performance requirements as set forth herein or as indicated.

Upon receipt of notice from the Client's Site representative, of failure of any part of system or Equipment during the defect liability period the affected parts shall be replaced.

1.2.11. Equipment and Materials Approval

Approval of materials and equipment shall be based on latest manufacturer's published data. Complete and detailed information of all materials and equipment to be incorporated in the work shall be submitted. Submit detailed description and specifications, catalogues cuts, installation data, diagrams, dimensions, controls and any other data required to demonstrate compliance with

the Tender Documents. Each item submitted shall be referenced to the applicable paragraph in the Specification.

At the request of the Client's Site representative, submit a sample of any equipment or material for further study before approval. Where samples are required by the Client's Site representative, the period required to obtain the sample will be taken into account when scheduling approvals.

Only approved materials shall be employed at the site. All materials installed which are not approved shall be removed and reinstated by approved ones.

Time periods for equipment and materials approvals shall be as submitted for the approval of the Client's Site representative.

1.2.12. Workmanship

The entire work provided in this specification shall be constructed and finished in every aspect in a workmanlike and substantial manner. The Contractor shall provide the system in accordance with the best trade practice and to the satisfaction of the Client's Site representative.

Keep others fully informed as to the shape, size and position of all openings required for apparatus and give full information sufficiently in advance of the work so that all openings may be built in advance. Provide and install all sleeves, supports, etc., hereinafter specified or required.

Obtain detailed information from the manufacturers of apparatus as to the proper method of installing and connecting the same. Obtain all information from others which may be necessary to facilitate work and the completion of the whole Project.

Provide the services of an experienced Wireman and Supervisor (**who having valid Electrical License's**) shall be continuously in charge of the erection of the electrical work, together with all necessary skilled workmen, helpers and labours, required to properly unload, transfer, erect and connect up, adjust, start, operate and test the system.

Before installing any work, verify that it does not interfere with clearance required for other work. Notice of adverse conditions shall be forwarded in writing to the Client's Site representative before any work in question is installed. If notification is not made, and work installed causes interference with the contemplated design, make such changes in his work as directed by the Client's Site representative to permit the installation of all work of the Project, at no additional cost to the Client.

All equipment and accessories shall operate without objectionable noise or vibration. Should operation of any of the equipment or systems produce noise or vibration which is, in the opinion of the Client's Site representative objectionable, make change in equipment and do all work necessary to eliminate the objectionable noise or vibration at no additional cost to the Client.

All equipment and components shall be installed in strict compliance with manufacturers' recommendations. Consult the manufacturer's installation manuals for all wiring diagrams, schematics, physical equipment sizes, etc., before beginning system installation.

All equipment shall be attached to walls and ceiling/floor assemblies and shall be held firmly in place. Fasteners and supports shall be adequate to support the required load.

1.2.13. On Site Training

Upon completion of all work and all tests, the Contractor shall furnish necessary operators, labor and helpers for operating the entire installation for a period of 5 working days of eight (8) Hours each, to enable the Client's staff to get acquainted with the operation of the system. During this period, the contractor shall train the Client's personnel in the operation, adjustment and maintenance of all equipment installed.

1.2.14. Completion Certificate

On completion of the electrical and related works, a certificate shall be furnished by the contractor, counter signed by the licensed supervisor, under whose direct supervision the installation was carried out.

The contractor shall be responsible for getting the entire electrical installation for electrical works duly approved by the local authorities concerned like CEA etc., and shall bear expenses if any, in connection with the same.

1.2.15. Accessibility

The Contractor shall verify the sufficiency of the size of the shaft openings, clearances in cavity walls and suspended ceilings for proper installation of his piping/cabling/ducting/ other ancillaries. His failure to communicate insufficiency of any of the above shall constitute his acceptance of sufficiency of the same. The Contractor shall locate all equipment which must be serviced, operated or maintained in fully accessible positions. The exact location and size of all access panels, required for each concealed, valve or other devices requiring attendance, shall be finalized and communicated in sufficient time, to be provided in the normal course of work. Failing this, the Contractor shall make all the necessary repairs and changes at his own expense. Access panel shall be standardized for each piece of equipment / device / accessory and shall be clearly nomenclature / marked.

1.2.16. Manufacturer's Instructions

Where manufacturer has furnished specific instructions, relating to the material and equipment used in this project, covering points not specifically mentioned in these documents, such instructions shall be followed in all cases.

1.2.17. Maintenance/ DLP clause:

The contractor shall provide warranty of all the electrical system/equipment/materials like DG set transformers, Panels, Solar Plant, switch gear, luminaires, DBs etc. for a period of minimum one year from the date of completion or handed over of the project whichever is later.

Contractor should depute its representative to attend any sort of breakdown within 48 hours after registering the complaint.

Further, for the work of supply and installation of lift works the defect liability period along with maintenance period will be of 24 (Twenty Four) Months. Quoted rates shall be deemed to be inclusive of, free comprehensive maintenance (including spares) of lifts for a period of Two years from the accepted date of completion of the project. If any defects or failure is noticed in the work within the specified DLP the same will be notified to the contractor and he will be liable to rectify/re-execute the work at his own expenses within 48 hours time.

The Contractor shall maintain the work for a period of 12 months from the date of issue of completion certificate and in any damage shall happen to the work while in progress or after completion from any cause whatever or any imperfection or defect becomes apparent either in the materials supplied by the Contractor or in the workmanship within a period of 12 months from the date of issue of completion certificate, the contractor shall make the same good at his own expenses or in default, the Architect /Project Director may cause the same to be made good by other workmen and deduct expenses (of which expenses the decision of the Architect / Project Director shall be final) from any sums that may be due or at any time thereafter become due to the Contractor or from his security deposit. During the defects liabilities period the Contractor shall be responsible for any defects in materials, workmanship in the works shall remedy the same at his own cost to the entire satisfaction of the Owner's.

2. PRODUCT SPECIFICATION AND INSTALLATION

2.1 High Voltage Switchgear

2.1.1 Description

- a) The switchgear shall be in accordance with NEMA SG-4, IEEE C37.20.2, applicable UL and CSA standards and listings and the National Electrical Code as minimum requirements, and shall be as shown on the drawings and as specified.
- b) Indicating instruments shall be in accordance with ANSI C39.1
- c) Relays and relay systems shall be in accordance with IEEE C37.90.
- d) Instrument transformers shall be in accordance with IEEE C57.13.
- e) The switchgear line-up shall be a complete, grounded, continuous-duty, metal clad, dead-front, dead-rear, self-supporting, front connected switchgear assembly. Incorporate devices shown on the drawings and everything required to fulfil the operational and other requirements shown on the drawings.
- f) Switchgear shall conform to the arrangements and details of the drawings and space designed for installation.
- g) Interlocking shall be provided as shown on the drawings and as required for the safety of personnel and safe operation of the equipment.

2.1.2 Seismic Requirements

- a) The switchgear shall meet the following seismic standards. The equipment shall be tested on a shake table to comply with these standards.
- b) International Building Code, IBC-2006 Sections 1613 and 1708, ASCE/SEI 7-05, Minimum Design Loads for Buildings and Other Structure
- c) International Code Council, ICC-ES-AC156 Acceptance Criteria for Seismic, Qualification by Shake Table Testing of Non-structural Components and Systems
- d) IEEE-344-2004, Recommended Practice for Seismic Qualification of Class 1E, Equipment for Nuclear Power Generating Station
- e) IEEE-693-2005, Recommended Practices for Seismic Design of Substations

2.1.3 Housing

The equipment and structure shall have the following features:

2.1.3.1 Frames and enclosures

- a) The assembly shall be braced with reinforcing gussets as required to assure rectangular rigidity.
- b) The enclosure shall be steel with all exposed parts painted and fabricated from not less than the gauge required by NEMA and ANSI Standards.
- c) Provide adequately spaced holes for connecting adjacent structures to ensure proper alignment and to allow for future additions.
- d) The equipment sections shall be configured to provide an arc resistance enclosure with the ability to have all cable terminations located near the lower of the equipment with suitable clearances and bending radius for the cable type and terminations types specified. The cable compartment and CTs shall be front accessible.
- e) Provide doors, covers, and infrared windows as shown to allow for UL and cUL / CSA listed rating as arc resistance equipment as supplied. Provide an extension from the arc plenum to allow for connection to ducting (by others) for the exit of gases resulting from an internal arc.
- f) Properly isolate circuit breakers, buses, and cable terminations in separate compartments with steel partitions or barriers of approved and tested materials.

Meet all UL, ANSI, CSA and NEMA standards regarding individual section isolation for bus compartments.

2.1.3.2 Switchgear sections:

- a) The individual switchgear sections shall be comprised of three individual compartments and to be in the GA DWG approved by the Oil India.
- b) A circuit breaker or CPT compartment shall be supplied for each circuit breaker, CPT or future circuit breaker indicated.
- c) Each compartment furnished with a circuit breaker (active or spare) shall be fully equipped as noted on drawings and specified below.
- d) Each compartment noted as space for future circuit breaker shall be fully equipped for positioning and connecting the breakers. Provide all equipment required to implement the future breaker installation, except for any the relays and meters in the associated LV control compartment.

2.1.3.3 Compartment doors:

- a) The doors shall permit convenient removal and interchanging of the circuit breakers between cubicles. The doors shall be capable of a swing approaching 180 degrees and shall be equipped with infrared windows or tested blast proof Lexan windows as shown on the drawings.
- b) Each door shall include suitable handles. Suitable heavy-duty hinges for the arc resistant rating shall be provided to attach the doors.
- c) The following equipment shall be mounted on the door of the low voltage compartment:
 - i. Draw out or other protective relays as specified herein or shown on the drawings.
 - ii. A breaker control switch.
 - iii. Relays and/or metering as indicated on the drawings or other sections of the specifications.
 - iv. Any additional items indicated on the drawings for example, transfer switch controller, Generator controller, HMI, etc.

2.1.3.4 Finish:

- a) Provide a light grey or other suitable standard factory finish for the switchgear.
- b) The cut-outs in the low voltage compartment shall be fully painted after punching the low voltage compartment door.

2.1.4 Bus bar

2.1.4.1 Bus bars and interconnections:

- a) Provide silver plated aluminum/copper buses, fully rated and tested for the amperage shown on the drawing as 630A AL with the rated KA rating.
- b) Fully insulate and totally enclose the buses within the bus compartment of the switchgear.
- c) Mount the buses on appropriately spaced insulators and brace to withstand the available short circuit currents.
- d) The bus and bus compartment shall be designed and tested so that the acceptable NEMA, ANSI, UL and CSA standard temperature rises are not exceeded.
- e) Install a ground bus the full length of the switchgear assembly.

2.1.4.2 Insulation:

The insulation shall be a 15 kV rated, high flame-retardant, self-extinguishing, high track resistant epoxy material that complies with the NEMA Standard 65 degree C temperature rise.

2.1.5 Circuit breakers

- a) Breakers that have the same ratings shall be interchangeable with other breakers in that line- up
- b) The circuit breakers shall be in accordance with IEEE C37.04, NEMA C37.06.1 and NEMA SG-4. Breakers shall have the following features:
- c) Draw out, vacuum interrupter type, UL and cUL / CSA listed.

Vacuum:

- i. Three independent sealed high vacuum interrupters contained within epoxy encapsulated poles for high reliability.
- ii. Breaker total interrupting time of 3 cycles.
- iii. Suitable contacts to allow for a minimum of 50,000 no load or light load operations without intermediate maintenance.
- iv. Contact surfaces to be made of special chrome-copper alloys or equivalent to reduce effect of chopping.
- v. Vacuum interrupters shall meet the safety requirements of ANSI C37.85.

2.1.5.1 Operating mechanism:

- a) The mechanism shall operate in a quick-make, quick-break manner and shall be operated by a linear magnetic operator. Breaker tripping, closing, and indicating lamps shall be AC or DC operated.
- b) The speed of the contacts during the operation shall be independent of the control voltage and the operator's movements.
- c) Equip the mechanism for manual opening of the contacts during loss of normal control power.

2.1.6 Relays

Comply with IEEE C37.90, integrated digital type; with test blocks and plugs.

2.1.7 Multifunction digital-metering monitor:

Microprocessor-based unit suitable for three- or four-wire systems, with the following features: Inputs from sensors or 5-A current-transformer secondary's, and potential terminals rated to 600 V.

- a) Switch-selectable digital display with the following features:

Phase Currents, Each Phase: ± 1 percent.

Phase-to-Phase Voltages, Three Phase: ± 1 percent. Three-Phase Real Power: ± 2 percent.

Three-Phase Reactive Power: ± 2 percent. Power Factor: ± 2 percent.

2.1.8 Draw-out rails:

- a) Design the rails to guide the breakers to their disconnected, and connected positions. Provide an indication in the cubicle of each of the positions.
- b) The breaker shall maintain contact with ground in all positions through a ground connection that has been fully tested and approved by UL.

2.1.9 Power line and load disconnecting contact fingers and springs:

- a) The contact fingers shall be silver-plated, full-floating, self-aligning, self-coupling, and designed for smooth action during engaging and disengaging movements.
- b) Provide adequate flexibility between stationary and movable components to assure proper meeting of the contact fingers, while also providing adequate pressure on the contact surfaces.
- c) Mount the contacts on the breaker so that they can be conveniently inspected.

The stationary contacts for the line and load breaker contact fingers shall be isolated from the breaker compartment by metal shutters when the breaker is removed from the connected position. The control and auxiliary contacts of the breaker shall be multi-contact plug on an umbilical cord with a positive locking mechanism to insure connection. The mechanism on the umbilical cord shall also provide leverage to allow for easy disconnection when the breaker is in the withdrawn position. Interlocks to prevent disconnection of the umbilical cord when the breaker is in the connected position shall be provided.

2.1.10 Mechanical interlocks

- a) Shall prevent the breaker from movement, except when the breaker contacts are in the open position.
- b) Shall prevent the breaker from closing the contacts while in the connected position, except when the power line and load disconnecting contacts are completely connected.
- c) The interrupting ratings of the breakers shall be not less than 270 MVA for 5kV systems and 800 MVA for 15 kV systems, but higher ratings if shown on the drawings shall apply.

2.1.11 Current transformers

- a) Provide ring type current transformers or approved equal. The transformers shall have a mechanical and one-second thermal rating in RMS amperes of not less than the momentary and interrupting rating of the breaker at rated voltage.
- b) Provide transformer ratios as shown on the drawings. Accuracies shall be coordinated with the associated relays and meters by the switchgear manufacturer to assure proper operation at the selected pick up and operating current ratings.
- c) Current transformers shall be mounted over the circuit breaker connections to the main (line) bus or load bus and shall be able to be replaced from the front of the equipment without major disassembly of the circuit breaker cubicle.

2.1.12 Potential transformers

- a) The potential transformers shall be encapsulated, draw out, disconnecting type and shall be properly protected by primary current-limiting fuses.
- b) When the transformers are withdrawn from the compartment the primary terminals shall be grounded.
- c) The transformer ratios and accuracies shall be coordinated with the associated relays and meters by the switchgear manufacturer.
- d) All potential transformers shall be UL and cUL / CSA listed for use in the equipment.

2.1.13 Control power transformers

- a) The control power transformers shall be encapsulated, draw out, disconnecting type and shall be properly protected by primary current-limiting fuses.
- b) The ratings of the transformer shall be as indicated on the drawings.

2.1.14 Metering

- a) Provide ring-type current transformers for each meter. Current transformers shall be wired to shorting-type terminal blocks.
- b) Provide voltage transformers including primary fuses and secondary protective devices for metering as shown on the drawings.

2.1.15 Other Equipment

2.1.15.1 Cable Terminations:

- a) Cable terminations shall conform to the requirements in Section 16 05 13, MEDIUM-VOLTAGE CABLES.
- b) Coordinate cable terminations with the switch gear being furnished.

2.1.15.2 Medium voltage surge arresters:

- a) Distribution class, metal-oxide-varistor type. Comply with NEMA LA 1.
- b) Provide each ungrounded conductor of each incoming circuit with an arrester.

2.1.15.3 Auxiliaries

Install all additional components required for proper operation of the switchgear.

2.1.15.4 Control wires

- a) Switchgear control wires shall not be less than No. 14 AWG copper 600-volt, Stranded SIS. Install wiring complete at the factory, adequately bundled and protected. All conductors across hinges, and all conductors for interconnection between shipping units shall be stranded.
- b) Conductors shall be sized in accordance with the NEC. Provide separate control circuit fuses in each breaker compartment and locate for ease of access and maintenance.

2.2 Transformer

2.2.1 Oil Filled Transformers

- A. Codes and Standard: (As per latest BIS:1180)
Transformer shall conform to Indian Standard IS: 2026-Part I to Part IV, ECBC-2007 (as per revised latest standards).
- B. Rating:
Selected transformer shall be of specified rating suitable for continuous operation.
- C. Connections and Vector Group:
Delta on High Voltage side and star on low voltage side with neutral terminal brought out for solid earthing corresponding to the Vector Symbol Dyn - 11.
- D. System of Supply:
3 phase, 50 Hz 6.6 KV earthed system.
- E. Tapping's:

'ON' load tap changing links on HV side. The tapping's to be provided for variation on HV side from + 5% to – 15% in steps of 1.25% each.

F. Temperature rise:

Continuously rated for full load, temperature rise not exceeding 40 deg C by thermometer in oil or 45 Deg C by resistance.

G. Type:

Outdoor type.

H. Terminals:

The cable box with glands on HT side shall be suitable for 3core XLPE cable of specified capacity. Flanges with cable box on LT side shall be suitable for aluminium conductor armoured cables of size mentioned in BOQ. All cable glands shall be earthed.

I. Cooling:

Natural cooling by means of pressed/round tubes around transformer tank.

J. Insulation:

The transformer shall be oil insulated type.

K. Earthing:

Two separate earthing terminals to be provided at the bottom on both sides.

L. Fittings and Accessories:

The following accessories and fittings shall be provided.

- Lifting Lugs: The arrangement for lifting the active part out of the transformer tank along with the cover by means of lifting lugs without disturbing the connections.
- Swivel Type Rollers: the transformer to be provided with 4 Nos Bi-Directional rollers fitted on cross channels to facilitate the movement of the transformer in both directions.
- Oil Conservator: The transformer to be provided with an oil conservator with welded end plates. It is to be bolted to the cover and can be dismantled for purpose of transport. It has to be provided with magnetic oil level gauge and an oil filling hole 1 1/4" BSF size with a cap, which can be used for filtering oil. For draining purpose, a plug shall be provided. A connection pipe between the conservator and the main tank is to be provided which projects inside the conservator and the main tank
- Air release Valve: An air release valve is to be provided on the top of the tank cover facilitate the release of the entrapped air and filling of oil.
- Breather: The transformer to be provided with an indicating dehydrating silica gel breather of sufficient capacity.
- Drain-cum-oil Filter Valves: The transformer to be provided with a drain-cum-oil filter valve of 1 1/4" BSF size at the bottom of the tank.
- Diagram and rating plate: Diagram and rating plate shall be provided indicating the details of transformer, connection diagram, vector group, tap changing diagram etc.
- Dial type thermometer for Oil (150 mm dia) with maximum set pointer at 75 deg C and electrical contacts for electrical alarm at high temperature.
- Winding temperature indication and electrical contacts for trip /alarm.
- Buchholz relay of double float type with high gas pressure alarm & trip suitable for 24 volts DC supply.
- Filter valve of 1 1/4" BSF at top.
- Explosion vent.
- Disconnecting chamber shall be provided for cable termination.
- Outdoor type Marshalling box with interconnecting cables
- HT Cable box suitable for 3C x 240 sq.mm 6.6KV HT XLPE (UE) cable

- LV Cable box suitable for L.V cable arrangement as per SLD

M. Winding:

The transformer shall be copper conductor wound.

N. Core:

The magnetic core shall be made up of cold rolled grain oriented low loss steel stampings.

O. Maximum Allowable Power Transformer Losses:

Maximum allowable losses for oil filled distribution transformers with highest voltage for equipment 6 KV, at 50% and 100% of the load.

P. Testing:

The transformer shall be subject to the following tests at the factory before dispatching the same and test certificates shall be furnished:

- Measurement of winding resistance.
- Ratio polarity and phase relationship.
- Impedance voltage.
- Load losses.
- No-load losses and no-load current.
- Insulation resistance.
- Induced over voltage withstand.
- Separate - source voltage withstand.
- Temperature rise.
- Di-electric strength of oil.

2.3 LT switchboards**2.3.1 General**

The switchboard shall be metal clad, totally enclosed, rigid, compartmentalized design, floor mounting, air insulated, extensible cubicle type for use on medium voltage power, 3 phase 4 wire 50 cycles system.

The equipment shall be designed for operation in high ambient temperature and high humidity tropical atmospheric conditions. Means shall be provided to facilitate ease of inspection, cleaning and repairs for use in installations where continuity of operation is of prime importance.

2.3.2 Codes and standard:

Some of the important applicable codes/ standards issued by the Bureau of Indian Standards are listed below for the guidance of the Contractor. Latest issues of the standards/codes shall be applicable:

IS: 13947	: L.V. switchgear and control gear Part-I – 1993 General rules
IS: 5578	: Guide for marking of insulated conductors
IS: 11353	: Guide for uniform system of marking and identification of conductors and apparatus terminals
IS: 2147	: Degree of protection provided by enclosures for low voltage switchgear and control gears
IS: 2675	: Enclosed distribution fuse boards and cutouts for Voltages not exceeding 1000 V
IS: 255	: Danger notice plates
IEC60947	: Circuit Breakers (Part- II)
IEC60947	: Circuit breakers (Part-II)
IS: 13947	: Switches, Disconnectors, switch disconnector (Part - III) and fuse Combination units.
IS: 1818	: Alternating current isolators (disconnectors) and earthing switches.
IS: 8623	: Factory built assemblies of switchgear and control gear for voltages up to and including 1000 V AC & 1200 V DC.
IS: 8828	: Miniature air brake circuit breakers for voltages not exceeding 1000 V
IS: 9926	: Fuse wires used in rewirable type Electric fuses up to 1100 Volts
IS: 2208	: HRC fuse links
IS: 2705	: Current Transformers (Part- I, II & III)
IS: 3156	: Voltage Transformers (Part- I, II & III)
IS: 1248	: Indicating Instruments
IS: 722	: Integrating Instruments
IEC 60947 /IS: 13947	: Control devices and switching elements (Part - 5) Section-1
IEC60947/ IS: 13947	: Contactors and motor starter section 1 (Part - 4) Electromechanical. Section - 1
IS: 3231	: Relays
IS: 375	: Marking and arrangement of bus bars Indian Electricity Act and Rules

2.3.3 Type and construction

The switchboard shall be of:

- a. Indoor type floor mounted panel: IP 54.
- b. Outdoor feeder pillar: IP 66.
- c. Made up of the requisite vertical sections modular type which when coupled together shall form continuous dead front switchboards.
- d. Sheet steel enclosed, dust, vermin and damp proof and enclosure.
- e. Each feeder/instrument compartment shall be provided with a hinged door interlocked with MCCB inside the compartment such that door can only be opened when MCCB in off position.
- f. Readily extendable as required by the addition of vertical sections after removal of the end covers.
- g. Switchboards shall have access to the feeders, bus bars, cable termination, cable alley, etc. as required.
- h. Main Breakers need to be lockable.

Each vertical section shall comprise:

- a. A front framed structure of rolled/folded CRCA sheet steel angle section of minimum 3 mm thickness rigidly bolted together. This structure shall house the components contributing to the major weight of the equipment such as circuit breaker cassettes, main horizontal bus bars, vertical risers and other front mounted accessories.
- b. The structure shall be mounted on a rigid base frame of folded CRCA sheet steel of minimum 6 mm thickness and 75 mm height. The design shall ensure that the weight of the components is adequately supported without deformation or loss of alignment during transit or during operation.
- c. A cable chamber housing the cable end connections and power or control cable terminations. The design shall ensure generous availability of space for ease of installation and maintenance of cabling and adequate safety for working in one vertical or horizontal section without coming into accidental contact with live parts of the adjacent section.
- d. A cover plate at the top of the vertical section, provided with a ventilating hood where necessary. Any aperture for ventilation shall be covered with a perforated sheet having less than 1mm diameter perforations to prevent entry of vermin.
- e. Front and rear doors fitted with dust excluding neoprene gaskets with fasteners designed to ensure proper compression of the gaskets. When covers are provided in place of doors generous overlap shall be ensured between sheet steel surfaces with closely spaced fasteners to preclude the entry of dust

The height of the panel shall not be more than 2200 mm unless otherwise specified and maximum height of switch operating handle shall not be more than 1800mm from FFL. The total depth of the panel shall be adequate to cater for proper cabling space.

Doors shall be of minimum 14-gauge sheet steel and covers and partitions of 160 sheet steel. All sheet steel work forming the exterior of switchboards shall be smoothly finished, levelled and free from flaws. The corners shall be rounded.

The Components in the switchboards shall be so arranged as to facilitate ease of operation and maintenance and at the same time to ensure necessary degree of safety.

Components forming part of the switchboards shall have the following minimum clearances:

- a. Between phases 25 mm
- b. Between phases and neutral 25 mm
- c. Between phases and earth 25 mm
- d. Between neutral and earth 19 mm

When, for any reason, the above clearances are not available, suitable insulation barrier/shielding shall be provided. Clearances shall be maintained during normal service conditions.

Creep-age distances shall comply with those specified in relevant standards. All insulating material used in the construction of the equipment shall be of non-hygroscopic material treated to withstand the effects of high humidity, high temperature and tropical ambient service conditions.

Functional units such as circuit breakers, MCCBs, etc. shall be arranged in multi-tier formation except that not more than two air circuit breakers shall be housed in a single vertical section.

Metallic and/or insulated shrouding shall be provided within vertical sections and between adjacent sections to ensure prevention of accidental contact with:

- a. Main bus-bars and vertical risers during operation, inspection or maintenance of functional units and front mounted accessories.
- b. Cable terminations of one functional unit, when working on those of adjacent units.

