

**OIL INDIA LIMITED**  
(A Government of India Enterprise)  
P.O. Duliajan-786602, Assam, India  
E-mail: [Contracts@oilindia.in](mailto:Contracts@oilindia.in)  
**INVITATION FOR BID**

OIL INDIA LIMITED invites Local Competitive Bid (LCB) through its e-procurement portal <https://etender.srm.oilindia.in/irj/portal> for the following items:

<b>TENDER NO</b>	<b>Job Description</b>	<b>BID CLOSING/OPENING DATE</b>
CDI1548P17	Construction of new Office Building with Garage at WSS Duliajan, including electrification and supply of all materials except Cement.	28.07.2016
CDI1549P17	Vertical Extension of Contracts Office at Duliajan including Electrification and supply of all materials except Cement.	28.07.2016

**Tender fee (Non-refundable): ₹ 1000.00, Bid Closing/Opening Time: 11:00/14:00 Hrs; Last date for submission of tender fee is 21.07.2016.** The complete bid documents and details for purchasing bid documents, participation in E-tenders are available on OIL's e-procurement portal <https://etender.srm.oilindia.in/irj/portal> as well as OIL's website [www.oil-india.com](http://www.oil-india.com).

**NOTE:** All addenda, Corrigenda, time extension etc. to the tenders will be hosted on above website and e-portal only and no separate notification shall be issued in the press. Bidders should regularly visit above website and e-portal to keep themselves updated.

(A. Das)  
**DGM-Contracts (Civil)**  
**For Resident Chief Executive**

**Date: 24.06.2016**

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

OIL INDIA LIMITED (OIL) invites Bids under Single Stage Two Bid System from established Civil Engineering firms / contractors through its E-Procurement portal "<https://etender.srm.oilindia.in/irj/portal>" for the following works.

IFB No.	SHORT DESCRIPTION OF SERVICE	BID SECURITY	COST OF BID DOCUMENT
CDI1549P17	Vertical Extension of Contracts Office at Duliajan including Electrification and supply of all materials except Cement.	₹ 13,100/-	₹ 1000/-
<b>Period of Sale of Bid Doc. for all the above works: 27.06.2016 to 21.07.2016</b>			
<b>Bid Closing / Opening Date &amp; Time for all the above works: 28.07.2016 11.00/14.00 Hrs</b>			
<p>Bidder shall require User ID and Password for online submission of Bid. Vendors having user ID &amp; password can purchase bid documents on-line through OIL's electronic Payment Gateway. Alternatively, bidders can write to DGM-Contracts, Contracts Department, Oil India Limited, P.O. Duliajan, Assam-786602 along with cost of bid document (non-refundable) in the form of Demand Draft / Banker's Cheque from any Scheduled Bank in favour of OIL INDIA LIMITED and payable at Duliajan, which must reach DGM-Contracts office on or before the last date of sale of Bid Document.</p> <p>New Vendors who do not have User ID &amp; password shall request OIL for the issue of the same well in advance and OIL will take up to 5 working days to issue the same. Therefore bidder should not delay in making request till the last moment in their own interest. In case of delay because of late request by the bidders, OIL shall not be responsible for non-submission of Bid in absence of user ID and Password. Alternatively, User ID and Password may be generated online by the bidders by using the link for supplier enlistment given in OIL's e-tender portal and can purchase bid documents subsequently in the similar manner.</p>			
<b>EXEMPTION OF TENDER FEE:</b> If the bidder is a Micro or Small Enterprise under the Micro, Small and Medium Enterprises Development Act, 2006 and is registered with District Industries 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 Micro, Small and Medium Enterprises, then they are exempted from payment of tender fees for the items/services for which they are registered. Copy of valid Registration Certificate, must be enclosed along with the application for issuing tender documents and the Registration Certificate should clearly indicate the monetary limit, if any and the items for which bidder are registered with any of the aforesaid agencies. Public Sector Units (PSU) are also exempted from payment of tender fee. Application for exemption of Tender Fee must reach the office of DGM-Contracts, Contracts Department, Oil India Limited, Duliajan-786602(Assam) within the bid selling period.			
<b>No physical Bid documents will be issued.</b> The details of IFB can be viewed using "Guest Login" provided in the E-Procurement portal and also in OIL's web site <a href="http://www.oil-india.com">www.oil-india.com</a> . The link to OIL's E-Procurement portal has also been provided through OIL's web site <a href="http://www.oil-india.com">www.oil-india.com</a> .			
All corrigenda, addenda, amendments, time extension, clarifications etc. to the tender will be hosted on the OIL's website and in the e-tender 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.			

**Date: 24-06-2016**

**DGM- Contracts (Civil)  
for RESIDENT CHIEF EXECUTIVE**

OIL INDIA LIMITED  
(A Govt. of India Enterprise)  
Contracts Department, Duliajan

OIL INDIA LIMITED a premier Public Sector Enterprise of Govt. of India engaged in drilling and exploration activities for hydrocarbon invites ON-LINE BIDS from experienced and established firms / contractors meeting the requisite criteria for the following mentioned work under **SINGLE STAGE TWO BID System** through its e-Procurement site:

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**DESCRIPTION OF WORK/ SERVICE:** Vertical Extension of Contracts Office at Duliajan including Electrification and supply of all materials except Cement.

**LOCATION OF WORK:** -Contract Office, OIL, Duliajan, Dibrugarh, Assam.

**CONTRACT PERIOD:** 26 (Twenty Six) Weeks.

**BID CLOSING/ OPENING DATE & TIME:** 28.07.2016 (11:00 HRS/14:00 HRS)

**BID SECURITY DEPOSIT:** ₹13,100/- (Rupees Thirteen Thousand One Hundred Only).

- a) Bid Security deposited vide Demand Draft / Banker's Cheque / Money Receipt/Bank Guarantee

No. \_\_\_\_\_ dated \_\_\_\_\_ of \_\_\_\_\_

(Original hard copy of (a) should reach the office of DGM-CONTRACTS before Bid opening date and time, otherwise Bid will be rejected. A scanned copy of this document should also be uploaded along with the Un-priced bid documents.

- b) Bidders to confirm that in the event of the award of Contract he/she/they will submit Performance Security Deposit @ 2.5% of the total contract price within two weeks of issue of LOI/LOA and this will not earn any interest. Immediately after deposit of Performance security, successful bidder shall have to sign the formal contract Agreement.

2.0 SEALED ENVELOPES containing the Bid Security Deposit (EMD) shall be marked with the above Tender Number and description of work and addressed to

**DGM-CONTRACTS  
CONTRACTS DEPARTMENT  
OIL INDIA LIMITED  
Duliajan – 786602  
Assam.**

2.1 All bidders shall deposit the requisite BID SECURITY in the form of Demand Draft/Banker's Cheque/ Money Receipt/Bank Guarantee from a Nationalized /

Scheduled Bank in favour of M/s Oil India Limited and payable at DULIAJAN. Alternatively, applicants already having User ID & Password for OIL's e-portal can pay the requisite Bid security against the individual IFBs through the online payment gateway. This Bid Security shall be refunded to all unsuccessful bidders, but is liable to be forfeited in full or part, at Company's discretion, as per Clause No. 6 below.

**Bids without Bid Security in the manner specified above will be summarily rejected. However, OIL registered 'A', 'B' & 'C' class bidders are exempted from depositing the bid security against this tender.** Bid should be submitted on-line through OIL's e-Tendering Portal up to 11:00 hrs (IST) (Server Time) on the date as mentioned and will be opened on the same day at 14:00 hrs (IST) at Office of the DGM-Contracts in presence of authorized representative of the bidder. **THE BID SECURITY SHOULD BE DROPPED IN THE TENDER BOX PLACED AT THE OFFICE OF THE DGM CONTRACTS ON OR BEFORE 1:30 p.m. OF THE SCHEDULE DATE OF OPENING OF TENDER. ALTERNATIVELY, APPLICANTS ALREADY HAVING USER ID & PASSWORD FOR OIL'S E-PORTAL CAN PAY THE REQUISITE BID SECURITY AGAINST THE INDIVIDUAL IFBS THROUGH THE ONLINE PAYMENT GATEWAY**

**Exemption from submission of bid security:**

If the bidder is a Micro or Small Enterprises (MSE) 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, then they are exempted from submitting Bid Security. Bidding MSEs shall have to submit a Copy of valid Registration Certificate clearly indicating the monetary limit, if any and the items for which bidder are registered with any of the aforesaid agencies.

2.2 THE PHYSICAL BID SECURITY IS TO BE SUBMITTED ALONGWITH A COVERING LETTER MENTIONING THE e-TENDER NO AND THE BIDDER'S NAME AND ADDRESS IN A DULY SEALED ENVELOPE ADDRESSED TO – DGM – CONTRACTS, OIL INDIA LIMITED, CONTRACTS DEPARTMENT, DULIAJAN – 786602

2.3 If the bidders deposit the requisite Bid security in the form of Bank Guarantee, then the Bank Guarantee should be valid for 30 days beyond the required bid validity period.

3.0 However, if the above mentioned closing / opening day of the tender happens to be non-working day due to Bandh / Strike or any other reason, the bids will be received and opened on the following working day at the same time except on Saturdays.

4.0 The rates shall be quoted per unit as specified in the "Price Bidding Format" attached just below the "Tendering text". Bidder should note that no pricing information is furnished in the "c-Folder" (Technical Bid) otherwise the bid will be rejected.

4.1 All other techno-commercial documents other than price details to be submitted with un-priced bid as per tender requirement placed in the 'un-priced' bid folder.

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

4.3 The authenticity of above digital signature shall be verified through authorized CA after bid opening. If the digital signature used for signing is not of “Class -3” with Organization’s name, the bid will be rejected.

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

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

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

6.0 (a) No Bidder can withdraw his bid within the validity or extended validity of the bid. Withdrawal of any bid within validity period will lead to forfeiture of his/her/their Bid Security in full and debarment from participation in future tenders, at the sole discretion of the Company and the period of debarment will not be less than 2 (two) years.

(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

a) The Bid must be valid for 120 (One Hundred & Twenty) days from the date of opening of the tender.

b) In case of extension of Bid Opening Date, Bid validity must be extended suitably by the bidder, as and when advised by OIL.

c) The amount of Bid Security shall be as specified in the NIT.

d) In case the Bidder submits Bid security in the form of Bank Guarantee (BG), the BG must be valid for minimum 150 days (One Hundred & Fifty) from the date of Technical bid opening.

e) In case of extension of Bid Opening Date, Bid Security validity must be extended suitably by the bidder, as and when advised by OIL.

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

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

10.0 Before submission of bids, the bidder is advised to inspect the work site with permission from DGM (Civil) or his representative, to assess the nature and extent of work and the conditions under which it will be carried out. He may also seek such clarification from this office as are deemed necessary.

**11.0 The bidders should quote their rates against individual items. The rates shall be quoted within (+/-) 10% on the internal estimate against individual items as specified in Schedule of Works (Part-II) subject to the limit of overall percentage from at par to (+10%) of the internal estimated contract cost. However, the bids with quoted rates below (-10%) or above (+10%) of the rates of internal estimate against individual items and bids with quoted overall percentage below at par and above (+10%) of the internal estimated cost will be rejected outright. The rates shall be in figures and up to two decimal places only. In case of any identical situation, the L-1 bidder will be decided through draw of lots.**

12.0 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.

12.1 In case of Sole Proprietorship Firm, Copies of Telephone/Electricity/Mobile Bill, PAN card, latest Income Tax Return form indicating therein the name, business and residential address, E-mail and telephone numbers of the owner and copies of Service Tax and Central Excise Registration Certificate.

12.2 In case of HUF, Copies of Telephone/Electricity/Mobile Bill, PAN card, latest Income Tax Return form, Family Arrangement indicating therein the name, residential address, E-mail and telephone numbers of the owners in general and Karta in particular and copies of Service Tax and Central Excise Registration Certificate.

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

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

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

the Registrar of the state and copies Service Tax and Central Excise Registration Certificate.

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

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

NOTE: Point no. 12.1 to 12.7 are not applicable for contractor who are already registered with OIL INDIA LIMITED.

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

**14.0 SECURITY DEPOSIT:**

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

15.0 OIL INDIA LIMITED reserves the right to curtail / enhance the scope of the work stated above or cancel, if required.

16.0 The amount of retention money shall be released after 6 (six) months from the date of completion certified by the concerned department.

17.0 The work shall have to be started within seven days from the date of work order.

18.0 Time Schedule: The time allowed for completing the work will be reckoned from the date of issue of work order. Time is the essence of the Contract and failure on part of the contractor to complete the work within the stipulated time, shall entitle the Company to impose liquidated damages and / or penalty from the contractor as per terms of the Contract.

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

**20.0 BACKING OUT BY BIDDER:** In case any bidder withdraws their bid within the bid validity period, The Bid security will be forfeited and the party will be debarred for a period of 2(two) years from the date of withdrawal of bid.

**21.0 BACKING OUT BY L-1 BIDDER AFTER ISSUE OF LOA:** In case LOA issued is not accepted by the L1 bidder or the Performance Security is not submitted as per the terms of the contract within the time specified in the Bid Document, the bid security shall be forfeited and the bidder shall be debarred for 2 (two) years from the date of default.

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

**23.0 Bidder(s) must also furnish the followings:**

- a) NAME OF FIRM :
- b) DETAIL POSTAL ADDRESS :
- c) MOBILE / TELEPHONE NO :
- d) E-MAIL ADDRESS :
- e) FAX NO (If available) :
- f) CONTACT PERSON :
- g) VENDOR CODE (If available) :

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

- a) Covering Letter.
- b) Part - I - General Terms and Conditions for Works Contract. (GCC)
- c) Part - II - Schedule of Work, Unit and Quantity (SOQ)
- d) Part - III -Particular Specification, Special Terms, Conditions & Instructions of Contract (SCC)
- e) Part- IV - SCPME
- f) Part- V-Safety Measures
- g) Bid Rejection Criteria & Bid Evaluation Criteria (BRC/BEC).

**i) Special Note:**

Please note that all tender forms and supporting documents are to be submitted on-line through OIL's E-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with tender no. and due date at following address:

**The DGM Contracts,  
Contracts Department,  
Oil India Limited,  
Duliajan- 786602, 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.

25.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. The bidder has to submit both the “TECHNICAL” and “PRICED” bid through electronic form in the OIL’s e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. The Technical Bid is to be submitted as per Scope of Work & Technical Specification of the tender. The Price Bid rates shall be quoted per unit as specified in the “Price Bidding Format” attached just below the “Tendering text” in the main bidding engine of OIL’s e-Tender Portal. The price quoted in the “Price Bidding Format” will only be considered for evaluation.

26.0 In Technical Bid opening, only Technical RFX (Technical-Folder) will be opened. Therefore, the bidder should ensure that Technical bid is uploaded in the Technical - Folder link (Technical RFX link) under Un-priced Bid Tab Page only. No price should be given in above Technical RFX, otherwise the offer will be rejected. Please go through the help document provided in OIL’s e-Portal, in detail before uploading the document.

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

**(Note:** Shri Rajiv Mathur, IPS (Retd.), Former Director, IB, Govt. of India, E-Mail ID: [rajivmathur23@gmail.com](mailto:rajivmathur23@gmail.com) have been appointed as Independent External Monitors).

**27.0 SCREEN SHOTS:**

**Display RFX Response:**

Technical RFX Response

RFX Response Number 60006452 RFX Number TEST2  
RFX Owner WIPRO\_TEST1 Total Value 0.00 INR

2013 11:00:00 INDIA  
Number 4

RFX Information Items Notes and Attachments Conditions Summary Tracking

Basic Data Questions

Event Parameters

Currency: Indian Rupee

Detailed Price Information: Price with Conditions

Terms of Payment: 9010 90% against despatch+10% after receipt

Service and Delivery

Incoterms

Status and Statistics

Created By

Created By

Last Processed By

Last Processed By

Partners and Delivery Information

Details Send E-Mail Call Clear

Function	Number	Name	Valid from
The table does not contain any data			

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

**Edit RFX Response:**

Submit Read Only Print Preview Check Technical RFX Response Close Save Verify signature

RFX Response Number 60006452 RFX Number TEST2 Status Withdrawn Submission Deadline 13.04.2013 11:00:00 INDIA  
RFX Owner WIPRO\_TEST1 Total Value 0.00 INR RFX Response Version Number 2 RFX Version Number 5

RFX Information Items Notes and Attachments Conditions

Notes

Add Clear

Assigned To	Category	Text Preview
The table does not contain any data		

Attachments

Sign Attachment Add Attachment Edit Description Versioning Delete Create Qualifier

Assigned To	Category	Description	File Name	Checked
The table does not contain any data				

**Note :**

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

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

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

**DGM-CONTRACTS**  
**For RESIDENT CHIEF EXECUTIVE**

OIL INDIA LIMITED  
(A Govt. of India Enterprise)  
Contracts Department,  
Duliajan, DISTRICT: DIBRUGARH  
ASSAM, PIN: 786602  
**Works Contract**

**DESCRIPTION OF WORK/SERVICES: - Vertical Extension of Contracts Office at  
Duliajan including Electrification and supply of all materials except Cement.**

**GENERAL CONDITIONS OF CONTRACT (GCC)**

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

**WITNESSETH:**

1. a) The contractor hereby agrees to carry out the work set down in the Schedule of work which forms part-II of this Contract in accordance with the 1968 General Conditions of Contract of Oil India Limited and General Specifications read in conjunction with any drawings and Particular Specifications & instructions which forms Part-III of the contract utilizing any materials/services as offered by the Company as per Part-IV of the contract at \_\_\_\_\_ .

