

#### **Tender Notification for**

## CONSTRUCTION OF 11 KV SWITCHGEAR SUB-STATION BUILDING AT DTC KALKAJI & 33KV SUB-STATION BUILDING AT DTC SUKHDEV VIHAR.

NIT No. CMC/BR/22-23/RB/CR/SS/1052 DT: 05.08.2022

Due Date for Submission: 25.08.2022, 15:15 HRS Due Date for Opening: 25.08.2022, 15:30 HRS

## **BSES RAJDHANI POWER LIMITED,**

BSES Bhawan, Nehru Place, New Delhi-110019 Corporate Identification Number: U74899DL2001PLC111527 Telephone Number: 011-49207235

Website: www.bsesdelhi.com



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#### **SECTION – I: REQUEST FOR QUOTATION**

#### 1.00 Event Information

BRPL invites sealed for "CONSTRUCTION OF 11 KV SWITCHGEAR SUB-STATION BUILDING AT DTC KALKAJI & 33KV SUB-STATION BUILDING AT DTC SUKHDEV VIHAR."

1.01 . The bidder must qualify the requirements as specified in clause 2.0 stated below.

The sealed envelopes shall be duly super scribed as "CONSTRUCTION OF 11 KV SWITCHGEAR SUB-STATION BUILDING AT DTC KALKAJI & 33KV SUB-STATION BUILDING AT DTC SUKHDEV VIHAR."

"NIT NO. CMC/BR/22-23/RB/CR/SS/1052 DT: 05.08.2022 DUE ON DT 25.08.2022".

Estimated cost of work : Rs. 3.33 Cr. i/c GST Earnest money Deposit : Rs 6.66 Lakhs Cost of Tender form (Non- Refundable) : Rs. 1180/-

Duration of the Work : 4 months (from date of issuance of LOI/order

whichever is earlier)

Tender documents on sale : 05.08.2022 (working days)

Date & time of Submission of Tender : 25.08.2022 till 15:15 HRS

Date & time of opening of Tender : 25.08.2022 till 15:30 HRS

1.02 The tender document can be obtained from address given below against submission of non-refundable demand draft of Rs.1180/- drawn in favour of BSES Rajdhani Power Ltd, payable at Delhi. The tender papers will be issued on all working days upto 25.08.2022, 1.00 PM. The tender documents & detail terms and conditions can also be downloaded from the website "www.bsesdelhi.com-Tenders-BSES Rajdhani Power Ltd.-Open Tenders".

In case tender papers are downloaded from the above website, then the bidder has to enclose a separate demand draft covering the cost of bid documents.

1.02 Offers will be received up to 25.08.2022, 3:15 PM. at the address given below. Part A of the bid shall be opened on 25.08.2022, 3:30 PM. It is the sole responsibility of the bidder to ensure that the bid documents reach this office on or before the last date:

Head of Department Contracts & Material Deptt. BSES Rajdhani Power Ltd 1<sup>st</sup> Floor, C Block BSES Bhawan, Nehru Place New Delhi - 110019

1.04 BSES Rajdhani Power Ltd reserves the right to accept/reject any or all Tenders without assigning any reason thereof and alter the quantity of materials mentioned in the Tender



documents at the time of placing purchase/ work orders. Tender will be summarily rejected if:

- (i) **Earnest Money Deposit (EMD)** of Rs. 6,66,000/- is not deposited in shape of Bank Draft/Pay Order/Banker's Cheque/BG drawn in favour of "BSES Rajdhani Power Ltd" payable at Delhi.
- (ii) Tender is received after due date and time.

## 2.0 Qualification Criteria:-

## (A) Qualification Criteria:-

The prospective bidder must qualify all of the following requirements to be eligible to participate in the bidding. Bidders who meet following requirements will be considered as successful bidder and management has a right to disqualify those bidders who do not meet these requirements.