All covers providing access to live power equipment or circuits shall be provided with tool operated fasteners to prevent unauthorized access. Provision shall be made for permanently earthing the frames and other metal parts of the switch gear by two independent distinct connections. Only CRCA steel sheets shall be used for fabricating the cubicle. Thickness tolerance for sheets shall be as applicable in relevant IS.

Metal Treatment and Finish Generally the treatment and finish of the metal surface shall be as per detailed specifications in Clause 8.4 Metal Treatment and Finish.

2.3.4 Air circuit breakers

2.3.4.1 General

The ACBs shall conform to IS 13947-172/IEC60947-1&2; conforming to test sequence 1. The ACBs shall be suitable for 3 phase 415 Volts. 4 pole ACBs shall have settable neutral at site (0,50, 100% In). All the breakers shall have topologicalization as a standard feature.

2.3.4.2 Construction

The Breaker shall be suitable for rear and vertical mounting and line load reversibility without duration. The operating mechanism shall be designed such that the handle can only be in 'OFF'

position if the Main contacts are actually separated and vice versa. It shall conform to Isolation as per standard.

2.3.4.3 Control Units

The Control Units shall be housed in a separate enclosure and there shall be total insulation of the control unit with respect to the power unit. The Control Unit shall be suitable to provide short circuit, overload and earth fault protection (wherever specified). The Control Unit shall not be a peak sensing device and shall measure the true RMS values to make the measurement free from the influence of harmonics. It shall have thermal memory.

2.3.4.4 Protections

The overload settings shall be adjustable from 0.4 to 1.0 times the nominal rating (I_n) and shall have time delay. Short circuit protection shall be from 3 to 9 times the rated current (I_r) with time delay. Instantaneous protection shall be settable up to 15 times nominal rating. Earth fault Protection (wherever specified) from 0.2 to 0.7 times nominal current (I_n) with time delay.

All breakers shall have segregated Led fault Indications & microprocessor failure indication.

2.3.4.5 Accessories

- All ACB feeders shall have metering and local display features viz. Ammeter, Voltmeter, frequency, KVA, KW, KVAh, p.f, maximum demand. It shall be possible via COM (485 port) to transmit the protection & metering settings to PC.
- ACB shall be provided with following accessories, in addition to the item specified in Bill of Quantities. Further these devices shall be fit-table at site accessible from the top and front and shall be common for all ratings.
- The connection for the auxiliary shall be accessible from the front.
- All ACBs shall have Under Voltage trip, shunt trip, auxiliary switches with NO. + NC. In EDO type, closing coil shall be provided.

2.3.4.6 Interlocking

- ACBs shall be provided with the following interlocking devices for interlocking the door of a switchboard:
- Handle interlock to prevent unnecessary manipulations of the breaker.
- Door interlock to prevent door being opened when breaker is ON position.
- Defeat interlocking device to open the door even if the breaker is in ON position.

2.3.5 MCCB - Moulded Case Circuit Breaker

2.3.5.1 General

MCCB shall conform to IS 13947-1&2/IEC60947-1&2; conforming to test sequence 1 and Isolation as per standard. It should be suitable for Horizontal and Vertical mounting and line load reversibility without any duration.

The Moulded Case Circuit Breaker incorporated in the switchboard shall be of the current limiting type, cat A, up to 630A. 800A and above shall be cat B i.e with Short time withstand capacity $I_{cw}/0.5$ sec of minimum 20kA. MCCB shall be suitable either for Single Phase AC 230V On Three Phase 415V. The MCCB shall be available in fully rated four pole versions for neutral isolation. It shall have topolization as standard feature.

The MCCB cover and case shall be made of high strength heat-resistant and flame-retardant thermosetting insulating material. The operating handle shall be quick make, quick break, and trip - free type. The operating handle shall have suitable 'ON' 'OFF' 'TRIPPED' indicators and in order to ensure suitability for isolation complying with IS 13947-2/IEC60947-2, the operating mechanism shall be designed such that the toggle or the handle can only be in 'OFF' position: if the main contacts are actually separated.

All Breakers shall have adjustable overload and short circuit settings. Overload – adjustable 0.4 to 1 times nominal rating (In)

Short-circuit – adjustable from 2 – 9 times rated current (Ir)

Earth fault (wherever specified) – adjustable setting with time delay.

All MCCB feeders shall have monitoring & display feature viz. Ammeter, Voltmeter, frequency, KVA, KW, KVAh, p.f.

2.3.5.2 Accessories

MCCB shall be designed to have following accessories and it shall be able to fit at site.

- a. Under voltage trip
- b. Shunt trip
- c. Alarm switch
- d. Auxiliary switch

2.3.5.3 Interlocking

MCCB/ACB shall be provided with following interlocking devices for interlocking the door of a switch board.

- a. Handle interlock to prevent unnecessary manipulations of the breaker.
- b. Door interlock to prevent door being opened when breaker is in ON position.

2.3.6 Other Equipment

2.3.6.1 Contactors

Contactors shall comply with IS 13947-1 for general rules and IS 13947 - 4.1 for Standards pertaining to Contactor and Motor Starter.

The Contactors shall be capable of withstanding breaking and making capacities per following:

AC3 Category	AC4 category
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Making Current 10 x Rated Current 12 x Rated Current Breaking Current 08 x Rated Current 10 x Rated Current

Contactors shall be capable of withstanding an impulse voltage of 8kV and have an insulation voltage of 1000V.

- Contactors shall be suitable for copper termination with a maximum permissible temperature rise of 65 Deg; C at the terminals with an ambient temperature of 50 Deg; C.
- The coils shall have three terminals and the insulation shall be of class H type.
- The auxiliary contact block shall have a switching capacity of 240V at 2A. Contactors shall have one auxiliary in built and it shall be possible to have additional normally opened, normally closed contacts in steps of two.

2.3.6.2 Miniature circuit breakers [MCB]

MCB shall be in 1,2,3 or 4, pole versions. MCB casing shall be made of self-extinguishing, tropicalized material.

MCB shall comply with IS 8828-1996/IEC 898-1995. It shall be suitable for use in frequency range 40Hz to 60Hz and shall accommodate AC/DC supply according to requirements. It shall have a trip-free mechanism and toggle shall give a positive contact indication. It shall be suitable for mounting on 35mm DIN rail/surface mounting.

Line supply may be connected to either top or bottom terminals i.e. there shall be no line-load restriction. Degree of protection, when the MCB is flush mounted, shall be IP40. MCB shall be supplied with clamping terminals fully open. Contact closing shall be independent of the speed of the operator. The breaking capacity of the MCB shall be 10kA. The MCB shall be capable of being used as Incomer Circuit Breaker and shall be suitable for use as an isolator. In case of multiple MCBs in a single location (DB), it shall be possible to remove any MCB without having to disturb other MCB's in the vicinity.

2.3.7 RCCB - (Residual Current Circuit Breaker)

RCCB shall be available in 2 pole and 4 pole versions and threshold sensitivities of 30mA, 100mA, 300mA and current ratings from 25 to 80A. Rating and sensitivities shall be as specified.

RCCB shall comply with IS 12640-1988/IEC 1008. The short circuit withstand of the RCCB without the associated short circuit/overhead protection shall not be less than 3 kA. It shall be operationally independent of line voltage. The sensitivity thresholds (30mA, 100mA, 300mA) shall be of non-user adjustable type by construction.

2.3.8 Current Transformers

Current transformers shall comply with the requirements of IS 2705. They shall have ratios, outputs and accuracy as specified/required. All CT's shall be of resin cast type unless otherwise specifically called for.

- All CTs shall be of bar type primary or suitable for the cable given type and size.
- For all the CTs suitable type and size clamps are to be supplied for mounting in the switchboards.
- Polarities and terminal markings of primary and secondary shall be clearly marked on all CTs

2.3.8.1 Specifications For CTs

- a) Current Ratios:
 - 1. Primary: As per feeder ratings
 - 2. Secondary: 5A
- b) Type: Resin Cast
- c) Class: PS-Differential Protection 5P10-O/C, E/F, RPR Class 1 for metering
- d) System Voltage LT: 415V, 3Ph, 50Hz

2.3.9 Potential Transformers

- All the Potential Transformers shall comply with the requirements of IS 3156 latest editions. All PT's shall be resin cast type and shall have Voltage ratios, output and accuracy class as specified in Data Sheet.
- All PT's shall be single phase, dry type suitable for mounting inside the panel or cubicles. Clamps, brackets and supports required for the mounting shall be supplied along with PT. Polarities and Terminal markings shall be clearly marked in all PT's. Name plate indicating, voltage ratio, burden, accuracy class, type, serial number, make and model plus other related data, shall be provided.
- A common earth terminal for earthing of core, bolts, clamps (noncurrent carrying metal parts) etc., shall be provided.

For 415V system, Specification of the PT's shall be as follows:

- a) Voltage ratio : 415V/110V
- b) Type : Resin cast
- c) Burden : 100VA
- d) Class (Metering/Protection): 0.5/3P

2.3.10 Instruments And Meters

All instruments and meters shall be enclosed in dust proof, moisture resistant black finished cases and shall be suitable for tropical use. They shall be calibrated to read directly the primary quantities. They shall be accurately adjusted and calibrated at Works and shall have means of calibration, check and adjustment at site. Definition of various meters as follows: -

- A. Automatic Scale Change on V and I for linearity of reading min scales: 2 current scales 1 voltage scale and Auto offsetting of Errors for Consistent reading
- B. Accuracy: Class 1 according to IEC1036 standards
- C. IP rating: Instrument = IP20 Front panel = IP40

- D. Temperature range: from -10°C to +40°C Relative humidity: R.H. max 90%
Condensation: not permitted
- E. Isolation: in accordance with group B VDE 0110 standards for 250 VACrms operating voltages.

2.3.10.1 Multi-Function Meter

Multifunction meter used on Panels as shown in SLD.

1. To display all electrical parameter V, I, Hz, kw, kVA, kVAR , Energy (kwh kVAh, kVARh), Max Demand, and Neutral Current.
2. To Display Individual harmonics from 0 to 31 on V, I and KW with Indication of Direction of Harmonic from load to Source or Vice versa
3. Accuracy Class 1 on energy complying with IEC EN 61036. Quadrants. 2 and 4 quadrant measurement (programmable) with Auto Automatic Scale Change on V and I for linearity of reading min scales: 2 current scales 1 voltage scale and Auto offsetting of Errors for Consistent reading
4. Standards - Safety: IEC EN 61010 class 2 – E.M.C IEC EN 61326-1A
5. Protection degree IP51 on front panel.
6. OUTPUT through RS 485 confirming to J MODBUS MODICON communication Protocol or Output thru RS 4*20mA
7. 2 Set Points as 2 digital outputs rated 27Vdc-27mA (DIN43864) with programmable functionality (pulse output or alarm)
8. Galvanic Isolation on all inputs and outputs to Attenuate RFI Disturbance

2.4 Distribution Board

2.4.1 General

Distribution boards shall be TP & N type for 415 volts, 3 phases, A.C. supply or 230V single-phase A.C. supply as required. Distribution boards shall generally conform to IS 8878 - 1978. However, the specifications hereinafter described shall take precedence over the above wherever these specifications call for a higher standard of material or workmanship.

2.4.2 Cabinet design

Distribution boards shall be of totally enclosed dead front safety type and with dust and vermin proof construction. The enclosure shall be made of the sheet steel of 14G corresponding to the size. The sheet steel shall be treated with a rigorous rust inhibition process before fabrication. The distribution boards shall comprise of miniature circuit breaker, Earth leakage Circuit Breaker as incoming and required number of miniature circuit breakers as outgoing. The mains and outgoing shall rating as specified on the drawings and schedule. The cabinet shall spray enameled to required colour shade finish. The interior surface shall be finished to an off-white shade. The interior components shall be mounted on a separate sheet steel which is mounted on locked on to the studs provided inside the cabinet. The cabinet shall be equipped with a 14 G inside hinged front door having a spring latch and a vault lock or over flanged door. Cabinets shall have detachable suitable size top and bottom, cable/conduit entry boxes with gland plates made out of 14 gauge. The hinged type door shall be with compressed rubber gasket lining and for over flanged type door the same gasket shall be provided inside the box.

2.4.3 Bus Bars

Suitable size bus bars made of high conductivity copper/Aluminum and mounted on non-hygroscopic insulating supports shall be provided. Neutral and earth bus bar shall be with taped holes and brass screws spring washers, etc., complete. For UPS distribution boards separate bus bars shall be provided for system neutral and body earthing.

2.4.4 Circuit Breakers:

Miniature circuit breakers shall be of approved design and make. Circuit breakers shall be equipped with individually insulated, braced and protected connectors. The front face of all the breakers shall be flush with each other. The incoming MCBs shall be provided with insulator shoes.

2.4.5 Safety and Interlocks:

All the live parts be properly shrouded such that accidental contact with live parts are totally avoided. Distribution boards interior assembly shall be dead front with the front cover removed. Incoming MCB terminal shall be shrouded with insulating shoes. Suitable insulating barrier made of arc resistant material shall be provided for phase separation. Ends of the bus structures shall also be shrouded.

2.4.6 Terminals:

Distribution boards shall be provided with a terminal block of adequate size to receive mains and outgoing circuits. The location of the terminal block shall be so located that, crowding of wires in the proximity of live parts is avoided.

2.4.7 Directory:

Distribution boards shall be provided with a directory indicating the areas of loads served by each circuit breaker, the rating of breakers, size of conductors, etc.. The directory shall be mounted on metal holder with a clear plastic sheet on inside surface of the front door. The Din Plate with a clear Perspex sheet shall be provided on the front door for over flanged door type DBs.

2.4.8 Installation:

Distribution boards shall be surface or recess mounted as required and at the locations shown on the drawings. The surface mounted boards shall be fixed on 40 x 40 x 6 mm angle iron frame work and bolts. All the cables/conduits shall be properly terminated using glands/grips/check nuts, etc.. Wiring shall be terminated properly using crimping lugs/sockets and PVC identification ferrules while carrying out the termination. No bare conductors shall be provided inside the board.

Distribution boards shall be bonded to the earthing system at least at two points using brass bolts and lugs. Suitable name plate/danger plate indicating the voltage, number of ways shall be fixed to the front cover. Minor civil works for mounting the DB shall be in the scope of the Contractor.

2.5 Power and Control Cables

2.5.1 Scope

This specification covers the design, manufacture, testing, inspection at Manufacturer's works and supply of power and control cables as detailed in Data Sheet conforming to specific requirements mentioned in this specification. The estimated quantities are given in the price schedule. However, the Contractor shall recheck the quantities and supply according to the requirements.

2.5.2 Codes and standards

The design manufacture and performance of cables shall comply with the requirements of the latest editions of the codes and standards.

2.5.3 Specific Requirements-Power Cables

2.5.3.1 415V Power Cables

The cables shall be 1100V grade, single / multicore, stranded aluminium conductor, unarmoured, PVC insulated, with PVC inner sheath and outer sheath of PVC. The cables for emergency services shall be with additional FRLS properties. The cables shall conform to IS-1554 - Part - I (1988).

For multicore cables, fillers used to fill in the space between the phases shall be non-hygroscopic, chemically inert and non-putrescent.

Cables laid outside the building, either buried or in trench shall be of armoured type.

2.5.4 Specific requirements-control cables

1100V grade multicore, 1.5 sq.mm stranded copper conductor, PVC insulated and extruded PVC inner sheathed and extruded PVC outer sheathed of PVC. FRLS cables, which have outer sheath of specially formulated FRLS PVC cable, shall be used for cables connected to Emergency services. The cables shall conform to IS 1554 Part- I (1985) / IEC 502 (1983) in all other respects. Cables laid outside the building, either buried or in trench shall be of armoured type.

2.5.5 Power cables shall be selected on the following basis:

Power cable shall carry the full load current of the circuit continuously under site conditions considering the various de-rating factors like ambient air temperature (40 deg C), grouping, laying methods etc.

Power cables shall be sized to restrict the voltage drop to 5% and a voltage dip of 10% for motors.

Power cable shall withstand the fault current of the circuit for the duration not less than the maximum time taken by the primary protective system to isolate the fault.

2.5.5.1 Instruction manuals

Four copies of instruction manuals, descriptive bulletins etc. as indicated in the distribution schedule shall be furnished prior to dispatch of cables. The manual shall include amongst others, the following particulars.

Description of insulation, sheathing and screening. This should include data on resistance to attack by chemicals, fungus, termites, rodents, water and ultra-violet radiation.

2.5.5.2 Test certificates

Type/Routine test certificates for all types of cables included in the order and special tests on FRLS/FS cables.

Specified number of copies of the approved test certificates shall be furnished to the Employer before dispatch of cables.

2.5.6 Cable and Installation

These notes in general apply to installation of cables up to and including 11KV grade.

Electrical installation work shall comply with all currently applicable statutes, regulation and safety codes in the locality / country where the installation is to be carried out.

Installation of cables shall be carried out generally as per IS: 1255 or relevant applicable standards of any other country specified in the specification and as per the instructions contained in specification, enclosed standard drawings and relevant project drawings.

Installation of cables includes storing, laying, fixing, jointing, termination, and all other work necessary for completing the job. Supply of glands and lugs, together with other necessary materials for joining and termination shall also be included in the Contractor's scope.

Construction of cable trenches, provision of embedment and similar work involving civil items shall be coordinated with Civil. However when such work is required to be done by the Contractor, it shall be carried out as per the instruction / notes on the relevant project drawings and installation specification of the project.

Cables shall be installed in trenches, trays, racks, tunnels, conduits, and ducts or directly buried. The actual cable layouts shall be shown on the relevant project drawings. Changes if necessary, after obtaining prior approval of the Employer shall be carried out at site by the Contractor and shall be clearly indicated in "As Built Drawings" by him and forwarded to the Employer

Cables to each circuit to be laid in one continuous length. Cable joining if necessary shall be done only after obtaining prior permission from Employer.

2.5.7 Outdoor cable Installation

For HT cable 1000mm trench or buried way to be laid and for LT minimum of 750 mm to be done Where cable cross roads and water / oil / gas / sewage pipes, the cable shall be laid in MS/GI/Steel/HDPE pipes. For road crossing the pipe for the cable shall be buried at not less than 750mm depth for LT and 1000mm for HT unless otherwise noted in the drawings

Control cables and small power cables in trenches, tunnels and racks shall be run in ladder type cable trays (Maximum tray width 600mm) supported on trench/ tunnel/ rack carrier arms. The cables shall be tied to tray rungs by means of 3mm dia. Nylon cord at an interval not exceeding 3000mm and also at bends.

For good sealing arrangements at entry points, suitable pipe sleeves, adequate in number and adequate in sizes shall be provided in building walls / slabs for passage of cables into building from cable trays/ racks/ cable trenches located outside the buildings. Details of sleeves and exact location of such entry points will be available on relevant project drawings.

Cable route marker shall be install at an interval of maximum 100 m or advised by Engineer-in - Charge.

2.5.8 Bending Radius for Cables

The bending radius for various types of cables shall not be less than those specified below, unless specifically approved by the manufacturer.

Type and voltage grade of the cable.	Minimum Bending Radius	
	Single core	Multicore
a) Paper insulated upto 1.1KV	20 D	15 D
b) Paper insulated above 1.1KV and upto 11KV	20 D	15 D
c) Paper insulated above 11KV	25 D	20 D
d) PVC & XLPE insulated upto 1.1KV	15 D	12 D
e) PVC & XLPE insulated above 1.1KV and upto 11KV	15 D	15 D

Where “D” is the overall diameter of the cable.

(For other types of cables, recommendation of manufacturers shall be followed.)

The values may be reduced to the extent of 70% when making only one bend such as in case of installing the termination.

2.5.9 Termination, Clamping, Straight through joints, Miscellaneous Details

Cable entry to the motors, Push button stations and other electrical devices shall be from the bottom as far as possible or from the sides. Top entry shall be avoided particularly for outdoor equipment.

Identification tags made from aluminium sheet shall be attached to each end of each cable by means of GI binding wire. Tags shall be additionally put at an interval of 30 meters on long runs of cable and in pull boxes.

All cable terminations shall be soldering less crimping type. Whenever lugs are to be supplied, adequate size crimping lugs for approved make shall be used by the contractor. The crimping tools shall be adequate for the size of the lug

Saddle type clamps to suit number of cables to be clamped at a particular location shall be used for clamping cables running along the walls, ceilings, structures etc. The interval between adjacent clamps shall be shown on the relevant enclosed drawings

Wooden cleats when required for supporting vertical runs of one or more single core cables per phase, such as near transformer cable boxes, shall be made of well-seasoned wood and shall be painted with two coats of fire-retardant paint of approved quality.

All cable joints shall be carried out by experienced and **licensed jointers**, under strict supervision. All jointing of cables in joint boxes, etc. shall be done as per section 12 of I.S.: 1255/1968. Best quality of jointing materials shall be used. All cable accessories and other associated materials shall conform to I.S. wherever applicable. Proper care shall be taken to prevent ingress of moistures into cable core during jointing.

The design, manufacture and performance of the **Heat Shrinkable Straight through joints** and Transition joints shall comply with all currently applicable statutes, regulations and safety codes. Nothing in this specification shall be construed to relieve the contractor off his responsibilities Unless otherwise specified, the Heat Shrinkable Straight through joints and Transition joints offered shall conform to the latest applicable Indian, IEC and in particular, to the following:- 1. IS: 13573- Part 2, 2011 Type Test and Performance requirement for Cable Termination & Joints on XLPE cable for 6.6KV up-to 33KV 2. ESI09-13 issue 1:1981 Performance specifications for higher voltage Heat shrinkable components for use with High Voltage Solid Cables up-to and including 33KV.

2.5.10 Testing and commissioning of cables

Cables shall be checked for insulation resistance before Laying and after laying and termination/ jointing of the cable. The voltage rating of the megger for cables of different voltage grade as indicated below.

Voltage Grade of cable	Megger Rating
1.1 KV	500V
3.3 KV, 6.6 KV and 11 KV	1000V
11/33 KV	2.5KV motorized megger

2.5.11 Earthing

Metallic sheaths, screens and armour of all multicore cables shall be earthed at both equipment and switchgear end.

Sheath and armour of single core power cables shall be earthed at switchgear end only. If specially indicated in the project specification / drawings, for long lengths of cables, multiple earthing may have to be adopted to safeguard against the presence of standing voltages under normal as well as under faulty conditions.

2.6 Lighting

2.6.1 Scope

This specification covers the design, material specification, manufacture, testing, inspection and delivery to site of lighting system equipment such as lighting fixtures, lighting poles and other similar items necessary for lighting system.

2.6.2 Standards

The items of supply comply with the latest applicable standards as specified in specification. Where no standards are available, the supply items shall be backed by test results shall be of good quality and workmanship.

2.6.3 Lighting fixtures and Accessories

Lighting Fixtures / Luminaires – General Requirements

Luminaires shall be designed for continuous trouble-free operation under atmospheric conditions without reduction in lamp life or without deterioration of materials and internal wiring. Outdoor fittings shall be weatherproof and waterproof type.

All luminaires shall be supplied complete with lamps suitable for operation on a normal supply voltage and the variation in supply voltage and frequency indicated in data sheet.

LED type luminaires shall be complete with accessories like LED's, drivers etc. These shall be mounted as far as possible in the luminaire housing only. If these cannot be accommodated integral with the luminaire then a separate metal enclosed control gear box shall be included to accommodate the control accessories together with a terminal block suitable for loop-in, loop- out connections. Outdoor type fixtures shall be provided with outdoor type weatherproof box with IP 65 or better. Mounting facility and conduit knockouts for the luminaires shall be provided.

2.7 Diesel Generator

2.7.1 Scope

The dealer shall furnish standby power units, including all equipment, materials, and labour to insure complete, functional, and reliable standby power. Only manufacturer's authorized dealers who have a minimum of 'Five to seven years' experience in the field of power generation with the same manufacturer whose products are being offered and can certify to this requirement, are allowed to supply equipment for this project. The dealer must be authorized by the manufacturer to administrate warranty for the engine generator set and must employ factory-trained mechanics.

2.7.2 Standards

The items of supply comply with the latest applicable standards as specified in specification. Where no standards are available, the supply items shall be backed by test results shall be of good quality and workmanship.

2.7.3 Quality assurance

- A. Design, manufacture, testing and method of installation of all apparatus and materials furnished under requirements of these specifications shall conform to latest publications or standard rules.
- B. All equipment and materials shall be listed by Underwriters Laboratories, Inc. (UL) for their intended use and shall bear the UL label or shall be manufactured according to that agency's standards where such standards have been established
- C. All materials shall be new and free of defects and shall be installed using the manufacturer's latest standard design.

2.7.4 Submittals

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Detail equipment assemblies and indicate dimensions, weights, required clearances, method of field assembly, components and location and size of each field connection.
- C. Compliance: At the time of bid, supplier must submit a certificate indicating compliance with the specifications. A copy of the manufacturer's printed and published service manual, parts book, installation guide, operation guide, service directory, and warranty shall be available to the Engineer during bid evaluation.
- D. Field quality-control test reports.

2.7.5 General

2.7.5.1 Manufactures

The standby generator set as specified is based on an acceptable unit. The Vendor shall be responsible for any engineering changes and costs that may be incurred with substitution. Only engine manufacturer's standard rating shall be acceptable, no dealer special ratings will be approved.

2.7.5.2 Generator set characteristics

- A. Rating at 1500 RPM: 415 volts
 - 1. Standby kVA with fan: selection as per requirement
 - 2. Power factor: 0.8
 - 3. Frequency: 50 Hz
- B. The specified or selected standby kW shall be for continuous electrical service, interruption of the normal utility source, per NEMA standards.