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

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

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

3. The Company's Engineer shall have power to:

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

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

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

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

e) Order deviations in Part II and III of this Contract. All such deviation orders shall be in writing and shall show the financial effect, if any, of such deviation and whether any extra time is to be allowed. The rates to be applied for such Deviation Order shall be the same for those appearing in Company's Schedule of Rate in force on the date of issue of such Deviation Order, to which the contractor has no objection.

4. The Contractor shall have no claim against the company in respect of any work which may be withdrawn but only for work actually completed under this contract. The contractor shall have no objection to carry out work in excess of the quantities stipulated in Part-II. During the actual execution of the contract, if any, additional items (deviation items) are required, which are not covered in the tender, payment of such items shall be made at the current OIL schedule of rate. In case of positive variation in quantity of any items for the quantity mentioned in the schedule of work during the actual execution of work, the contractor will have to carry out the positive varied quantity at the contract rate, or internally estimated rate whichever is lower.

5. The Company reserves the right to cancel this Contract at any time upon full payment of work done and the value of the materials collected by the contractor for permanent incorporation in the work under this contract particularly for execution of this contract up to the date of cancellation of the Contract. The valuation of the work done and the materials collected shall be estimated by the company's Engineer in presence of the contractor. The Contractor shall have no claim to any further payment whatsoever. The valuation would be carried out exparte if Contractor fails to turn up despite reasonable notice which will be binding on the Contractor.

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

I. The Mines Act.

Contractor

- 2

Company

- II. The Minimum Wages Act, 1948.
- III. The Workman's Compensation Act, 1923.
- IV. The Payment of wages Act, 1963.
- V. The Payment of Bonus Act, 1965.
- VI. The Contract Labour (Regulation & Abolition) Act, 1970 and the rules framed there under.
- VII. Employees' Pension Scheme, 1995.
- VIII. Inter-State Migrant (Regulation of Employment and Condition of Service) Act. 1979.
- IX. The Employees Provident Fund and Miscellaneous Provisions Act, 1952.
- X. VAT Act.
- XI. Service Tax Act.

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

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

8. The Contractor must complete the work within 26 weeks of the written order to commence work. During the currency of the job, the work progress must be commensurate with the time elapsed. In the event of any delay on the contractor's part, he/she will be liable to pay to the company liquidated damages at the rate of 1/2% (Half p.c ) per week of the contract price of the item(s) delayed in completion and the maximum value of the liquidated damage will be 7.5% of the contract price of the item(s) delayed provided the item(s) delayed are not critical for commissioning and final utilization of the work. If, however, the item(s) delayed in completion are critical for commissioning and final utilisation of the work then the contractor will be liable to pay liquidated damages by way of penalty at the rate of 1/2% (Half percent) per week of delay of the total contract cost subject to a maximum of 7.5% of total contract cost.

The Chief Engineer's certificate as to the criticality or otherwise of an item shall be final.

The payment of liquidated damages/penalty may be reduced or waived at the sole discretion of the Company whose decision in this regard will be final.

In the event of there being undue delay in execution of the Contract, the Company reserves the right to cancel the Contract and / or levy such additional damages as it deems fit based on the actual loss suffered by the company attributable to such delay. The company's decision in this regard shall be final.

9. In order to promote, safeguard and facilitate the general operational economic in the interest of the Company during the continuance of this contract the Contractor hereby agrees and undertakes not to take any direct or indirect interest and or support, assist, maintain or help any person or persons engaged in antisocial activities,

Contractor Company

demonstration, riots , or in any agitation prejudicial to the Company's interest and any such even taking shape or form at any place of the Company's works or and its neighbourhood.

10. The tendered all-inclusive Price (i.e. the Contract price) is ` \_\_\_\_\_ **(Not to be filled up by bidder while submitting the offer in c-Folder. This figure will be filled up by OIL at the time of award of the contract to the successful bidder.)**  
( \_\_\_\_\_ only.)

but the Company shall pay the Contract or only for actual work done at the all inclusive rates set down in the Schedule of work part II of this Contract.

On account payment may be made, not oftener than monthly, up to the amount of 92.5% of the value of work done. Final payment will be made only after satisfactory completion of the work . Such final payment shall be based on the work actually done allowing for deviations and any deductions and the measurement shall be checked and certified correct by the Company's Engineer before any such final payment is made.

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

12. Wages shall be paid by the Contractor to the workmen directly without any intervention of any Jamadars or Thekaders and that the Contractor shall ensure that no amount by way of commission or otherwise be deducted/ recovered by the Jamadar from the wages of the workmen.

13. The Company for any reason whatsoever and of which the company shall be sole judge may terminate this Contract with a 24 hours notice in writing to the Contractor and in the event of Company's so doing the clause 5 here of shall prevail and the accounts between the parties will be in accordance therewith finalised.

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

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

16. All Statutory taxes levied by the Central and State Government or any other competent authority from time to time will be borne by Contractor and the amount of the contract specified in the contract is inclusive of all tax liabilities.

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

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

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

20. **Special Conditions**

a) The amount of retention money shall be released after 6(six) months from the date of issue of completion certificate from concerned department.

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

c) Contractor(s) whosoever is liable to be covered under the P.F. Act and contract cost is inclusive of P.F., must ensure strict compliance of provisions of Provident Fund and Miscellaneous Provisions Act, 1952 in addition to the various Acts mentioned elsewhere in this contract. Any contractor found violating these provisions will render themselves disqualified from any future tendering. As per terms of the contract, if applicable, the Contractor must deposit Provident Fund Contribution (covering Employee's & Employer's share) with the competent authority monthly under their direct code. The Contractor shall be required to submit documentary evidence of deposit of P.F. Contribution to the Company. In case of failure to provide such documentary evidence, the Company reserves the right to withhold the amount equivalent to applicable P.F. Contribution.

d) In case P.F. is not included in the contract cost and later on required to be deposited by the Contractor, the same will be reimbursed on production of documentary evidence of depositing the same to the authority concerned. 12% P.F. will be applicable on the wage component of the contract cost. The following points are incorporated in the contract based on Contractor's declaration at the time of submission of offer against this contract.

(i) 12% P.F. is included / not included in the contract cost.

(ii) Wage component of the contract cost is 16.69 %.

e) As per Service Tax Act, the contractors are required to furnish service Tax Invoices Containing the following details:

(i) Name, address and registration No of the contractor

(ii) Name and address of the service recipient i.e. OIL

(iii) Description and value of taxable services and the service Tax payable thereon

Note: In absence of Service Tax invoices, Service Tax will not be reimbursed and the consequences of the same shall entirely rest upon the Contractors

The Contractor shall have to submit Invoice of Service Tax as per the following Format:

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

**TAX INVOICE**

Name of the Service Provider.....

Address of the Service Provider.....

Service Tax Regn. No of the service provider.....

Name & address of the Service Receiver  
Oil India Limited, Duliajan, AssamInvoice Serial No.....  
Invoice Date.....

Particulars	Amount (Rs)
Description of the service provided or agreed to be provided (e.g. AMC Bill against Contract No.....for the period.....)	A
Add service Tax 15 % on (A) above (In case of taxable value of service is not 100 %, than specify the value of taxable service and apply 15 % of the qualifying amount) (e.g. if the value of service is only 40%, than service tax should be calculated at 15 % on 40% of the value declared at (A) above.)	B
Total amount (Including service Tax) (A + B)	C
Less: Service Tax Payable by Oil India Limited under reverse charge	D
Net Bill Amount	E

Signature of Proprietor/partner

**21. ARBITRATION:**

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

Place of Arbitration: Duliajan, Dibrugarh, Assam

**22. FORCE MAJEURE:**

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

**23. I.B. VERIFICATION REPORT AND SECURITY REVIEW:**

Contractor will be required to submit the verification report to ascertain character and antecedents from the Civil Administration towards the persons engaged under this contract to the Head of the user Department before engagement.

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



**25. SET OFF CLAUSE:-**

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

**26.0 FURNISHING FRAUDULENT INFORMATION/DOCUMENT:**

If it is found that a Bidder/Contractor has furnished fraudulent document/information, the Bid Security/ Performance Security shall be forfeited and the party shall be debarred as per the "Guidelines for Banning business Dealings".

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

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

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

SIGNED & DELIVERED FOR AND  
ON BEHALF OF

-----  
(Signature of Contractor or his legal Attorney)

By the hand of

-----  
(Full Name of Signatory)

-----  
It's Partner/Legal Attorney

-----  
(Seal of Contractor's Firm)

And in presence of

-----  
(Signature of witness)

-----  
Date: \_\_\_\_\_

-----  
(Full Name of Signatory)

Address:

-----  
-----  
(Signature of Acceptor)

SIGNED & DELIVERED FOR & ON  
BEHALF OF OIL INDIA LIMITED

Designation \_\_\_\_\_

Date \_\_\_\_\_

**Part-II SOQ**

OIL INDIA LIMITED  
(A Govt. of India Enterprise)  
Duliajan, Assam  
**WORKS CONTRACT**

**E-Tender No.: CDI1549P17**

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
	<b>Group A SEC-A (Civil Part)</b>				
10	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement: 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size).	7.00	m3	INR	4394.86
20	Centering and shuttering including strutting, propping etc. and removal of form for: Columns, Pillars, Piers, Abutments, Posts and Struts.	59.00	m2	INR	409.73
30	Centering and shuttering including strutting, propping etc. and removal of form for: Lintels, beams, plinth beams, girders, bressumers and cantilevers.	58.00	m2	INR	293.90
40	Centering and shuttering including strutting, propping etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform.	9.00	m2	INR	348.76
50	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars.	1630.00	KG	INR	69.76
60	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in: Cement mortar 1:4 (1 cement : 4 coarse sand).	50.00	m3	INR	5777.84
70	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length ( hold fast lugs or dash fastener shall be paid for separately). Kiln seasoned and chemically treated hollock wood.	0.13	m3	INR	52246.42

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
80	Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15:2001 (Part B), including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, all complete as per directions of Engineer-in-charge and panelling with panels of: 12 mm thick pre-laminated particle board (decorative lamination on both sides) grade - 1, medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPTI, conforming to IS : 3087, bonded with BWP type synthetic resin adhesive as per IS : 848 and pre-laminated conforming to IS : 12823, Grade 1, Type - II marked.	6.50	m2	INR	2773.73
90	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer-in-Charge.	5.00	m	INR	453.44
100	Providing and fixing to existing door frames 30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm ( $\pm 0.2$ mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm ( $\pm 0.2$ mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	6.00	m2	INR	2899.53
110	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete: 200x10mm.	12.00	EA	INR	245.77
120	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	5.00	EA	INR	724.53

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
130	Providing and fixing chromium plated brass handles with necessary screws etc. complete: 100 mm.	14.00	EA	INR	189.73
140	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	5.00	EA	INR	82.26
150	Providing and Fixing IS : 3564 marked Aluminium die cast body tubular type universal hydraulic door closer with necessary accessories and screws etc. complete.	3.00	EA	INR	742.80
160	Providing and fixing M.S. fan clamp type I or II of 16 mm dia M.S. bar, bent to shape with hooked ends in R.C.C. slabs or beams during laying, including painting the exposed portion of loop, all as per standard design complete.	8.00	EA	INR	119.13
170	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar.	8.00	m3.	INR	634.99
180	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in-charge.	2.50	m3.	INR	1097.11
190	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	55.00	m2.	INR	732.51
200	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm.	74.00	m2.	INR	1398.43
210	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc., complete.	14.00	m2.	INR	756.76
220	6 mm cement plaster of mix: 1:3 (1 cement : 3 fine sand).	116.00	m2.	INR	88.35

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
230	12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand).	477.50	m2.	INR	121.43
240	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required: W.C. pan with ISI marked white solid plastic seat and lid.	2.00	Ea.	INR	4730.25
250	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required: One urinal basin with 5 litre white P.V.C. automatic flushing cistern.	2.00	Ea.	INR	3187.72
260	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing: Rectangular shape 1500x450 mm.	1.00	Ea.	INR	1357.17
270	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing: Rectangular shape 453x357mm.	1.00	Ea.	INR	670.51
280	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour. 600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms.	2.00	Ea.	INR	465.31
290	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	2.00	Ea.	INR	201.84
300	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings: Flat back wash basin of size 630x450 mm.	2.00	Ea.	INR	1001.40
310	Providing and fixing toilet paper holder :C.P. brass.	2.00	Ea.	INR	281.24
320	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc.25 mm dia nominal bore.	15.00	m.	INR	272.50
330	Providing and Fixing soil, waste and vent pipes: 100mm dia.Sand cast iron S&S pipe as per IS: 1729.	15.00	m.	INR	822.93

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
340	Providing and fixing gun metal non-return valve of approved quality (screwed end) : 25mm nominal bore. Horizontal.	2.00	Ea.	INR	429.73
350	Providing and fixing gun metal non-return valve of approved quality (screwed end) : 25mm nominal bore. Vertical.	2.00	Ea.	INR	442.73
360	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required: 15 mm nominal bore.	2.00	Ea.	INR	290.99
370	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 15 mm nominal bore.	2.00	Ea.	INR	482.57
380	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.: 15 mm nominal bore.	2.00	Ea.	INR	478.03
390	Providing and fixing PTMT pillar cock of approved quality and colour . 15 mm nominal bore, 125 mm long foam flow, weighing not less than 120 gms.	2.00	Ea.	INR	310.71
400	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately): Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15).	200.00	Kg.	INR	401.55
410	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item). With float glass panes of 4.0 mm thickness.	14.00	m2.	INR	812.90
420	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	387.00	m2.	INR	93.91

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
430	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade: New work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm).	135.00	m2.	INR	90.16
440	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade: New work (two or more coats) over and including water thinnable priming coat with cement primer.	252.03	m2.	INR	74.75
450	Applying priming coat: With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood).	3.00	m2.	INR	28.97
460	Varnishing with varnish of approved brand and manufacture: Two or more coats glue sizing with spar varnish or an under coat of flattening varnish.	3.00	m2.	INR	91.45
470	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	1084.81	Kg.	INR	74.53
480	Providing and fixing pre-coated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	157.12	m2.	INR	674.38
490	Providing and fixing pre-coated galvanised steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete: Ridges plain (500 - 600mm).	11.00	m.	INR	695.67
500	Providing and fixing pre-coated galvanised steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete: Gutter .(600 mm over all girth).	22.00	m.	INR	841.31

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
510	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	22.00	Kg.	INR	435.28
520	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with: Fully Perforated Gypsum Plaster Board of size 1200 x 2400x12.5 mm having approx. 15 % perforated area with perforation size and pattern as approved by the Engineerin-charge and as per manufacturer's specification, with all 4 side tapered and backed by acoustical tissue with NRC value not less than 0.60.	100.00	m2.	INR	1823.15
530	Providing and fixing 2nd class teak wood plain lining tongued and grooved, including wooden plugs complete with necessary screws and priming coat on unexposed surface. 40 mm thick.	100.00	m2.	INR	5071.17