## (A.1) Technical Qualifying Criteria:

a) Bidder must have executed the works of like nature and shall have extensive experience of carrying out similar types of work as specified in the attached BOQ. They should have successfully completed in preceding five years:-

Three similar completed works of executed value not less than amount equal to Rs. 135 Lakhs (i/c GST) each

Or

Two similar completed works of executed value not less than amount equal to Rs. 200 Lakhs (i/c GST) each

Or

One similar completed work of executed value not less than amount equal to Rs. 265 Lakhs (i/c GST) each

The bidder shall submit Performance/Completion Certificate supporting the above requirement. Copy of contract also to be submitted in case of work order issued by organization other than BSES.

#### (A.2) COMMERCIAL CRITERIA

- (A.2.1) The bidder should have average annual turnover of Rs. 1 Cr. in the last three financial years i.e. FY 2019-20, FY 20-21 & FY 21-22.Bidder to provide UDIN based CA certificate / balance sheet as proof of the same. In case the audited balance sheet is not available with the bidder for 21-22, the bidder shall submit the audited balance sheet for FY 18-19 or turnover certified by the auditor of the firm for FY 21-22.
- (A.2.2) Bidder must provide proof of having solvency of an amount equal to Rs. 50 Lakhs from any nationalized/ scheduled commercial bank. It should not be older than 01.01.2022.
- (A.2.3)Bidder should have valid Registration No. of GST.



- (A.2.4) Bidder should have PAN No. & should fulfill all statutory compliances like PF, ESI registration etc.
- (A.2.5) Entities that have been debarred/blacklisted by any Private/central/state government institution including electricity boards in India will not be considered; in this regard a written statement has to be provided on bidder's letterhead along with other documents. Vendors/ Agencies who have been debarred/ blacklisted/ suspended by BRPL in last 3 financial years will not be considered in this tender.
- (A.2.6) The bidder should submit an undertaking certified by their auditor for "No Litigation" / no legal case is pending with BRPL or its Group Companies. Bidders having any litigation/ legal case pending with BRPL shall not be considered qualified for this tender.
- (A.2.7) The bidder should give an undertaking on their letterhead that all the documents/certificates/information submitted by them against the tender are genuine/true/correct and the copies of documents have been made from the original document/s. Further in case any of the documents/certificates/information submitted by the bidder is found to be false or forged, BRPL at its sole discretion shall be free to take all actions as permitted under law, including forfeiture of EMD and disqualification from participation in the future tenders for 1 year in BRPL & its group companies.

Please note that BRPL will verify the bidder's credentials like work order copies, performance certificates etc. submitted by the bidder from the respective issuing client, in case any of the documents/certificates/information submitted by the bidder is found to be false or forged, action as deemed fit, including forfeiture of EMD & blacklisting may be initiated by BRPL. If required, BRPL may direct the bidder to provide the required contact details of the client who can confirm the authenticity of the documents submitted to facilitate the verification process within the timelines provided by BRPL.

The bidder shall submit all necessary documentary evidence to establish that the bidder meets the above qualifying requirements.

#### Please Note:

- i) Firms who are debarred/blacklisted in other utilities /BSES & in India in last 3 years will not be considered.
- ii) Company reserves the right to carry out technical capability/ infrastructure assessment of the bidders by facility/office inspection or by any other means and company's decision shall be final in this regard.
- iii) No joint ventures/ consortiums are allowed



Also, the Bidder shall furnish the following technical & financial documents along with the tender:

- ✓ Last Financial Years (FY 18-19, FY 19-20, FY 20-21& FY 21-22) audited financial statement
- ✓ Bidder to submit UDIN based CA Certificate showing NIL dues towards Statutory Liabilities, including GST, Taxation, PF, ESI, or any other dues Statutory in nature for the period upto 31.03.2022, herein collectively called as "Statutory dues" and there is no liability over the bidder relating to deposition of such statutory dues.
- ✓ Details of constitution of the company (Proprietary/ Limited. Along with details)
- ✓ Memorandum & Articles of Association of the Company
- ✓ Organization Chart of the company
- ✓ Experience details with credentials
- ✓ No of Employees detail
- ✓ Premises Detail and addresses across India
- ✓ Work order copies along with performance certificates in support of relevant experience

BSES reserves the right to disqualify any bidder in spite of the bidders meeting the above Qualifying requirements. The decision of BRPL shall be final & binding on the bidder.