2.7.5.3 Components

- C. Engine: The engine shall be water-cooled, compression-ignited, rated for continuous standby application. It shall produce sufficient horsepower to achieve ratings as shown on the drawing while driving all accessories and parasitic loads such as fuel, lube oil, and jacket water pumps. The engine cylinders shall be equipped with replaceable cylinder liners and shall be fully water-cooled. Pistons shall be one piece, three ring design with cast in iron banks for the top two minimal restrictions and long life. Connecting rods shall be forged, hardened, and peened for increased strength. Main and rod bearings shall be of aluminum construction with copper bonding to the lead tin overlay, super finished for uniform film. A fuel priming pump shall be standard equipment. The engine shall incorporate one-piece high strength cylinder heads. The cylinder block shall be of single piece construction and constructed in such a way that liner shall rest on top of the block with a spacer plate installed between the block and cylinder head. Each cylinder shall have a continuously pressurized oil cooling jet directed at bottom of the pistons.
- D. Governor: The engine shall be equipped with a speed control with 0 (isochronous) speed drop from no load to full rated load and steady state speed regulation shall be $\pm 0.25\%$ over a range of -40° to 75° C. The governor shall be Woodward electronic type with speed control.
- E. Safety Device: The generator set shall have installed and be warranted by the engine manufacturer the following alarms and shutdowns.
 - 1. Oil pressure shutdown with step protection at high and low idle
 - 2. High water temperature shutdown
 - 3. Over speed shutdown
 - 4. Over crank shutdown
 - 5. Emergency stop push-button
- F. Cooling System:
 - 1. Construction: The engine jacket water shall be cooled through an integral tube and fin type radiator sized to provide full cooling of engine heat rejected to the coolant at 105 % of maximum load operation and a maximum external air flow restriction of 0.5" water. A blower type fan and

- all rotating members and drive belts shall be guarded and meet OSHA standards.
2. Coolant and Conditioner: The unit shall be provided with factory installed and tested 50%ethylene glycol Nalcool treatment shall also be added to the system in proper proportion.
 3. Jacket Water Pump: Provide an integrally mounted jacket water pump of sufficient capacity to circulate jacket water through engine coolant system at a rate as required to provide full cooling of engine heat rejection to coolant at full load rated speed.
- G. Provide dual connection compression type lugs.
- H. Provide two (2) battery charges and two (2) battery racks.
- I. Exhaust System:
- Muffler
- a. Provide a critical grade exhaust silencer, Maxim M41, as manufactured by Beaird Industries, Inc. or approved equal, properly sized by the manufacturer. The exhaust outlets on the engine shall be joined so there is only one common exhaust connection, one common flexible connection and one companion flange. Gaskets shall be furnished as required. Muffler shall be of double-walled, all welded construction protected by two single coats of shop primer.
 - b. Provide performance data for sound attenuation in dB in each of the eight octave band frequencies and 'A' scale attenuated exhaust noise with silencer at ten feet.
- J. Main Circuit Breaker shall be moulded case, enclosure mounted on the generator, and be sized as per requirement, 480 volts, and a 24 volt DC shunt trip. The circuit breaker enclosure shall be built to accept a flexible conduit, bottom entrance.
- K. Voltage Regulator: The voltage regulator shall be solid state, three phase sensing, volts per hertz type, to be supplied by the engine generator set manufacturer. Voltage drift shall be no more than $\pm 0.5\%$ of rated value at constant temperature. Adjustable controls for voltage drop, level and gain shall be easily accessible. Voltage level adjustment shall be a minimum $\pm 10\%$. Current limiting circuits shall be used to restrain exciter field current in the event of a sustained low power factor load. It shall provide rapid response during transient conditions. Overvoltage and under voltage protection shall be provided along with a solid state circuit to remove excitation when generator overload for more than 10 seconds occurs. Telephone Influence Factor shall not exceed 50. At full throttle engine starting, output voltage shall not overshoot more than 5% of its rated value, with respect to the volts/Hz curve and response time shall be less than 20 milliseconds.
- L. Control Panel: A generator mounted solid state control panel with digital readout meters and self\diagnostic capability shall be provided, shock mounted and vibration isolated on the generator. Control panel shall include 1% true RMS reading meters for amps, and volts, a phase selector switch (four position), frequency meter, and voltage adjust rheostat, oil pressure gauge, water temperature gauge, battery DC voltmeter, tachometer, auto start-stop control module, over crank, four position engine control switch for: Stop-Off/Reset-Manual-Auto, Cycle Cranking, Cool down Timer, and Emergency Stop Push-button.

1. Alarm module with flashing LEDs and horn to annunciate the following:
 - a) High coolant temperature alarm
 - b) Low coolant temperature alarm
 - c) Low oil pressure alarm
 - d) Battery Charger Malfunction
 - e) Generator on load
 - f) Low oil level
 2. Engine run contact
 3. All necessary control wiring, fuses, fuse blocks, terminal blocks, name-plates, fault contacts, auxiliary contacts, metering control transformers.
- M. Remote Annunciation Panel: A remote annunciator panel shall be provided with alarm indicating lights and alarm horn with test switch and silence button for the following alarm conditions:
1. Low oil pressure
 2. Over speed Shutdown 1
 3. Battery charger malfunction
 4. Low coolant temperature
 5. Over crank Shutdown
 6. Generator On load
 7. Low Oil level
- N. Foundation: The engine and generator shall be factory mounted on a torsionally stiff base, prime painted, fabricated from channel or I-beam to insure adequate mounting surface contact and minimal deflection.
- O. Vibration Isolator: Provide spring-type vibration isolators between engine structure and foundation pad. Quantity of isolators shall be furnished as required to provide the whole system (base, engine, and generator) with proven compatibility and shall be certified as such by the manufacturer of the unit. Spring isolators shall be capable of 96% of transmitted vibration isolation, rated for a static deflection of 1" maximum, and suitable for seismic design appropriate for an importance factor of III (essential facility) and a ground motion acceleration as indicated in the International Building Code Sections 1614 and 1615. Seismic protection and vibration efficiency calculations shall be submitted for approval. Vibration Isolators shall be by Ace Mounting Co., Inc., Series 632, or approved equal.
- P. Power Generator: The power generator shall be of the single bearing type, KW rating as per selection, 1500 rpm, 0.8 pf, 50 Hz, 3 Phase, 4 wire, 415 V, Brushless type. Sub transient reactance shall be a minimum of .20 per unit on the direct access. The power generator shall be manufactured and packaged by the engine manufacturer to insure proper performance and affect a single source of responsibility. The generator shall be rated and conform to NEMA standards for temperature rise and construction. The unit shall be synchronous, tropicalized and built per NEMA MG I-22 and IEEE standards. Class H insulation shall be used on stator and rotor and both shall be protected with an asphalt modified epoxy on all end coils. The generator shall derive excitation current from the generator output. The AC power shall be converted and controlled by silicon-controlled rectifiers. The rotor assembly shall demonstrate 130% overspeed capability at 170° C for 2 hours. The generator rotor two plane dynamic balance shall be within 0.002" peak-to-peak amplitude displacement while at operating speed. The generator shall

have a waveform deviation of not more than 5% and shall meet NEMA limits for telephone influence factors. Generator pitch shall be .6666. Power supply to the voltage regulator shall be by a Self-Excited Self-regulated Brushless type excitation system.

- Q. Automatic Starting System
- A 24 volt DC electric starting system with positive engagement drive shall be furnished.
 - Provide 24 volt Lead-Acid storage batteries of the heavy duty diesel starting type. The battery set shall be complete with steel rack, necessary cable and connectors, all in conformance with the engine manufacturer's requirements. Battery set shall be rated 244 amp hour capacity minimum.
 - For maintenance of the batteries at 90% - 100% of full charge, a 20 amp minimum, automatic dual rate battery charger, as manufactured by La Marche or approved equal, shall be provided. The charger shall recycle automatically to "on" or high rate at sufficient frequency to maintain high state of charge and long battery life. The charger shall be complete with DC ammeter, voltmeter, on-off switch, DC fuse, and charging indicator light. The 120 volt input to the charger shall be automatically disconnected during engine cranking cycle.
- R. Jacket Water Heater: Thermostatically controlled, jacket water heater, 480 V, single phase, 50 Hz, as per manufacturer's recommendations, with an oil pressure switch to shut down the water heater when the engine starts and flow of oil has been proven. It shall maintain engine coolant temperature at a minimum of 100° F in an ambient of 40° F. A contact shall close when jacket water temperature drops below 70° for remote alarm.
- S. A VAR/Power Factor controller shall be provided.

2.7.5.4Day Tank

- T. Provide a packaged design fuel oil day tank for each emergency generator. Day tank shall be complete in all respects in order to provide the generator with a reliable, local source of fuel. Tank assembly shall be complete in all respects in order to provide the generator with a reliable, local source of fuel. Tank assembly shall be in compliance with NFPA 30, 31, and 37 and in conformance with UL-142.
- U. Capacity: 300 gallons or as per standards.
- V. Power requirements: 240 VAC, single phase, 50-Hertz, 15 A dedicated branch circuit.
- W. Day tank construction:
- All welded steel atmospheric tank of rectangular construction, built in accordance with codes and standards noted above for indoor use with fuel oil.
 - Pipe thread connections shall be provided for fuel oil supply from main tank, supply to prime mover, return from prime mover, over flow to main tank, vent, and drain with ball valve. The drain will penetrate the containment described below. A weather- proof, screened vent cap shall be provided as a loose item for field installation at the outdoor vent termination.
 - An inspection port in the top shall be provided.

- The tank shall be equipped with a welded steel channel base suitable for bolt attachment to a concrete pad.
- The tank shall have interior corrosion protection consisting of an epoxy coating.
- The exterior of the day tank and the interior and exterior of the containment described below shall receive a heavy duty industrial anti-corrosion coating and be finish painting.
- All day tank system components shall be protected by a removable steel equipment cover.
- Day tank shall be factory leak tested at 5 psi.
- The tank shall be installed and anchored with a steel containment basin having a minimum capacity of 110% that of the day tank. The containment shall be protected against intrusion of debris and falling water. The containment shall be equipped with a leak detector that shall activate the “rupture” alarm. A drain with ball valve shall be supplied.
- The day tank shall be equipped with a solenoid valve 1.0 inch NPT, 100 psi, normally closed, under control of level controller. An inlet shut off valve shall be provided.
- Day tank level controller: Provide an electronic liquid level controller/indicator with functions to include: adjustable differential valve level control, tank level indication, system alarms, and manual operating controls. Level controller shall be self-contained as a unit and within a NEMA 1 box mounted on top of the day tank.

3 BILL OF MATERIAL

3.1 Preamble

- All items of work mentioned in the Schedule of Quantities shall be read and executed strictly in accordance with the description of the item in the Schedule of Quantities & read in conjunction with the appropriate IS and conditions of Contract.
- The rate for each item of work included in the bill of quantities shall unless expressly stated otherwise included cost of: -
 - a. All materials, fixing materials, accessories, hardware, operations, tools, equipment, consumables, civil works wherever involved and incidentals required in preparation for in the full and entire execution and completion of the work called for in the item as per specification and drawings completely.
 - b. Wastage on materials and labour.
 - c. All taxes, duties, Octroi, including works contract tax, sales tax, transit insurance, packing and forwarding charges, loading, transportation, unloading, handling, hoisting, to all levels, setting and fixing in position, disposal of debris and all other labour necessary in accordance with contract documents, good practice and recognized principles.
 - d. Liabilities, obligations and risks arising out of conditions of contract.
 - e. Liaison service charges.

E-TENDER: CGI6319P25

- All requirements of system whether such of them are mentioned in the item or not the specifications and drawings are to be read as complimentary to and part of the schedule of quantities and any work called for in one shall be taken as required for all.
- In the event of conflict between the bill of quantities and other documents, the most stringent shall apply and interpretation of the Architect shall be final and binding.
- The installation price of switchboards, metering panels, DB's or any other items shall include supply and fixing of supporting steel structures/MS channels grouting of the same civil works etc., as required.
- No change in unit rate shall be allowed for any change in quantity or for any other reason whatsoever.
- Supply of materials shall mean supply of materials at site. The rate for supply shall include all taxes, insurance, packing and forwarding charges, transportation, unloading at site. However, the quote should indicate the tax structure separately with necessary details.
- The successful contractors shall submit the Schematic diagrams, fabrication drawings with details of all equipment wirings diagrams etc., to Client/ Architect for approval prior to supply/commencement of such works. The approval of these drawings will be general and will not absolve to contractor of the responsibility of the correctness of these drawings. At least four copies of the approved drawings shall be supplied to Architects for their distribution to various agencies at site at no cost of Owner.
- The Contractor must see the site conditions such as type of soil, locations etc., and take all factors into consideration while quoting the rates as no extra cost will be allowed on any ground arising out of or relating to the site conditions.
- Any error in description or in quantity or omission of items from the contract shall not vitiate this contract but shall be corrected and deemed to be a variation required by the Architect/Owners.
- The Liaison Service Charges shall include the following:
 - a. Follow up expenses with the Local Statutory authorities from the drawing approval up to servicing the installation and getting the safety certificate.
 - b. Preparation of detailed drawings required by the Local Statutory Authorities.
 - c. Obtaining approval of drawings and installation from Local statutory Authorities as applicable.
 - d. Obtaining route drawings from Local Statutory Authorities as applicable.
 - e. All incidental charge/expenses associated with the above work as applicable.
 - f. Official deposits paid to the above agencies will be reimbursed separately at actual by the Owners.
- The tenderer shall take into account the expenses of pre-commissioning tests to be conducted as per specification of the complete installation by licensed agencies.

END OF MATERIAL SPECIFICATIONS

END OF E&C SPECIFICATIONS

**Technical specification for
Design, Fabrication, Supply, Installation & Commissioning of 8 Passenger Lift**

1. Introduction

The required passenger lift as per will be installed two numbers of multi-storied (G+6) residential building blocks inside Oil housing colony at Narengi, Guwahati, Assam.

Type of lift 8 Passenger lift with machine room.

2. Service condition

Ambient Temperature & Relative Humidity: 11 Deg C(Min)- 42 Deg C(Max) & up to 95% RH.

3. Scope of Supply

Scope of work: Design, Fabrication, Supply, Installation, Commissioning, packing, forwarding, transportation to OIL INDIA site, unloading, furnishing of final drawings and manuals, handling at site, performance demonstration and performance acceptance etc. of 8 passenger capacity lift, to make the system complete in all respects and required civil work as per technical Specification & as per the tender document.

Table-1

CAPACITY (kgs)	8 persons.
SPEED (mps)	1 mps
RISE (m)	11.55m
STOPS	6 Stops With (all opening on the same side)
CONTROLLER TYPE	ACD3-MR
DRIVE	VF Regenerative (Closed Loop)
POWER SUPPLY	400/415 Volts (3 Phase AC) / or as per man specs.
OPERATION	Full collective operation
MACHINE	PM Gearless (Located above shaft)
TRACTION MEDIA	Flat Coated Steel Belt / or as per manufacturers specification
CAR FINISH	· Rear Panel =SS Hairline finish · Side Panels = SS Hairline finish · Front Panels = SS Hairline finish
FALSE CEILING TYPE	metallic with LED light fixtures
FLASE CEILING FINISH	Black Powder coated
VENTILLATION	Cross flow fan
HAND RAILS	Stainless Steel Mirror Finish Handrails on rear car panels
FLOORING	Heavy duty Vinyl Tiles
CAR DOOR FINISH	Stainless steel - Hairline finish
LANDING DOORS FINISH	Stainless steel - Hairline finish
FIRE RATED DOORS	Fire rating-60mins
HOISTWAY DIMENSIONS (W x D - mm)	2.0 m x 2.0m
CAR DIMENSIONS (W x D x H - mm)	As per manufacturer specs
CAR & HOISTWAY DOOR TYPE	Central opening (CO) doors
DOOR OPENING (W x H - mm)	800 mm W x 2100 mm H
DOOR OPERATOR	DC Door Operator
COP	Gien Buttons in Stainless Steel #4(Hairline)
CAR POSITION INDICATOR	(RED LED) Scrolling Display
HALL FIXTURES	To
HALL FIXTURE FACE PLATE	Stainless Steel #4(Hairline)
HALL BUTTON ARRANGEMENT	Hall Button with HPI
STANDARD FEATURES	Anti-nuisance Car Call Protection, Independent Service (for Duplex only), Overload Device, Nudging, Emergency

	Firemen's Service, Emergency Car Light Unit, Infrared Curtain Door Protection, Door Time Protection, Emergency Alarm Button, Extra Door Time of Lobby & Parking, Door Open/Close Button, Manual Rescue Operation, Belt Inspection Drive, Auto Fan Cut Off
OPTIONS REQUIRED	Automatic Rescue operation, Voice Synthesizer
OPTIONS REQUIRED	Mirror on rear side wall

4. Standards

The following Indian Standard Specifications and Codes of Practice, currently applicable and updated as of date irrespective of dates given below, shall apply to the equipment's and the work covered by this contract. In addition the relevant clauses of the Indian Electricity Act 1910 and Indian Electricity Rules 1956/ CEA 2022 as amended up to date shall also apply. Wherever appropriate Indian Standards are not available, relevant British and/or IEC Standards shall be applicable

1. Code of Practice for installation, operation and maintenance of electric passenger & goods lifts. IS-14665 (Part 2) Sec-1 :2000
2. Code of practice for installation, operation and maintenance of electric service lift. IS-14665 (Part 2) Sec-2 : 2000
3. Safety Rules Section-1 Passenger and Good lifts IS-14665 (Part 3) Sec-1 : 2000
4. Safety Rules Section-2 – Service Lifts IS-14665 (Part 3) Sec-2 : 2000
5. Outline dimension for electric lifts. IS-14665 (Part-1) : 2000
6. Inspection Manual for Electric Lifts IS-14665 (Part 5) : 1999
7. Electric Traction Lifts – Components
8. Installation And Maintenance of Lifts For Handicapped Persons (Code of Practice) IS-14665 (Part 4) Sec-1 to 9 :2001 IS 15330 :2003
9. Specification for lifts cables. IS-4289 (Par-1) : 1984 Reaffirmed 1991
10. Specification for hot rolled and slit steel tee bars. IS-1173-1978 Reaffirmed 1987
11. Method of loading rating of worm gear. IS-7443-1974 Reaffirmed 1991
12. Code of practice for selection of standard worn and helical gear box. IS-7403-1974 Reaffirmed 1991
13. Isometrics screw threads. IS-4218-(Part-II)1976 Reaffirmed 1996
14. Degree of protection provided by enclosure for low voltage switchgear and control gear. IS-2147-1962

15. Classification of insulating materials for electrical machinery and apparatus in relation to their thermal stability in service. IS-1271- 1985 Reaffirmed 1990
16. Code of practice for earthing. IS-3043-1987
17. Electrical installation Fire Safety of Building. IS-1646-1997
18. PVC insulated electric cable for working voltage up to and including 1100 volts.IS-694-1990
19. Code of practice for electrical wiring and installation IS-732-1989
20. PVC insulated (Heavy Duty) electric cables for working voltage up to and including 1100 volts. IS-1554-1988 (Part-1)
21. Flexible steel conduits IS-3480-1966
22. Accessories for rigid steel conduit for electrical wiring IS-3837-1976
23. Boxes for the enclosure of electrical accessories IS-5133-1969 (Part 1)
24. Guide for safety procedures and practices in electrical work. IS-5216- 1982 (Part-1)
25. Conductors for insulated electric cables and flexible cordes IS-8130- 1984
26. Miniature Circuit Breakers IS-8828-1996
27. Rigid steel conduits for electrical wiring (Second revisions) IS-9537- 1981
28. Methods of test for cables IS-10810-1998
29. Earth Leakage Circuit Breakers. IS-12640-1988
30. Moulded Case Circuit Breakers IS-13947-1993
31. General requirement for switchgear and control gear for voltage not exceeding 1000 volts.IS-13947-1993
32. 1100-volt grade XLPE insulated armoured cables IS 7098
33. Specifications for hoistway door-locks IS 7754-1975
34. Rules for design, installation, testing and operation of lifts, escalators and moving parts.IS 1735-1975

In addition, the relevant clauses of the following, as amended up to date shall apply.

- The Indian Electricity Rules 1956
- The Indian Electricity Act 1910
- Fire safety regulations pertaining to lifts

5. Technical Specifications - General

5.2 GENERAL REQUIREMENTS

The Elevators shall include all elements conforming to specifications or as amended herein. Elevators covered by these specifications shall be provided, installed, tested, commissioned, certified and approved as per statutory requirements of Lift Inspectorate. Elevator shall have its own driving machine.

The method of drive shall be Electric Traction with Gear less motor having VVVF Control.

The design of the Elevators shall take into consideration fire prevention, elimination of dust and dirt traps, and easy accessibility for cleaning and routine maintenance.

5.2 ELECTRIC TRACTION DRIVE SYSTEM

5.2.1 Traction Machine

The construction of all Elevator machines shall conform with IS-14665

5.2.2 Brake

- a) The Electro-magnetic brake with non-asbestos lining shall be spring applied and electrically released type having noiseless operation.
- b) The brake shall be capable of stopping and holding the Elevator car in its downward travel to rest with 125% of its rated load from the maximum governor tripping speed. In this condition the retardation of the Car shall not exceed that resulting from the operation of the Safety gear or stopping on the buffer.
- c) Springs used to apply the brake shoes (two nos.) shall be in compression and adequately supported.
- d) Brake linings shall be of renewable incombustible materials and shall be secured to the brake shoes such that normal wear shall not weaken their fixings. Band brakes shall not be used.
- e) No earth fault, short circuit or residual magnetism shall prevent the brake from being applied in the event of loss of power supply to the Elevator motor and control circuit.
- f) A means of adjusting the brake plunger stroke and releasing the brake in emergency shall be provided.
- g) The Elevator machine shall be fitted with a manual emergency device capable of having the brake released by hand and requiring a constant effort to keep the brake open.
- h) The fail safe break shall incorporate an approved design of brake switch i.e. pick up, hold, discharge. Brake coil shall be wired in series & their respective switches in parallel. The operation of brake shall be thyristor controlled from solid state drive in order to effect minimum pick up time and synchronized start.

5.2.3 Driving Mechanism

5.2.3.1 Lift Machine

The lift machine shall be suitable for 415 volt 3 phase 50 Hz AC supply with a voltage variation of +10% and -20% and shall be placed directly above the hoist way on steel beams resting on machine room floor slab. The lift machine shall have high efficiency and low power consumption and shall be designed to withstand peak currents in lift duties.

Means for manual operation of the lift car shall be made by providing winding wheel suitably marked to indicate the direction of the movement to enable the lift car to be brought to the nearest landing. There shall be a warning display for switching off electrical supply before the manual operations.

5.2.4 Driving Sheaves

- a) The sheaves shall be manufactured in steel or SG iron and fitted with sealed for life lubricated bearings.
- b) The sheaves shall have machined rope grooves that can be reworked for future wear.

- c) Adequate provision shall be made to prevent any suspension ropes leaving groove due to rope slack or introduction of foreign objects.

5.2.5 Alignment

- a) The brake plunger, collar, sleeve, motor, sheaves and all bearings shall be mounted and assembled so that proper alignment of these parts is maintained.
- b) The assembly shall be reviewed and rectified when excessive noise is emitted during operation.

5.2.6 Gearless Machines

The gearless machine shall consist of a motor traction sheave and brake drum or brake disc completely aligned on a single shaft. Gearless machine shall be AC gearless with VVVF drive.

5.2.7 Anti-Vibration Supports

The whole traction machine shall be mounted on appropriate anti-vibration supports to minimize noise and vibration.

5.3 CONTROL SYSTEMS

5.3.1 Description

The Lifts shall have state of art microprocessor based AC variable voltage variable frequency (ACVVVF) drive. Some of the technical parameters required are innumerate below.

- a) Starting current 1.2 - 1.5 times full load running current
- b) Power saving 50 - 55%
- c) Leveling accuracy ± 3 mm
- d) Acceptable voltage fluctuation +10 to - 20%

The controller shall be mounted on the side of the top of lift shaft, vertical, totally enclosed cubicle type with hinged doors on the front provide easy access to all components in the controller. Cubicle shall be well ventilated such that the temperature inside never exceeds the safe limits of the components at ambient room conditions. The controller shall operate within the supply voltage variation of plus 10% to minus 20% of the nominal voltage.

The Controller shall be include protection against the following abnormalities and shall cut off the power supply, apply the brake and bring the car to a rest in the event of any of the abnormalities occurring.

- a) Over current
- b) Under voltage
- c) Overvoltage
- d) Single phasing
- e) Phase reversal
- f) Earth leakage

5.3.2 Features

Control system features are detailed as below.

• **Attendant Operation**

lift shall be provided with attendant control facilities. A key switch for change of operation mode shall be provided in a lockable recess panel on the car operation panel. After gaining control on the lift, the attendant can direct the car to stop at any storey. The attendant can also by pass the landing calls (but not cancel them) or reverse the direction of travelling.

• **Automatic By-pass**

Load weighing devices located either on car top or under the car cage shall be provided for all lifts. Whenever the load exceed 60-70% of the capacity load of the lifts, the lifts shall ignore all landing calls and only respond to car calls.

• **Over load device**

A load weighing devices shall operate when the load in the car exceeds the rated capacity. The operation of the device shall activate buzzer sound and flashing 'overload' signals. At the same time the car doors shall be prevented from closing. When the excess load has been removed from the car, the buzzer alarm shall be muted automatically and the car shall function normally. The sensitivity shall be 30 kg for Passenger lift.

• **Automatic self-levelling**

All lifts shall be provided with automatic self-levelling feature that shall bring the lift car level to within ± 3 mm for passenger elevators of the landing floor regardless of load or direction of travel. The automatic self levelling feature shall correct for over travel and rope stretch.

6. TECHNICAL SPECIFICATIONS - LIFTS, LIFT CAR, DOORS AND SAFETY DEVICES

6.1 CAR ENCLOSURES

6.1.1 General Requirements

- **Frame**

Every lift car body shall be carried in a steel car frame assembly which shall have sufficient mechanical strength to resist the forces applied by the safety gear or impact of the car on the buffers. The deflection of the steel members carrying the platform shall not exceed 1/1000 of their span under static conditions when the rated load is evenly distributed on the platform

At least four renewable guide shoes or shoes with renewable linings or sets of guide's rollers shall be provided two at the top and two at the bottom of the car frame assembly.