Sl. no	Description of Work	Quantity	UOM	Currency	Rate
540	Dressing, planning and making, fixing chicken wire net framing at eaves of CI sheet or Asbestos sheet roof with 50mm x 25mm or 75mm x 25mm timber frame and 20mm x 12mm beading inside including making the frame to fit exactly with corrugation.	8.80	m2.	INR	260.46
550	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work.	54.00	m2.	INR	60.35
560	Providing and Fixing 18mm thick gang saw cut (mirror polished, premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edge to give high gloss finish etc. complete at all levels. Granite of any colour and shade Area of slab over 0.50 sqm.	10.00	m2.	INR	3455.57
	<b>Group B SEC-A (Electrical Part)</b>				
10	<b>Point wiring:</b> Wiring for light point/fan point/ exhaust fan point/call bell point with 3x1.5 sq.mm FRLS PVC insulated single core copper conductor in surface/recessed with medium grade ISI approved PVC conduit,with suitable size GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc as required identical size phase,neutral and earth wires ,colour coded red,black and green respectively).Concealed Point wiring includes laying of PVC conduit in the roof/Wall also. Make of cable:Havells/Finolex/L&T/Polycab,Make of PVC conduit: AKG/PLaza/Richa.	34.00	EA		1394.35
20	<b>Light plug point wiring:</b> Wiring for light plug point with 3X1.5 sq. mm FRLS PVC insulated single core copper conductor in surface/ recessed medium grade ISI approved PVC conduit alongwith FRLS PVC insulated copper conductor single core cable for earthing as required(identical size phase ,neutral and earth wires ,colour coded red ,black and green respectively). Concealed Plug point wiring includes laying of PVC conduit in the roof/Wall also.Make of cable :Havells/Finolex/L&T/Polycab, Make of PVC conduit : AKG/PLaza/Richa.	110.00	M		193.22

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
30	<b>Circuit Wiring 2.5 sq mm:</b> Wiring for circuit/ submain/Power wiring alongwith earth wire with the 3x2.5 mmsq sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class ISI approved PVC conduit as required.Wiring shall be done from MCB DB to desired Switch Board/power point.(identical in size phase ,neutral and earth wires ,colour coded red ,black and green respectively) .Concealed circuit wiring includes laying of PVC conduit in the roof/Wall also.Make of cable :Havells/Finolex/L&T/Polycab ,Make of PVC conduit : AKG/PLaza/Richa.	120.00	M		249.94
40	<b>Power Wiring 4.0 sq mm:</b> Wiring for circuit/ submain/Power wiring alongwith earth wire with the 3x4 mmsq sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class ISI approved PVC conduit as required.Wiring shall be done from MCB DB to desired Switch Board/power point.(identical in size phase ,neutral and earth wires ,colour coded red ,black and green respectively).Concealed circuit wiring includes laying of PVC conduit in the roof/Wall also.Make of cable :Havells/Finolex/L&T/Polycab,Make of PVC conduit : AKG/PLaza/Richa.	140.00	M		302.27
50	<b>Circuit Wiring 10.0 sq mm:</b> Wiring for circuit/ submain/Power wiring alongwith earth wire with the 3 x10 mmsq sizes of FRLS PVC insulated copper conductor, single core cable for in surface/ recessed medium class ISI approved PVC conduit as required.Wiring shall be done from 3 phase MCB DB to SPN MCB DB or SB as required (identical in size phase ,neutral and earth wires ,colour coded red ,black and green respectively).Concealed circuit wiring includes laying of PVC conduit in the roof/Wall also.Make of cable :Havells/Finolex/L&T/Polycab ,Make of PVC conduit : AKG/PLaza/Richa. Main DB To SPN DB.	90.00	M		754.54
60	<b>Circuit Wiring 16.0 sq mm:</b> Main: Wiring for 3 phase and neutral circuit wiring alongwith 2 earth wire with the 4 x 16 mmsq of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit from main MCCB to TPN/SPN DB as required. All conductors shall be identical in size and distinct colour code as follows- Red,Yellow, Blue for phase and black for neutral, Earthing conductor shall be green. Concealed sub main wiring includes laying of PVC conduit in the roof/Wall also. Make of cable :Havells/Finolex/L&T/Polycab, Make of PVC conduit : AKG/PLaza/Richa.Panel to Main DB	100.00	M		1960.29

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
70	<b>3 Module Switchboard:</b> Supply,fixing and installation of 3 modules GI box along with modular base & cover plate for modular switches in recess etc as required. Make of Modular item:Legrand/MK/ Schneider/Crabtree/Havells.	2.00	NO		336.77
80	<b>8Module Switchboard:</b> Supply,fixing and installation of 8 modules GI box along with modular base & cover plate for modular switches in recess etc as required.Make of Modular item ::Legrand/MK/Schneider/Crabtree/Havells.	6.00	NO		622.50
90	<b>Supplying and fixing of 6 A S/Socket:</b> Supply and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. Make of Modular item :Legrand/MK/Scheider/Crabtree/Havells.	22.00	NO		759.55
100	<b>Supplying and fixing 16 A S/Socket:</b> Supplying and fixing 4 module GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.Make of Modular item :Legrand/MK/Schneider/Crabtree/Havells.	4.00	NO		1061.55
110	<b>Supply and fixing of 20 A Metallic S/Soc:</b> Supply and installation of Surface/recess type 20A metallic plug/socket DB complete with 20A Plug and Socket and 20 A DP RCBO,30mA sensitivity for AC. Make: Legrand/Schneider/Siemens/Havells/Indo Asian.	3.00	NO		6200.37
120	<b>S/F of 32 A Single phase Industrial Plug:</b> Supply,fixing and installation of surface/recess type 3pin 32 A metallic plug/socket DB complete with 3pin 32A plug and socket and 32A 2 pole RCBO,100ma sensitivity .Make: Legrand/Schneider/Siemens/Havells/Indo asian.	1.00	NO		7034.37
130	<b>Supply and fixing of 6 A Modular Switch:</b> Supply, installation and fixing of 6 A Modular switch in the existing modular boxes, Make of Modular switch: Legrand/Schneider/Crabtree/MK/Havells.	34.00	NO		159.37
140	<b>Supply and fixing of ceiling rose:</b> Supplying and fixing 3 pin, 5 amp ceiling rose.Make:Richa/Anchor.	2.00	NO		54.00
150	<b>Supply and fixing of Modular Regulator 1:</b> Supply, installation and wiring of 1 Module Fan Regulator 100W Make:Legrand/MK/Crabtree/Schneider/Havells.	1.00	NO		825.63

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
160	<b>Supply &amp; Fixing of Ceiling Fan, 1400 mm:</b> Supply & fixing of 1400 mm sweep ceiling fan without modular step regulator, including wiring the down rods of standard length (upto 30 cm) .Make of fan: Havell/Crompton Greaves/Bajaj/Usha.Colour: White	1.00	NO		2408.00
170	<b>Supply &amp; Fixing of Exhaust Fan, 300 mm:</b> Supply ,Installation and commissioning of 300 mm sweep heavy duty metallic exhaust fan in the existing opening, including making the hole to suit the size of the above fan, connection, testing, commissioning etc. as required.Make of fan: Havell/ Crompton Greaves/ Bajaj/Usha.	2.00	NO		3896.09
180	<b>Supply and fixing of Led 2x2 Luminaires:</b> Supply,Installation, testing and commissioning of recessed type 35 to 38 W LED luminaire complete with all mounting accessories for fixing in the grid type ceiling including supplying,fixing and connection with 1.5 sq. mm FR PVC insulated,copper conductor, single core cable and earthing etc.as required.Minimum output Lumen shall be 3200 and colour temperature shall be 6000K to 6500K.Driver shall be inbuilt. Power factor>0.9,THD<10%,IEC Compliant for safety. Make:Philips/Crompton/GE/Bajaj/Havells.	15.00	NO		7172.78
190	<b>Supply and fixing of 20 W LED batten fit:</b> Supply, Installation, testing and commissioning of pre-wired, wall mounted LED batten with extruded anodised aluminum housing and robust construction. Batten type LED fitting with all accessories including fixing arrangement on wall, wiring and connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc as required.minimum output Lumen shall be 1700 Lumen and efficacy shall be more than 85%.Power factor >0.9, THD < 10%. Make:Philips/Crompton/GE/Bajaj/Havells.	2.00	NO		3049.46
200	<b>Supply and fixing of 13 W LED batten fit:</b> Supply, Installation, testing and commissioning of pre-wired, wall mounted LED batten with extruded anodised aluminum housing and robust construction.Batten type LED fitting with all accessories including fixing arrangement on wall, wiring and connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc as required.minimum output Lumen shall be 1300 Lumen and efficacy shall be more than 85%.Power factor >0.9, THD < 10%. Make:Philips/Crompton/GE/Bajaj/Havells.	4.00	NO		2526.78

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
210	<b>Supply and fixing of suspended /recess t:</b> Supply and fixing of recessed accent lighting luminaire (downlight) with matt finish reflector complete with green perform LED lamps with all accessories including fixing arrangement in the ceiling, wiring and connection with 1.5 mmsq FRLS single core copper conductor.Minimum lumen out shall be 1200 Lumen,CRI>80%,driver shall be constant current non integrated,Optics High Efficiency diffuser with more than 85% transmittance. Make: Philips/ Crompton/ GE/Bajaj/ Havells.	10.00	NO		2559.36
220	<b>Supply and Fixing of Single phase 63 A M:</b> Supplying,installation and fixing of 16 way as outgoing with double door , single pole and neutral, sheet steel, MCB distribution board, 240 volts, on surface,complete with 100 A tinned 12 way copper busbar, 12 way neutral busbar, 12 way earth bar, din bar, detachable gland plate, interconnections, phosphatized and powder painted including earthing etc. as required.DB shall have following as incomer :63 A RCBO, sensitivity 100mA -1 nos.Outgoings are 10 A MCB ,C curve-6 nos,20 A MCB,C curve- 6 nos.Make of RCBO, MCBs and box shall be of same make and shall be Schneider/ Siemens/Indo Asian/Legrand.DB shall be similar to Legrand cat no- 6077 13	2.00	NO		12313.79

Sl. no	Description of Work	Quantity	UOM	Currency	Rate
230	<p><b><u>Supply, Installation, Testing &amp; commission:</u></b> SHORT TEXT: 160 A, 8 W, VTPN MCCB DB</p> <p>Detailed description: Supply of 3 Phase, 8 WAY, vertical TPN MCCB DB, as per the following specifications: A. Incoming: a. 160 A Thermal adjustable MCCB: 1 no b. Rating: 4 pole, 160 A, 25kA, 50Hz, 415VAC c. Protection: Thermal and Magnetic Protection d. Make &amp; Model : Legrand, Cat no 4200 57 or similar B. Outgoing Feeders: a. 63 A TP C curve MCB: 4nos b. 63 A SP C curve MCB: 12 nos c. All outgoing MCBs shall be 'C' curve, 240v AC, 10kA breaking capacity, with DMC housing, suitable for class-II tropicalisation (as per IEC) &amp; approved by ISI or IEC. MCBs shall have integrated label holder, biconnect upper &amp; lower terminals &amp; air channels for low temperature rise. C. Bus bar: 250 A, Tinned Copper D. Constructional details of DB:DB shall be as per IS-8623 with latest amendment. DB shall have external earth terminal &amp; mounting holes. Cable ties &amp; wire leads for wiring incomer MCCB to respective phase &amp; neutral buses shall be supplied and wired with single core 35 sqmm stranded copper cable with tinned copper lugs. Enclosure shall be IP-43&amp; IK-09 with double door. DB shall have detachable cable entry gland plate on top and bottom side for keeping spare length of cables. All wires inside DB shall have ferrules for identification of circuit number. All unused openings shall be fitted with Blanking Plates. The DB shall be provided with 250 amp tinned copper bus bar for phase &amp; neutral. Neutral &amp; Earth bar shall be 8 way each &amp; suitable for termination of wires with pin type cable lugs (MAKE &amp; Model No: Legrand, Cat no. 6079 14 or similar Schneider/Siemens/Indo Asian/ABB/L&amp;T</p>	1.00	NO		49383.24
240	<p><b><u>Supply and Fixing 200 x 250 x 48 mm PVC:</u></b> Supply and fixing of PVC switchboard with cover &amp; screws, approved and marked by IS-14772. Colour- White. Size- 250mm x200mm x 48mm. Make:Presto plast/AKG</p>	4.00	NO		145.36
250	<p><b><u>Supply and Fixing 175 x 100 x 48 mm PVC:</u></b> Supply and fixing of PVC switchboard with cover &amp; screws, approved and marked by IS-14772. Colour- White. Size- 175 mm x100mm x 48mm.Make:Presto plast/AKG</p>	8.00	NO		111.44
260	<p><b><u>Hexagonal Fan Box:</u></b> Supplying and fixing of Mild steel hexagonal/Round fan box with 12mm Rod ,18G in the fan position.Make:Richa/Anchor/AKG/Plaza.</p>	1.00	NO		134.40

- **Bidder must include all liabilities including statutory liabilities in their quoted rates.**

Note: The Company's Internal Estimated Rates, as indicated in Part-II, are inclusive of all overheads, taxes, duties, levies etc. except P.F. & Service Tax.

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

**DESCRIPTION OF WORK/SERVICES:** Vertical Extension of Contracts Office at Duliajan including Electrification and supply of all materials except Cement.

**A. SPECIAL CONDITION OF CONTRACT (CIVIL)**

**Part - A: SCOPE OF CIVIL WORK**

**1. GENERAL:**

All materials used in the work shall conform to the latest revision of the relevant Indian Standard Specifications to the extent practicable. Where no such specifications exist they shall be of the best quality available in the market. Wherever ISI certified materials and products are available these alone shall be used. All materials shall be stored at site in accordance with IS-4082-1996.

Unless specially provided for in the contract the tendered rates shall include the cost of carriage, transport, loading, unloading and stacking as directed for all materials required on the work. Where a tender provides a rate for transport of materials, it includes for all loading, unloading and stacking on the site in such position and manner as directed. Any materials found not conforming to specification must be removed from site within 48 hours.

**2. STORAGE:**

Materials shall be transported, handled and stored at site carefully to the approval of Engineer so as to prevent any damage of any kind to be kept at his own risk and cost.

Cement shall be stored in a weather proof shed, the floor of which shall be raised 300 mm clear from the ground and 600 mm away from the wall all round in order to protect from rain and moisture. Empty cement bag shall be returned to the Company in good condition.

**3. CEMENT CONCRETE/ REINFRCED CEMENT CONCRETE WORK:**

All C.C. work in 1:3:6 proportions shall be done with 18 mm graded down broken stone. Broken stone shall be properly screened before use. All reinforced cement concrete work to be done in prop. 1:1.5:3 unless otherwise specified -- 18mm down to 12mm graded down broken stone as per related drawings and instructions of site Engineer to be followed in case of any discrepancies. Proper vibration to be done as



per IS recommendation. Floor paneling to be done in the line of expansion joint as directed by Engineer In-charge.

**Fine Aggregate** - Fine aggregate shall be hard, durable, clean and free from adherent coating and organic matter. It shall not contain harmful impurities such as pyrites, coal, lignite, mica, shale or similar laminated material, clay, alkali, soft fragments, sea shells and organic impurities in such quality as to affect the strength or durability of the concrete. Fine aggregate to be used for reinforced concrete shall not contain any material liable to attack the steel reinforcement. Fine aggregate which is chemically reactive with alkalis of cement is harmful as cracking of concrete may take place.

**Coarse Aggregate** - Coarse aggregate shall be obtained from natural sources such as stone, gravel, etc crushed or un-crushed or a continuation thereof from approved quarries. This shall consist of coarse material most of which is retained on 4.75mm sieve. Aggregate shall be hard, strong, dense, durable, clean and free from veins and adherent coatings. It shall be free from soft, feeble, thin, elongated or laminated pieces and shall be roughly cubical in shape. It shall be clear and free from dirt and any other deleterious matter.

**Reinforcement bars** - The following types of steel for reinforcement shall be used in reinforced concrete construction and these shall conform to Indian Standards or as revised from time to time mentioned against each

- a. Mild steel and medium tensile steel bars and hard drawn steel wire – IS: 432.
- b. HYSD bars – IS: 1786.

**Bending & Placing steel reinforcement in position**-Bending shall be carried out as per relevant IS specification and direction of the Engineer-in-charge. All reinforcement bars shall be accurately placed in position with spacing and cover as shown in the drawing or as specified and firmly held so during the placing and vibrating and setting of concrete. Bars shall be thoroughly cleared of rust, seals, grease, oil and any other foreign matter before placing them in position. The overlap jointing shall be staggered. The bars shall be fixed with 22G binding wire. Precast cover blocks 1:2 (1 cement: 2sand) cement mortar 40 mm square and necessary thickness shall be used to keep the reinforcement bars in proper position. For this block, no extra payment to be made. Wire required for binding shall not be measured separately. Tack welding shall also be permitted in lieu of building with steel wire.