## 3.0 Bidding and Award Process

Bidders are requested to submit their offer strictly in line with this tender document. **NO DEVIATION IS ACCEPTABLE**. BRPL shall respond to the clarifications raised by various bidders and the same will be distributed to all participating bidders through website.

#### 3.01 BID SUBMISSION

The bidders are required to submit the bids in 2(two) parts in original to the following address:-

Head of Department Contracts & Material Deptt. BSES Rajdhani Power Ltd 1<sup>st</sup> Floor, C Block BSES Bhawan, Nehru Place New Delhi 110019

#### PART A

:: TECHNO-COMMERCIAL BID comprising of following

- EMD of requisite amount
- Non-refundable demand draft for Rs. 1180/- In case the forms are downloaded from the website
- Documentary evidence in support of qualifying criteria
- Any other relevant document



- Acceptance to Commercial Terms and Conditions viz Delivery schedule/period, Payment terms, BG, Reverse auction etc.
- Acceptance to Special Conditions of Contract.
- Duly filled, signed & stamped Bid Form(Format given in Annexure-II)

The technical bid shall also contain this tender Document with all pages signed & stamped with bidder's seal as an acceptance to the terms & conditions mentioned in this tender document.

PART B :: FINANCIAL BID comprising of

Price strictly in the Format enclosed in SECTION VI

## 3.02 TIME SCHEDULE

The bidders should complete the following within the dates specified as under:

S. No.	Steps	Comprising of	Due date
1	Pre-bid Queries, if any	Queries be addressed to amitava.nandi@relianceada.com, 011-49209619/shilpa.suman@relianceada.com, 011-49209878	12.08.2022 02:30 PM
2	PART A Technical and Commercial Bid	<ul> <li>EMD of requisite amount</li> <li>Non-refundable demand draft for Rs. 1180/- In case the forms are downloaded from the website</li> <li>Documentary evidence in support of qualifying criteria</li> <li>Technical Literature/ list of makes etc</li> <li>Any other relevant document</li> <li>Acceptance to Commercial Terms and Conditions viz Delivery schedule/period, Payment terms, BG, Reverse auction etc.</li> </ul>	25.08.2022, 3:15 PM
3	PART B Financial Bid	<ul> <li>Price strictly in the Format enclosed(Section VI) indicating Break up regarding</li> </ul>	25.08.2022, 3:30 PM



S. No.	Steps	Comprising of	Due date
		basic price, taxes & duties etc.	

This is a two part bid process. Bidders are to submit the bids in 2(two) parts

Both these parts should be furnished in separate sealed covers super scribing NIT no., DUE DATE OF SUBMISSION, with particulars as **PART-A TECHNICAL BID & COMMERCIAL TERMS & CONDITIONS** and **Part-B FINANCIAL BID** and these sealed envelopes should again be placed in another sealed envelope which should be super scribed with —"**Tender Notice No.& Due date of opening**". The same shall be submitted before the due date & time specified.

<u>Part – A</u>: Technical Bid should not contain any cost information whatsoever and shall be submitted within the due date 24.08.2022 up to 15:00 Hrs. After techno-commercial evaluation, the qualified tenders will be informed immediately.

<u>PART B</u>: Financial bid will be opened after techno-commercial evaluation and only of the qualified bidders.

<u>PART C</u>: Reverse auction shall be conducted for finalization of contract and the details of the price bid shall not be shared with bidders.

The qualified bidders will participate in reverse auction through SAP-SRM tool. The reverse auction process shall be governed by the terms and conditions enclosed as Annexure-II in this tender document. Training/details shall be provided to bidders before participation in auction.

Notwithstanding anything stated above, the Company reserves the right to assess bidders' capability to perform the contract, should the circumstances warrant such assessment in the overall interest of the Company. In this regard the decision of the Company is final.

In case RA is not conducted /concluded for any reasons, a "final no regret" financial bid in a sealed envelope will be called for from all qualified bidders.