6.1.2 Landing fixture

The landing fixtures shall be recess mounted on a base junction box in the wall by the side or on top of landing doors as required. Each landing fixtures shall consist of micro touch type landing call buttons with illuminated call acknowledge signal and illuminated digital type car position indicators on separate stainless steel face panels with hairline finish.

6.2 CAR AND LANDING DOORS

6.2.1 General requirements

All car doors shall extend to the full height and width of landing opening unless otherwise specified and shall be operated with variable frequency door operator. A similar imperforate door shall be provided for every landing opening in the lift hoistway enclosure. The top track of the landing and car doors shall not obstruct the entrance to the lift cars. All car and landing doors shall have a fire resistance of not less than 1 hours. In addition, all the car and landing doors shall meet the following general requirements.

- a) Car door locking devices

Every car door shall be provided with an electrical switch to prevent the lift car from being started or kept in motion unless the car door is closed. A mechanical locking

- **Enclosure finishes**

The car enclosure, doors etc. shall be as per Table-1 enclosed. The following are to be provided.

- **_Alarm System:** An emergency alarm buzzer, including wiring shall be provided and connected to a plainly marked push button in the car operating panel. The alarm bell shall be located in central security room. The alarm unit shall be solid state siren type, to give a waxing and waning siren when the alarm button in the car is pressed momentarily
- **Sealed Maintenance Free Nickel Cadmium Batteries** capable of maintaining the following in each lift for 2 hrs after mains failure.
 - Emergency light of adequate illumination in car
 - Car Ventilation
 - Intercommunication System
 - Alarm bell

- One no. 16 amp switch socket outlet to IP 54 and a permanent weatherproof type luminaries to IP54 (with lighting switch) adequately protected shall be provided on the top of the lift car for maintenance
- One no. 16 amp switch socket outlet to IP 54 at bottom of lift car for maintenance

6.2.2 Operation Panel

A full length car operating panel incorporating following control/indications shall be provided on the return panel

- LCD Illuminated touch push buttons of micro pressure type corresponding to the floors served at Ground floor and Inside Car. For Other floors LED Illuminated touch push buttons of micro pressure type to be provided.
- Door open and door close button
- Emergency stop button with Alarm
- Two position key operated switch for 'with attendant' and 'without attendant' operation.
- Ventilation fan ON/OFF switch with auto OFF when there is no call after 120 seconds (Two Speed & concealed vents).
- Built in intercom of the hands free type as well as space for providing EPABX telephone instrument and 5 pair telephone trailing cable to communicate from car to Two Locations i.e. Operator's Room (at remote location) & Security Guard Room and vice-versa.
- Dynamic car direction display
- Car position indicator (digital)
- Audio/Visual overload warning indicator
- Digital voice synthesizer (Optional) for announcing special messages with background music.
- device shall also be provided to prevent door opening from inside the car whilst the car is in motion.

b) Landing door locking devices

Every landing door shall be provided with a mechanical locking device to prevent opening of the door from the landing side in normal cases unless the lift car is in that particular landing zone.

c) Projections and recesses

Sliding car and landing doors shall be guided on door tracks and sills for the full travel of the doors.

d) Door locking devices

All doors locking devices, door switches and associated actuating rods, levers or contracts, shall be inaccessible from the landing or the car.

e) Protective devices

Protective devices shall be fitted to the leading edges of both car door panels. It shall automatically initiate reopening of the door in the event of a passenger being struck (or about to be struck) by the door in crossing the entrance during the closing movement. The obstruction of either leading edge when closing shall actuate the protective device to function.

f) "Door open" alarm

"Door open" alarm shall be provided in the car to initiate alarm and a continuous buzzer if a car or landing door has been mechanically kept open for a present period. The period shall be adjustable from 0-10 minute.

g) Emergency landing door unlocking devices and key

- Every landing door shall be provided with an emergency landing door unlocking device. When operated by an authorized person with the aid of a key to fit the unlocking triangle, the landing door shall be unlocked irrespective of the position of the lift car for rescue purpose. When there is no "unlocking" action, the key shall only be able to stay in the locked position.
- In the case of coupled car and landing doors, the landing doors shall be automatically closed by means of weight or springs when the car is outside the unlocking zone.

6.2.3 Door Hangers and Tracks

The car and the landing doors shall be provided with two point suspension sheave type hangers complete with tracks. Sheaves and rollers shall be steel with moulded nylon collar and shall include shielded ball bearings. Tracks shall be of suitable steel section with smooth surface. The landing doors shall be complete with headers, sills, frames etc. as required.

6.2.4 Lift Door Protection

Multiple-Infra red door protection and mechanical shoes shall be provided for lift to control door movement which shall cover the entire door opening effectively.

6.2.5 Protective Hand Rail in the Car (Optional)

6.2.6 CABIN FAN

A noiseless pressure fan shall be provided in the lift cabin.

6.3 HOIST ROPES

Hoist way material shall be non-flammable (02 hrs fire rated) except travelling cables which shall be flame resistant.

Lift Ropes – IS 14665 (Part 4 / Sec 8)-2001

Round strand steel wires ropes made from steel wire ropes having a tensile strength not less than 12.5 tonnes/cm² and of good flexibility shall be used for lift. Lubrications between the strands shall be achieved by providing impregnated hemp core. The lift ropes shall conform to IS 14665-(Part-4-Sec. 8):2001 and the required factor of safety shall be adhered to. The minimum diameter of rope for cars and counter weight of passenger and goods lift shall be 8mm.

Rope fastenings

The ends of lift ropes shall be properly secured to the car and counter weight hitch plates as the case may be with adjustable rope shackles having individual tapers babbitt sockets, or any other suitable arrangement. Each lift rope shackle shall be fitted with a suitable shackle spring, seat washer, shackle nut & lock & shackle nut split pin.

Guards for Lift Ropes

Where lift ropes run round a sheave or sheaves on the car and/ or counterweight of geared/ gearless machine suitable guards shall be provided to prevent injury to maintenance personnel.

Number & Size of Ropes

The contractor must indicate the number and size of lift ropes and governor ropes proposed to be used, their origin, type, ultimate strength and factor of safety. The contractor should furnish certificate or ropes from the rope manufacturers issued by competent authority.

6.4 COUNTER WEIGHT

The counter weight for lift cars shall be in accordance with clause 6 of IS 14665 (Part 4-Sec-3) : 2001 and shall be designed to balance the weight of empty lift car plus approximately 50 percent of the rated load. It shall consist of cast sections firmly secured in relative movement by at least two numbers steel tie rods having lock nuts/split pins at each end and passing through each section and Housed in a rigid steel frame work. Cracked and broken sub weights shall not be accepted. Counter weight for passenger lifts should be able to accommodate suitable weight Interior finishes. In case interior finishes material exceeds this provision, then the elevator contractor shall adjust the Counter Weight accordingly, however this will be decided and intimated much before the delivery of the elevators.

Counter Weight Guards

Guards of wire metal / mesh shall be provided in the lift pit to a suitable height above the pit floor to eliminate the possibility of injuries to the maintenance personnel.

6.5 GUIDES / Guide Rails

Car and counterweight guide shall be machined T section as per relevant Indian Standards IS-14665 of 2000 revised up to date. The guides shall be capable of withstanding forces resulting from the application of the car or counter weight safety devices The guide rails shall be minimum 16mm Tongued & Grooved type.

6.6 TRAILING CABLES

A single trailing cable for lighting control and signal circuit is permitted, if all the conductors of this trailing cables are insulated for maximum voltage running through any one conductor of this cable. The lengths of the cables shall be adequate to prevent any strain due to movement of the car. All cables shall be properly tagged by metallic / plastic tags for identification. Cable jacket should be suitable for immersion in water, salt water & oil etc.

6.7 SAFETY DEVICES

Safety devices shall be capable of operating only in the downward direction and stopping fully loaded car, at the tripping speed of the over speed governor, even if the suspension devices break, by gripping the guides, and holding the car there. Governor sheave in elevator pit shall be enclosed in a wire cage to a height of 2.40 mtr. All safety devices statutorily required by Lift Inspector, including but not restricted to the following shall be provided.

- **Terminal slow down switches**

These shall be provided and installed to slow down the lift car when approaching the top and bottom landings. The slowdown switches shall act independently from the normal car operating device.

- **Over travel limit switches**

These shall be provided and installed to stop the car within the top and bottom clearance, independent of the normal car operating device. The bottom over travel limit switch shall become operative when the bottom of the car touches the buffer.

When the over travel limit switches are operative, it shall be impossible to operate the car until the car has been hand would to a position within the normal travel limits.

- **Pit Switch**

An emergency stop switch shall be located in the pit which when operated shall stop the car regardless of the position of hoist way.

- **Terminal Buffers**

Suitable spring buffers mounted on RCC foundation blocks shall be provided in the pit in compliance with ANSI/ASME/CENEN-81 /JIS codes for stopping the car in case of mal-operation. Dowels for the purpose shall be left while casting the pit floor alternatively floor reinforcement could be exposed by chipping for welding additional reinforcement for Dowels. However clearance from underside of the car resting on a fully compressed buffer shall not be less than 1.20 mtr. Buffers shall be designed for a design speed + 15%. Oil buffers shall be provided for the passenger elevators for speed of more than 1.75 mps and spring buffers for lower speed.

• **Interlocking**

Adequate interlocking is to be provided so that the car shall not move if the landing doors are even partially open and also the lift is overloaded.

• **Over speed governor**

Over speed governor shall be of centrifugal type and shall operate the safety gear at a speed at least equal to 115% of the rate speed and less than the over speed governors shall be driven by flexible wire ropes with the following requirements.

- The breaking load of ropes shall be related to the force required to operate the safety gear by the safety factor of at least 8
- The nominal rope diameter shall be at least 7 mm
- The ratio between the pitch diameter of the over speed governor pulley and the nominal rope diameter shall be at least 30 The over speed governors shall be sealed after setting the tripping speed. The breaking or slackening of the governor rope shall cause the motor to stop by an electric safety device.

• **Alarm bells**

A Concealed 200 mm diameter alarm bell shall be installed in the main security area. The alarm bell shall sound when the alarm bell button in the car operating panel is pressed. The bell shall mute when the pressure on the alarm bell button is released.

• **Emergency Stop Switches**

An emergency stop for use by maintenance personal shall be provided in each lift car.

6.8 FIREMAN SWITCH

Lift shall have a Fireman switch with glass front for access by the Firemen. The operation of this switch shall cancel all calls to this lift and shall stop at the next nearest landing if traveling upwards. The doors shall not open at this landing and the lift shall return to the ground floor. In case the lift is traveling downwards when the fireman's switch is operated it shall go straight to the ground floor bypassing all calls enroute. The emergency stop button inside the car shall be rendered inoperative. The fireman's switch shall be located adjacent to the lift opening at the terminal floor and shall be at a height of approximately 2 m above the floor level. For easy identification of firemen's lift which conform to the local authorities requirements, a red and white diagonal striped backing shall be provided behind the glass of the firemen's switch.

A permanent notice of prominent size indicating the floors served shall be provided and displayed adjacent to the firemen's lift at the terminal floor. The notice shall be made of laminated plastic sheet or other approved materials with red letters on white background. Details of the notice shall be submitted to the Engineer-in-Charge for approval prior to fabrication.

6.9 CONTROL OF NOISE AND VIBRATION

6.9.1 General

The whole of the lift assembly, including the opening and closing of the car and landing doors shall be quiet in operation and shall be free of rattling or squeaking noises. Lift doors operation shall be smooth to avoid the transmission of impact noise to the surrounding structure. Noise level resulting from the operation of the lifts, including direct sound transmission, breakout noise and re-radiation of structure borne noise, shall not exceed the specified noise criteria of the adjacent spaces. Vibration resulting from operation of lifts of escalators shall not be perceptible in any occupied areas.

6.9.2 Car construction

All elements of the lift car construction shall be sufficiently rigid to avoid generation of noise by panel excitation as a result of movement. The total noise level in a moving lift car shall not exceed 45 dBA with the ventilation system operating.

6.9.3 Machinery

The gearless traction machine and compact PM motor are installed within the hoist way and the slim control panel is located on the shaft side wall. Provision shall be made for the control vibration isolation measures employed to ensure that structure borne noise resulting from the operation of the lift machinery is not audible in any occupied area. Lift machinery noise levels under normal operating conditions shall not exceed 70 dBA at 1 m from the equipment in free field.

6.9.4 Arrival chimes

Noise from arrival chimes shall not exceed 60 dBA.

The above levels shall be measured at 3 m from the arrival chimes using a noise meter set to 'fast' response. Chimes with adjustable loudness shall be provided.

6.10 FIRE SAFETY REQUIREMENTS

General requirements of lifts shall be as follows:

6.9.5 Landing doors in lift enclosures shall have a fire resistance of not less than one hour.

6.9.6 Lift car door shall have a fire resistance rating of one hour.

6.9.7 Grounding switch (es), at ground floor level, shall be provided on all the lifts to enable the fire services to ground the lifts.

7. TECHNICAL SPECIFICATIONS - LIFTS-ASSOCIATED WORKS**7.1 ASSOCIATED ELECTRICAL WORKS****7.1.1 Scope**

Electrical power supply with proper switchgear shall be arranged by the contractor based on power requirements of lifts. All cabling /wiring/loop earthing for interconnection with the lift controllers / motors/ indicators / push buttons / safety devices etc. shall be in the scope of the contractor.

7.1.2 Cabling

Cabling between switchboard and the controller /lift motor shall be with XLPE insulated HR PVC sheathed 1100 volt grade aluminium conductor armoured cables conforming to IS 7098 or PVC insulated, PVC sheathed, 1100 volt grade al conductor armoured cables conforming to IS 1554. Cables shall be terminated in glands fitted with armour clamps the gland body shall be provide with an internal conical sating to receive the armour clamping cone and clamping nuts which shall secure the armour wires. A PVC shroud shall be fitted to cover the gland body and exposed armour wires Trailing cables for the lifts shall be EPR insulated stranded copper conductor flexible cables conforming to IS 9968 Control cabling shall be with multi core stranded copper conductor PVC insulated and sheathed 1100 volt grade cables conforming to IS 8130. Minimum size of the cable shall be 2.5 sq mm. Where cables pass through walls or floor slabs, pieces of GI sleeves shall be provided for cast into the wall / floor and cable shall be drawn therein.

7.1.3 Wiring

All wiring shall be carried out with FRLS PVC insulated 1100 volt grade stranded copper conductor wires conforming to IS 694 drawn in MS rigid / flexible conduiting system and / or MS raceways. Minimum 2.5 sq mm size wires shall be used. Wires shall be cut only at terminations. Intermediate jointing shall not be permitted. Drawing, cutting and terminating of the wires shall comply with the relevant Indian standard specifications and shall be carried out in the most workman like manner as per standard practice. All normal care like cutting the insulation with a pencil edge, taking care not to cut the strands and proper tightening of terminal connector screws to avoid loose connection or breaking of conductors etc. shall be taken. Heavy gauge black enameled screw type ISI embossed MS conduits with superior quality accessories approved by Engineer-in-Charge shall be used in the work. Conduits could either be recessed in floors / walls or fixed on surface with saddles and clamps. Final connections to vibrating the equipment shall be made with metal flexible conduits. Entire work shall be carried out in work man like manner as per standard practice

7.1.4 Earthing

Metal enclosures of all electrical equipment and devices including frames of motors, controllers, switchgear, conduits and raceways etc. shall be properly earthed so as to form an equi-potential zone. Loop earthing of vibrating equipment shall be done with flexible copper earthing braid or flexible cables. The lift motor frame shall be connected to the building earthing system termination at the switchboard by duplicate loop earthing conductors of appropriate size.

7.2 ASSOCIATED CIVIL & STRUCTURAL ITEMS

All civil and structural items of work associated with erection and operation of lifts shall be provided by the Contractor at his cost including (but not restricted to) the following.

- _ Hook for lifting lift equipment's in the top of shaft.
- _ Temporary scaffoldings and safety barricades during lift installation in and around lift Lift wells
- _ Sill angels
- _ Bearing plates
- _ Buffer supports
- _ Checqured plates
- _ Fascia plates
- _ Ladders in pits (MS)
- _ Safety railing on car top
- _ Separator /stretcher beams if required.
- _ Dowels for terminal buffers in pit floor during casting.

The Contractor shall ensure erection and fixing of steel work in such a manner that no RCC wall or any other structural member is damaged.

8. Note

1. The lift shaft Drawings of passenger lift is provided with all details to oil India.
2. Materials should be offered strictly conforming to the specifications within acceptable tolerance level given in specifications / drawings given in tender document. Deviations, if any, should be clearly indicated by the Contractor in their bid. The supplier should also indicate the Make/Type number of the materials offered and catalogues, technical literature and samples, wherever necessary should accompany the quotation.
3. Any fittings or accessories which may not be specifically mentioned in the Specifications or Particulars but which are usual or necessary for proper and efficient functioning of the Stores as per the specifications of the tender shall be supplied by the Contractor without extra charge to the Purchaser; the Stores supplied shall be complete in all respects.
4. Oil india has the right to ask for the minor modifications at any stage even after the design is mutually agreed.. As from the date, the Stores shall be in accordance with the specifications, patterns and drawings so altered, which the contractor is bound to comply with. In the event of such alteration involving a revision in the cost, or in the delivery period, the same shall be discussed and mutually agreed to, taking into account the unit rates of similar items in the Contract. In case of disagreement, the decision of OIL INDIA, in the cost or the delivery period, shall be final and conclusive.
5. **Minor modifications / Additional Scope of Work:**
Minor modifications/additional scope of work to be done by the contractor without any extra cost to OIL INDIA.
6. Primarily this lift will be used to handle delicate optics. Hence designer should consider the best quality materials with required factor of safety with maximum possible compactness. Design should reflect the delicate handling of these optics. Fast movements, jerks etc are not permitted during any lifting/movement. These cranes will be used inside the clean rooms. It should not become the source of contamination inside the facility like particulate or molecular. Care shall be taken while deciding the secondary process like painting etc.,
7. Copy of valid ISO certificate and manufacturing license issued by the competent authority & company profile should be submitted as a proof. Vendor must submit the following documents, without which, their bid will not be considered.
 - a) a. Registration Certificates.
 - b) Factory License.
 - c) Purchase Order Copies for 4 Ton and above capacity Single Girder EOT Cranes along with the Commissioning Certificates & Performance Certificates.
 - d) Appreciation Letters from the Clients.
 - e) ISO Certificate
8. Vendor may visit the project site to evaluate site requirements after obtaining prior permission from OIL INDIA.
9. Vendor shall arrange required lifting equipment's, tools etc. required during the installation. Transportation from factory to site is in vendor scope.

10. Vendor shall take responsibility of material stores at site.
11. Vendor shall provide safety devices (helmets, safety belts, gloves etc.) for personnel carrying out installation as per the safety standards.
12. Vendor shall give the schedule for Procurement of raw materials, Testing, manufacturing, Assembly, Factory acceptance test, transportation to site, installation& commissioning at site,etc.,
13. OIL INDIA's decision to consider as to whether a vendor has met with the eligibility criteria or not is final.
14. The Equipment should be completely designed and made as per the relevant I.S.Specifications. IS 3177/807/800 , AGMA / DIN Stds

15. Testing

Testing for the various items of equipment shall be performed at the contractor's cost and test certificate to be furnished by the contractor (for Motor, Machine Break-tests Controller & Steelwire Ropes). If required by the Engineer, the Contractor shall permit the Owner's authorized representative to be present during any of the tests. After notification to the Owner that the installation has been completed the contractor shall make under the direction and in the presence of the Engineer such test and inspections as have been specified or as the Engineer shall consider necessary to determine whether or not the full intent of the requirements of the plans and specifications have been fulfilled. In case the work does not meet the full intent of the specifications and further tests shall be considered necessary the contractor shall bear all the expenses thereof.

16. Compliance of statutory observation.

Complying with observations, if any, of Lift/Electrical Inspector and/or any other Statutory Authority after completion of work in order to obtain a categorical clearance to start beneficial use.

17. Manuals, drawings etc.

I. Along with the tender

Technical Parameters enclosed as duly filled in by the Tenderers along with technical catalogue etc. of the equipment offered.

II. Shop drawings on award of work before commencement

The Contractor shall submit GA drawings of Lift System to Architects/Owners for approval before commencement of work at site/fabrication/ manufacture.

III. Operation and maintenance manuals

Three sets of operation and maintenance manual with support drawings shall be submitted to the Owners after completion of work.

IV. Training

Training of Owners personnel in operation, handling and maintenance of equipment.

V. The Contractor shall submit following documents

3 sets of operation and maintenance manual with support drawings shall be submitted to the owner after completion of work. 3 sets of test results of pre-commissioning test carried out at site. 3 sets of as built GA drawings.

18. COMPLETION CERTIFICATE

On completion of the electrical installation a certificate shall be furnished by the Contractor countersigned by the Licensed Supervisor, under whose direct supervision the installation was carried out. This certificate shall be in the prescribed form as required by the local supply authority. The Contractor shall be responsible for getting the electrical installation inspected and approved by the local and statutory authorities concerned and expenses if any shall be borne by the contractor.

19. WORKMANSHIP

Good workmanship is an essential prerequisite to be complied for this work. Entire work shall be carried out in the most workman (**License holder**) like manner by skilled workers under competent supervisor.

END OF LIFT SPECIFICATIONS

TECHNICAL SPECIFICATION

FOR

25KW GRID SOLAR POWER PLANT

1. INTRODUCTION:

Harnessing of Non-Polluting Renewable Energy Resources to Control Green House Gases is receiving importance from the Government of India. The Solar mission, which is part of the National Action Plan on Climate Change has been set up to promote the development and use of Solar Energy for Power Generation and other uses with the ultimate objective of making solar energy competitive with fossil-based energy options. It has been proposed to set up a 25kWp Grid Interactive Solar Photovoltaic Power Plant at multi-storied (G+6) residential building blocks inside Oil housing colony at Narangi, Guwahati, Assam.

2. SPECIFICATION FOR 25KW ON GRID INTERACTIVE SOLAR POWER PLANT

- a) This specification covers the requirements of Design, Manufacture, Installation, Testing, Delivery and Commissioning of 25KW Grid Interactive Solar Power Plant complete with all Mountings and Accessories .

Solar PV System shall consist of following equipment's:

1. Solar PV Modules consisting of required number of PV Cells.
2. Power Conditioning Unit/ Inverters with LCD display
3. Mounting Structures
4. Cables and Hardware
5. Junction Box and Distribution Boxes as required
6. Earthing Kit
7. Lightning Arrestors
8. PVC Pipes and Accessories
9. Tool Kit

b) Site Conditions

Temperature: Maximum 42 Deg.C, Minimum 10 Deg.C, And Humidity: Around 80%

c) Specifications

PV Array Capacity:	25 kWp
Cell Technology:	Mono Crystalline
Module Characteristics:	Modules of output 530Wp or above. PCU
Rating:	25 KWp
PCU Efficiency:	> 95%
Grid Voltage:	415V, 3 ph
Frequency:	50 Hertz
Frequency Variation Limits:	+/- 2%
Power Factor:	better than 0.9
Current THD:	< 5%
DC Offset Current:	should be less than 1% of the max. current rating. Duty
Cycle:	Average Hours of Operation/day: 8-10 hrs per day.

- d) The Power-Conditioning Unit (PCU) should contain a Maximum Power Point Tracker (MPPT), Grid side Converter and Grid side Filter
- e) The PCU must automatically synchronize with the grid and should shutdown in case of faults and very low power generation, and wake-up automatically from shutdown state.
- f) **Protections:** Over Voltage

Under Voltage
Frequency Errors
over Current.

- In all faulty conditions the system should get isolated from grid and should start working when the grid is healthy
- Phase sequence reversal should be automatically detected and system should continue to work.
- Anti- Island Protection: When the grid fails the system should stop operation and it get isolated from the grid within a cycle before getting any damage to the system.

g) Metering & Indicators

Input side: Voltage and Current for individual strings with MCB **Output side:** Voltmeter, Ammeter, Bi-directional Power/Energy Meter SFU for output isolation

Status indication with LCD display

- h) The system should automatically 'WAKEUP' during daytime and "SLEEP" during night.

3. POWER SUPPLY ARRANGEMENTS:

Solar shall be connected with the power feeder with the newly set up panel.

4. SCOPE OF SUPPLY:

- a) The scope of this specification shall cover Design, Engineering, Manufacture, Quality Surveillance, Testing, Packing, Supply, Erection and Commissioning of 25 kWp Grid Interactive Solar Power Plant with associated components on Turnkey basis.
- b) These systems shall be complete with PV Modules, Inverter, Metering, Junction Boxes, AC, DC Distribution Boards and Cables, Communication Interface, and any other equipment necessary for Safe and Efficient Operation of the Solar Power Plant.
- c) The work shall also include Interconnection of Solar Plant with the Grid.
- d) The Civil, Fabrication works required for the successful installation and Commissioning of complete system shall also be in scope of Contractor.
- e) It is not the intent of this specification to specify completely herein all the details of Design and Construction of equipment as it is on Turnkey basis. However, the equipment offered shall conform in all respects to High Standards of Engineering, Design and Workmanship and be capable of performing in commercial operation up to Contractor's Guarantee in a manner acceptable to the Purchaser, who will interpret the meaning of Drawings, Specification and shall have the power to reject any work or materials, which in his judgment are not in full accordance therewith.
- f) All the fittings and accessories that might not have been mentioned specifically in the specification but are necessary for equipment's of the Plant, shall be deemed to be included in the specification and shall be supplied and furnished by the Contractor without any extra charge.
- g) It shall be responsibility of the Contractor to ensure that all the works as per scope of the specification are completed for safe and efficient working of the system.
- h) The Contractor shall carry out all the necessary co-ordination with regard to sub-contracted items. The Purchaser will communicate only with the Contractor for all matter pertaining to this contract.
- i) It shall be responsibility of the Contractor to obtain all necessary Statutory and Regulatory clearances from the Competent Authorities.
- j) The Total Price Quoted for this contract shall be one lump sum all-inclusive basis and shall cover all items and service necessary for successful completion of the contract. Even if all components of a system included in this specification are not explicitly identified and /or

listed herein, these shall be supplied under this contract to ensure completion of the system and facilitate proper operation and easy maintenance of the Plant.