**Proportioning of mix** - Proportioning shall be done by volume. Boxes of suitable size shall be used for measuring sand and aggregates. The size of the boxes (internal) shall be 35 x 25cm and 40cm deep. The unit of measurement for cement, shall be a

bag of cement weighting 50 Kg and this shall be taken as 0.035 cubic metre. While measuring the aggregate and sand the boxes shall be filled without shaking, ramming or hammering. The proportioning of sand shall be on the basis of its dry volume and in case of damp sand; allowances for bulkage shall be made.

Mixing - Mixing of reinforced cement concrete shall, as a rule be done in a mechanical mixer. However, the Engineer-in-charge may permit hand mixing in specific cases where in his opinion it is not practicable to resort to mechanical mixing, either on account of the quality of cement concrete required is small or for any other reason. In such cases, it should be ensured that the inferior quality of concrete produced by hand mixing will not adversely affect the structure.

Consistency - The quantity of water to be used for each batch containing 50 Kg of cement, to give the required consistency shall not be more than 34 litres for 1:3:6, mix 32 litres for 1:2:4 mix, 30 litres for 1:1.5:3 mix and 27 litres for 1:1:2 mix. In case of vibrated concrete, the above quantity shall be suitably reduced. The quantity of water shall be regulated by carrying out regular Slump Test.

Placing of concrete - Before placing the concrete the sub-base/form work shall be cleared of all injurious or foreign matter, watered and well consolidated. Formwork shall be clean and free from all foreign material. It is necessary that the time between mixing and placing of concrete does not exceed the initial setting process. Mixed concrete that has been left standing shall not be used after the initial set has commenced the addition of water (or cement) to make such a mixture more workable shall not be allowed. In foundation trenches or such other situations, the entire concrete used in the work shall be laid gently (not thrown) in layers not exceeding 15cm. The concrete so deposited shall be thoroughly vibrated by means of mechanical vibrators till dense concrete is obtained.

Curing - Concrete shall be carefully protected during first stage of hardening from harmful effects or excessive heat, drying winds, rain or running water and shock. After the concrete has begun to harden i.e. about 1 to 2 hours after its laying it shall be protected from quick drying with moist gunny bags or any other material approved by the Engineer-in-charge. After 24 hours of laying of concrete the surface shall be cured by flooding water upto 25mm depth or by covering with wet adsorbent materials. The curing shall be done for a minimum period of 7 days from the date of pouring of concrete, unless otherwise specified.

Finishing - In case of roof slabs the top surface shall be finished even and smooth with wooden trowel, before the concrete beings to set. The surface of RCC slab on which the cement concrete or mosaic floor is to be laid shall be roughened with brushes while the concrete is green. This shall be done carefully without disturbing the concrete. Before laying the floor, the laitance shall be removed, the surface of slab hacked and a coat of cement slurry at 2.75 Kg of cement per square metre shall be

applied, so as to get a good bond between RCC and concrete floor. The exposed surface which is to receive plaster or where it is to be joined with brick masonry wall, shall be properly roughened immediately after the removal of form work, taking care to remove the laitance completely without disturbing the concrete. Before the surface is plastered, it shall be cleaned and wetted so as to give good bond between concrete and plaster.

#### 4. **FORM WORK:**

The formwork shall be rigid and so corrected as to retain the shape and dimensions of the member being cast. Form work for concrete shall be seasoned timber/steel or other approved materials as per directions of the Engineer. It shall be sufficiently tightened to prevent loss of cement slurry and all holes and joints shall be chaulked with putty. It shall have sufficient strength and rigidity to withstand the load of concrete, and vibrations, movement of men, materials and plants and any other incidental loads without excessive deflection beyond permissible limits. The formwork shall be so constructed as to be removable in sections by inscribing or otherwise loosening – them without hammering or levering with force. Only wedges, clamps bolts or screws etc. shall be used in preference to nails or spikes. All side pieces shall be easily removable without disturbing the bottom pieces. Where however, use of nails and spikes become unavoidable, these shall be left projecting so that they can easily be withdrawn.

Surface treatment for shuttering - Forms shall be cleaned of all dust, wood shavings, dirt and other matter by washing with water. This process is facilitated by providing draining holes in the shuttering. The surface shall then be coated with soap solution applied before concreting is done. Soap solution for the purpose shall be prepared by dissolving yellow soap in water to get consistency of paint. Alternatively a coat of raw linseed oil/refined pale paraffin mineral oil or form oil of approved manufacture may be applied. In case steel shuttering is used, soap solution or raw linseed oil shall be applied after thoroughly cleaning the surface. Care shall be taken that such approved composition is kept out of contact with the reinforcement.

In normal circumstances (temperature not below 15 degree C) and where ordinary Portland cement is used form may generally be removed after the expiry of the following periods.

- a. Vertical form work to columns, walls, beams = (16-24) hours
- b. Slabs side (props left under): 3 days
- c. Beam soffits (props. left under): 7 days
- d. Removal of props under slabs
  - i. Spanning up to 4.5 m: 7 days
  - ii. Spanning over 4.5 m: 14 days
- e. Removal of props under beams and arches:
  - i. Spanning up to 6 m: 14 days
  - ii. Spanning above 6 m: 21 days

In no circumstances shall forms be struck until the concrete reaches a strength of at least twice the stress to which concrete may be subjected at the time of removal of form work. All form works shall be removed without such shock or vibration as would damage the concrete. Form work for long span deep beams to be supported by MS props or Bhaluka Bamboo props as required based on the design for the formwork to take care the massive load of the green concrete.

#### 5. **BRICKWORK:**

- a. All bricks shall be of 75 class designation quality locally available as approved by the Site Engineer.
- b. Bricks shall be of size as specified in the item of work or of nominal size where no particular size is mentioned.
- c. Bricks shall be well burnt, sound, hard with sharp edges of uniform size and shape free from cracks, stones or particles of lime and other defects, shall be kiln burnt and satisfy the following requirement:
  - i. They shall give a clear metallic sound when struck
  - ii. They shall be of uniform colour and size
  - iii. They shall not be cracked, stratified or under or over burnt
  - iv. The tolerance in dimensions shall be +/- 12mm in length, 6mm in width and 3mm in height.
  - v. Keys or frogs shall be formed on one of the larger size, except in the case of machine extruded bricks where no frogs are required
  - vi. The increase in weight when soaked in water for 24 hours shall not be more than 20% of the dry weight of the bricks.
- d. If required by the Site Engineer, necessary test shall be conducted at the contractor's expense to ensure quality. In general, the bricks shall be the best quality locally available.

Bricks used for masonry in cement mortar or composite mortar shall be thoroughly soaked in clean water for at least an hour immediately before use (The absence of bubbling when the soaked brick is immersed in water is the test for thorough soaking). The soaked bricks shall be kept on a platform free from dirt, mud or any foreign element. Bricks shall be laid in English bond unless otherwise specified. Care must be taken that the bricks are perfectly clean and free from lime, moss or dirt of any kind. If necessary they must be scrubbed before use. Half or cut bricks shall be not used except for closures which may be required to complete the bond. It shall be ensured that all horizontal and vertical joints are completely filled with mortars without any void in brickwork. Brickwork shall be raised truly plum (or true to required better whereso specified). All courses shall be laid truly horizontal. Vertical joints shall be truly vertical and those in alternate courses shall be in the same vertical line. The thickness of brick courses shall be uniform. Great care must be taken to masonry in progress of construction damp. When work is left off for the day troughs shall be formed, by means of fillets of mortar 51mm high all round the unfinished work and shall be kept filled with water. Vertical or inclined surfaces

must be frequently watered from a rose headed can. Water should not be dashed with violence against new work as this washes out the mortar. Should the work be delayed owing to holidays or for other reason, the contractor must make adequate arrangements for keeping the work wetted, and shall continue to do so for at least ten days or such longer time as directed, after the brickwork has been completed.

- e. Brick work in cement mortar with 75 designation brick including racking out joints and curing complete as directed, in sub structure and superstructure in mortar of specified proportion.
- f. 115mm thick 75 designation brick nogged wall in cement mortar embedded with protruding M.S. rod 6mm dia in column including racking out joint and curing complete as directed in super structure above plinth in proportion as specified.

#### 6. **CEMENT MORTAR:**

- a. Must be freshly mixed: Cement mortar will only be mixed in such quantities as can be used up on the work within half an hour of mixing. Mortar which has been mixed longer or which has taken its initial set will on no account be used on the work or remixed with fresh mortar. It must be immediately removed from the site or work.
- b. Method of mixing: The cement and sand will be mixed dry in the specified proportions, by turning over at least three times on the mixing platform. Only sufficient water will then be added, thorough a rose of a watering can, to produce a workable mixture. The wet mortar will be thoroughly worked or mixed by repeatedly turning over, not less than three times on the mixing board.
- c. Size of mixing platform and precaution against list : All mixing of mortar must be done on platforms of angle size and workman bringing the material to and from the platform must not be permitted to walk about on it, thereby bringing mud or dirt to the place, where the mortar is being mixed. The platform must be clean and level and all joints closed or filled so that the cement is not washed out.
- d. Proportion of cement and sand: Where not otherwise specified, cement mortar for plaster will consist of one part of cement to two parts of sand. For mortar for brick or stone masonry work the proportion unless otherwise specified, will be one part of cement to three parts sand

#### 7. **WOOD WORK:**

The work shall be carried out as per detailed drawings and/or as directed by the Engineer-in-charge. The wooden members of the frame shall be planed smooth and accurate to the full dimensions. Rebates, rounding, moldingsetc as shown in the drawing shall be done before the members are joined into frames. Timber will be 1st class seasoned as approved by the Engineer-in-charge.

Jointing - Jointing in timber frames must be made carefully and accurately. They shall be strong, neat and shall fit without wedging or filling. The joints shall be

pinned with hard wood 10 to 15mm dia after the members of the frame are pressed together in a suitable vice-mechanism.

Surface treatment - Woodwork shall be painted, oiled, polished or otherwise treated as specified. All portions of timber abutting against masonry or concrete portion of building shall be coated with boiling coat tar or other type of approved wood preservative or primer, before placing them in final position.

Hold fasts - Hold fasts used for fixing doors and window frame shall be made of 40 x 3mm flat iron long. It shall have a hole on one end for fixing to frame with 10mm dia bolt, at the other end the flat iron shall be split and bent at right angles in the opposite direction. The hold fast shall be tightly fixed to the frame by means of bolts, the bolt hole in frame being plugged suitably and finished neat. The hold fast shall be embedded into masonry by concrete block as described in the item of work.

#### **8. DOORS:**

- a. The flush door shutters (solid core type) decorative and non-decorative type shall conform to IS: 202 (Part I). The door should be fixed using 4 nos. of hinges 125mm long ensuring that the hinges are not fixed less than 150mm from the edges with 8 nos. parallel sunk fully threaded screws 38mm long, should be used for fixing the hinges to the flush door after drilling a pilot hole 2.50mm dia 40mm long. Screws should not be hammered. Lock, tower bolts etc. necessary, if any to be paid separately.
- b. Door frame (Chowkaths) of door, windows, other similar works wrought, framed and fixed in position in contact with C.C. or brick masonry walls including supplying, fitting and fixing with M.S. flat hold fast (40mm x 3mm x 250mm) as per design and embedded in cement concrete block in prop 1:2:4 and with two coats of kirecide oiling to the timber faces in contact with C.C. and masonry as directed and specified.

#### **9. STEEL DOORS, WINDOWS AND VENTILATORS:**

The type, over all sizes, side opening position of steel doors, windows and ventilators shall be specified as per details given in IS: 1038, specification for steel doors, windows and ventilators. Both the fixed and opening frames shall be constructed of sections, which have been cut to length and mitred. The corners of fixed and opening frames shall be electrically flash butt welded to form a solid and true right angle and all frames shall be square and flat.

Side-hung shutter windows – Window shutters shall be hung on projecting type hinges (not less than 65mm and not more than 75mm wide). One leaf of the hinge shall be welded into a slot in the outer frame and the other leaf of the hinge riveted to the opening shutters. Friction hinges may be provided for side-hung shutter windows in which case peg-stay may not be required. In cases where non-friction type hinges are provided, the windows shall be fitted with peg-stays, which shall be either of hot pressed brass, cast brass; Aluminium or steel protected against rusting and shall be

300mm long with steel peg and locking bracket. The peg stay shall have three holes to open the side hung casements in three different angles.

**Top Hung Ventilators** – The steel butt hinges for top hung ventilators shall be riveted to the fixed frame or welded to it after cutting a slot in it. Hinges to the opening frame shall be riveted or welded and cleaned off. Top hung casements shall be provided with a peg stay three holes which when closed shall be held tightly by the locking bracket. The locking bracket shall either be fitted to the fixed frames or to the window.

**Glazing of metal doors, windows and ventilators** - Doors and windows shall normally be glazed with glazing putty on unless otherwise specified. Putty shall be applied between glass panes and glazing bars. Putty shall be applied over the glass panes, which shall stop 2 to 3mm from the sight line of the back rebate to enable the painting to be done upto the sight line, to seal the edge of the putty to the glass. The oozed out back putty shall be cleaned and cut to straight line.

#### 10. **PLASTER WORK**

- a. **Preparation of surface:** All putlog holes in brick work and junction between concrete and brick work shall be properly filled in advance. Joints in brick work shall be raked about 10mm and concrete surface hacked to provide grip to the plaster. Projecting burrs of mortar formed due to gaps at joints in shuttering shall be removed. The surface shall be scrubbed clean with wire brush/coil brush to remove dirt, dust etc. and the surface thoroughly washed with clean water to remove efflorescence, grease and oil etc. and shall be kept wet for a minimum of six hours before application of plaster.
- a. **Proportion:** The cement plaster shall be in specified proportion of cement and sand.
- b. **Mixing:** The cement and sand should be thoroughly mixed in dry condition. After dry mixing the materials shall be wetted with just sufficient water to bring the mortar to proper consistency of thick paste. Mortar should be used immediately after mixing and arrangements shall be made so that not more than 30 minutes elapse between the cement first coming in contact with the moisture and laying. In all exterior plaster works waterproofing compound to be added to the mortar as per the specification of the manufacturer, if not indicated in the item rate quoted should be inclusive of the same.
- c. **Placing:** Plaster shall be laid over the prepared surface in one coat to the specified thickness and rubbed with "PATAS" and trowel and shall be smooth, free from waviness and trowel marks.
- d. **Sequence of operations:** For external plaster, the plastering operations shall be started from the top floor and carried downwards. For internal plaster, the plastering operations may be started wherever the building frame and cladding work are ready and the temporary supports of the ceiling resting on the wall or the floor have been removed.

- e. Curing: Each coat shall be kept damp continuously till the next coat is applied or for a minimum period of 7 days. Moistening shall commence as soon as plaster is hardened sufficiently. Soaking of walls shall be avoided and only as much water as can be readily absorbed shall be used.

**11. DAMP PROOFING COURSE:**

It shall consist of 1:1.5:3 plain cement concrete with approved water proofing materials such as cico, impermo etc. of specified thickness. Edges of DPC shall be straight, even and vertical side shuttering shall consist of wooden or steel forms and shall be strong and properly fixed so that it is not disturbed during compaction and mortar or cement slurry does not leak through. When forms are struck the surface should be smooth without any honeycombing. The surface shall be kept wet for seven days. Before commencing the superstructure work, the top of concrete course shall be dried and cleaned of all materials. Blown type bitumen shall then be applied uniformly on the surface and the side of the concrete coming in contact with flooring on the inside shall also be painted with bitumen.

**12. WASHABLE DISTEMPER/OIL BOUND DISTEMPER/PLASTIC EMULSION PAINTING**

Preparation of surfaces: The surface shall be thoroughly brushed free from dust, dirt, grease, mortar droppings and other foreign matter and sand papered smooth. Thereafter a smooth surface shall be prepared by applying putty, made of plaster of Paris mixed with water on the entire surface including filling up the undulation and then sand papering the same after it is dry.

Primer coat: The primer where used as on undecorated surfaces shall be alkali resistance primer or acrylic based cement primer as specified in the item. These shall be of the same manufacture as oil bound distemper/ plastic emulsion paint. If the wall surface plaster has not dried completely alkali resistance primer shall be applied before distempering the walls. But if the distempering is done after the wall surface is dried completely, cement primer shall be applied.