- k) It shall be responsibility of the Contractor to co-ordinate along with required support with the Competent Authorities to obtain the Subsidy.
- l) The breakup of lump sum price shall also be given for clarity.

5. GUARANTEE

The successful Contractor shall guarantee the material and workmanship of all components and operation of the equipment and shall meet the requirement of the specifications. Should the performance test result at works deviate from the guaranteed values including the specified tolerance the Contractor shall correct his equipment at no extra cost to the Purchaser and repeat the performance tests within a reasonable period as agreed by the Client. As regard to the component clauses if the Contractor fails to meet the guaranteed values subject to tolerances specified, the Purchaser will not accept the equipment/system.

6. CODES AND STANDARDS

- a) All Equipment and Accessories shall comply with requirement of Standards published by Bureau of Indian Standards (BIS). In case no BIS Codes exist the equipment's shall meet the requirement of International Standard including IEEE for Design and Installation of Grid connected PV System. The list of Standards adopted shall be indicated in the Bid.
- b) The quality of equipment supplied shall be generally controlled to meet the Guidelines for Engineering Design included in the Standards and Codes listed in the relevant ISI and other Standards, such as:

IEEE 928: Recommended Criteria for Terrestrial PV Power Systems.

IEEE 929: Recommended Practice for Utility Interface of Residential and Intermediate PV Systems.

IEEE 519: Guide for Harmonic Control and Reactive Compensation of Static Power Controllers.

National Electrical NFPA 70-1990 (USA) or Equipment National Standard. National Electrical Safety Code ANSI C2 (USA) or Equipment National Standard. IEC: 61215 (2005)- Crystalline Silicon Terrestrial Photovoltaic (PV) Modules

IEC: 61730 -1, -2 Photovoltaic (PV) Module Safety Qualification Part 2: Requirements for Testing

IEC: 60904-1(2006) Photovoltaic Devices- Part-I

IS 9000 Basic Environmental Testing Procedures for Electronic and Electrical items.

7. PV ARRAYS

- a) The PV Modules convert the light reaching them into DC Power. The amount of power they produce is roughly proportional to the intensity and the angle of the light reaching them. Vendor has to ensure the proper positioning of the Modules to take maximum advantage of available Sunlight within site constraints with the Sun's movements during the day.
- b) Supplier shall follow the latest Engineering Practice; ensure long-term compatibility requirements and continuity of equipment supply and the Safety of the Operating Staff.
- c) Vendor is required to optimize generation of electricity in terms of kWh generated with available Solar Radiation at the site (may be obtained through use of efficient electronics, lower cable losses, maximization of power transfer from PV Modules to Converter and the Grid etc).
- d) The operator interface shall be such that operating personnel shall be able to operate the system easily after having received some basic training.
- e) The Manufacturer shall arrange Certification on Qualification of PV Modules.
- f) The SPV Cells shall be manufactured using unique highly efficient diffusion process or any other technology so as to ensure uniform diffusion profile to achieve close spread and higher efficiency for each cell.
- g) Stabilized net output of the Solar PV Array for the Solar Power System should not be less than the Nominal design level for the System under Standard Test Condition.
- h) Each Solar PV Module shall be warranted by the Manufacturer for at least 95% of its rated power for 10 Years from the date of System acceptance.
- i) The Contractor shall provide the sample Solar PV Module electrical characteristics including current-voltage (I-V) performance curves and temperature co-efficients of power, voltage and

current. However, the tabulated document with all the relevant data like voltage, current, power output for all the modules also to be provided.

- j) The PV Modules shall be suitable for continuous outdoor use.
- k) The PV Module shall be made of high quality laminated in ultra violet stabilized polymer material such as Ethyl Vinyl Accelerate (EVA), Tedler, toughend class. The size of single crystalline silicon PV Cells shall be so chosen so as to maximize energy density and align with economies of scale.
- l) PV Module shall be provided with frame of anodized channels for size and simplicity in installation offered as a single module or series parallel combination of modules. The PV Module shall be provided with screen-less frame with Solar Cable and Connector.
- m) The PV Modules shall be made of light weight cells, resistant to abrasion, hail impact, rain, water and environmental pollution. The PV Modules shall be provided with antireflection coating and Back Surface Field (BSF) structure to increase conversion efficiency.
- n) The PV Module shall use lead wire with weatherproof connector for output terminal.
- o) The terminal box on the module should have a provision for opening for replacing the cable, if required.

8. PCU

- a) The DC power produced is fed to inverter for conversion into AC. In a grid interactive system AC power shall be fed to the grid at three phase 415/380 V AC bus. Power generated from the solar system during the daytime is utilized fully by powering to the grid as long as grid is available.
- b) The output of the inverter must synchronize automatically its AC output to the exact AC voltage and frequency of the grid.
- c) Inverter shall continuously monitor the condition of the grid and in the event of grid failure; the inverter automatically switches to off-grid supply within a cycle. The solar system is resynchronized with the grid within two minutes after the restoration of grid or DG set.
- d) Grid voltage shall also be continuously monitored and in the event of voltage going below a preset value and above a preset value, the solar system shall be disconnected from the grid within the set time.
- e) Metal Oxide Varistors (MOVs) shall also be provided on DC and AC side of the inverter.
- f) The inverter control unit shall be so designed so as to operate the PV system near its Maximum Power Point (MPP), the operating point where the combined values of the current and voltage of the solar modules result in a maximum power output.
- g) The inverter shall be a true sine wave inverter for a grid interactive PV system.
- h) Following shall also be displayed Protective function limits (AC over voltage, AC under voltage, Over frequency, under frequency, ground fault, PV starting voltage, PV stopping voltage, over voltage delay, under voltage delay over frequency, ground fault delay, PV starting delay, PV stopping delay.)
- i) Nuts & bolts and the inverter enclosure shall have to be adequately protected taking into consideration the atmosphere and weather prevailing in the area.
- j) All doors, covers, panels and cable exit shall be gasketed or otherwise designed to limit the entry of dust and moisture. All doors shall be equipped with locks.
- k) Operation Mode:
 - Night or Sleep Mode: where the Inverter is almost completely turned off, with just the timer and control system still in operation, losses shall be less than 2 W per 5 kW
 - Standby Mode: where the control system continuously monitors the output of the solar generator until pre-set value is exceeded (typically 10 W).
 - MPP tracking mode: The control system continuously adjust the voltage of the generator to optimize the power available. The power conditioner shall automatically reenter standby mode as input power reduces below the standby mode threshold. Front panel shall provide display of status of the inverter.

9. SYNCHRONISING EQUIPMENT

Solar PV Systems shall be provided with synchronizing equipment having three input for comparison i.e. grid supply vs. solar output, DG output vs solar output so as to connect the SPV systems in synchronism with grid or DG. In case of grid failure, solar PV system shall be disconnected from the grid and out of synchronization for a period DG supply is not restored. PV system shall be synchronized with the DG supply after DG is started.

10. PROTECTIONS AND CONTROL

PV system software and control system shall be equipped with all the protection as described above. In addition to disconnection from the grid (islanding protection i.e. on no supply), under and over voltage conditions, PV systems shall be provided with adequate rating fuses, fuses on inverter input side (DC) as well as output side (AC) for overload and short circuit protection and disconnecting switches to isolate the DC and AC system for maintenances are needed. Fuses of adequate rating shall also be provided in each solar array module to protect them against short circuit. A manual disconnect switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personal to carry out any maintenance. This switch shall be locked by the utility personal.

11. POWER QUALITY REQUIREMENTS:

The injection of DC power into the grid shall be avoided by using an isolation transformer at the output of the inverter. It is proposed to limit DC injection within 1% of the rated current of the inverter as per IEC 61727.

Harmonic distortion is caused principally by non-linear load such as rectifiers and arc furnaces and can affect the operation of a supply system and can cause overloading of equipments such as capacitors, or even resonance with the system leading to overstressing (excessive voltage & current). Other effects are interference with telephone circuits and broadcasting, metering errors, overheating of rotating machines, overheating of delta connected winding of transformer due to excessive third harmonics or excessive exciting current. The limits for harmonics shall be as stipulated in the CEA Regulations on grid connectivity, which are as follows:

- Total Voltage harmonic Distortion= 5%
- Individual Voltage harmonics Distortion=3%
- Total Current harmonic Distortion=8%

Voltage Unbalance - The Voltage Unbalance in the grid shall not exceed 2.0%

Voltage Fluctuations - The permissible limit of voltage fluctuation for step changes, which may occur repetitively, is 1.5%. Occasional fluctuations limit is 3%.

12. MOUNTING STRUCTURES:

Hot dip galvanized iron mounting structures may be used for mounting the modules / panels/arrays. These mounting structures must be suitable to mount the SPV modules

/panels/ arrays on the roof top, on the ground or on the poles/masts, at an angle of tilt with the horizontal in accordance with the latitude of the place of installation. The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.

13. POWER AND CONTROL CABLES:

Power Cables of adequate rating shall be required for interconnection of: - Modules/panels within array. The minimum size of 1.1 kV power cables shall be chosen taking into account Fault level

contribution to the system and full load current. However, power cables size for 415 V systems shall be chosen taking into account the full load current & voltage drop. The allowable voltage drop at terminal of the connected equipment shall be max. 2.5% at full load. The derating factors viz. group duration of temp. Duration shall also be considered while choosing the conductor size.

Control cables shall be 1.1 grades, heavy duty, stranded copper conductor, PVC type insulated, flame retardant low smoke (FRLS) extruded PVC type ST-1 outer sheathed. The cables shall, in general conform to IS-1554 P-I & other relevant standards.

The permissible voltage drop from the SPV Generator to the Charge controller shall not be more than 2% of peak power voltage of the SPV power source (generating system). In the light of this fact the cross-sectional area of the cable chosen is such that the voltage drop introduced by it shall be within 2% of the system voltage at peak power. All connections should be properly terminated, soldered and/or sealed from outdoor and indoor elements. Relevant codes and operating manuals must be followed. Extensive wiring and terminations (connection points) for all PV components is needed along with electrical connection to lighting loads.

14. EARTHING MATERIAL:

Earthing is essential for the protection of the equipment & manpower. Two main grounds used in the power equipment's are:

- System earth
- Equipment earth

The provision for lightning & surge protection of the SPV power source is required to be made. In case the SPV Array cannot be installed close to the equipment to be powered & a separate earth has been provided for SPV System, it shall be ensured that all the earths are bonded together to prevent the development of potential difference between any two earths.

Earth resistance shall not be more than 3 ohms. The earthing conductor shall be rated for the maximum short circuit current. & shall be 1.56 times the short circuit current. The area of cross-section shall not be less than 1.6 sq mm in any case.

The array structure of the PV modules shall be grounded properly using adequate numbers of earthing pits. All metal casing/ shielding of the plant shall be thoroughly grounded to ensure safety of the power plant.

15. JUNCTIONS BOXES OR COMBINERS

Dust, water and vermin proof junction boxes of adequate rating and adequate terminal facility made of Fire Resistant Plastic (FRP) shall be provided for wiring. Each solar PV panel shall be provided with fuses of adequate rating to protect the solar arrays from accidental short circuit.

16. GENERAL CONDITIONS

Cabling work up to the grid side and PV panel mounting and fabrication work including all materials are under the scope of the supplier. Array support structure of galvanized mild steel sections on concrete pads.

17. INSTALLATION, COMMISSIONING, TRAINING AND DOCUMENTATIONS

Supplier shall undertake installation & commissioning and provide training to client's maintenance team. Party has to submit all the relevant documents like Qualification Documents, Test Certificates, Catalogue of all Brought Out Items, User Manual, Electrical Circuit Diagram, Warranty Certificates etc... during handing over of the Project.

18. GURANTEED TECHNICAL PARTICULARS (TO BE FILLED BY THE CONTRACTOR AT THE COMMISSING)

DC Output of PV Array (KWp) Area
Required (Square Feet) No. of Cells in
one PV ModuleDC Rating of one Module
(WP)Connection Configuration

Rated DC Current of one Module

Rated DC Voltage of one Module (Vmpp)No. of PV
Module in one Array (all in series)Max. DC Output
Voltage of Array (Volt) No. of Arrays

Rating of Inverter (KVA)

Nominal AC Output Voltage (Volt)Variation In
Output Voltage Nominal Frequency (Hz)

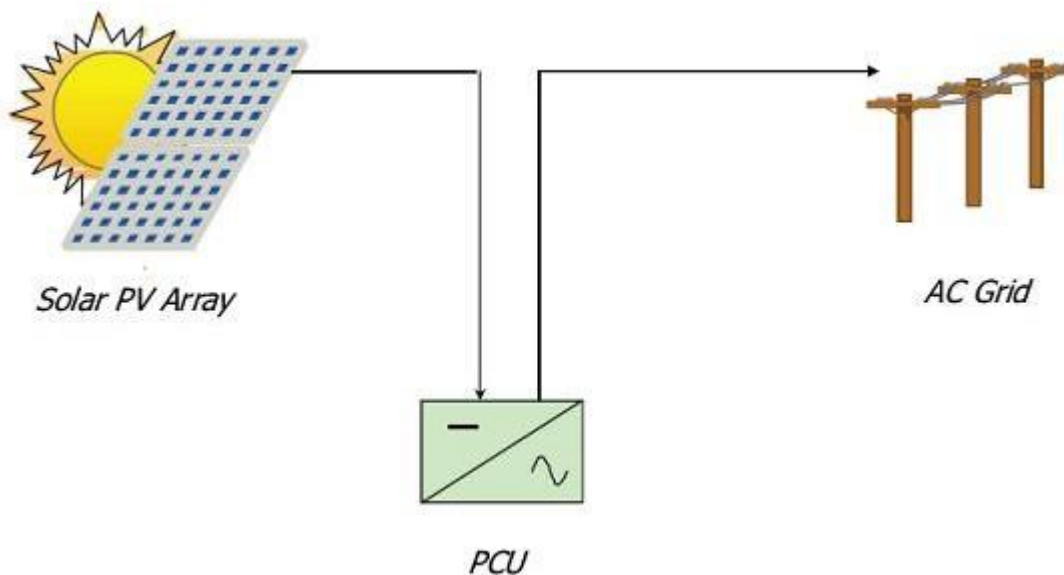
Grid Frequency VariationNo. of
Phases / Wire

AC Output Voltage Range (Grid)Power
Factor Range

Minimum Efficiency of Inverter (%) No load
Losses of Inverter (max) DC Injection into Grid
(max) Ripple Content on DC side

Total Voltage Harmonic Distortion (AC side) Individual Voltage
Harmonic Distortion (AC side) Total Current Harmonic Distortion
(AC side)

19. SCHEMATIC DIAGRAM OF THE GRID INTERACTIVE SOLAR PLANT



LIST OF APPROVED MAKES

Note:- The Contractor shall obtain prior approval from Engineer In-charge before placing order for any specific material or engaging any of specialized agencies the contractor shall make a detail submittal with catalogues and highlighted proposed specifications as well as full details of the works executed by specialized agency as specified.

Wherever applicable the Engineer In-charge may approve any material equivalent to specified in tender subject to proof being offered by contractor for equivalence to his satisfaction.

The Contractor shall provide samples of all material in the list of make to Engineer Incharge.

Following brands/makes will be adopted only for those items for which Brnad/Makes are not mentioned in the BOQ and the specification of work .

A. CIVIL WORKS

Sl. No.	Material /Article	Manufacturers/ Agencies/ Brand make
1	Cement (OPC 43 grade/ 53 grade)	A.C.C., Dalmia, Ultratech, JK cement, Ambuja Cement, Star Cement, Cement Corporation of India.
2	Steel Reinforcement	SAIL, TISCO, Tata, Jindal, Shyam
3	Ready Mix Concrete	Ultra Tech (Ultra Tech Cement Ltd.), ACC Cement, JK cement, Ambuja cement, RMC (India) Pvt. Ltd.
4	AAC Blocks	Xtralite (Ultra Tech Cement Ltd), Areocon (Birla), Green AAC, Nucon (Green Way building materials India Pvt.Ltd.), Magicrete (Magicrete Precast), Tuffblocks AAC (Godrej), JK Lakshmi
5	Structural Steel	SAIL, TISCO, RINL, JINDAL (JSW), SHYAM
6	Stainless Steel	Salem (SAIL), Jindal (JSW), SAIL (SAIL), Essar, RINL
7	Corrugated GI Sheets	TATA, Essar, SAIL, JSW, Jindal
8	Colour coated profile sheet	TATA, JINDAL, SAIL, Essar, Dyna roof, Dura roof
9	Float Glass Profile sheet	TATA, Modiguard, Saint Gobain , Rathi , SAIL,

E-TENDER: CGI6319P25

	TATA (transparent)	Jindal , Bhusan
10	Aluminium extruded sections	Jindal, Hindalco, Superfine, Global Century, Galco, Reynobond, Alucobond
11	Aluminium plain sheets	Jindal, Hindalco, Reynobond, Alucobond
12	Factory made Machine pressed Pre-laminated flush door shutter	Green-ply, Century Architect Ply, Duro, Durian Sumo, Green panel, Archid, Kitply, Duroply, Merino, Fenesta
13	Block Board	Green-ply, Century Architect Ply, Duro, Durian Sumo, Green panel, Century, Archid, Kitply, Duroply, Merino, Fenesta
14	Flush door shutter	Green-ply, Century Architect Ply, Duro, Durian Sumo, Amulya, Greenpanel, Century, Archid, Kitply, Duroply, Merino
15	Boiling Water proof plywood, Block board, Commercial plywood	Green-ply, Century Architect Ply, Duro, Durian Sumo, Amulya, Greenpanel, Century, Archid, Kitply, Duroply, Merino
16	Aluminium door & window fittings	Jindal, Hindalco, Reynobond, Alucobond, Everest
17	PVC rigid foam sheet	Fenesta, Aluplast, Sintex, Jindal
19	Door Closure	Godrej, Dorma, Dorset, Hafale, Hettich, Ozone
20	uPVC doors, door frames and windows	Fenesta (Fensta DCM Shriman), Encraft (Encraft India Pvt. Ltd.), Duroplast (DuroPlast Extrusion Pvt. Ltd.), Aluplast
21	Float Glass	Saint Gobain (Saint Gobain India Pvt. Ltd.), Modiguard (Gujarat Guardian Ltd.), Asahi (Asahi India Glass ltd.)
22	SWR uPVC pipe & fitting	Astral, Finolex. Supreme, Prince
23	CPVC Pipe (White Colour) & fittings	Astral, Finolex, Utkarsh, Ashirwad, Supreme, Prince
24	Ceramic glazed wall tiles	Kajaria, Johnson, Orient bell, Somany, NITCO, Asian
25	Vitrified Tiles	Kajaria, Johnson, Orient bell, Somany, NITCO, Asian
26	Bitumen VG-30, VG-10 etc.	As per particular specification of IOCL, BPCL, HPCL.
27	Admixtures	Pidilite, Grace, Choksey Chemicals, FOSROC, SIKKA, CICO Technologies Ltd.
28	Mild Steel Tubes	Sail, Tata, Jindal, Shyam steel

29	1st quality Acrylic distemper (Ready mix)	Asian, Berger, Dulux, Nerolac
30	Premium Acrylic smooth exterior Paint with silicon additives	Asian, Berger, Dulux, Nerolac
31	Paints	Asian, Berger, Dulux, Nerolac
32	Steel/Wood Primer paints	Asian, Berger, Dulux, Nerolac
33	Factory made C.C. Interlocking Paver Blocks	Hero, Luit, Unistone, Ultratech, Nitco, Everon
34	Bitumen 85/25	HPCI, IOCL
35	Water Proofing Compound	PIDILITE, CHOKSEY, GRACE, SIKA, FOSROC, Dr. FIXIT, BASF
38	1C/Spray/roller applied Liquid PU/Polyisoprene elastomeric coating	BASF, Choksey, Grace, Pidilite
39	Waterproofing compound (crystalline)	Kryton, Choksey, Grace, Penetron
40	2C Polymeric Cementitious Coating for wet rooms, balconies, kitchen, refuge areas, tank	BASF, Choksey, Pidilite, Fosroc
41	Construction Joints for raft, retaining wall,	BASF, Choksey, Grace, ALP AEROFLEX
42	Coal Tar Epoxy for STP	BASF, Choksey, STP, Pidilite
43	Food Grade Epoxy	BASF, Choksey, Fosroc, Pidilite
44	Drainboard	Hafele, Jindal, Hindware, Bluestar
45	G.I pipes	Prakash Surya, TATA, Jindal, Hissar
46	G. I. Fittings	Zoloto, 'c" ,Sant, Unik
47	PVC Water Storage Tanks	Sintex, Plasto, Supreme,
48	CPVC Pipes	Astral/Ajay/Ashirwad/Prince/Supreme
49	Mirrors	Saint Gobain (Saint Gobain India Pvt. Ltd.), Modigurad (Gujarat Guardian Ltd.) Asahi (Asahi India Glass Ltd.), Atul (Atul Glass Industries Ltd.)
51	Sanitary ware/China ware	Roca, Jaguar, kohler, Cera, Parryware, Hindware
52	C.P Fittings and accessories	Jaquare, Gem, Astral, Finolex, Supreme,

	for bathroom/toilets	Hindware
53	RCC Pipes	Pragati, Super Wire, ISI Indian Hume Pipes (Indian Hume Pipe Ltd.), Jain & Co (Jain spun pipes Co)
54	SFRC Cover and grating	KK (kk Manhole and grating Co Pvt Ltd.)
55	CI Manhole cover	Neco, Srif, Skf, RifRPFM (M/s Raj Pattern Makers & Founders Pvt. Ltd.), BIC (Bengal iron corporation), Neco (JayaswalNeco Ltd)
57	Water stops	Hydrotite (Sika India), Dr. Fixit (Pidilite industries), Flexswell (Choksey Chemicals), Hydroswell (ALP Hayakawa); Ferrous Crete (Ferrous Crete (India) Pvt Ltd.)
58	Aluminium doors/ windows sections	Hindalco (Hindalco Industries Ltd.), Jindal (Jindal Aluminium Lt)
59	Glass Reinforced Concrete (GRC) jali	Dalal Tiles industries, Unistone, Brick, Birla GRC, Ultratech, Hindalco (Hindalco Industries Ltd.), Jindal (Jindal Aluminium Ltd.)
60	Ms shutter and frame	TATA, Essar, SAIL, JSW, Jindal
61	Window shutter and Frame	Green-ply, Century Architect Ply, Duro, Durian Sumo, Amulya, Greenpanel, Century, Archid, Kitply, Duroply, Merino
62	Fire doors	Godrej, Globle Fire Protection Company, Radiant Staff Fire Doors, kitply
63	Fire rated steel doors	Kutty's, Gmp Technical Solutions, Tirupati, Vijay System Engineer
64	HEAT RESISTANCE TILES	THERMATECH, BIRLA, SOMANY, KAJARIA, JOHNSON
65	EXTERIOR WALL TILES	BELL, JOHNSON, KAJARIA, SOMANY
66	CC INTERLOCKING PAVER/GRASS PAVER/CURVE STONE/CHEQUERED TILES/TERRAZZO FLOORING TILES	DALAL TILES INDUSTRIES, KK, UNISTONE, BASANT BETONS, ULTRATECH, AMBANI TILES
67	EXPANSION JOINT/ JOINT COVERS	MIGUA, WORLDWIDE ASP, EMSEAL, LATHAN
68	HAND RAIL/ CRASH RAIL/ CORNER GUARD	WORLDWIDE ASP, CS, PAULING
69	EXTERIOR WOOD HIGH	FUNDERMAX, PRODEMA, REZNOCLAD,

PRESSURE LAMINATE WALL CLADDING	WORLDWIDE ASP, GREENLAM
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FIRE FIGHTING WORKS

Sl. No.	Material /Article	Manufacturers/ Agencies/ Brand make
1)	MS Pipes	TATA/Jindal/Swastik
2)	Gunmetal Ball Valves	Leader/DRP/Sant/Zoloto/TBS
3)	CI Double Flanged Sluice valves & Check Valves	Kirloskar/Sant/Leader
4)	Slim Seal Butterfly Valve	Audco/Veeson/C&R/KSB/Advance/Sant
5)	Dual Disk type Non Return Valve	Audco/Veeson/C&R/KSB/Advance/Sant
6)	Fire Hydrant Valves/Branch Pipes & Fire Main Axe.	Minimax/Firex/Newage
7)	Fire Aid Fire Hose reels	Minimax/Firex/Newage
8)	CP Hose Pipes	Minimax/Firex/Newage
9)	Sprinkler Head	Tyco/Grinel/Viking
10)	Fire Pumps	Kirloskar/Mather-Plate
11)	Motors	Kirloskar/Seimens/Crompton
12)	Electric Switch Gear	L&T/Seimens
13)	Cables	RR Cable /Polycab/Paramount/Finolex/Havells
14)	Suction Stainer	Vaishno/Jaypee/Grandpit
15)	Vibration Eliminator Connector	Resistoflex/Kanwal
16)	Single Phasing Preventer	Siemens/Minilec/L&T
17)	Pipe Coat Material	PYPKOTE/Coaltek/STP
18)	Flow switch	Potter/System Sensor/Jhonson Control
19)	Main Control Panel	Tricolite/Vidyut Control
20)	Fire Brigade Inlet	Minimax/Newage
21)	Rubber Hose Pipe	Jyoti/Tiger/Padmini
22)	Hose Coupling Branch	Minimax/Newage
23)	Pressure Switch	Indfoss/Switzer
24)	Pressure Gauge	H/Guru/Fiebig
25)	Battery	Exide/Prestolite