Application of distemper/plastic paint coat: For undecorated surfaces, after the primer coat has dried for at least 48 hours, the surface shall be lightly sand papered to make it smooth for receiving the distemper/plastic paint taking care not to rub out the priming coat. All loose particles shall be dusted off after rubbing. Minimum two coats of distemper/plastic paint shall be applied with brushes in horizontal strokes followed immediately by vertical, which together shall constitute one coat. The subsequent coats shall be applied after a time interval of at least 24 hours between consecutive coats to permit of the proper drying of the preceding coat. For decorated surfaces, the distemper/plastic paint shall be applied in two coats or more over the prepared surface in the same manner as for undecorated surfaces.



Purchase of paint, varnish or oil: Only the best brands obtainable will be used and should the contract permit the contractor to supply any paint, oil or varnish he shall purchase only such brands as the Site Engineer shall approve of in writing. All purchases must be made direct from the manufacturers or through an agent approved of in writing by the Site Engineer. Should the Site Engineer so direct copies of all indents and receipts for purchase must be submitted for inspection. Paint etc. to be purchased in sealed containers. All paints, oil or varnishes supplied by the contractor must be produced for the inspection of the Site Engineer of the work in the manufacturers sealed and unopened containers. All containers from which the contents have been removed and are not required on the work must be destroyed and no extra payment will be granted for such destruction. Only ready mixed or varnished of the make or brand specified will be permitted to be used exactly as received from the manufacturer without any admixture what so ever unless previously authorised, in writing, by the Site Engineer.

**13. SYNTHETIC ENAMEL PAINT:**

Preparation of surface: The surfaces before painting shall be cleaned of all rust, scale, dirt and other foreign matter sticking to it with wire brushes, steel wool in case of steel surfaces and sand papering in case of wooden surfaces. Thereafter, one coat approved primer paint will be applied on the surface. Synthetic enamel paint (Superior quality as approved) shall be applied – two or more coats to give an even shade.

**14. CERAMIC TILE FLOORING/SKIRTING:**

- a. Preparing of Plinth Filling: All plinth fillings shall be properly consolidated in layers, watered, rammed and allowed to consolidate to the Site Engineer's satisfaction before any flooring is laid. When the flooring is to be laid over a foundation of sand, broken stone, brick or a combination of sand and broken stone or brick the filling shall be removed to a depth equal to the thickness of the flooring plus such foundation layers.
- b. Foundations:
  - i. Sub-layer of sand : After the plinth filling has been prepared as detailed in specification above a sublayer of sand 300mm deep shall be laid watered and brought to an even surface.
  - ii. Layer of broken stone or brick: Over the sand a foundation course of bricks shall be laid and the interstices filled in with sand. The bricks shall be tightly packed and laid so as to break joint.
- c. Tile floors:
  - i. Foundation and cement floating under tiles: Over the foundation as in (b) above 2 coats of cement plaster, 1part of cement to 1 part of sand, prepared in a very liquid condition will be floated over it and allowed to set.

- ii. Laying: After the tiles have been soaked in water for at least two hours and the cement foundation sprinkled with water, laying work may commence and shall start from the centre of the room or area to be tiled, work being continued in both directions so that borders are laid last. A layer of 20mm thick (average) cement mortar: 1:4 (1 cement: 4 sand) (unless otherwise specified) shall be provided as bedding for the tiles. Each tile will be laid in and drawn up in neat cement of honey like consistency at 4.40 Kg of cement per sqm, care being taken to exclude air bubbles. Threads shall be stretched across the surface, at intervals, parallel to the short sides of the area to be tiled to serve as guide lines. Each tile being gently tapped with a wooden mallet till it is properly bedded. The joints shall be grouted with white cement and matching pigment complete. The surface of the flooring shall be checked frequently with a straight edge so as to obtain a true surface with slope, if required. At position where full tiles cannot be fixed, the tiles shall be cut to size and smoothened to give straight and true joints.
- iii. Cleaning: After a small area has been laid all superfluous cement will be wiped off the surface. Stains shall be removed by moistening with hydrochloric acid and rubbing with pumice stone and afterwards washing with warm water.
- iv. Curing: The floor shall be kept wet for a minimum of 7 days so that bedding and joints set properly.

**15. SANITARY, PLUMBING WORKS AND WATER SUPPLY FITTINGS & FIXTURES:**

All sanitary, plumbing and water supply fittings and fixtures shall conform to the specifications and particular make specified in the items of work and direction of Engineer-in- charge. All waste and soil pipes and fixtures shall conform to IS specifications and shall be jointed as specified.

- i. Indian/European W.C. with PVC flushing cistern as per drawing & specification.
- ii. Wash basin and urinal pan at toilet as per drawing & specification. Wash basins to be provided with C.I. brackets.
- iii. Providing soap tray in the toilet.
- iv. Rain water pipe as per drawing & specification
- v. Gully trap
- vi. Inspection chambers, manholes, septic tanks, drainage pipes etc. as per drawings.
- vii. Medium class GI pipes with all GI fittings clamps and specials etc. for water supply lines 25mm, 20mm & 15mm.
- viii. Concealed PE-AL-PE pipes for water supply.

**16. P/F PRE PAINTED GALVALUME/GALVANISED SHEET ROOFING:**

Pre Painted Galvalume Sheet at all levels shall be fitted and fixed with self-drilling, self-tapping screws complete (roof trusses, purlins to be measured and paid

separately) of make Dyna roof/sathyam/century wells and of thickness as specified in the respective items. Preferably it shall be carried out by a reputed party.

**17. ANODISED ALUMINIUM WORKS:**

Aluminium sections used for fixed/openable windows, ventilators, partitions, frame work & doors etc. shall be suitable for use to meet architectural designs to relevant works and shall be subject to approval of the Engineer-in-Charge for technical, structural, functional and visual considerations. The Aluminium extruded sections shall conform to IS 733 and IS 1285 for chemical composition and mechanical properties. The stainless steel screws shall be of grade AISI 304.

The permissible dimensional tolerances of the extruded sections shall be as per IS 6477 and shall be such as not to impair the proper and smooth functioning/operation and appearance of door and windows. Aluminium glazed doors, windows etc. shall be of sizes, sections and details as shown in the drawings. The details shown in the drawings may be varied slightly to suit the standards adopted by the manufacturers of the Aluminium work, with the approval of Engineer-in-Charge. Before proceeding with any fabrication work, the contractor shall prepare and submit, complete fabrication and installation drawings for each type of glazing doors, windows, ventilators and partition etc. for the approval of the Engineer-in-Charge. If the sections are varied, the contractor shall obtain prior approval of Engineer-in-

Charge and nothing extra shall be paid on this account.

**18. ALUMINIUM CLADDING WORKS:**

Aluminium cladding work shall comprise of designing, providing and fixing composite panel 4 mm thick 35 microns DFT, PVDF coated Aluminium cladding of Alucobond / Alucomat or equivalent make of approved shade and colour for external wall either segmental curved or straight in plan, around corners and wherever else specified fixed to masonry / concrete with extruded Aluminium " U " sections, angle cleats Silicon weather sealants, rivets, brackets, plastic board for the cladding to either masonry or concrete as required, including all necessary accessories etc. and as directed by the Engineer-in-charge complete as per detailed fabrication drawings to be approved by Engineer-In-Charge.

**Pre-laminated Particle Board**

A particles board laminated on both surfaces by synthetic resin impregnated base papers under heat and pressure. Pre-laminated particle boards shall be of two grades, namely, Grade I and II corresponding to IS 3087 & 12823.

**19. EPDM- GASKETS:**

The EPDM Gaskets shall be of size and profile as shown in drawings and as called for, to render the glazing, doors, windows, ventilators etc. air and water tight. Samples of gaskets shall be submitted for approval and the EPDM gasket approved by Engineer-in-Charge shall only be used.

**20. SEALANT:**

The sealants of approved grade and colour shall only be used. The silicone for perimeter joints (between Aluminum section and RCC/Stone masonry) shall be of make approved by the Engineer in Charge.

**21. PE-AL-PE PIPES:**

The PE-AL-PE pipes are bonded, multilayer pipes consisting of metal Aluminium and Polyethylene i.e. metallic pipe bonded with adhesive both internally and externally by polyethylene coating. The layers of PE-AL-PE pipes are:-

- i. The interior layer of polyethylene
- ii. The adhesive layer
- iii. Aluminium tube
- iv. The adhesive layer
- v. The external layer of polyethylene

Polyethylene composite pressure pipes have welded Aluminium tube reinforcement between inner and outer polyethylene layers, inner and outer polyethylene layer being bonded to Aluminium tube by melt adhesive and are manufactured as per IS 15450 The specially manufactured compression joints fittings should be used for PE-AL-PE pipes which are available in 3 types i.e. brass, composite and composite external sealing. Either of these fittings should be used.

**Jointing**

While jointing PE-AL-PE pipes, following steps are required to be taken to ensure a leak proof and strong pipe joint:-

- a. Cut the pipe square by cutter to the required and proper length.
- b. Select the fitting to be used and dismantle its nuts and split rings.
- c. Place the nut and split ring over the pipe. Ensure that 'O' rings are in proper position of insert.
- d. Prepare the end of pipe to be jointed for roundness and chamfer by using beveling tool. Push the pipe over the insert and inside the support groove fully.
- e. Push the split ring and nut towards connector till split ring touches the support groove.
- f. Tighten the nut over connector with spanner.

If the joints are required to be dismantled for any reason, the 'O' ring and split ring should be inspected before reassembling the joint for any damage. If any ring is found damaged, the same should be replaced. All other components can be reused. The joint sealing with fittings is done by silicone rubber ring. No thread sealing is involved. Tightening of the nuts is required only for compressing the split ring over the pipe, hence excessive tightening of the nuts is to be avoided. In case threading is required for fixing valves.

Only Teflon Tape should be used on threads. While for fittings, specially designed rubber "Seal" should be used. For pressure testing the pipeline system, specially designed test plugs are to be used in female thread elbows instead of ordinary GI nipples with MS plugs before covering the pipes in chases.

**22. MANDATORY TESTS:**

The various mandatory tests shall be carried out by the contractor and no separate payment shall be made unless otherwise specified in the schedule of rates. Following tests /test certificate to be produced by the contractor at his own cost as and when directed by the Engineer-in-charge.

- i. Water for construction and curing to be tested before use ('PH' value should not be less than 6.)
- ii. Cube test for RCC to be done as per relevant is code of practice IS 456-2000.
- iii. Test certificate for steel materials, M.S. rod, Torsteel should be produced.
- iv. T.P. challan/procurement challan for timber and forest produce used shall be produced.
- v. Brick test as per BIS 1077 and BIS 3495 (part 1 and 2)
- vi. Any other tests as per the direction of Engineer-in-charge.

**23. MEASUREMENT & PAYMENT:**

Payment for all works done shall be made on the basis of actual work done as per the schedule of rates. For all extra work done on the advice of the Company's Engineer and which is not included in the schedule of rates, deviation order for the same shall be made on the rates as decided by the Company's Engineer.

**24. SAFETY MEASURE:**

Safety measure as per OIL regulations shall be strictly adhered to by the Contractor. Safety belts and other measure taken by the Contractors shall be borne by the Contractor. If any loss or damage caused to life during the erection and execution, the contractor shall be fully responsible for the loss.

**25. RECORD KEEPING:**

- i. A site order book will be maintained at site which will be in the custody of the Engineer-in-charge or his representative and all instructions given to the Contractor will be recorded in the site order book and the same has to be signed by the contractor to comply with the instruction given therein.
- ii. A register to be maintained at site which will be in the custody of the Engineer-in-charge or his representative to maintain the records of cement the same has to be signed by the contractor
- iii. A separate register to be maintained at site by the contractor to record the works executed and remarks columns to be added in this to record the hindrance.

In case of any ambiguity/conflict among various documents the decision of Engineer-in-charge will be final and binding.

**26. CONTRACTOR'S GODOWN**

The contractor must make adequate arrangement as directed by the Engineer-in-Charge, for the storage in suitable godown of all perishable materials such as cement. On no account may cement be stacked on the ground either in or outside godown. The contractor shall also construct a temporary office at site, before start the execution of work at site, as directed by the Engineer- in charge.

**27. SITE BOOKS & RECORDS:**

A site order book will be maintained at site which will be in the custody of the Engineer-in-charge or his representative and all instructions given to the Contractor will be recorded in the site order book and the same has to be signed by the contractor to comply with the instruction given therein.

A register to be maintained at site which will be in the custody of the Engineer-in-charge or his representative to maintain the records of cement the same has to be signed by the contractor

A separate register to be maintained at site by the contractor to record the works executed and a remarks column to be added in this to record the hindrance

**28. SPECIAL INSTRUCTION TO THE CONTRACTOR**

- i. Contractor must use mixture machine and vibrator for the RCC works. The Contractor shall use pump if needed for dewatering for excavation job for which no extra payment will be made.
- ii. Watch and ward, loss or damage to Company's property, theft and other incidental charges shall be Contractor's responsibility.
- iii. Efficient workmen to be engaged by the Contractor.
- iv. The Contractor's representative should report to Engineer-in charge on all working day's at 7.00AM for instruction.
- v. Materials if rejected should be removed from site within 48(forty eight) hours of rejection, failing which the company reserves the right to get the rejected materials removed at the risk and cost of the contractor.
- vi. The Company reserves the right to get the part or whole work completed through other agency at the risk and cost of the contractor if he fails to complete the work within the stipulated time without any valid reasons. The Company's decision shall be final and binding on the Contractor.
- vii. The Contractor shall obtain labour clearance within seven day's of signing the contract.

- viii. Water that may accumulate on the site during progress of the works or in trenches and excavation from other than accepted risks shall be removed from the site to the satisfaction of the Engineer-in-charge and at the Contractor's expense.
- ix. If needed water and electricity will have to be arranged by the Contractor at his own cost. However, if felt, the same may be provided by Co. on Chargeable basis depending on its availability & approved by the Competent authority.
- x. The Contractor and his workmen have to strictly observe the safety precautionary rules as per Mines Act. (Latest edition) while executing the work.
- xi. No road closure will be allowed during execution of work and necessary traffic signal/road boards to be displayed at proper place by the Contractor at his own cost. The Contractor shall be wholly responsible for any accident arising out of non-fulfilment of this condition.
- xii. The Contractor will be required to work expeditiously at the site and must visit the site before tendering.
- xiii. Welding and cutting sets with fuel & operator, welder, fitter etc. shall be arranged by the Contractor at his cost at site for fabrication and erection work.
- xiv. Hot and Cold permit, Gas leakage testing certificate issued by the Concerned Department to be submitted by the contractor (wherever applicable) to Engineer-in-Charge before starting of dismantling or the other execution of job.
- xv. The contractor must engage at least one or as mentioned in the Contracts Agreement qualified Technical personal (Preferable BE/B Tech in Civil Engineering with minimum 5 years' experience or diploma in Civil Engineering with minimum 10 years' experience) for the overall execution of the job and the complete bio-data of the person should be submitted to the engineer in charge within 7 days of the signing of the Contract agreement. In case the contractor does not deploy qualified technical person as mentioned above, the company has right to penalize the contractor at a rate decided by the company
- xvi. The contractor must submit a work plan in bar chart for the overall job to complete it within 14 days of issuing of work order.

## **B. PART-B (ELECTRICAL)**

### **SPECIAL CONDITION OF CONTRACT (FOR ELECTRIFICATION WORKS FOR CONTRACT OFFICE, DULIAJAN)**

#### **1. GENERAL:**

- 1.1 Special conditions if contract shall be read in conjunction with the General Conditions of Contract, Schedule of Quantities specifications of work, drawings

and any other document forming part of this contract wherever the context so requires.

- 1.2 Notwithstanding the sub-division of the documents into these separate sections and volumes, every part of each shall be deemed to be supplementary of every other part and shall be read with and into the contract so far as it may be practicable to do so.
- 1.3 Where any portion of the General Conditions of contract is repugnant to or at variance with any provisions of the Special conditions of Contract, then unless different intention appears, the provisions of the Special Conditions of Contract shall be deemed to override the provision(s) of General Conditions of Contract only to the extent that such repugnance or variance cannot be reconciled with the tender conditions of contract and shall be to the extent of such repugnance of variations, prevail; it being understood that the provisions of General Conditions of Contract shall otherwise prevail.
- 1.4 Wherever it is stated anywhere in this tender document that such and such a supply is to be effected or such and such a work is to be carried out, it shall be understood that the same shall be effected/carried out by the contractor at his own cost, unless a different intention is specifically and expressly stated herein or otherwise explicit from the context.
- 1.5 The materials, design and workmanship shall satisfy the relevant Indian Standards, the job specifications contained herein & codes referred to. Where the job specifications stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied. In the absence of any Standard/Specifications/Codes of practice for detailed specifications covering any part of the work covered in this tender, the instructions/directions of Company will be binding on the Contractor.
- 1.6 The items given under Bill of Quantity shall be read in conjunction with scope of work, scope of supply (by Company as well as by Contractor) and job specifications and in case of any irreconcilable conflict between them the provision in the item under "Bill of Quantity" will override the corresponding provision only if the scope of work, scope of supply and job specifications, which cannot be reconciled in such cases the decision of Company shall be final and binding on the contractor.
- 1.7 In case of contradiction between Indian Standards, General Conditions of Contract, Special Conditions of contract, Specifications Drawings, Bill of Quantity, the following shall prevail in order of precedence.
  - i. Letter of intent / Detailed Letter of intent along with statement of Agreed Variations and its enclosures.
  - ii. Bill of Quantity.



- iii. Special Conditions of Contract.
- iv. Job specifications/
- v. Drawings
- vi. General Condition of contract
- vii. Indian Standard/Technical/Material Specifications.

## **2. LOCATION OF SITE AND SITE PARTICULARS:**

- 2.1 The site of work is located at WSS , OIL INDIA LIMITED, DULIAJAN
- 2.2 The intending Bidder shall be deemed to have visited the site and familiarized himself thoroughly with the site conditions job details before submitting the tender. Non familiarity with the site conditions will not be considered a reason either for extra claims or for not carrying out the work in strict conformity with the drawings and specifications.

## **3. STATUTORY REQUIREMENT FOR WORK:**

- 3.1 The contractor should have valid Electrical Contractor License issued or recognized by Licensing Board, Govt. of Assam. In case license expires during contract period the same shall be renewed by the contractor. The contract shall be terminated if the license is not renewed if required.
- 3.2 Contractor shall employ work persons with valid wireman license issued by Licensing Board, Govt. of Assam to carry out all electrical jobs and shall employ one supervisor holding valid supervisor's competency certificate recognized by Govt. of Assam for supervision of electrical jobs.
- 3.3 Quality of jobs carryout by the Contractor shall be very high standard and should be as per the norms of BIS, NEC or other electrical standards recognized by the company.

## **4. POWER:**

Electricity required for wiring purpose shall be arranged by the contractor. However, electricity may be provided by the Company to use drilling machine or any other portable tools required for wiring purposes if available at nearest point on chargeable basis. Then the Contractor shall have to arrange for required switch board with proper safety device like RCBO, MCCB / MCBs to take power from the existing source.

## **5. SCOPE OF SUPPLY:**

Company does not envisage supplying any material for this work & contractor has to arrange all materials of his own & the rates quoted shall be deemed to include the same.

## **6. SCOPE OF WORK**

Brief details of work to be carried out by the contractor are as described below. This will include supply, storage, laying, installation, jointing and testing, obtaining

approvals, testing and commissioning and completion of different works. The work shall be carried out as described in Bill of Quantities (BOQ), specifications, and drawings, BIS / NEC guidelines and as per the instructions by Engineer-in-charge (electrical), of the Company. The scope of work shall cover internal electrification works of any office building/Industrial house/ Residential area and as specified by concerned Engineer in charge. The broad items/activities covered under internal electrical works shall include the Supply, Carry out & Installation of the following.

- i. Point wiring of all lights points, call bell points, Ceiling fan points, exhaust fan points.
- ii. Light plug points, general power points, metal clad plug & socket outlet points etc. including light and power accessories etc. complete in all respects.
- iii. All concealed wiring shall be through BIS marked Medium/heavy duty PVC conduit on or through wall, roof, floor beams, false ceiling, floors etc.
- iv. Cables from Main Distribution Board to Sub Distribution Board, sub main wiring from main/sub distribution boards to various final distribution boards.
- v. Main Distribution Boards, Sub-Main Distribution Boards and Sub Distribution Boards.
- vi. Light fixtures, and exhaust fans.
- vii. Earthing of all Main CFS, Main DBs and SUB DBs etc. complete in all respects.

#### **8. SCHEDULE OF QUANTITIES/RATE:**

- 8.1 The quantities shown against the various items are only approximate and may vary to any extent individually subject to relevant clause of General Conditions of Contract. Any increase or decrease in the quantities shall not form the basis for alteration of rates quoted and accepted including where low/high rates have been quoted by the successful bidder.
- 8.2 The Engineer in charge reserves the rights to interpolate or extrapolate the rate for any new item of work not finding a place in the Bill of Quantity, for similar items of lower and or higher magnitude available in the Bill of Quantity.
- 8.3 In case any activity though specifically not covered in Bill of Quantity description but covered under scope of work/spec./drawing etc., contractor has to carry out the same without any extra claim.

#### **9. PRICE VARIATION:**

OIL requires "FIRM PRICES" as indicated in General Conditions or Contract during Contract period and no material or labour escalation shall be admissible on any account whatsoever.

#### **10. MEASUREMENTS, BILLING & TERMS OF PAYMENT**

All works shall be measured in metric system based on actual work done as per the terms and conditions of the Tender documents. Running Accounts bills based on Bill of Quantity shall be prepared and submitted based on joint measurements.

**11. DEDUCTIONS FOR INCORRECT WORK:**

If, the Engineer-in-charge (Electrical) deems it expedient to correct work damaged or not done in accordance with the contract, an equitable deduction from the contract price shall be made thereof and the decision of the engineer shall be final.

**12. CONTRACT DRAWINGS**

Contractor has to prepare all working drawings mentioned below and obtain approval from the engineer in charge (Electrical) before starting the Civil work starts so that piping works for wiring job does not suffer due to non-approval of the working drawings:

- a. Layout diagram of complete conduit job for concealed wiring showing route for wiring from DB to sub-DB, sub-DB to Switch Board, Light and ceiling positions etc.
- b. Schematic diagram for complete electrical work.
- c. The contract shall keep at least one copy each of drawings, conditions of contract, specifications, instructions and schedule of quantities at the site of works available for reference by any authorized representative Engineer-in-charge(Electrical), at all times during the progress of the works.
- d. Contractor has to submit the LT Panel diagram (General Arrangement drawing, Schematic diagram and Bill of material) and take prior approval from Concern Engineer in charge before start manufacturing.

**C. TECHNICAL SPECIFICATIONS CHAPTER -1**

**TECHNICAL REQUIREMENTS & MEASUREMENT SYSTEM**

**1. SCOPE:**

This chapter covers the general technical requirements and measurement system of the various components in Internal Electrical Installation works.

**1.1 TERMINOLOGY:**

- 1.1.1 The definition of terms shall be in accordance with IS:732-1989 (Indian Standard Code of Practice for Electrical Wiring), except for the definitions of point, circuit, and sub-main wiring, which are defined in clauses 2.2.1, 2.3.1, and 2.3.2 hereunder.

**1.2 POINT WIRING:**

- 1.2.1 Definition of Point wiring:

A point (other than socket outlet point) shall include all work necessary to complete wiring to the following outlets from the controlling switch or MCB.

#### 1.2.2 Scope:

Includes supply & fixing of all specified items like Conduit Casing -capping, accessories like screws, rawl plug, Outlet boxes, junction boxes, pull-through boxes-etc, including metal boxes if any, provided with switch boards for loose wires/conduit terminations, Bushed conduit or porcelain tubing where wiring cables pass through wall etc.

#### 1.2.3 Measurement:

##### 1.2.3.1 Point Wiring:

There shall be no linear measurement for point wiring for light points, fan points, exhaust fan points and call bell points.

These shall be measured by counting only.

##### 1.2.3.2 Wiring for socket outlet points:

Light plug point 6 A, Power point 6/16A, 20A metallic socket wiring shall be measured as total length of wiring and shall be measured on linear basis along the run of wiring depending on the actual number and sizes of wires run .

The power point outlet may be 16A /6 A six pin socket outlet, where so specified in the tender documents.

### 1.3 **CIRCUIT AND SUBMAIN WIRING:**

#### 1.3.1 Circuit wiring:

Circuit wiring shall mean the wiring from the distribution board up to the tapping point for the nearest first point of that distribution circuit, viz. upto the nearest first switch box.

#### 1.3.2 Sub-main wiring:

Sub-main wiring shall mean the wiring item one main/distribution switchboard to another.

#### 1.3.3 Measurement of sub-main wiring:

The sub main wiring shall be measured on linear basis and paid for separately.

### 1.4 **OTHER WIRING WORKS:**

Except as specified above for point wiring, circuit wiring and sub-main wiring, other types of wiring 'shall be measured separately on linear basis along the run of wiring depending on the actual number and sizes of wires run.

### 1.5 **SYSTEM OF DISTRIBUTION AND WIRING:**

#### 1.5.1 Control at the point of entry of supply:

There shall be a circuit breaker on each live conductor of the supply mains at the point of entry.

#### 1.5.2 Distribution:

The wiring shall be done on a distribution system through main and/or branch distribution boards. The system design as well as the locations of boards shall be as indicated in BOQ/drawings or as specified by the OIL Engineer-in-charge. Main distribution board shall be controlled by a circuit breaker. Each outgoing circuit shall also be controlled by a circuit breaker. The branch distribution board shall be controlled by a circuit breaker. Each outgoing circuit shall be provided with a miniature circuit breaker (MCB) of specified rating on the phase or live conductor. The loads of the circuits shall be divided, as far as possible, evenly between the numbers of ways of the distribution boards, leaving at least one spare circuit for future extension.

The neutral conductors (incoming and outgoing) shall be connected to a common link (multilayer connector) in the distribution board and be capable of being disconnected individually for testing purposes.

'Power' wiring shall be kept separate and distinct from 'Lighting' wiring, from the level of circuits i.e., beyond the branch distribution boards.

#### 1.5.3 Balancing of Circuits:

The balancing of circuits in three wire or poly phase installations shall be arranged beforehand to the satisfaction of the OIL Engineer-in-charge.

#### 1.5.4 Wiring System:

Wiring shall be done only as per "point wiring" or "running metre" standard, as explained above.

Lights, fans and call bells shall be wired in the 'lighting' circuits.

6/16A combined socket outlets and other power outlets shall be wired in the 'Power' circuits. 5A/6A Socket outlet shall be wired in the light plug point circuit.

The wiring throughout the system shall be such that there is no break in the neutral wire except in the form of linked MCCB's, MCB's, RCBO's etc.

#### 1.5.5 Run of Wiring:

The wiring shall be in concealed conduit only. Due consideration shall be given for neatness, good appearance and safety.

#### 1.6 Joints in wiring:

No bare conductor in phase and / or neutral or twisted joints in phase, neutral, and / or protective conductors in wiring shall be permitted. There shall be no joints in the through-runs of cables. If the length of final circuit or sub main is more than the length of a standard coil, thus necessitating a through joint, such

joints shall be made by means of approved mechanical connectors in suitable junction boxes.

**1.7 Ratings of Outlets:**

Exhaust fan, LED light, shall be rated according to their capacity.

**1.8 Capacity of Circuits:**

'Lighting' circuit shall not have more than a total of 10 points of light, fan and socket outlets, or a total connected load of 800W, whichever is less. 'Power' circuit shall have only one outlet per circuit.

**1.9 CONFORMITY TO CEA REGULATIONS, 2010 AND STANDARDS:**

All electrical works shall be carried out in accordance with the provisions of CEA Regulations, 2010, BIS AND National Electric code, National Building Code. List of Rules of particular importance to building installations is given in Appendix for reference. The works shall also conform to relevant Indian Standards In all electrical installation works, relevant safety codes of practice shall be followed.

**1.10 GENERAL REQUIREMENTS OF COMPONENTS:**

**1.10.1 Quality of materials:**

All materials shall be of such design, size and material as to satisfactorily function under the rated conditions of operation and to withstand the environmental conditions at site.

**1.10.2 Ratings of components:**

All components in a wiring installation, conductors, switches and accessories shall be of appropriate ratings of voltage, current, and frequency, as indicated in BOQ.

**1.10.3 Conformity to Standards:**

All components shall conform to relevant Indian Standard Specification, as per broad list specifying makes of components given in Appendix 'A' including amendments or revisions there of up to the date of tender acceptance, shall be applicable in the respective contracts.

**1.10.4 General Notes:**

- a) Items shall be procured from the manufacturer or their authorized dealers only.
- b) All the items shall be brand new and shall bear BIS monogram, wherever specified.
- c) Item shall be guaranteed for a period of one year from the date of installation of materials against any manufacturing defect or workmanship.

**1.11 CABLES:**

**1.11.1 Wiring cables:**

Conductors of wiring cables shall be of copper. The smallest size of conductor for various circuits including earthing shall be not less than as follows:

'lighting' 1.5 sqmm. 'power' 4 sqmm, Sub Main 6 sq mm, Main 10 or 16 sq.mm , All wiring cables shall be Copper , FRLS, single core, PVC insulated, unsheathed, 1100V grade, BIS marked & FIA & TAC approved, with flexible conductor.

### 1.12 **PVC Casing and Capping:**

#### 1.12.1 Fixing casing-capping

PVC casing and capping shall be BIS marked. PVC casing and capping should be strong and properly fitted so as to hold wires laid in it 70% to its full capacity for all areas. It should be rigidly screwed at 150mm interval crosswise with suitable woodscrews of 25mm length turned in PVC sleeve inserted in neatly drilled holes of proper size and depth with cup washer to give proper grip over more surface area. Providing and fixing of PVC casing and capping include bends, elbows, tees, inside and outside corners, round blocks and painting. It can be run whether in horizontal or vertical position as required. The inspection shall be done from time to time as the work progresses. Capping shall not be put on until the work has been inspected after the wires are laid in position and approved by the Engineer-in-charge.

#### 1.12.2 Providing earth continuity wires:

The earth continuity wire shall be provided in the casing throughout the length of wiring. The size of earth continuity wire shall be same size with the main wire for circuits. All metallic parts, switchboards, light fittings and power sockets shall be connected to the earth wires and the connection shall be electrically and mechanically sound.

### 1.13 **PVC Conduits:**

#### 1.13.1 All rigid conduit pipes shall be of medium duty PVC conduit of standard quality and be BIS marked.

#### 1.13.2 The conduit wiring system shall be complete in all respects, including their accessories. Where a large number of control switches and/or fan regulators are required to be installed at one place, these shall be installed in more than one outlet box adjacent to each other for ease of maintenance.

#### 1.13.3 Bunching of cables in conduit:

Cables shall always be bunched so that the outgoing and return cables are drawn into the same conduit. Where the distribution is for three phase loads only, conductors for all the three phases and neutral wire shall be drawn in one conduit.

### 1.14 **WIRING ACCESSORIES:**

#### 1.14.1 Control switches for points:

Control switches (single pole switches) carrying not more than 16A shall be modular type complete with plate, as specified, and the switch shall be #ON#

when the knob is down. Control switch shall be placed only in the live conductor of the circuit. No single pole switch or fuse shall be inserted in the protective (earth) conductor, or earthed neutral conductor of the circuit.

#### 1.14.2 Socket outlets:

6/16 pin Socket outlets shall be of shutter type modular complete with plate. These shall be rated either for 6A, or 16A. Combined 6 pin 6A/16A pin socket outlet shall be provided in 'power' circuits wherever specified. 6A Socket outlets shall only be of 5 pin type; the third pin shall be connected to earth through protective (loop earthing) conductor. The control switches for 6A and 16A socket outlets shall be kept along with the socket outlets. Generally socket outlet shall be installed at a height of above 30 cm but below 130 cm from the floor level. The layout of wiring shall be as approved by Engineer in Charge.

#### 1.14.3 Switch box covers:

These shall be modular type of suitable size.

### 1.15 **FITTINGS:**

#### 1.15.1 Indoor type fittings specification:

Mirror optic suspension/recessed type LED luminaire with all accessories and LED drivers, ready for installation as per the following description.

1. Optical system should provide all round glare and beam control.

2. Luminaire shall be supplied with:

- a. For 2 x2 LED luminaire, minimum output Lumen shall be 3500 and colour temperature shall be 6500K. Driver shall be inbuilt. Power factor >0.9, THD < 10% , IEC Compliant for safety.
- b. For LED Batten 4ft long Luminaire ,minimum output Lumen shall be 1700Lumen and efficacy shall be more than 85%. Power factor >0.9, THD < 10%.
- c. For LED Batten 2ft long Luminaire ,minimum output Lumen shall be 1300 Lumen and efficacy shall be more than 85%. Power factor >0.9, THD < 10%.
- d. For LED downlight, minimum lumen out shall be 1200 Lumen, CRI>80%, driver shall be constant current nonintegrated, Optics High Efficiency diffuser with more than 85% Transmittance.