E-TENDER: CGI6319P25

26	Fire Extinguisher	Minmax/Newage
27	Enamel Paint	Asian/Nerolac/Berger
28	Annunciation panel	Safeway/agni/Matter &Palet
29	Contactora	L&T/Siemens
30	Thimbles/Ferrules	Dowel
31	Cable Gland	Commex/Power/Gripwell
32	Power capacitor	L&T/Crompton/Asian/Ducati
33	Measuring meter	L&T/Siemens/AE
34	MS Conduit	BEC/AKG/steel craft

ELECTRICAL WORKS**E-TENDER: CGI6319P25**

1)	MCCB, MPCB	L&T/ABB/GE/SEIMENS /Schneider/ Indo Asian/ Hager/LEGRAND/HAVELLS/
2)	MCB, ELMCB, RCBO	L&T/ABB/GE/SEIMENS /Schneider/ Indo Asian/ Hager/LEGRAND/HAVELLS
3)	Lugs, Thimbles	DOWELL/3D-BILLET / JAINEX/ SCHNEIDER (MERLIN GERIN)
4)	Capacitor	EPCOS/DUCATI/MEHER
5)	APCR relay	EPCOS/DUCATI/CONZERV
6)	Reactor	EPCOS/DUCATI/ELSPEC/SAIGON
7)	Indication Lights	Schneider/L&T/Siemens
8)	Selector Switch	Sulzer/Kaycee
9)	Push Button	Schneider/L&T/Siemens
10)	Digital Meter	Conzerv/Trinity/ Bentec/Rishabh/ AE/ Schneider/ Minilec
12)	Analogue Meter	Rishabh/AE/IMP/ Bentec/ Schneider/ Minilec
13)	Current transformer cast Resin	AE/Meco/HPL/Kappa /G&M
14)	Compression Glands	HMI/Comet/Dowell's
15)	HRC Fuses	Siemens/L&T/Bussmann
16)	Lighting Fixtures/ Luminaries	Philips/Wipro/Bajaj/Crompton/Syska/ Jaquar/ GE/ Havells/Surya
17)	Power (PVC/XLPE 1.1KV grade cables)	POLYCAB/FINOLEX/Havells /RICHA/KEI/RPG/RR
18)	Cable Tray	Slotco/SECO/Steel Ways/Indiana or equivalent
19)	Ms Conduit & Accessories	BEC/AKG/Steel Craft /Richa/Vidyut Mitra/Plaza
20)	PVC insulated copper conductor	Finolex/RR Kabel/KEI/Polycab/Anchor/Havells/L&T
21)	Switches, socket, Fan regulator	Northwest/Legrand/Havells/anchor / SCHNEIDER / CRABTREE / Indo Asian /MK
22)	Distribution board (DB)	Legrand/Havells/Indo Asian / Schneider/ Siemens /L&T/ ABB <i>Wherever feasible Distribution board (DB) and all its components like RCBO, MCB etc. should be</i>

		<i>from the same manufacturer.</i>
23)	HT Cable	Polycab/ RPG/KEI/RR/RICHA/Finolex
24)	Telephone wire	Finolex/Polycab/RR Kabel/Havells/Anchor
25)	Fans & exhaust fans	Orient/Crompton/Bajaj/Havells/ /USHA
27)	Pre-Fabricated MS Junction Box	Legrand/ MK /Presto plast/AKG/Presto teak/Plaza/Richa.
28)	LED Display unit	Delite Or Equ.
29)	Lightning Protection	Alltec/ LPI or equivalent
30)	Conventional fire alarm system	Notifier/Edwards/Siemens/Simplex
31)	Transformer	Kirloskar/ Crompton/ VOLTAMP / Raychem RPG/Siemens/ABB/ALSTOM/
32)	DG set	Cummins/ Caterpillar/ Kirloskar/ Mahindra Powerol Ltd./ Perkins / Ashok Leyland
33)	LT Panel & PDB's	Assam Electricals / Indoasian / ABB/ L&T / /AARVEE/Electro/IPC/vidyut/Milestone/Precision System Control or Equivalent
34)	HT PANELS	SCHNEIDER / L & T / SIEMENS /ABB/ Alstom/GE
	Relay	SCHNEIDER / L & T / SIEMENS /ABB/Alstom/GE
36)	HT CABLE TERMINATION KIT	RAYCHEM / 3-M
37)	INDUSTRIAL TYPE PLUG AND SOCKET	L & T / PANASONIC / ABB /LEGRAND/SCHNEIDER /MERLIN GERIN/SIEMENS/HAVELLS/INDO-ASIAN
38)	ACB	L & T / ABB / SCHNEIDER/Indoasian/Siemens/C&S
39)	Lifts	KONE/OTIS/Schindler/Jhonson

Note : Wherever feasible Distribution board (DB) and all its components like RCBO, MCB etc. should be from the same manufacturer.

External Electrification

Sl. No.	Material /Article	Manufacturers/ Agencies/ Brand make
1	SDFUs with HRC fuse for Main LT Panel and Essential Panel	L&T / Siemens/Havells /ABB / SCHNEIDER/Indoasian/C&S
2	SDFUs with HRC fuse for SFP & MFP	L&T / Siemens/Havells /ABB / SCHNEIDER/Indoasian/C&S
3	Change Over Switch	L&T/Siemens/C&S/Havells/ Indoasian
4	PVC Wires	Finolex/Havells/Polycab/L &T/KEI/ Richa/RPG/RR

5	Ammeter, Voltmeter	AE/Minilec/Rishabh/ Schneider
6	CTs	AE/Meco/HPL/Kappa /G&M

S.NO.	LOCATION/ ROOMS	FLOORING SKIRTING	& WALL FINISH	CEILING FINISH
1	Parking Area	Trimix Flooring	Emulsion Paint	Paint
3	Lift Wall	Dado Italian		MF Acoustic Ceiling
4	Electrical Room	Concrete flooring		Paint
5	Utility Room	Concrete flooring		Paint
6	Corridor's/Passage	Vitrified Tiles		Paint
7	Reception/Lobby	Vitrified Tiles		Paint
8	Staircase	Granite		
9	Living room/ dining room	Vitrified Tiles	Emulsion Paint	Paint
10	Bedrooms/ multi purpose room	Vitrified Tiles	Emulsion Paint	Paint
11	Toilet	Anti skid vitrified tiles/ glazed ceramic tiles	Emulsion Paint	Paint
12	Kitchen	Vitrified Tiles/ top- granite	Emulsion Paint	Paint
13	Balcony	Vitrified tiles	Emulsion Paint	Paint
14	Machine Room	Concrete flooring	Emulsion Paint	Paint
15	Toilets	Vitrified Tiles	Emulsion Paint	Paint
16	Dress	Vitrified Tiles		Paint

Note:-

- 1. The contractor will use one of the approved makes with prior approval of the engineer in charge. For technical reason the engineer in charge can specify a particular make.**
- 2. Order will be placed with the prior approval of engineer in charge relating to makes and quantities.**
- 3. When certain makes of the items are missing in the above list/description of item, the make will be decided as per the approval of Engineer- in-charge.**

APPLICATION FOR EXTENSION OF TIME

(To be completed by the Contractor) P A R T –I

- 1.Name ofContractor

- 2.Name of the work as given in the Agreement

- 3.Agreement No.

- 4.Estimated amount put to tender

- 5.Date of commencement work as per agreement

- 6.Period allowed for completion of work as per agreement

- 7.Date of completion stipulated as per agreement

- 8.Period for which extension of time has been given previously Extensiongranted
 - a) First extension videEngineer-in-charge..... letterNo... date MonthsDays

 - b) 2nd extension videEngineer-in-charge..... letter No... date MonthsDays

 - c) 3rd extension videEngineer-in-charge.....letterNo... date MonthsDays

 - d) 4th extension videengineer-in-chargeletterNo... date MonthsDays

- Total extension previously given
- 9.Reasons for which extension have been previously given (copies of the previous application should be attached)

10. Period for which extension is applied for:

11. Hindrances on account of which extension is applied for with dates on which hindrances occurred, and the period for which these are likely tolast.
 - a) SerialNo.

 - b) Nature of hindrance

- c) Date of Occurrence
- d) Period for which it is likely to last
- e) Period for which extension required for this particular hindrance.
- f) Over lapping period, if any, with reference to item
- g) Net extension applied for
- h) Remarks, if any

Total period for which extension is now applied for
on account of hindrances mentioned above.....
Month/ days.

- 12. Extension of time required for extra work.
- 13. Details of extra work and on the amount involved:

- a) Total value of extra work
- b) Proportionate period of extension of
time based on estimated amount put to
tender on account of extrawork.

- 14. Total extension of time required for 11 &12

Submitted to the Engineer-in-Charges office.

SIGNATURE OF CONTRACTOR DATE

PART-IX

ANNEXURE-LABOUR SAFETY PROVISION

The contractor shall be fully responsible to observe the labour safety provisions as per prevailing act and amended from time to time.

- 1.0 Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1/4 to 1 (1/4 horizontal and 1vertical).
- 2.0 Scaffolding or staging more than 3.6m (12 feet) above the ground or floor, swung or suspended from an overhead support or erected with stationery support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3 feet) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 3.0 Working platforms, gangways, and stairways should be so constructed that they should not run equally, and if the height of the platform or the gang way or the stairway is more than 3.6m (12 feet) above ground level or floor level, they should be closely boarded, should have adequate width & should be suitable fastened as described in (2.0) above.
- 4.0 Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 90 cm (3feet).

5.0 Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30 feet) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. for ladder up to and including 3m (10 feet) in length. For longer ladders this width should be increased at least 1/4" for each additional 30 cm (1 ft.) of length. Uniform step spacing shall not exceed 30 cm (12"). Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of the work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident, and shall be bound to bear the expenses of defence of every suit, action or other proceeding at law that may be brought by an person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any such person or which may, with the consent of the Contractor, be paid to compensate any claim by any such person.

21 6.0 EXCAVATION AND TRENCHING

All trenches, 1.2mts.(four feet) or more in depth, shall at all times be supplied with at least one ladder for each 30m. (100 feet) in length or fraction thereof, Ladder shall be extended from bottom of the trench to at least 90 cm (3feet) above the surface of the ground. The side of the trenches, which are 1.5m (5 feet) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger or sides to collapsing. The excavated materials shall not be placed within 1.5m (5 feet) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.

7.0 DEMOLITION-

Before any demolition work is commenced and also during the progress of the work:

- a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
- b) No electric cable or apparatus that is likely to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
- c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be overloaded with debris or materials as to render it unsafe.

8.0 All necessary personal safety equipments as considered adequate by the Engineer-in-charge should be kept available for the use of persons employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned- The following safety equipment shall be in variably provided.

8.1 Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.

8.2 Those engaged in white washing and mixing or stacking of cement bags or any materials that are injurious to the eye shall be provided with protective goggles.

8.3 Those engaged in welding works shall be provided with welders protective eyeshields.

8.4 Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe interval.

8.5 When workers are employed in sewers and manholes, which are in active use, the Contractors shall ensure that the manhole covers are opened and ventilated at-least for an hour before the workers are

allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident the public. In addition, the contractor shall ensure that the following safety measures are adhered to:

- a. Entry for workers into the line shall not be allowed except under supervision of JE or any other higher officer
- b. At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manholes for working inside.
- c. Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper, which changes colour in the presence of such gases and gives indication of their presence.
- d. Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygenkit.
- e. Safety belt with rope should be provided to the workers. While working inside the manholes such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
- f. The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- g. No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- h. The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- i. Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer In-charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
- j. Gas masks with Oxygen Cylinder should be kept at site for use in

emergency.

- k. Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air-blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at-least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
- l. The workers engaged for cleaning the manholes/ sewers should be properly trained before allowing working in the manhole.
- m. The workers shall be provided with Gumboots or non sparking shoes, bump helmet and gloves non sparking tools, safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
- n. Workmen descending a manhole shall try each ladder step or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- o. If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
- p. The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer In charge regarding the steps to be taken in this regard in an individual case will be final.

8.6 The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form wherever men above the age of 18 are employed on the work of lead painting the following precautions should be taken.

8.6.1 No paint containing lead or lead products shall be used except in the form of paste or ready made paint.

8.6.2 Suitable facemasks should be supplied for use by

the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.

8.6.3 Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.

8.6.4.1

- a. White lead, sulphate or lead work products containing those pigments shall not be used in painting operation except in the form of paste or of paints ready for use.
- b. Measures shall be taken whenever required in order to prevent danger arising from the application of paint in the form of spray.
- c. Measures shall be taken, whenever practicable to prevent danger arising out of dust caused by dry rubbing down and scrapping.

8.6.4.2

- a. Adequate facilities shall be provided to enable working painter to wash during and on cessation of work.
- b. Suitable arrangements shall be made to prevent clothing put off during working hours being spoiled by painting materials.

8.6.4.3

- a. Cases of lead poisoning and of suspected lead poisoning shall be notified and shall be subsequently verified by a medical man appointed by the competent authorities of the Consultant.
- b. The OIL INDIA LTD may require when necessary a medical examination of workers.
- c. Instructions with regard to the special hygienic precautions to be taken in the painting trade shall be distributed to working painters.

9.0 When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps

taken for prompt rescue of any person in danger and adequate provisions should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.

10.0 Use of hoisting machines and tackle including their attachment encourage and supports shall conform to the following standard of conditions.

10.1

- a. These shall be of good mechanical construction, sound material and adequate strength and free from patent, defects and shall be kept required in good working order.
- b. Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.

10.2 Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in-charge of any hoisting machine including any Scaffolding, winch or giving signals tooperator.

10.3 In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

10.4 In case of OIL INDIA LTD machines, the safe working load shall be notified by the Engineer-in- Charge. As regards Contractor's machines the Contractor shall notify the safe working load of the machine to the Engineer-in-charge whenever he brings any machinery to site of work and get verified by theEngineer-in-Charge.

- 11.0 Motors gearing, transmission electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguard, hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energized, insulating mats, wearing apparel, such as gloves sleeves and boots as may be necessary be provided. The worker should not wear any rings, watches and carry keys or other materials, which are good conductors of electricity.
- 12.0 All scaffolding, ladders, and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
- 13.0 These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place of work spot. The person responsible for compliance of the safety codes shall be named therein by the contractor.
- 14.0 To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the Contractor shall be open to inspection by the or their representatives.
- 15.0 Notwithstanding the above Clauses from (1) to (14) there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

22 MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS

1.0 APPLICATION

These rules shall apply to all building and construction works in which 20 (twenty) or more workers are ordinarily employed or are proposed to be employed in

any day during the period during which the contractor work is in progress.

2.0 DEFINITION

Work place means a place where twenty or more workers are ordinarily employed or are proposed to be employed in connection with construction work on any day during the period during which the contractor work is in progress.

3.0 FIRST-AID FACILITIES

3.1 At every work place first aid facilities shall be provided and maintained, so as to be easily accessible during working hours, First-Aid boxes at the rate of not less than one box per 150 contract labour or part thereof ordinarily employed.

3.2 The First-Aid boxes shall be distinctly marked with a red cross on white ground and shall contain the following equipments:-

3.2.1

- a) For work places in which number of contract labour employed does not exceed 50, each First-Aid box shall contain the following equipments:
 - i) 6 small sterilized dressings.
 - ii) 3 medium size sterilized dressings.
 - iii) Large size sterilized dressings.
 - iv) 3 large sterilized burn dressings.
 - v) 1 (30 ml) bottle containing a two percent alcoholic solution of iodine.
 - vi) 1 (30 ml) bottle containing Sal volatile having the dose and mode of administration indicated on the label.
 - vii) 1 snake bite lancet.
 - viii) (30 gms) bottle of potassium permanganate crystals.
 - ix) 1 pair of scissors.
 - ix) 1 copy of the First-Aid leaf-let issued by the Director General, Factory Advice Service & Labour Institutes, Government of India.
 - x) 1 bottle containing 100 tablets (each of 5 grams) of aspirin.
 - xi) Ointment for burns.

xii) A bottle of suitable surgical antiseptic solution.

3.2.2 For work places in which the number of contract labour exceed 50. Each First-Aid box shall contain the following equipments:

- i) 12 small sterilized dressings.
- ii) 6 medium size sterilized dressings.
- iii) 6 large size sterilized dressings.
- iv) 6 large size sterilized burn dressings.
- v) 6 (15 gms) packet sterilized cotton wool.
- vi) 1 (60 ml.) bottle containing a two percent iodine alcoholic solution.
- viii) 1 (60 ml.) bottle containing sal volatile having the dose and mode of administration indicated on the label.
- viii) 1 roll of adhesive plaster.
- ix) 1 snake – bite lancet.
- x) 1 (30 gms.) bottle of potassium permanganate crystals.
- xi) 1 pair of scissors.
- xiii) 1 copy of the First-Aid leaf-let issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
- xii) A bottle containing 100 tablets (each of 5 grams) of aspirin.
- xiii) Ointment for burns.
- xiv) A bottle of suitable surgical antiseptic solution.

3.3 Adequate arrangements shall be made for immediate recoument of the equipment when necessary.

3.4 Nothing except the prescribed contents shall be kept in the First Aid box.

3.5 The First Aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the workplace.

3.6 A person in charge of the First-Aid box shall be a person trained in First-Aid treatment, in work places where the number of labour employed is 150 or more.

3.7 In work places where the number of labour employed is 500 or more and hospital facilities are not available within easy distance of the works, first-Aid Posts shall be established and run by a trained Compounder. The Compounder shall be on duty and shall be available at all hours when the workers are at work.

3.8 Where work places are situated in places, which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or persons suddenly taken ill to the nearest hospital.

4.0 DRINKING WATER

4.1 In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.

4.2 Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.

4.3 Every water supply or storage shall be at a distance of not less than 50 feet from any latrine, drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap-door which shall be dust and water-proof.

4.4 A reliable pump shall be fitted to each covered well, trap-door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5.0 WASHING FACILITIES

5.1 In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of labour employed herein.

5.2 Separate and adequate screening facilities shall be provided for the use of male and female workers.

5.3 Such facilities shall be conveniently accessible & shall be kept clean and in hygienic condition.

6.1 LATRINES AND URINALS

6.1 Latrines shall be provided in every work place on the following scale, namely:

a) Where females are employed there shall be at least one latrine for

every 25 females.

- b) Where males are employed, there shall be at least one latrine for every 25 males.

6.2 Provided that where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females, as the case may be, up to the first 100, and one for every 50 thereafter.

6.3 Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.

Construction of Latrines: The inside walls shall be constructed of masonry or some suitable heat resisting non-absorbent materials and shall be cement washed inside and outside at least once a year. Latrine shall not be a standard lower than bore hole system.

6.4

- (a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women only" as the case maybe.
- (b) The notice shall also bear the figure of man or of women, as the case maybe.

6.5 There shall be at least one urinal for male workers up to 50 and one for female workers up to 50 employed at a time. Provided that where the number of male or female workmen, as the case may be, exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females up to the first 500 and one for every 100 or part thereof, thereafter.

6.6

- a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
- b) Latrines and urinals other than those connected with a flush sewerage system shall comply with the

requirements of the Public Health Authorities.

6.7 Water shall be provided by means of a tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.

6.8 Disposal of Excreta

Unless otherwise arranged for by the local sanitary authority arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternatively excreta may be disposed off by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm layer of waste or for refuse and then covering it with a layer of earth for fortnight (when it will turn into manure).

The Contractor shall, at his own expense, carry out all instruction issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in respect of the Contractor's workmen or employees on the site. The Contractor shall be responsible for payment of any charges, which may be levied by Municipal or Cantonment Authority for execution of such work on his behalf.

23 7.0 PROVISION OF SHELTER DURING REST

At every place there shall be provided, free of cost four suitable sheds, two for males and the other two for rest separately for the use of man and women labour. The height of each shelter shall not be less than 3 meters from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sqm. Per head, provided that the Engineer-in-Charges may permit, subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

8.0 CRECHES

8.1 At every work place, at which 20 or more women workers are ordinarily employed, there shall be provided

two rooms of reasonable dimensions for the use of their children under the age of six years. One room shall be used as a playroom for the children and the other as their bedrooms.

The rooms shall be constructed on standard not lower than the following:

- i) Thatched roof
- ii) Mud floor and walls.
- iii) Planks spread over the mud floor and covered with matting

8.2 The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.

- 8.3 The Contractor shall supply adequate number of toys and games in the playroom and sufficient number of cots and beddings in the bedroom.

The Contractor shall provide one Ayah to look after the children in the creche when the number of women workers does not exceed 50 and two when the number of women workers exceeds 50.

The use of the rooms/earmarked as crèche shall be restricted to children, their attendant and mother of the children.

9.0 CANTEENS

9.1 In every work place where the work regarding the employment of contract labour is likely to continue for six months and wherein contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the Contractor for the use of such labour.

9.2 The canteen shall be maintained by the Contractor in an efficient manner.

9.3 The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.

9.4 The canteen shall be sufficiently lighted at all times when any person has access to it.

9.5 The floor shall be made of smooth and impervious material and inside walls shall be lime washed or colour washed at least once in each year provided that the inside walls of the kitchen shall be lime-washed every four months.

9.6 The premises of the canteen shall be maintained in a clean and sanitary condition.

9.7 Waste Water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.

9.8 Suitable arrangements shall be made for the collection and disposal of garbage.

9.9 The dining hall shall accommodate at a time 30 persons of the labour working at time.

9.10 The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chair shall not be less than one square meter per dinner to be accommodated.

9.11

- a) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number.
- b) Washing places for women shall be separate and screened to secure privacy.

9.12 Sufficient tables, stool, chairs or benches shall be available for the number of dinners to be accommodated.

9.13.1

- a) There shall be provided and maintained sufficient utensils, crockery, furniture and any other equipment necessary for the efficient running of the canteen.

- b) The furniture, utensils and other equipment shall be maintained in a clean and hygienic condition.

9.13.2

- a) Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.
- b) A service counter, if provided, shall have top of smooth and impervious material.
- c) Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment.

9.14 The foodstuffs and other items to be served in the canteen shall be in conformity with the normal habits of the labour.

9.15 The charge for foodstuffs, beverages and any other items served in the canteen shall be based on 'No profit No loss' and shall be conspicuously displayed in the canteen.

9.16 In arriving at price of foodstuffs, and other articles served in the canteen, the following items shall not be taken into consideration as expenditure, namely:

- a) The rent of land building.
- b) The depreciation and maintenance charges for the building and equipment provided for the canteen.
- c) The cost of purchase, repair and replacement of equipment including furniture, crockery, cutlery and utensils:
- d) The water charges and other charges incurred for lighting and ventilation:
- e) The interest and amounts spent on the provision and maintenance and equipment provided for in the canteen.

9.17 The accounts pertaining to the canteen shall be audited once in every 12 months by registered accountants and auditors.

10.0 ANTI MALARIAL PRECAUTIONS

The Contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer-in-Charge including the filling up of any borrow pits which may have been dug by him.

11.0 AMENDMENTS

OIL INDIA LTD may from time to time, add to or amend these rules and issue such directions as it may consider necessary for the purpose of removing any difficulty which may arise in the administration hereof.

CONTRACTOR'S LABOUR REGULATIONS

1.0 SHORT TITLE

These regulations may be called the Contractor "Labour Regulations".

2.0 Definitions

2.1 "Workman" means any person employed by the OIL INDIA LTD or its Contractor directly or indirectly through a sub-contractor, with or without the knowledge, of the OIL INDIA LTD to do any skilled, semi-skilled, un-skilled, manual, supervisory, technical or clerical work for hire or reward, whether, the terms of employment are expressed or implied but does not include any person-

a) Who is employed mainly in a managerial or administrative capacity; or

b) Who being employed in a supervisory capacity draws wages exceeding Rupees Two thousand Five hundred per person or exercises either by the nature of the duties attached to the office or by reason of powers vested to him, functions mainly of managerial nature.

c) Who is an outworker, that is to say, a person to whom any articles or materials are given out by or on behalf of the principal employer to be made up cleaned, washed, altered, ornamental finished, repaired, adopted or otherwise processed for sale for the purpose of the trade or business of the principal employer and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal employer.

2.2 "**Fair Wages**" means wages whether for time or piecework fixed and notified under the provisions of the minimum Wages Act from time to time.

2.3 "Contractor" shall include every person who undertake to produce a given result other than a mere supply of goods or

articles of manufacture through labour or who supplies labour for any work and includes a sub-contractor.

2.4 “Wages” shall have the same meaning as defined in the Payment of Wages Act

2.4.1 Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.

2.4.2 When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week he shall be paid overtime for the extra hours put in by him at double the ordinary rate of wages.

2.4.3.1 Every worker shall be given a weekly holiday on a Sunday, in accordance with the provisions of the Minimum Wages (Central) Rules 1960 as amended from time to time, irrespective of whether such worker is governed by the Minimum Wages Act or not.

2.4..3.2 Whether the Minimum Wages prescribed by the Government under the Minimum Wage Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next preceding day, provided he has worked under the same contractor for a continuous period of not less than 6 days.

2.4..3.3 here a contractor is permitted by the Engineer-in-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substitute holiday to him for the whole day on one of the five days immediately before or after the normal weekly holidays and pay wages to such worker for the work performed on the normal weekly holiday at overtime rate.

3.0 DISPLAY OF NOTICE REGARDING-WAGES, ETC.

The contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition in conspicuous places on the work, notices in English and in the local Indian languages spoken by the majority of the workers, giving the minimum rates of wages fixed under the Minimum Wages Act, the actual wages being paid, the hours of work for which such wages are earned, wage period, dates

of payment of wages and other relevant information as per Appendix 'A'.

4.0 PAYMENT OF WAGES

4.1 The contractor shall fix wage periods in respect of which wages shall be payable.

4.2 No wage period shall exceed one month.

4.3 The wages of every person employed as labour in an establishment or by a contractor where less than one thousand, such persons are employed shall be paid before the expiry of the seventh day and in other cases before the expiry of tenth day

after the last day of the wage period in respect of which the wages are payable.

4.4 Where the employment of any worker is terminated by or on behalf of the contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.

4.5 All payments of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.

4.6 Wages due to every worker shall be paid to him direct or to other person authorized by him in this behalf.

4.7 All wages shall be paid in current coin or currency or in both.

4.8 Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956.

4.9 A notice showing the wage period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the contractor to the Engineer-in-Charge under acknowledgment.

4.10 It shall be the duty of the contractor to ensure the disbursement of wages in the presence of the Engineer or any other authorized representatives of the Engineer-in- Charge

who will be required to be present at the place and time of disbursement of wages by the contractor to workmen.

4.11 The contractor shall obtain from the Engineer or any other authorized representative of the Engineer-in-Charge as the case may be, a certificate under his signature at the end of the entries in the “Register of Wages” or the “Wage-cum-Muster Roll” as the case may be in the following form:

“Certified that the amount shown in column No..... has been paid to the workmen concerned in my presence on..... at”

5.0 FINES AND DEDUCTIONS, WHICH MAY BE MADE FROM WAGES

5.1 The wages of a worker shall be paid to him without any deduction of any kind except the following–

- a) Fines
- b) Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
- c) Deduction for damage to or loss of goods expressly entrusted to the employed persons for custody, or from loss of money or any other deduction which he is required to account where such damage or loss is directly attributable to his neglect or default.
- d) Deduction for recovery of advances or for adjustment of over payment of wages, advances granted shall be entered in a register.
- e) Any other deduction, which the Central Government may from time to time allow.

5.2 No fines should be imposed on any workers in respect of such acts and omissions on his part as have been approved by the Chief Labour Commissioner.

5.3 No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.

5.4 The total amount of fine, which may be imposed in any one-wage period on a worker, shall not exceed an amount equal to three paise in Rupees of the total wages, payable to him in respect of that wage period.

5.5 No fine imposed on any worker shall be recovered from him in installment, or after the expiry of sixty days from the date on which it was imposed.

5.6 Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

6.0 LABOUR RECORDS

6.1 The contractor shall maintain a "Register of persons employed" on work on contract in form XIII of the CL (R&A) Central Rules 1971 (Appendix-B).

6.2 The contractor shall maintain a "Muster Roll" register in respect of all workmen employed by him on the work under contract in form XVI of the CL (R&A) Rules 1971 (Appendix-C).

6.3 The contractor shall maintain a "Wage Register" in respect of all workmen employed by him on the work in form (Appendix-D).

6.4 Register of accidents – The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:

- a) Full particulars of the labourers who met with accident.
- b) Rate of wages
- c) Sex
- d) Age
- e) Nature of accident and cause of accident.
- f) Time and date of accident.
- g) Date and time when he/she admitted in Hospital
- h) Date of discharge from the Hospital
- i) Period of treatment and result of treatment
- j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
- k) Claim required to be paid under Workmen's

CompensationAct.

- l) Date of payment of compensation.
- m) Amount paid with details of the person to whom the same was paid.
- n) Authority by whom the compensation was assessed.
- o) Remarks.

7.0 ATTENDANCE CARD-CUM WAGE SLIP:

7.1 The contractor shall issue an attendance card-cum-wage slip to each workman employed by him in the specimen form at (Appendix-E).

7.2 The card shall be valid for each wage period.

7.3 The contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.

7.4 The card shall remain in possession of the worker during the wage period under reference.

7.5 The contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.

7.6 The contractor shall obtain the signature or thump impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

8.0 EMPLOYMENT CARD

The contractor shall issue an Employment Card in form to each worker within three days of the employment of the worker (Appendix-F).

9.0 SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the contractor shall issue to the workman whose services have been terminated, a service certificate in from Appendix-G.

10.0 PRESERVATION OF LABOUR RECORDS

All records required to be maintained under Regulations Nos. 6 and 7 shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available for inspection by the Engineer-in-Charge, Labour Officer.

11.0 POWER OF LABOUR OFFICERS TO MAKE INVESTIGATIONS INQUIRY

The Labour Officer or any other person authorized by OIL INDIA LTD on its behalf shall have power to make inquiries with a view to ascertaining and enforcing due and proper observance of the Fair Wage Clauses and the Provisions of Regulations. He shall investigate into any complaint regarding the default made by the contractor or sub-contractor in regard to such provision.

24 12.0 Inspection of Book and slips

The contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour officer or any other person, authorized by the Central Government on his behalf.

25 13.0 Submission of Returns

The contractor shall submit periodical returns as may be specified from time to time.

14.0 **Amendments**

The OIL INDIA LTD may from time to time, add or amend the regulations and on any question as to the application, interpretation or effect of these regulations the decision of the OIL INDIA LIMITED concerned shall be final.

15.0 Contractor has to follow all the rules & regulations as per Labour Act and maintain all the records in the proper formats by obtaining from concerned labour department/office which are to be produced before the OIL INDIA LTD / labour officers for inspection as & when asked.

Appendix – ‘A’

LABOUR BOARD

S. No	Description	
1.	Name of work	
2.	Name of Contractor	
3.	Address of Contractor	
4.	Name and Address of UNIT	
5.	Name of Labour Enforcement Officer	
6.	Address of Labour Enforcement Officer	
7.	Date:	

S. No	Category	Minimum Wages fixed	Actual Wages fixed	Numbers present	Remarks

Weekly Holiday	
Wage Period	
Date of Payment of wages	
Working hours	
Rest interval	

See rule 75**Appendix – ‘B’****REGISTER OF WORKMEN EMPLOYED BY CONTRACTOR**

Sl.No.	Description	
	Name and Address of Contractor	
	Name and Address of Establishment in/ under which contract is carried on	
	Nature and location of work	
	Name & Address of Principal Employer	
1.	Sl. No.	
2.	Name and surname of workman	
3.	Age & sex	
4.	Father's/ Husbands Name	
5.	Nature of employment / designation	
6.	Permanent home address of the workman (village and Taluka and District)	
7.	Local address	
8.	Date of commencement of employment	
9.	Signature or thumb impressions of the workman	
10.	Date of termination of employment	
11.	Reasons for termination	
12.	Remarks	

(See Rule 78(2) (193))

MUSTER ROLL

SL.No.	Description	
	Name and address of contractor	
	Name and address of establishment in/under	
	which contract is carried on	
	Nature and location of work	
	Name and Address of Principal Employer	
	For the month / fortnight	
1.	S. No.	
2.	Name of the workman	
3.	Sex	
4.	Father's/Husband's Name	
5.	Dates (1, 2, 3, 4, 5, -----12, 13,14, 15)	
6.	Remarks	

[See Rule 78(2) (03)]

REGISTER OF WAGES

	Name and address of contractor	
	Name and address of establishment in/under which contract is carried on	
	Nature and location of work	
	Name and Address of Principal Employer	
	Wage period: per month/ fortnightly	
1	Sl. No.	
2	Name of Workman	
3	Serial No. in the register of workman	
4	Designation /nature of work done	
5	Nos. of days worked	
6	UNITs of work done	
7	Daily rate of wages/ piece rate	
8	Basic rate of Wages	
9	Dearness allowance	
10	Overtime	

11	Other cash payments (Nature of payments to be indicated)	
12	Total	
13	Deduction if any (indicate nature)	
14	Net amount paid	
15	Signature thumb impression of the workman	
16	Initials of contractor or his representatives	

[SEE RULE 78 (2) (B)]

W A G E S L I P

	Name and address of contractor	
	Name and Father's/Husband's Name of workman	
	Nature and location of work	
	For the Week/Fortnight/Month ending	
1	No. of days worked	
2	No. of UNITS worked in case of piece rate works	
3	Rate of daily wages/piece rate	
4	Amount of overtime wages	
5	Gross wages payable	
6	Deductions if any	
7	Net amount of wages paid	
	Sign of the Contractor	
	Received the sum of Rs.----- -----	
	towards my wages for the above period.	

Sign.ofworkman: -----

WAGE CARD

Wage Card No. &	Date of Issue
	Month/Fortnight
Name and address of Contractor	
Nature of work with location	Designation
Name of workman	

Rate of Wages

Dates	Morning	Evening	Rate	Amount	Initials
1	2	3	4	5	6

Received from the sum of Rs. on account of my wages.

Signature

The wage card is valid for one month from the date of issue.

26

(See Rule 76)

EMPLOYMENT CARD

Sl.No	Description	
.		
	Name and address of contractor	
	Name and address of establishment under which	
	the contract is carried out	
	Nature and location of work	
	Name and address of Principal Employer	
1	Name of the workman	
2	Sl. No in the register of workman employed	
3	Nature of Employment/Designation	
4	Wage rate (with particulars of unit in case of piece work)	
5	Wage Period	
6	Tenure of employment	
7	Remarks	

Signature of Contractor

(See Rule 77)

SERVICE CERTIFICATE

Name and address of contractor	
Nature and location of work	
Name and address of workman	
Age or date of birth	
Identification Marks	
Father's/Husband's Name	
Name and address of establishment in/under which contract is carried on	
Name and address of Principal Employer	
Total period of which employed	

S. No.	From	To	Nature of work	Rate of wages	Remarks

With particulars of unit (in case
of piece work)

Signature

TAXES AND DUTIES CLAUSE - FOR VENDOR/SUPPLIER/CONTRACTOR
(For Supplies/ Services during GST Regime i.e., New Tender)

INDIRECT TAXES/ GST

1. For the purposes of levy and imposition of GST, the expressions shall have the following meanings:
 - (a) GST - means any tax imposed on the supply of goods and/or services under GST Law.
 - (b) Cess – means any applicable cess, existing or future on the supply of Goods and Services as per Goods and Services Tax (Compensation to States) Act, 2017.
 - (c) GST Law - means IGST Act 2017, CGST Act 2017, UTGST Act, 2017 and SGST Act, 2017 and all related ancillary Rules and Notifications issued in this regard from time to time.
2. **The rates quoted by the bidders shall be inclusive of all taxes, duties and levies.** However, bidders are required to provide separately the rate and amount of all types of taxes, duties and levies. In case, the quoted information related to various taxes, duties & levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/ tax, if the finally assessed amount is on the higher side and OIL will have to right to recover the difference in case the rate of duty/ taxes finally assessed is on the lower side. Further, for the purpose of this contract, it is agreed between the parties that if Goods and Services Tax introduced during the tenure of this contract/agreement then the bidders have to clearly show the amount of GST separately in the Tax Invoices. Further, it is the responsibility of the bidders to make all possible efforts to make their accounting / IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to OIL INDIA LIMITED.
3. Offers without giving any of the details of the taxes (Including rates and amounts) as specified above will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.
4. Bidders are required to pass on the benefit arising out of introduction of GST, including seamless flow of Input Tax Credit, reduction in Tax Rate on inputs as well as final goods by way of reduction of price as contemplated in the

provision relating to Anti-Profitteering Measure vide Section 171 of the CGST Act, 2017. Accordingly, for supplies made under GST, the bidders should confirm that benefit of lower costs has been passed on to OIL by way of lower prices/taxes and also provide details of the same as applicable. OIL reserves the right to examine such details about costs of inputs/input services of the bidders to ensure that the intended benefits of GST have been passed on to OIL.

5. OIL INDIA LIMITED Ltd. shall declare the value of free issue of materials and services, if any, involved in the execution of the contract. The Contractor should consider the same while working out the GST liability, if any. Further in cases where GST is leviable on any facilities provided by OIL and used by bidders and the consideration for which is recovered by OIL in the form of reduction in the invoice raised by bidders then OIL will raise GST invoices on such transactions and the same will be reimbursed by bidders.

6. When Input tax credit is available for Set Off as per the end use certification given by User Department at the time of raising Purchase Requisition (P.R.)

Evaluation of L-1 prices shall be done based on Quoted price after deduction of Input Tax Credit (ITC) of GST, if available to OIL. OIL shall evaluate the offers on the basis of the quoted rates only and any claim subsequently by the bidders for additional payment/liability shall not be admitted and has to be borne by the bidders

When Input tax credit is NOT available for Set Off

Evaluation of L-1 prices shall be done based on Quoted price only. OIL shall evaluate the offers on the basis of the quoted rates only and any claim subsequently by the bidders for additional payment/liability shall not be admitted and has to be borne by the bidders

7. In a situation where Purchase Orders (POs)/ Contracts have been placed prior to GST Regime and supplies are effected during GST Regime, it is made clear that any statutory variation (increase/decrease) due to introduction of GST, as the case may be, but within the contractual delivery/completion period will be to the account of OIL subject to documentary evidence. However, any increase in statutory levy after the expiry of the scheduled date of delivery shall be to the supplier's account.
8. Bidders agree to do all things not limited to providing GST compliant Tax Invoices or other documentation as per GST law relating to the supply of goods and/or services covered in the instant contract like raising of and /or acceptance or rejection of credit notes / debit notes as the case may be, payment of taxes, timely filing of valid statutory Returns for the tax period on the Goods and Service Tax Network (GSTN), submission of general information as and when called for by OIL in the customized format shared by OIL in order to enable OIL to update its database etc. that may be necessary to match the

invoices on GSTN common portal and enable OIL to claim input tax credit in relation to any GST payable under this Contract or in respect of any supply under this Contract.

9. In case Input Tax Credit of GST is denied or demand is recovered from OIL by the Central / State Authorities on account of any non-compliance by bidders, including non-payment of GST charged and recovered, the Vendor/Supplier/Contractor shall indemnify OIL in respect of all claims of tax, penalty and/or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. OIL, at its discretion, may also withhold/recover such disputed amount from the pending payments of the bidders.
10. GST liability, if any on account of supply of free samples against any tender shall be to bidder's account.

PART -IV : PROFROMA & ANNEXURES

PROFORMA-A

PRICE SCHEDULE FORMAT (As attached)

PROFORMA-B

BID FORM

To
THE GM (CONTRACTS)
OIL INDIA LIMITED
(A Govt. of India Enterprise)
P.O. GUWAHATI-781171
DIST. KAMRUP(M)
ASSAM

Sub: IFB No.: **CGI 6319P25**

Dear Sir,

Having examined the General and Special Conditions of Contract and the Terms of Reference including all attachments thereto, the receipt of which is hereby duly acknowledged, we the undersigned offer to perform the services in conformity with the said conditions of Contract and Terms of Reference for the sum of ____ (Price not to be indicated)____ stated below or such other sums as may be ascertained in accordance with the Price Bid Form attached herewith and made part of this Bid:

We undertake, if our Bid is accepted, to commence the work within (____) days calculated from the date of issue of Company's LOA.

We agree to abide by this Bid for a period of **120 days** from the date fixed for Bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof in your notification of award shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this _____ day of _____ 2024.

Signature and seal of the Bidder: _____

(In the capacity of) : _____

Name of Bidder : _____

PROFORMA - C

STATEMENT OF NON-COMPLIANCE

(Only exceptions/deviations to be rendered)

1.0 The Bidder shall furnish detailed statement of **exceptions/deviations**, if any, to the tender stipulations, terms and conditions in respect of each PART of Bid Document in the following format:

PART No.	Clause No. (Page No.)	Non-Compliance	Remarks

Authorised Person's Signature: _____

Name: _____

Designation: _____

Seal of the Bidder:

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 Compliance**" in the above Proforma is left blank (or not submitted along with the technical bid), then it would be construed that the bidder has not taken any exception/deviation to the tender requirements.

FORM OF BID SECURITY (BANK GUARANTEE FORMAT)

To
M/s. OIL INDIA LIMITED
CONTRACTS DEPARTMENT,
PIPELINE HEADQUARTERS
GUWAHATI, ASSAM, INDIA, PIN - 781171.

WHEREAS, _____(Name of Bidder) (hereinafter called "the Bidder") has submitted their offer Dated _____ for the provision of certain services (hereinafter called "the Bid") against OIL INDIA LIMITED, Duliajan, Assam, India (hereinafter called the Company)'s Tender No. _____ KNOW ALL MEN BY these presents that we _____ (Name of Bank) of _____(Name of Country) having our registered office at _____(hereinafter called "Bank") are bound unto the Company in the sum of (*) for which payment well and truly to be made to Company, the Bank binds itself, its successors and assignees by these presents.

SEALED with the said Bank this _____day of _____20__.

THE CONDITIONS of these obligations are:

1. If the Bidder withdraws their Bid within its original/extended validity; or
2. The Bidder modifies/revises their bid suo moto; or
3. The Bidder does not accept the contract; or
4. The Bidder does not furnish Performance Security Deposit within the stipulated time as per tender/contract; or
5. If it is established that the Bidder has submitted fraudulent documents or has indulged into corrupt and fraudulent practice.

We undertake to pay to Company up to the above amount upon receipt of its first written demand (by way of letter/fax/cable), without Company having to substantiate its demand provided that in its demand Company will note that the amount claimed by it is due to it owing to the occurrence of any of the conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including the date (**--/--/--) and any demand in respect thereof should reach the Bank not later than the above date.

The details of the Issuing Bank and Controlling Bank are as under:

A. Issuing Bank:
BANK FAX NO:
BANK EMAIL ID:
BANK TELEPHONE NO.:
IFSC CODE OF THE BANK:

B. Controlling Office:

Address of the Controlling Office of the BG issuing Bank:

Name of the Contract Person at the Controlling Office with Mobile No. and e-mail address:

Notwithstanding anything contained herein:

a) Our liability under this Bank Guarantee shall is restricted up to Rs.....

- b) This guarantee shall be valid till
- c) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before (Date of Expiry of BG PLUS one year claim period).
- d) At the end of the claim period that is on or after (Date of expiry of the Bank Guarantee Plus Minimum of 1 year claim period shall be stipulated) all your rights under this Guarantee shall stand extinguished and we shall be discharged from all our liabilities under this Guarantee irrespective of receipt of original Bank Guarantee duly discharged, by Bank.

Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

- a) SIGNATURE AND SEAL OF THE GUARANTORS _____
- b) Designation _____
- c) Name of the Bank _____
- d) Address _____

Note:

* The Bidder should insert the amount of the guarantee in words and figures.

** Date of expiry of Bank Guarantee should be minimum 30 days after the end of the validity period of the Bid / as specified in the Tender.

*** The Bank Guarantee issuing bank branch must ensure the following:

a. The Bank Guarantee issued by the bank must be routed through SFMS platform as per the following details:

- (i) MT 760/MT 760 COV for issuance of bank guarantee.
- (ii) MT 760/MT 767 COV for amendment of bank guarantee.

[Tender Number should reflect in the SFMS text under MT 760/MT 760 COV]

The above message / intimation shall be sent through SFMS by the BG issuing Bank branch to Axis Bank, Guwahati Branch, IFS Code- UTIB0000140, Branch Address – Axis Bank Ltd, Guwahati Branch, Chibber House, G S Road, Dispur, Assam, PIN- 781005..

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

c. Further correspondence against BG towards Bid Security must contain the Tender Number.

PROFORMA-E

FORM OF PERFORMANCE BANK GUARANTEE

(To be submitted by the successful bidder in case of award of contract)

To:

M/s. OIL INDIA LIMITED ,
CONTRACTS SECTION
PIPELINE DEPARTMENT, GUWAHATI
ASSAM, INDIA, PIN -781 171.

WHEREAS _____ (Name and address of Contractor) (hereinafter called "Contractor") had undertaken, in pursuance of Contract No. _____ to execute (Name of Contract and Brief Description of the Work) _____ (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee as security for compliance with Contractor's obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee; NOW THEREFORE we hereby affirm that we are Guarantors on behalf of the Contractor, up to a total of (Amount of Guarantee in figures) _____ (in words _____), such amount being payable in the types and proportions of currencies in which the Contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of guarantee sum as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or the work to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way cease us from any liability under this guarantee, and we hereby waive notice of such change, addition or modification.

This guarantee is valid until the -----day of -----

The details of the Issuing Bank and Controlling Bank are as under:

A. Issuing Bank:

BANK FAX NO:

BANK EMAIL ID:

BANK TELEPHONE NO.:

IFSC CODE OF THE BANK:

B. Controlling Office:

Address of the Controlling Office of the BG issuing Bank:

Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

SIGNATURE AND SEAL OF THE GUARANTORS _____

Designation _____

Name of Bank _____

Address _____

Witness _____

Address _____

Date _____

Place _____

Note: Bank details of OIL INDIA LIMITED may be required by Bank for issuance of Bank Guarantee (BG):

BANK DETAILS OF BENEFICIARY		
a	Bank Name	AXIS BANK
b	Branch Name	GUWAHATI
c	Branch Address	CHIMBER HOUSE, G.S.ROAD, DISPUR ASSAM
d	Banker Account No.	140010200027654
e	Type of Account	CURRENT ACCOUNT
f	IFSC Code	UTIB0000140
g	MICR Code	781211002
h	SWIFT Code	Axisinbb140
i	Contact No.	8876501401
j	Contact Person Name	Mr. Dibakar Ghaosh
k	Fax No.	Not available
l	Email Id	<u>Guwahati.branchhead@axisbank.com</u>

PROFORMA - F

DRAFT AGREEMENT COPY
(To be executed by the successful Bidder)

This AGREEMENT is made on the day of

BETWEEN

OIL INDIA LIMITED , a Government of India Enterprise, incorporated under the Companies Act 1956, having its registered office at Duliajan in the state of Assam, hereinafter called the “COMPANY” which expression unless repugnant to the context shall include executors, administrators and assignees on one part

AND

M/s., having its address hereinafter called the “CONTRACTOR” or “~~Transport Supplier:~~” which term shall unless excluded by or repugnant to the subject or context include its successors and permitted assignees, on the other part,

WHEREAS

OIL INDIA LIMITED being desirous of awarding a comprehensive contract for “ Construction of 02 Nos. of G+6 Storied Residential Buildings including Electrification works, lifts, Sanitary works, Site Development etc. all complete inside Pipeline Headquarters Township, Oil India Limited (OIL), Guwahati, Assam..”

- A. M/s. , have examined the nature and magnitude of the service to be provided and have satisfied themselves by careful examination before quoting their rates as to the nature and magnitude of the services to be provided , local conditions, the availability of manpower and resources necessary for rendering the service and have made local and independent enquiries and obtained complete information and have examined and considered all other issues, conditions and things and probable and possible contingencies, and generally all matters incidental thereto and auxiliary thereof affecting the services and have included them while making their offer.

WHEREAS, Company, (OIL INDIA LIMITED) having accepted the offer of the Contractor and (subsequent letter dated _____), issued the “Letter of Award” under reference _____ dated _____.

Whereas, the Contractor has accepted Company’s Letter of Award vide their letter _____

NOW IN CONSIDERATION OF THE MUTUAL COVENANTS AND AGREEMENTS HERINAFTER CONTAINED IT IS HEREBY AGREED AS FOLLOWS:

- i) In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of Contract referred to.
- ii) The following documents shall be deemed to form and be read and construed as part of this agreement viz:
 - (a) The Tender Document No.....dated, inter-alia providing the Instruction to the bidder ,General Conditions of Contract, Scope of Work / terms of reference /Technical specifications etc., Special conditions of contract.

- (b) The Bid submitted by the Contractor in response to the Tender enquiry,
- (c) The contractors letter dated (after price negotiation) if any .
- (d) The Company’s Notification of Award vide Letter of Award No. _____ dated _____.
- (e) Section-I, II, III & IV hereto.
- (f) Annexure –I hereto
- iii) The rates payable for the job will be as indicated in **Part-III**
- iv) In consideration of the payment to be made by the Company to the Contractor for carrying out the assigned service , the Contractor hereby covenants with the Company that the Contractor shall and will carry out the assigned service and complete the said service and shall do and perform all other acts and things mentioned in the Agreement or described or which are to be implied there from or may be reasonably necessary for the execution of the said assignment in the desired manner and time and subject to the terms and conditions or stipulations mentioned in the Agreement.
- v) The Company hereby covenants to pay the Contractor in consideration of the due provision, execution and completion of the services and the remedying of defects therein , the contract price or such other sum as may become payable under the provisions of this contract at times and in manner prescribed in this contract.

IN WITNESS thereof, the parties have executed this contract on the day and the year first above mentioned at the office of the General Manager, Pipelines, Pipeline Head Quarter, Narengi, Guwahati, Assam.

Signed and Delivered for and
On behalf of Company

Signed and Delivered for and
on behalf of Contractor

(OIL INDIA LIMITED)

()

IN PRESENCE OF TWO WITNESSES :

IN PRESENCE OF TWO WITNESSES

- 1.
- 2.

- 1.
- 2.

PROFORMA-H

AUTHORISATION FOR ATTENDING BID OPENING

TO,
GM (CONTRACTS)
OIL INDIA LIMITED .,
P.O. Udayan Vihar,
Guwahati - 781171
Assam, India

Date: _____

Sir,

Sub: OIL's IFB No. CGI6319P25

We authorise Mr. /Mrs. _____ (Name and address) to be present at the time of opening of the above IFB due on _____ at Guwahati on our behalf.

Yours Faithfully,

Authorised Person's Signature: _____

Name: _____

Designation: _____

Seal of the Bidder:

Note: This letter of authority shall be on printed letter head of the Bidder and shall be signed by a person who signs the bid.

.....

PROFORMA-I :-INTEGRITY PACT—(APPLICABLE FOR THIS TENDER)

INTEGRITY PACT

Between

OIL INDIA LIMITED (OIL) hereinafter referred to as "The Principal"

And

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

Preamble:

The Principal intends to award, under laid down organizational procedures, contract/s for ----- . 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.

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

- (i) No employee of the Principal, personally or through family members, will in connection with the tender for, or during 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.
- (ii) 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.
- (iii) 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 the Chief Vigilance Officers and in addition can initiate disciplinary actions.

Section: 2 -Commitments of the Bidder/Contractor

(1) The Bidder commits itself to take all measures necessary to prevent corruption. During his participation in the tender process, the Bidder commits himself to observe the following principles:

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

- (ii) The Bidder 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.
 - (iii) The Bidder(s) will not commit any offence under the relevant Anticorruption Laws of India, further, the Bidder(s) 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.
 - (iv) The Bidder 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.
 - (v) Bidders to disclose any transgressions with any other public/government organization that may impinge on the anti-corruption principle. The date of such transgression, for the purpose of disclosure by the bidders in this regard, would be the date on which cognizance of the said transgression was taken by the competent authority. The period for which such transgressions (s) is/are to be reported by the bidders shall be the last three years to be reckoned from date of bid submission. The transgression (s), for which cognizance was taken even before the said period of three years, but are pending conclusion, shall also be reported by the bidders.
 - (vi) The Bidder(s) of foreign origin shall disclose the name and address of the Agents/ representatives in India, if any. Similarly, the Bidder(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further, all the payments made to the Indian agent/ representative have to be in India Rupees only.
 - (vii) Bidders not to pass any information provided by Principal as part of business relationship to others and not to commit any offence under PC/ IPC Act;
- (2) The Bidder will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (3) The Bidder signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.