2) Luminaires shall be supplied with all standard accessories (including chains etc. if required) for suspension mounting.

Power supply: 230/240v, 50 Hz, single phase

Make: Philips/Bajaj/Crompton Greaves/GE/Havells/Osram

The type of fittings shall be as specified in BOQ.

#### 1.16 **PRE-WIRED MCB DISTRIBUTION BOARDS:**

Pre wired MCB DB's shall be provided only where specified.



The complete board shall be factory fabricated and shall be duly pre wired in the works, ready for installation at site.

The board shall be of wall mounted, cubicle type construction, fabricated out of 1.6mm thick sheet steel, with stove enameled paint finish. The board shall also be provided with a loose wire box as a compartment for the complete width and, depth of the board, and of minimum height of 125mm in case of TPN DB's, and 100mm in case of SPN DB's. The board shall be provided with a hinged cover of 1.6mm thick sheet steel in the front. Only the knobs of the MCB's shall protrude out of the front covers through openings neatly machine made for the purpose. Knock out holes at the bottom, and detachable plate with knock out holes at the top of the board shall be provided. Each distribution board shall be provided with a circuit list giving details of each circuit which it controls and the current rating of the circuit, and the size of the MCB. The board shall be complete with the following accessories:

- a. 100 A copper bus bar(s) for MCB DBs.
- b. 250 A copper busbar for MCCB DB
- c. Neutral link.
- d. Common earth bar.
- e. DIN bar for mounting MCB's
- f. Screw type terminal connectors suitable for incoming and outgoing cables.
- g. Earthing stud(s)

The board shall be fully prewired with single core PVC insulated copper conductors/insulated solid copper links, and terminated on to extended type terminal connectors, suitable for connections to the sizes of the respective conductors. All incoming and outgoing wiring to the pre wired MCB DB's shall be terminated only in extended terminal connectors to be provided within the DB. The terminal connectors shall, therefore, be so provided as to facilitate easy cable connections and subsequent maintenance. Elmex connectors are to be provided. A common copper earth bar shall be provided within the loose wire box. The common neutral bar as well as the terminal connectors shall, however, be provided within the main compartment just below the loose wire box.

#### **1.17 MINIATURE CIRCUIT BREAKERS (MCB's):**

'C' series MCB's shall be invariably used for all loads. Ratings (A), number of poles, type as MCB or isolator, etc. shall be as specified in the BOQ. The MCB's shall be of minimum 10KA rupturing capacity.

#### **1.17 SWITCH BOARD LOCATIONS:**

##### **1.17.1 General aspects:**

Switch boards shall be located as indicated on the drawings or as instructed by OIL's engineer. However exact location will be as per suitable available spaces.

1.18 A switch board shall be installed so that its bottom is 1.30 m from the floor level. Where it is required to terminate a number of casing capping or conduits

on a board, it may be convenient to provide a suitable PVC adopter box for the purpose. Such boxes shall be provided with the prior approval of the Engineer-in-charge (Electrical) and this will not be paid for separately. No apparatus shall project beyond any edge of the panel.

#### **1.21 FANS, REGULATORS AND CLAMPS:**

##### **1.21.2 Fan Regulators:**

Electronic modular type fan regulator shall be from approved vendor. The regulators are to be procured from authorized dealer to ensure genuineness of the material. Fan regulator shall be fixed in the switch board as per the ceiling fan circuit shown in the drawing.

#### **1.22 WORKMANSHIP:**

Good workmanship is an essential requirement to be complied with. The entire work of manufacture/fabrication, assembly and installation shall conform to sound Engineering practice. The work shall be carried out under the direct supervision of a person holding a valid supervisor's certificate of competency issued by the State Govt. for the type of work involved, employed by the contractor, who shall rectify then and there the defects pointed out by the Engineer-in-charge (Electrical) during the progress of work.

#### **1.23 COMMISSIONING ON COMPLETION:**

After the entire wiring is completed, a joint inspection shall be carried out. The contractor shall rectify the defects pointed out by OIL during inspection. The works shall be tested by the contractor and contractor shall submit the test certificates duly signed by the competent persons. The system shall be energised only after OIL approves the work done and submission of test certificate.

#### **1.24 COMPLETION DOCUMENTS:**

The contractor shall submit 4 copies of as built layout drawings to the Owner after completion of the work. These complete drawings shall give the following information:

- a. Layout of all equipment, switch boards, DB's etc.
- b. Operation & Maintenance Manuals for all equipments.
- c. Manufacturers test report & data sheets for equipment's if any.
- d. Layout of lighting & power wiring, UPS wiring Etc.
- e. Location of DB's, Sub-mains, cables & earthing.
- f. Junction boxes.
- g. Cable schedule, DB Charts
- h. Schematic diagram for overall electrical distribution duly laminated
- i. GA & schematic MV Panel Distribution Boards UPS etc.

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**APPENDIX-A****APPROVED MAKE OF MATERIAL**

- i. SINGLE CORE BIS MARKED COPPER FRLS INSULATED STRANDED FLEXIBLE 1100 V GRADE CABLE AS PER IS 694.  
  
FINOLEX/HAVELLS/L&T/POLYCAB/RR KABEL/OR EQUIVALENT MAKE (TO BE APPROVED BY ELECTRICAL ENGINEER-IN-CHARGE)
- ii. COPPER LUGS  
DOWELL/3D-BILLET/JAINEX/SCHNEIDER (MERLIN GERIN)
- iii. BIS MARKED PVC CASING CAPPING  
  
PRESTO PLAST/AKG/PLAZA/RICHA/Equivalent
- iv. METAL CLAD SWITCH SOCKET UNIT- 20/25 Amps.  
  
LEGRAND/SCHNEIDER (MERLIN GERIN)/SIEMENS/HAVELLS/INDO-ASIAN
- v. CEILING FAN, 1400 mm Sweep, White in Color.  
  
HAVELLS (Pacer)/BAJAJ (Kassels)/ORIENT (PSPO)/USHA (Striker/Sonata Hi-Speed)/Crompton Greaves
- vi. LIGHT FITTINGS SIMILAR TO PHILIPS MAKE:
  - a. Similar to Philips make RC380B G2 LED35S-6500 PSU OD WH
  - b. Similar to Philips make BN150W LED20S-6500 PSE OD GR
  - c. Similar to Philips BN150W LED13S-6500 PSE OD GR
  - d. Similar to Philips- DN 393B LED12S-6500PSR WH
- vii. MCCB with electronic/microprocessor release having LSiG protection.  
  
Legrand Model 4202 35 for 100 A, MCCB /Model 4200 37 (FOR 160 A, MCCB)or Eqvt: SCHNEIDER/SIEMENS/ABB/INDO-ASIAN
- viii. MCB'S & MCB DBs (10KA, C- curve, IP54).  
  
SCHNEIDER/SIEMENS/LEGRANDS/ABB/INDO-ASIAN
- ix. Modular switches/Socket/Box –Make& Model.  
  
LEGRAND(Myrus)/SCHNEIDER(Vivace)/CRABTREE(Murano)
- x. Modular Fan regulator 100W.  
LEGRAND(Myrus)/SCHNEIDER(Vivace)CRABTREE(Murano)

**OTHER ITEMS:**

AS APPROVED BY THE ENGINEER-IN-CHARGE OR AS PER BOQ AND SPECS.

**APPENDIX-B****GENERAL HSE POINTS TO BE INCORPORATED IN THE CONTRACT**

1. It will be solely the Contractor's responsibility to fulfill all the legal formalities with respect to the Health ,Safety and Environmental aspects of the entire job (namely; the person employed by him, the equipment , the environment, etc.) under the jurisdiction of the district of that state where it is operating. Ensure that all sub-contractors hired by him comply with the same requirement as the contractor himself and shall be liable for ensuring compliance all HSE laws by the sub or sub-sub contractors.
2. Every person deployed by the contractor in a mine must wear safety gadgets to be provided by the contractor. The Contractor shall provide proper Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company PPE schedule. Safety appliances like protective footwear, Safety Helmet and Full Body harness has to be DGMS approved. Necessary supportive document shall have to be submitted as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may apply to the Company (OIL) for providing the same. OIL will provide the safety items, if available. But in turn, OIL will recover the actual cost of the items by deducting from Contractor's Bill. . However , it will be the Contractor's sole responsibility to ensure that the persons engaged by him in the mines use the proper PPE while at work. All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.
3. The Contractor shall prepare written Safe Operating Procedure (SOP) for the work to be carried out, including an assessment of (risk, wherever possible and safe methods to deal with it/them. The SOP should clearly state the risk arising to men,machineries& material from the mining operation / operations to be done by the contractor and how it is to be managed.
4. The contractor shall provide a copy of the SOP to the person designated by the mine owner who shall be supervising the contractor's work.
5. Keep an up to date SOP and provide a copy of changes to a person designated by the Mine Owner/Agent/Manager.
6. Contractor has to ensure that all work is carried out in accordance with the Statute and SOP and for the purpose he may deploy adequate qualified and competent personnel for the purpose of carrying out the job in a safe manner. For work of a specified scope/nature, he should develop and provide to the mine owner a site specific code of practice in line .
7. All persons deployed by the contractor for working in a mine must undergo Mines Vocational Training, initial medical examination, PME. They should be issued cards stating the name of the contractor and the work and its validity period, indicating status of MVT,IME& PME.
8. The contractor shall submit to DGMS returns indicating – Name of his firm, Registration number, Name and address of person heading the firm, Nature of work, type of deployment of work persons, Number of work persons deployed, how

many work persons hold VT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons.

9. The return shall be submitted quarterly (by 10th of April, July, October & January) for contracts of more than one year. However, for contracts of less than one year, returns shall be submitted monthly.
10. It will be entirely the responsibility of the Contractor/his Supervisor/representative to ensure strict adherence to all HSE measures and statutory rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by company's Installation Manager / Safety Officer / Engineer / Official / Supervisor/Junior Engineer for safe operation.
11. Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the contractor only.
12. Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the contractor.
13. The contractor shall have to report all incidents including near miss to Installation Manager / departmental representative of the concerned department of OIL.
14. The contractor has to keep a register of the persons employed by him/her. The contractor's supervisor shall take and maintain attendance of his men every day for the work, punctually.
15. If the company arranges any safety class / training for the working personnel at site (company employee, contractor worker, etc) the contractor will not have any objection to any such training.
16. The health check up of contractor's personnel is to be done by the contractor in authorized Health Centers as per OIL's requirement & proof of such test(s) is to be submitted to OIL. The frequency of periodic medical examinations should be every five years for the employees below 45 years of age and every three years for employees of 45 years of age and above.
17. To arrange daily tool box meeting and regular site safety meetings and maintain records.
18. Records of daily attendance, accident report etc. are to be maintained in Form B, E, J (as per Mines Rules 1955) by the contractor .
19. A contractor employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's act or omissions at work.
20. A contractor employee must, while at work, cooperate with his or her employer or other persons so far as is necessary to enable compliance with any requirement under the act or the regulations that is imposed in the interest of health, safety and welfare of the employee or any other person.
21. Contractor's arrangements for health and safety management shall be consistent with those for the mine owner.
22. In case Contractor is found non-compliant of HSE laws as required company will have the right for directing the contractor to take action to comply with the requirements, and for further non-compliance, the contractor will be penalized prevailing relevant Acts/Rules/Regulations.
23. When there is a significant risk to health ,environment or safety of a person or place arising because of a non-compliance of HSE measures company will have the right to direct the contractor to cease work until the non-compliance is corrected.

24. The contractor should prevent the frequent change of his contractual employees as far as practicable.
  25. The contractor should frame a mutually agreed bridging document between OIL & the contractor with roles and responsibilities clearly defined.
  26. For any HSE matters not specified in the contract document, the contractor will abide the relevant and prevailing Acts/rules/regulations/ pertaining to Health, Safety and Environment.
- D. **“The bidders should note that, if three (3) or more bidders are found to be technically eligible, no clarification / deficit documents will be sought from the bidders under any circumstances, once the bids are opened and the bids will be evaluated on the basis of documents submitted by the bidders along with the bid”.**
- E. The bidder shall also furnish following information / documents along with the bid. Company reserves the right to reject the bid in the event of non submission of such information / documents.
- Wherever applicable, the bidder shall have itself registered under Employees’ Provident Fund and Miscellaneous Provisions Act, 1952 and follow the relevant statutory provisions including Rules made there-under concerning contractual workers to be engaged by such bidder. The bidder shall furnish the Provident Fund code number issued by the appropriate Govt. Authority, with supporting documents, or a declaration / undertaking in stamped paper in the **Format Annexure-I.**
- F. The bidder shall furnish following information / documents on issuance of LOI within 15 (fifteen) days from the date of issuance. Company reserves the right to cancel the contract / LOI if these documents are not submitted within the stipulated period, besides taking action under **Clause H. (III)** of Part-III SCC of tender document.
- a. PAN, VAT Registration number (Not required for OIL registered contractors)
  - b. Service Tax Registration number issued by the appropriate Govt. Authority or exemption certificate from the concerned authority or a declaration / undertaking in stamped paper in the prescribed Format to the extent that provisions of the Service Tax are not applicable to him / her / them and in the event of any claim from the Service Tax Authority upon Company at a later date with respect to the services provided under the contract, the bidder shall deposit such amount to the Company, as per the rules applicable from time to time.
- G. The bidder must provide the following minimum numbers of equipments in operational condition capable of providing uninterrupted services under the contract as and when required.

**LIST OF MATERIALS & EQUIPMENTS TO BE SUPPLIED BY CONTRACTOR:**

- |      |                                  |              |
|------|----------------------------------|--------------|
| i.   | Concrete Mixture Machine:        | 1(One) No.   |
| ii.  | Concrete Vibrator (Needle Type): | 2 (Two) Nos. |
| iii. | Sump Pump (Capacity= 8 tonne):   | 1 (One) No.  |
| iv.  | Welding set:                     | 1 (One) No.  |

H. **(I)** The following check list to be enclosed (uploaded) by the bidder along with the bid document:-

**CHECK LIST:**

SL NO	DESCRIPTION													
1	Location /construction site visited & assessed.	YES												
2	Item descriptions clearly understood and availability of materials verified.	YES												
3	Understood that Mandatory Material tests to be performed (wherever applicable)	YES												
4	PF code No. / Annexure-I as <b>per clause no. E. of Part-III SCC</b> have been submitted by me /us	YES												
5	Bid validity from the date of technical bid opening is 120 days	YES												
6	<p>I / We shall provide the following minimum numbers of equipments in operational condition capable of providing uninterrupted services under the contract as and when required, failing which company shall have the right to terminate the contract, besides taking action as per Clause <b>H. (III)</b> hereunder.</p> <p><b>List of equipment's:</b></p> <table border="0"> <tr> <td>a.</td> <td>Concrete Mixture Machine:</td> <td>1(One) No.</td> </tr> <tr> <td>b.</td> <td>Concrete Vibrator (Needle Type):</td> <td>2 (Two) Nos.</td> </tr> <tr> <td>c.</td> <td>Sump Pump (Capacity= 8 tonne):</td> <td>1 (One) No.</td> </tr> <tr> <td>d.</td> <td>Welding set:</td> <td>1 (One) No.</td> </tr> </table>	a.	Concrete Mixture Machine:	1(One) No.	b.	Concrete Vibrator (Needle Type):	2 (Two) Nos.	c.	Sump Pump (Capacity= 8 tonne):	1 (One) No.	d.	Welding set:	1 (One) No.	YES
a.	Concrete Mixture Machine:	1(One) No.												
b.	Concrete Vibrator (Needle Type):	2 (Two) Nos.												
c.	Sump Pump (Capacity= 8 tonne):	1 (One) No.												
d.	Welding set:	1 (One) No.												

Bidder(s) should clearly understand these criteria before submission of the bid and in case of any doubt he / she / they may seek clarification from Engineer – in charge / DGM-Civil Engineering department, before submitting the bid.

**(II)** Information / List of other Civil works contract, if any, being executed by the bidder(s) in his / her / their firm's name in OIL and expected to continue beyond 6 months time from date of opening of bid document to be furnished to DGM-Civil by all bidders before issuance of work order.

**(III)** Company reserves the right to debar the bidder / contractor during processing of tender and / or during continuation of the contract on commission or omission on the part of the bidder / contractor as under:

- a) Has indulged in malpractices, bribery, fraud, pilferage.