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

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

1. If the Bidder 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 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 2 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 can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

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

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

Section 4 -Compensation for Damages

(1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit / Bid Security.

(2) The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder can prove and establish that the exclusion of the Bidder from the tender process has caused no damage or less damage than the amount or the liquidated damages, the Bidder 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 for such reason.

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

(1) The Principal will enter into Pacts on identical terms with all bidders.

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

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

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

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

Section: 8 -External Independent Monitor/Monitors

(1) The Principal appoints competent and credible Independent External Monitor (IEM) for this Pact.

(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 Bidder accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Bidder. The Bidder 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 Bidder. The parties offer the Monitor the option to participate in such meetings.

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

(6) The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

(7) If the Monitor has reported to the Chairperson of the Board a Substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

(8) The word 'Monitor' would include both singular and plural.

(9) In case of any complaints referred under IP Program, the role of IEMs is advisory and the advice of IEM is non-binding on the Organization. However, as IEMs are invariably persons with rich experience who have retired as senior functionaries of the government, their advice would help in proper implementation of the IP.

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. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(3) In case of a joint venture, all the partners of the joint venture should sign the Integrity Pact. In case of sub-contracting, the principal contractor shall take the responsibility of the adoption of IP by the sub-contractor. It is to be ensured that all sub-contractors also sign the IP. In case of sub-contractors, the IP will be a tri-partite arrangement to be signed by the Organization, the contractor, and the sub-contractor.

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

<p>..... For the Principal</p> <p>Date :</p> <p>Place :</p>	<p>..... For the Bidder/Contractor</p> <p>Witness 1:</p> <p>Witness 2:</p>
------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------

PROFORMA-J

SAFETY MEASURES

**To,
GM-CONTRACT
OIL INDIA LIMITED
Guwahati-781171**

Description of work/service: Construction of 02 Nos. of G+6 Storied Residential Buildings including Electrification works, lifts, Sanitary works, Site Development etc. all complete inside Pipeline Headquarters Township, Oil India Limited (OIL), Guwahati, Assam.

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. 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) 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.
(Seal)

Yours Faithfully

Date_____

M/s_____

FOR & ON BEHALF OF BIDDER

PROFORMA-L

ON THE OFFICIAL PAD OF THE BIDDER TO BE EXECUTED BY THE AUTHORIZED SIGNATORY OF THE BIDDER

Certificate of Compliance of FINANCIAL CRITERIA:

Ref Clause No. 1.1 - Financial Criteria of the BRC/BEC – under Note No. B of the Tender

I the authorized signatory(s) of
(Company or firm name with address) do hereby solemnly affirm and declare / undertake as under:

The balance sheet/Financial Statements for the financial year _____ (as the case may be) has actually not been audited as on the Original Bid Closing Date.

Place:

Date:

Signature of the authorized signatory

Note: Please note that any declaration having date after the Bid Closing Date will not be considered and will be rejected. This certificate is to be issued only considering the time required for preparation of Financial Statements i.e. if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date.

PROFORMA-M

**(Format of undertaking by Bidders towards submission of authentic information/documents
(To be typed on the letter head of the bidder)**

Ref. No. _____

Date _____

**To,
GM-CONTRACTS
OIL INDIA LIMITED
GUWAHATI-781171**

Sub: Undertaking of authenticity of information/documents submitted

Ref: Your tender No. _____ Dated _____

Sir,

With reference to our quotation against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.

We take full responsibility for the submission of authentic information/documents against the above cited bid.

We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/fraudulent, OIL has right to reject our bid at any stage including forfeiture of our EMD and/or PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.

Yours faithfully,
For (type name of the firm here)

Signature of Authorised Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

PROFORMA- N

[TO BE FILLED-UP / SUBMITTED BY THE VENDOR ON ITS LETTER HEAD FOR E-REMITTANCE]

Name:

FULL Address:

Phone Number :

Mobile Number :

E-mail address:

FAX Number :

Bank Account Number:
(in which the Bidder wants remittance against invoices)

Bank Name :

Branch :

Address of the Bank:

Bank Code :

IFSC/RTGS Code of the Bank:

NEFT Code of the Bank :

PAN Number :

GST Registration Number:

Signature of Vendor with Official Seal

Note: This declaration shall be printed on letter head of the Bidder and shall be signed by a competent person.



PROFORMA-O

FORMAT FOR UNDERTAKING (IN TERMS OF TENDER NO. CGI6319P25)

(On Non-Judicial Stamp Paper of Rs. 100/-)

TO BE NOTORISED

To
GM-CONTRACTS
OIL INDIA LIMITED
GUWAHATI

Dear Sirs,

UNDERTAKING/DECLARATION BY THE BIDDER IN RESPECT OF TENDER NO CGI6319P25

This is in connection with the Bid submitted by me/us, (Name of Bidder), against Tender No. **CGI6319P25** for “Construction of 02 Nos. of G+6 Storied Residential Buildings including Electrification works, lifts, Sanitary works, Site Development etc. all complete inside Pipeline Headquarters Township, Oil India Limited (OIL), Guwahati, Assam.”

I/We, the afore mentioned Bidder against the subject tender, hereby declare that my/our quoted rates include the following -

- (a) Labour wages as per Minimum Wages Act and notifications issued by the Central Govt. from time to time, including P.F, insurance and Bonus.
- (b) Material and Equipment (if any) cost.
- (c) PPE cost.
- (d) IME (Initial Medical Examination) cost.
- (e) Other charges / cost including overheads, profit, insurance and handling charge..

I/We, the afore mentioned Bidder against the subject tender take note that minimum wages may increase from time to time as notified by statutory authority and Central Govt. and undertake that I/We shall not make Company (i.e. OIL) liable to reimburse me/us for such statutory increase in wage rates of the labours/workers engaged by me/us during the entire period of the contract, including extension if any. Currently, such increase in the wage rates is twice in a year. I/We have bid after considering this increase in wage rates for the entire period of Contract including extension provision.

I/We, the afore mentioned Bidder against the subject tender, further undertake that I/We will pay my/our workers the existing Daily wages as notified under the Minimum Wages Act from time to time by the Central Govt. and such statutory or any other increase in the wages rates including consequent increase in statutory contributions like provident fund etc. of contract labours engaged by me/us shall be borne solely by me/us during the entire period of the contract, including extension if any, without any cost implication whatsoever upon the Company.

I/We further agree and undertake that in case of any violation of the above undertaking, OIL INDIA LIMITED (OIL) shall be at liberty to take appropriate action against me/us in terms of the Tender/Contract including but not limited to termination of contract and debarment from future

business with OIL. I shall duly comply with all the statutory obligations, more particularly under applicable labour laws. I further agree and undertake that in case of any dispute or claims arise out of my non-compliance of statutory obligations under the Contract, by the Labourers engaged by me or by any statutory authorities, I shall only be responsible for the same and hold the Company harmless against such dispute or claims. I further authorize the Company, in the event of my default or non-compliance of any statutory obligations, to deduct/recover and adjust such amount or claim against my Bills due under the Contract or against any other existing or future Contracts with the Company including performance security.

I/We declare that the information given above is true and any misstatement, misrepresentation, or suppression of facts in connection with the above undertaking may entail rejection of the bid and cancellation of contract, if awarded.

Yours faithfully,

1. Authorized Signatory with Seal

(Bidder)

Place:-

Date:-

PROFORMA-P

To,

General Manager (F&A)-PL
OIL INDIA LIMITED
Pipeline HQ, Narangi , Guwahati ,Assam-781171

Dear Sir,
Sub: E-Payments vide RTGS/NEFT

I/We request and hereby authorise you to execute E-Payment vide RTGS/NEFT modes to My /Our Bank account as per the details given below:

(A) BANK DETAILS

1. Bank A/c No. (Must Enclose Cancelled Cheque)
2. Account Type Saving Bank/ Curent Account
3. Bank Branch
4. Bank Address
5. IFSC Code
6. MICR No.

(B) VENDOR DETAILS :

1. Vendor Code (See the vendor code given in the PO/Contract)
2. Name
3. PAN No. (Must enclosed self-attested photo copy of PAN Card)
4. Address with Mobile/Telephone No.
5. ~~VAT TIN No.~~
6. ~~CST Regn. No.~~
7. GSTN. No.
8. ~~Central Excise Regn.No.~~
9. Email ID

I/We hereby declare that the particulars given above are correct and complete. I/We confirm that I/we shall bear the charges, if any levied by my/our bank for the credit in our above account through NEFT. If the transaction is delayed or lost because of incomplete or incorrect information, we would not hold the company responsible.

Thanking you,

Date:

Authorised Signatory & Stamp

.....
.....

Bank Certificate

We confirm that the details given above are correct as per our records.

Date:

Place:

Official

Signature, Code & Stamp of Authorised Bank

PROFORMA-Q

PROFORMA OF INDEMNITY BOND FOR SUPPLY OF MATERIALS BY PURCHASER/ OWNER

(To be executed on non-judicial stamp paper of appropriate value)

WHEREAS OIL INDIA LIMITED (hereinafter referred to as "OIL") which expression shall unless repugnant to the context includes their legal representatives, successors and assigns having their Pipeline Headquarters at PO Udayan Vihar, Guwahati-781171, Assam has entered into an Contract with _____ (hereinafter referred to as the CONTRACTOR which expression shall unless repugnant to the context include their legal representatives, successors and assigns) for _____ on the terms and conditions as set out, inter-alia, in the Contract No..... Dated..... and various documents forming part thereof hereinafter collectively referred to as the "CONTRACT" which expression shall include all amendments, modifications and/or variations thereto.

AND WHEREAS

- i) OIL has agreed to supply to the CONTRACTOR, equipment, plants and materials (finished, semi-finished and raw) for the purpose of EXECUTION of the said CONTRACT by the CONTRACTOR (the equipment, plants and materials to be supplied by OIL to the CONTRACTOR, hereinafter for the sake of brevity referred to as the "said materials") and pending execution by the CONTRACTOR of the CONTRACT incorporating the said materials, the said materials shall be under the custody and charge of the CONTRACTOR and shall be kept, stored, altered, worked upon and/or fabricated at the sole risk and expense of the CONTRACTOR.
- ii) As a pre-condition to the supply of the said materials by OIL to the CONTRACTOR, OIL has required the CONTRACTOR to furnish to OIL an Indemnity Bond in the manner and upon terms and conditions hereinafter indicated.

NOW, THEREFORE, in consideration of the premises aforesaid the CONTRACTOR hereby irrevocably and unconditionally undertakes to indemnify and keep indemnified OIL from and against all loss, damage and destruction (inclusive but not limited to any or all loss or damage or destruction to or of the said materials or any item or part thereof by theft, pilferage, fire, flood, storm, tempest, lightning, explosion, storage, chemical or physical action or reaction, binding, warping, exposure, rusting, faulty workmanship, faulty fabrication, or faulty method or technique of fabrication, strike, riot, civil commotion, or other act or omission or commission whatsoever within or beyond the control of the CONTRACTOR, misuse and misappropriation (inclusive but not limited to the misuse or misappropriation by the CONTRACTOR and the CONTRACTOR's servants and/or agents) whatsoever to, or of in the said materials or any part of them thereof from the date that the same or relative part of item thereof was supplied to the CONTRACTOR up to and until the date of return to OIL of the said materials or relative part of item thereof or completed fabricated works(s) incorporating the said material and undertake to pay to OIL forthwith on demand in writing without protest or demur the value as specified by OIL of the said material or item or part thereof, lost, damaged, destroyed, misused and/or misappropriated, as the case may be or, together with OIL's costs and expenses (inclusive of but not limited to handling, transportation, cartage, insurance, freight, packing and inspection costs/or expenses up to) and aggregate limit of

_____ (In words _____)

_____ Only).
AND THE CONTRACTOR hereby agrees with OIL that:

- i) This Indemnity/Undertaking shall be a continuing Indemnity/ Undertaking and shall remain valid and irrevocable for all claims of OIL arising hereunder up to and until the midnight of _____. However, if the CONTRACT for which this Indemnity/Undertaking is given is not completed by this date, the CONTRACTOR hereby agrees to extend the Indemnity/Undertaking till such time as is required to fulfill the CONTRACT.
- ii) This Indemnity/Undertaking shall not be determined by any change in constitution or upon insolvency of the CONTRACTOR but shall be in all respects and for all purposes be binding and operative until payment of all moneys payable to OIL in terms of hereof.
- iii) The mere statement of allegation made by or on behalf of OIL in any notice or demand or other writing addressed to the CONTRACTOR as to any of the said material or item or part thereof having been lost, damaged, destroyed, misused or misappropriated while in the custody of the CONTRACTOR and/or prior to completion of the completed fabricated work(s) and delivery to job site thereof incorporating the said materials shall be conclusive of the factum of the said material or item or part thereof having been supplied to the CONTRACTOR and/or the loss, damage, destruction, misuse or misappropriation thereof, as the case may be, while in the custody of the CONTRACTOR and/or prior to the completion of the completed fabricated work(s) and delivery to job site thereof incorporating the said materials without necessity on the part of OIL to produce any documentary proof or other evidence whatsoever in support of this.
- iv) The amount stated in any notice of demand addressed by OIL to the CONTRACTOR as to the value of such said materials lost, damaged, destroyed, misused or misappropriated, inclusive relative to the costs and expenses incurred by OIL in connection therewith shall be conclusive of the value of such said materials and the said cost and expenses as also of the amount liable to be paid to OIL to produce any voucher, bill or other documentation or evidence whatsoever in support thereof and such amount shall be paid without any demur and on demand and no dispute shall be raised concerning the same.

The undersigned has full power to execute this Indemnity Bond on behalf of the CONTRACTOR under the Power of Attorney dated _____.

Place:

Dated:

(SIGNED BY COMPETENT AUTHORITY)
Official seal of the CONTRACTOR

PROFORMA-R

CERTIFICATE FOR RESTRICTION OF PROCUREMENT

Format for Undertaking by Bidders towards compliance of office memorandum F. No. 6/18/2019-PPD dated 23rd July, 2020 (Public Procurement no. 1) issued by Department of Expenditure, Ministry of Finance, Govt. of India
(To be typed on the letter head of the bidder)

Ref. No. _____
Tender No. _____ dtd. _____

Date _____

OIL INDIA LIMITED

.....
.....

Dear Sirs,

“We have read the clause regarding restrictions on procurement from a bidder or a country which shares a land border with India; We certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. We hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where evidence of valid registration by the Competent Authority shall be attached.]”

We also agree that, during any stage of the tender/contract agreement, in case the above information/documents submitted by us are found to be false, OIL INDIA LIMITED has the right to immediately reject our bid/terminate contract at any stage and carry out further legal action on us in accordance with law.

Yours faithfully,
For (type name of the firm here)

Signature of Authorised Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

Note: This form should be returned along with offer duly signed.

PROFORMA-LC

UNDERTAKING FOR LOCAL CONTENT

(To be submitted in the letter head of the bidder)

We, _____ (Name of the bidder) have submitted Bid No. _____ against Tender No. _____ dated _____ for "Comprehensive Annual Maintenance Contract of OIL's Crude oil Pipeline SCADA system hardware, Servers, Workstations, Monitors, Switches, Routers, Firewall elements, Printers, PC's, Laptops, & Network elements installed under UGPS phase 1 in Assam, West Bengal and Bihar for a period of Three (3) years, extendable by 1 year."

We hereby undertake that we meet the mandatory minimum Local Content (LC) requirement i.e. _____ % as per Clause No. 1.0 of BEC/BRC of the tender and as per provision of **Public Procurement (Preference to Make in India) Order, 2017 of Department for Promotion of Industry and Internal Trade (DPIIT), Govt. of India as revised vide Order No. P45021/2/2017-PP (BE-II) dated 16th September 2020 (and as amended time to time) with modifications as notified vide MoP&NG Order No. FP-20013/2/2017-FP-PNG-Part (4) (E-41432) dated 26th April 2022**, to bid against the subject tender.

The percentage of local content in the bid is _____%.

For (Name of the firm _____)

Signature of Authorised Signatory/ POA

Name:

Designation:

Place:

Date:

(Affix Seal of the Organization here)

Proforma of Bank Guarantee towards Purchase Preference – Local Content

Ref. No. _____ Bank Guarantee No. _____
Dated _____

To
OIL INDIA LIMITED

India

Dear Sirs,

1. In consideration of _____ (hereinafter referred to as OIL, which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and assignees) having entered into a CONTRACT No. _____ dated _____ (hereinafter called 'the CONTRACT' which expression shall include all the amendments thereto) with M/s _____ having its registered/head office at _____ (hereinafter referred to as the 'CONTRACTOR') which expression shall, unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees) and OIL having agreed that the CONTRACTOR shall furnish to OIL a Bank guarantee for India Rupees/US\$ _____ for the faithful fulfillment of conditions pertaining to Local Content in accordance with the value mentioned in the certificate of Local Content submitted by the contractor for claiming purchase preference under the Purchase Preference Policy (linked with Local Content).
2. We (name of the bank) _____ registered under the laws of _____ having head/registered office at _____ (hereinafter referred to as "the Bank", which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and permitted assignees) do hereby guarantee and undertake to pay to OIL immediately on first demand in writing any / all money to the extent of Indian Rs./US\$ (in figures) _____ (Indian Rupees/US Dollars (in words) _____) without any demur, reservation, contest or protest and/or without any reference to the CONTRACTOR. Any such demand made by OIL on the Bank by serving a written notice shall be conclusive and binding, without any proof, on the bank as regards the amount due and payable, notwithstanding any dispute(s) pending before any Court, Tribunal, Arbitrator or any other authority and/or any other matter or thin whatsoever, as liability under these presents being absolute and unequivocal. We agree that the guarantee herein contained shall be irrevocable and shall continue to be enforceable until it is discharged by OIL in writing. This guarantee shall not be determined, discharged or affected by the liquidation, winding up, dissolution or insolvency of the CONTRACTOR and shall remain valid, binding and operating against the bank.
3. The Bank also agrees that OIL at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance, without proceeding against the CONTRACTOR and notwithstanding any security or other guarantee that OIL may have in relation to the CONTRACTOR's liabilities.
4. The Bank further agrees the 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 CONTRACT or to extend time of performance by the said CONTRACTOR(s) from time to time or to postpone for any time or from time to time exercise of any of the powers vested in OIL against the said CONTRACTOR(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said CONTRACTOR(s) or for any forbearance, act or omission on the part of OIL or any indulgence by OIL to the said CONTRACTOR(s) or any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

5. The Bank further agrees that the Guarantee herein contained shall remain in full force during the period that is taken for the performance of the CONTRACT and all dues of OIL under or by virtue of this CONTRACT have been fully paid and its claim satisfied or discharged or till OIL discharges this guarantee in writing, whichever is earlier.
6. This Guarantee shall not be discharged by any change in our constitution, in the constitution of OIL or that of the CONTRACTOR.
7. The Bank confirms that this guarantee has been issued with observance of appropriate laws of the country of issue.
8. The Bank also agrees that this guarantee shall be governed and construed in accordance with Indian Laws and subject to the exclusive jurisdiction of Indian Courts of the place from where the purchase CONTRACT has been placed.
9. Notwithstanding anything contained herein above, our liability under this Guarantee is limited to INR in figures) _____ (Indian Rupees/US Dollars (in words) _____) and our guarantee shall remain in force until _____(indicate the date of expiry of bank guarantee).

Any claim under this Guarantee must be received by us before the expiry of this Bank Guarantee. If no such claim has been received by us by the said date, the rights of OIL under this Guarantee will cease. However, if such a claim has been received by us within the said date, all the rights of OIL under this Guarantee shall be valid and shall not cease until we have satisfied that claim.

In witness whereof, the Bank through its authorized officer has set its hand and stamp on this _____ date of _____ 20__ at _____

(Signature)
Full name, designation and address
(in legible letters)
With Bank

Attorney as per power of
Attorney No. _____
Dated _____

UNDERTAKING TOWARDS PURCHASE PREFERENCE

**TO
GM(CONTRACTS)
Contracts Department
PHQ GUWAHATI
PIN-781171
Dist. KAMRUP (M), Assam
India**

Dear Sir,

We, _____ (Name of the bidder) have submitted Bid No. _____ against Tender No. _____

We are eligible and shall avail benefit of Purchase Preference under the policy,

(please (✓) tick the policy you have opted)

Policy	Response
PP MSE	
PP LC	

Yours faithfully,

Signature: _____

Name & Designation

_____ For & on 1

**UNDERTAKING TOWARDS COMPLIANCE OF PROVISIONS FOR RESTRICTIONS ON
PROCUREMENT FROM A BIDDER OF A COUNTRY WHICH SHARES LAND BORDER WITH
INDIA**

We, M/s _____, have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; we certify that we are not from such a country/or if from such a country, have been registered with the Competent Authority. We hereby certify that we fulfil all requirements in this regard and is eligible to be considered. *[wherever applicable, evidence of valid registration by the Competent Authority shall be attached]*

Yours faithfully,
For (type name of the firm here)

Signature of Authorised Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

EXHIBIT-II

UNDERTAKING FOR WORKS INVOLVING POSSIBILITY OF SUB-CONTRACTING

We, M/s _____, have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such-countries, we certify that we are not from such a country/or if from such a country, have been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. We hereby certify that we fulfil all requirements in this regard and is eligible to be considered. *[wherever applicable, evidence of valid registration by the Competent Authority shall be attached]*

Yours faithfully,
For (type name of the firm here)

Signature of Authorized Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

ADDITIONAL UNDERTAKING BY BIDDER IN CASES OF SPECIFIED TRANSFER OF TECHNOLOGY(ToT)

We, M/s _____, have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. We certify that we do not have any ToT arrangement requiring registration with the competent authority.

OR

We, M/s _____, have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. We certify that we have valid registration to participate in this procurement. *[Evidence of valid registration by the Competent Authority shall be attached]*

Yours faithfully,
For (type name of the firm here)

Signature of Authorised Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable.)

DECLARATION ABOUT BIDDER'S FINANCIAL STANDING

To,

GM(CONTRACTS)
Contracts Department, OLINDIA, PHQ, GUWAHATI
PIN-781171
Dist. KAMRUP (M),
Assam India

Sub: Undertaking/Declaration regarding financial standing

Ref: Tender No. _____

We, _____ (name of bidder), hereby confirm that:

- (1) We are neither bankrupt nor undergoing any insolvency resolution process or liquidation or bankruptcy proceeding under any law.

(OR)

- (2) No insolvency resolution process or liquidation or bankruptcy proceeding is initiated under any law against us.

Place: _____

Date: _____

(Name & Signature of the
authorised
signatory of the bidder)

APPENDIX-2

DECLARATION THAT BIDDER IS NOT UNDER HOLIDAY LIST/DELISTED/BLACKLISTED/DEBARRED IN OIL

To,

GM(CONTRACTS)
Contracts Department,~~OLINDALMIID~~PHQ,GUWAHATI
PIN-781171
Dist. KAMRUP (M),
Assam India

Sub: Undertaking/Declaration regarding Holiday List, debarment etc.

Ref: Tender No. _____

We, _____ (Name of the bidder) hereby declare that neither our company nor any of its allied concerns, partners or associates or directors or proprietors involved in any capacity, are currently put on holiday list/banning list by OIL debaring us/them from carrying on business dealings with OIL.

Place: _____

Date: _____

(Name & Signature of the
authorised
signatory of the bidder)

ANNEXURE-CL**CHECKLIST****DATE:****BIDDER:** **= SUBMITTED, = NOT SUBMITTED**

<i>DOCUMENTS TO BE SUBMITTED ALONG WITH THE BID</i>	<i>SUBMITTED/NOT SUBMITTED</i>	<i>REMARKS</i>
Price Schedule Format, (Proforma-A) SEC-II		
Bid Form, (Proforma-B)		
Statement of Non-Compliance, (Proforma-C)		
Bid Security Form (Proforma-D)/ DECLARATION FOR BID SECURITY PROFORMA-D2 whichever applicable		
Performance Security Form, (Proforma-E)		
Sample Agreement Form (Proforma-F)		
Proforma of Letter of Authority (Proforma-G)		
Authorisation for Attending Bid Opening (Proforma-H)		
Integrity Pact (Proforma -I)		
Safety Measures (Proforma – J)		
Certificate of Compliance of Financial Criteria (Proforma –L)		
Format of undertaking by Bidders towards submission of authentic information/documents (Proforma –M)		
E-remittance format (Proforma –N)		
Declaration/ Undertaking Labour wages& security (Proforma –O)		
E-Payments vide RTGS/NEFT-(Proforma –P)		
Format of indemnity bond for supply of materials by purchaser/ owner-(Proforma –Q)		
ANNEXURE-AA: CERTIFICATE OF ANNUAL TURNOVER & NETWORTH		
MSME UDYAM REGISTRATION CERTIFICATE		

E-TENDER: CGI6319P25

Certificate of Restriction of Procurement (Proforma-R)		
Undertaking of Local Content (Proforma-LC)		
Proforma of BG towards PPLC (Proforma-LCBG)		
Undertaking towards Purchase Preference (Proforma-PPLC)		
Exhibit-1 :-Undertaking of restriction of procurement from bidder of a country sharing land border with India		
Exhibit-2 :-Undertaking of sub contracting		
Exhibit-3 :-Undertaking -specified ToT (Transfer of Technology)		
Appendix-1:- Declaration of Financial Standing		
Appendix-2:- Declaration that bidder is not under holiday list/delisted/blacklisted/debarred in OIL		