- b) Is bankrupt or is being dissolved or resolved to be wound up or proceedings for winding up or dissolution have been instituted.
- c) Has furnished false information / statement / declaration and / or forged document / certificate.
- d) Has substituted materials in lieu of materials supplied by OIL or has not returned or has short returned or has unauthorizedly disposed-off materials / documents / drawings / tools or plants or equipments supplied by OIL.
- e) Has obtained official Company information or copies of documents in relation to the tender / contract by dubious methods / means.
- f) Has deliberately violated and circumvented the provisions of labour laws / regulations / rules, safety norms or other statutory requirements.
- g) Has indulged in construction and erection of defective works or supply of defective materials/services and not made good of the defects within reasonable time in spite of follow-up by Company.
- h) Has not cleared OIL's previous dues.
- i) Has committed Breach of Contract or has failed to perform a contract or has abandoned the contract.
- j) Has refused to accept LOA / LOI / Purchase Order / Signing of the Contract after accepting LOA / Work Order after the same is issued by OIL within the period of Bid validity and as per agreed terms & conditions.
- k) After bid opening, withdraws / revises its bid within the period of bid validity for no valid reasons. However, reduction of quoted rate(s) / Bid price by L1 Bidder after the bid opening date shall not constitute ground for banning.
- l) Has parted with, leaked or provided confidential / proprietary information of OIL given to the party only for its use (in discharging its obligations against an order / contract) to any third party without prior consent of OIL.
- m) Use intimidation / threatening or brings undue outside pressure on the Company or its Official(s) for acceptance of its bid or acceptance of materials supplied or performance of the job under the contract / purchase order.
- n) If the Director / Owner / Proprietor / Partner of a party is convicted by a court of law for offences involving moral turpitude in relation to its business dealings during last five years.
- o) Poor performance of the supplier / contractor / service provider in one or several contracts / supplies affecting Company's operations.
- p) Any other ground for which, in the opinion of the Company makes it undesirable to deal with the party.



**Part- IV SCPME**  
OIL INDIA LIMITED  
(A Govt. of India Enterprise)  
Contracts, Duliajan  
**WORKS CONTRACT**  
Schedule of company's Plants, Materials and Equipments  
**E-Tender No.CDI1549P17**

- a) SCHEDULE OF MATERIALS AVAILABLE AT THE COMPANY'S STORES/STOCK PILES for permanent incorporation in works and
- b) SCHEDULE OF COMPANY'S PLANTS AND EQUIPMENTS for use in the execution of work.

- **Material:** Cement will be supplied by company.

**Note:** All empty Cement bags must be returned to material's Godown, Duliajan failing which a sum of Rs 8.00(Rupees Eight) only per bag will be recovered from contractor's bill.

- **Plant & equipment:** Nil

**NOTE:-**

- The Contractor is to arrange transport of the above materials to site of work with proper safety.
- If the materials listed above are not available suitable substitute will be provided by the Company and Contractor shall incorporate the same in the works without extra cost.
- Containers must be returned to Company in good condition.
- Plants and equipment if issued to Contractor must be under proper watch so that no part is pilfered. These must be handled only by Company's operators. Contractor shall be responsible for any loss or damage to these plants and equipment while these are under his/their custody.
- Materials issued to Contractor must be under proper watch & ward so that no part is pilfered. If any pilferation takes place the matter will be referred to appropriate Govt. authorities for legal action as well as realization of the materials issued.
- Cement issued to Contractor by the Company is meant only for the specific Company work relating to the Contract. However, if any quantity of Cement is left over from the quantities issued for any reason whatsoever, on the completion / cancellation / termination of the Contract the same shall have to be returned to the Company in full

within one week of completion/cancellation of the work failing which the matter will be referred to appropriate Govt. authorities for legal action as well as realization of the Cement.

- Bitumen issued to Contractor by the Company is meant only for the specific Company work relating to the Contract. However, if any quantity of Bitumen is left over from the quantities issued for any reason whatsoever, on the completion / cancellation / termination of the Contract the same shall have to be returned to the Company in full within one week of completion/cancellation of the work failing which the matter will be referred to appropriate Govt. authorities for legal action as well as realization of the bitumen.
- All other materials issue to the Contractor by the Company if subsequently found to be in excess of the actual requirement will have to be returned by the Contractor within two weeks of completion of the work failing which the cost of all such materials will be recovered from the Contactor at double the value of materials without any reference to him.

**PART-V SAFETY MEASURES**

**To,  
DGM-CONTRACT  
OIL INDIA LIMITED  
DULIAJAN-786602**

**SUB: SAFETY MEASURES**

**DESCRIPTION OF WORK/SERVICE:** - Vertical Extension of Contracts Office at Duliajan including Electrification and supply of all materials except Cement.

Sir,

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

- a) Only experienced and competent persons shall be engaged by us for carrying out work under the said contract.
- b) The names of the authorized persons who would be supervising the jobs on day to day basis from our end are the following:
  - i) \_\_\_\_\_
  - ii) \_\_\_\_\_
  - iii) \_\_\_\_\_

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

- c) Due notice would be given for any change of personnel under item(b) above.
- d) We hereby accept the responsibility for the safety of all the personnel engaged by us and for the safety of the Company's personnel and property involved during the course of our working under this contract. We would ensure that all the provisions under the Oil Mines Regulations, 1984 and other safety rules related to execution of our work would be strictly followed by our personnel. Any violation pointed out by the Company's Engineers would be rectified forthwith or the work suspended till such time the rectification is completed by us and all expenditure towards this would be on our account.
- e) We confirm that all persons engaged by us would be provided with the necessary Safety Gears at our cost.
- f) All losses caused due to inadequate safety measures or lack of supervision on our part would be fully compensated by us and the Company will not be responsible for any lapses on our part in this regard.

g) We shall abide by the following HSE (Health Safety & Environment) points:

**GENERAL HEALTH, SAFETY & ENVIRONMENT (HSE) POINTS:**

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

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

3. The Contractor shall prepare written Safe Operating Procedure (SOP) for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with it/them. The SOP should clearly state the risk arising to men, machineries & material from the mining operation / operations to be done by the contractor and how it is to be managed.

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

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

6. Contractor has to ensure that all work is carried out in accordance with the Statute and SOP and for the purpose he may deploy adequate qualified and competent personnel for the purpose of carrying out the job in a Contractor 1 Company SCC safe manner. For work of a specified scope/nature, he should develop and provide to the mine owner a site specific code of practice in line.

7. All persons deployed by the contractor for working in a mine must undergo Mines Vocational Training, initial medical examination, PME. They should be issued cards

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stating the name of the contractor and the work and its validity period, indicating status of MVT, IME & PME.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(Seal)

Yours Faithfully

Date\_\_\_\_\_

M/s\_\_\_\_\_

FOR & ON BEHALF OF CONTRACTOR

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

**(A). BID EVALUATION CRITERIA (BEC):**

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

**2.1** Interested bidders shall have to submit the following documents to qualify for opening of the Price Bid:

**2.1.1**

- a. One successfully completed similar work of value ₹ 13,09,000.00/- under tender with CPWD, Railways, APWD, MES, NRL, ONGCL, OIL or any other Government Organization / Public Sector Undertaking during the last seven (07) years reckoned from the original bid closing date.
- b. For proof of requisite experience of SIMILAR work, Job Completion Certificate clearly mentioning Gross value of job done, Nature of works, Contracts period/Contract Start and Completion date issued by CPWD, Railways, APWD, MES, NRL, ONGCL, OIL or any other Government Organization / Public Sector Undertaking must be submitted along with the bid.
- c. SIMILAR work executed by a bidder for its own organization / subsidiary will not be considered as experience for the purpose of meeting BEC.

**2.1.1.1** The bidder must possess valid electrical license issued/endorsed by Licensing Board of Govt. of Assam or else have tie up with an Electrical Firm having the electrical license issued/endorsed by Licensing Board of Govt. of Assam. The bidder or their collaborators must have experience in internal electrification works in Office/ Residential Building during the last 7(seven) years reckoned from the original bid closing date in any organizations as listed in Civil Experience. In case of collaboration with any Electrical firm as mentioned above, the bidder must furnish a MoU entered into with the collaborator towards providing the requisite service as per the terms of the contract.

**2.1.2**

- 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 ₹7,86,000.00

- b) **Net worth** of bidder must be 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 financial year .....(as the case may be) has actually not been audited so far.

**Note:** For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid:-

- i) A certificate issued by a practicing Chartered/ Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in **Annexure-II**.
- OR**
- ii) Audited Balance Sheet along with Profit & Loss account.

**2.1.3** Bids must be valid for minimum 120 (one hundred twenty) days from the date of Technical Bid opening. If bidder does not submit / declare bid validity period, it will be presumed that the bid validity is 120 (one hundred twenty) days.

**Note:** In case of extension of Bid Opening Date, Bid validity must be extended suitably by the bidder, as and when advised by OIL.

**2.1.4** Bid Security must be furnished (except those exempted) as a part of the Technical Bid. The Bid Security (in original) must reach the Office of DGM-Contracts, OIL, Duliajan on or before 1:30 p.m. on the bid closing date. *Alternatively, applicants already having User ID & Password for OIL's e-portal can pay the requisite Bid Document cost & Bid security against the individual IFBs through the online payment gateway.*

The amount of Bid Security shall be as specified in the NIT.

**Note:**

(a) In case the Bidder submits Bid security in the form of Bank Guarantee (BG), the BG must be valid for minimum 150 days from the date of Technical bid opening.



(b) In case of extension of Bid Opening Date, Bid Security validity must be extended suitably by the bidder, as and when advised by OIL.

**2.1.5** The bidders must submit documentary evidence for BEC clause numbers **2.1.1, 2.1.1.1 and 2.1.2**. All the documents should be legible. The bidders must upload all the documents, digitally signed with “Organizational type’ Digital Signature Certificate having Organization’s name.

**OIL registered ‘A’ & ‘B’ & ‘C’ class bidders are exempted from depositing the bid security against this tender. They are also exempted from requirement of any experience or turnover criterion of this tender as per para 2.1.1, 2.1.1.1 & 2.1.2 above.**

**3.0 Notes to Clause no. 2.1.1 above:**

(a) **“Similar work”** mentioned in Paragraph 2.1.1 above means the following:

**Definition of similar work:** Construction/Renovation/redecoration of existing buildings/ boundary walls/ steel structures/watch tower.

(b) Non-submission of the documents as specified in all the paragraphs above will result in rejection of bids.

**4.0 SUBMISSION OF FORGED DOCUMENTS:** Bidders should note that Company may verify authenticity of all the documents /certificates / information submitted by the bidder(s) against the tender. In case at any stage of tendering process or Contract execution etc., if it is established that bidder has submitted forged documents / certificates / information towards fulfillment of any of the tender / contract conditions, Company shall immediately reject the bid of such bidder(s) or cancel / terminate the contract and forfeit EMD / SD submitted by the bidder(s), besides liable for action as per **Clause no. H. (III) of Part-III SCC** of tender document.

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

- i) To ascertain the inter-se-ranking, the comparison of the responsive bids will be made.
- ii) In case of identical lowest offered rate by more than 1 (one) bidder, the selection of priority-1 and priority-2 bidder will be made by draw of lots amongst the parties offering the same lowest. 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 jobs, then Company may think to award the same to priority -2 bidder after taking management approval for the same.

**Note:** The Company's Internal Estimated Rates, as indicated in Part-II, are inclusive of all overheads, taxes, duties, levies etc. except P.F. & Service Tax.

**(B). BID REJECTION CRITERIA (BRC):**

1. The bids are to be submitted in single stage under 2 (two) bid system i.e. Un-priced Techno-Commercial Bid and Price Bid together. Only the Price Bid should contain the quoted price.
2. Bid security shall be furnished as a part of the Techno Commercial Un-priced Bid. The amount of bid security should be as specified in the NIT. Any bid not accompanied by a proper bid security will be summarily rejected.
3. Bid Documents / User Id & Password for OIL's E-Tender portal are not transferable. Bid made by parties who have not submitted the requisite tender fees will be rejected.
4. Any bid received in the form of Physical document/ Telex/Cable/Fax/E-mail will not be accepted.
5. Bidders must quote clearly and strictly in accordance with the price schedule outlined in Price Bidding Format attached under "Notes and Attachments" tab in the main bidding engine of OIL's e-Tender portal; otherwise the bid will be rejected. All other techno-commercial documents other than price details to be submitted with Un-priced Techno-Commercial Bid as per tender requirement in the c-Folder link (collaboration link) under "Technical RFx Response" Tab Page only.
6. 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. Firm price
  - b. EMD / Bid Bond
  - c. Period of validity of Bid
  - d. Price Schedule
  - e. Performance Bank Guarantee / Security deposit
  - f. Delivery / Completion Schedule
  - g. Scope of work
  - h. Guarantee of material / work
  - i. Liquidated Damages clause
  - j. Tax liabilities
  - k. Arbitration / Resolution of Dispute Clause
  - l. Force Majeure
  - m. Applicable Laws
  - n. Specifications

7. 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.

## **8.0 GENERAL:**

- i. In case bidder takes exception to any clause of bidding document not covered under BEC/BRC, then the Company has the discretion to load or reject the offer on account of such exception if the bidder does not withdraw / modify the deviation when / as advised by Company. The loading so done by the Company will be final and binding on the bidders. No deviation will however be accepted in the clauses covered under BRC.
- ii. To ascertain the substantial responsiveness of the bid the Company reserves the right to ask the bidder for clarification in respect of clauses covered under BEC/BRC also and such clarifications fulfilling the BEC/BRC clauses in toto must be received or before the deadline given by the Company, failing which the offer will be will be evaluated based on the submission.. However, mere submission of such clarification shall not make the offer responsive, unless Company is satisfied with the substantial responsiveness of the offer.
- iii. If any of the clauses in the BRC contradict with other clauses of bidding document elsewhere, the clauses in the BRC shall prevail.
- iv. Bidder(s) must note that requisite information(s)/financial values etc. as required in the BEC/BRC & Tender are clearly understandable from the supporting documents submitted by the Bidder(s); otherwise Bids shall be rejected.
- v. OIL will not be responsible for delay, loss or non-receipt of applications for participating in the bid sent by mail and will not entertain any correspondence in this regard.

**NOTE:** Apart from BEC/BRC as detailed above bidders are also advised to kindly note that Documents/ Annexure/Declaration as per clause no. E. & H. (III) of part –III SCC of tender document should be furnished along with the bid. However, this will not be a part of BEC / BRC.

**Annexure-I**

**(ON THE NJSP OF RS.100/-)**

**TO BE NOTORISED**

**To  
DGM-CONTRACTS  
OIL INDIA LIMITED  
DULIAJAN**

Dear Sirs,

**Sub: UNDERTAKING/DECLARATION BY THE BIDDER (S) IN  
RESPECT OF TENDER NO. CDI1549P17**

(To be submitted by the Bidders who are not covered under EPF&MP Act, 1952)

This is in connection with the Bid submitted by .....(Name of the Bidder) against Tender .....for .....(subject of the Tender). As per the conditions stipulated in Clause no.....(Name of the Provision/SCC etc.), we/I ,being authorized on behalf of .....(Name of the Contractor) hereby confirm and undertake as follows;

- That our Firm/Company shall be responsible to comply with all the applicable labour laws in respect of the present Contract.
- That we are fully conversant with the applicable laws and confirm that our Firm/Company is not covered under the Employees Provident Funds and Misc. Provisions Act, 1952 and applicable Rules there under, and therefore I we have not obtained any registration or Provident Fund Code under the Act.
- That if, during the period of the present Contract, we/our Firm /Company comes within the coverage of the aforesaid Acts or any other statutes; we shall comply with the same and submit the necessary documents to OIL. We further confirm that we will indemnify OIL towards any future statutory compliances/claims raised from any corner including statutory authorities against the Labour engaged by our Firm/Company in the Contract.
- That in the event of any contravention towards the applicable laws found on our part in respect of the present Contract, we undertake to indemnify OIL and deposit the claims, if any.

- That we shall fulfill all the obligations arising from under the labour laws in force from time to time and keep OIL indemnified against any loss/liability arising out of failure of our avoiding the laws.

We, further agree and undertake that in case of any violation of the above undertaking, OIL shall be at liberty to take appropriate action against us in terms of the Tender including but not limited to termination of contract and debarment from future business with OIL.

I/We declare that the information given above is true and any misstatement or 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** \_\_\_\_\_  
**(BIDDER)**

**Place:-**

**Date:-**

**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.

<b>YEAR</b>	<b>TURN OVER</b> In INR (Rs.)	<b>NET WORTH</b> In INR (Rs.)

Place:

Date:

Seal:

Membership No. & Firm Registration No. :

Signature