#### 4.0 Award Decision

- 4.01 Company intends to award the business on a lowest bid basis, so contractors are encouraged to submit the bid competitively. The decision to place order/LOI solely depends on Company on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that Company may deem relevant.
- 4.02 The Company reserves all the rights to award the contract to one or more bidders so as to meet the delivery requirement or nullify the award decision without any reason.
- 4.03 In case any contractor is found unsatisfactory during the execution process, the award will be cancelled and BRPL reserves the right to award work to other.



## 5.0 Market Integrity

We have a fair and competitive marketplace. The rules for bidders are outlined in the Terms & Conditiog@2ns. Bidders must agree to these rules prior to participating. In addition to other remedies available, we reserves the right to exclude a bidder from participating in future markets due to the bidder's violation of any of the rules or obligations contained in the Terms & Condition. Bidders who violate the marketplace rules or engage in behavior that disrupts the fair execution of the marketplace can be restricted to length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

- Failure to honor prices submitted to the marketplace.
- Breach of the terms published in Request for Quotation/NIT.
- Misrepresentation of facts.

## 6.0 Confidentiality

All information contained in this RFQ is confidential and may not be disclosed, published or advertised in any manner without written authorization from BRPL. This includes all bidding information submitted.

All RFQ documents remain the property of BRPL and all bidders are required to return these documents to BRPL upon request.

Bidders who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

#### 7.0 Contact Information

Technical / Commercial clarification, if any, as regards this RFQ shall be sought in writing and sent by post/courier to following address:

	Technical	Commercial
Contact Person	Addl.V.P (civil) Projects, BRPL. Copy to :Head Contracts	Head Contracts
Mail ID	dharam.sharma@relianceada.com	amitava.nandi@relianceada.com shilpa.suman@relianceada.com
Address	20no. Building 1 <sup>st</sup> Floor, Nehru Place New Delhi-110019.	C&M Deptt. 1 <sup>st</sup> Floor, C-Block, BSES Rajdhani Power Ltd. BSES Bhawan, Nehru Place, New Delhi-110019



#### **SECTION – II: INSTRUCTIONS TO BIDDERS**

#### A. GENERAL

BSES Rajdhani power Ltd, hereinafter referred to as "The Company" are desirous for Rate Finalization for rain water harvesting system at various office buildings, grids & other locations in BRPL as notified in this tender document.

#### 1.0 SCOPE OF WORK:

Detailed specifications/ scope of work along with BOQ for work is mentioned in **SECTION-IV** 

#### 3.0 DISCLAIMER

- 3.01 This Document includes statements, which reflect various assumptions, which may or may not be correct. Each Bidder/Bidding Consortium should conduct its own estimation and analysis and should check the accuracy, reliability and completeness of the information in this Document and obtain independent advice from appropriate sources in their own interest.
- 3.02 Neither Company nor its employees will have any liability whatsoever to any Bidder or any other person under the law or contract, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage whatsoever which may arise from or be incurred or suffered in connection with anything contained in this Document, any matter deemed to form part of this Document, provision of Services and any other information supplied by or on behalf of Company or its employees, or otherwise a rising in any way from the selection process for the work.
- 3.03 Though adequate care has been taken while issuing the Bid document, the Bidder should satisfy itself that Documents are complete in all respects. Intimation of any discrepancy shall be given to this office immediately.
- 3.04 This Document and the information contained herein are Strictly Confidential and are for the use of only the person(s) to whom it is issued. It may not be copied or distributed by the recipient to third parties (other than in confidence to the recipient's professional advisors).

#### 4.0 COST OF BIDDING

The Bidder shall bear all cost associated with the preparation and submission of its Bid and the company will in no case be responsible or liable for those costs.

#### B. BIDDING DOCUMENTS

**5.01** The Scope of Work, Bidding Procedures and Contract Terms are described in the Bidding Documents. In addition to the covering letter accompanying Bidding Documents, the Bidding Documents include:

(a) Request for Quotation (RFQ)
 (b) Instructions to Bidders (ITB)
 (c) Commercial Terms & Conditions



(d) Special conditions of contract - Section -IV

(e) Drawing -Section V

(f) Bill of Quantity/Price Format - Section IV

5.02 The Bidder is expected to examine the Bidding Documents, including all Instructions, Forms, Terms and Specifications. Failure to furnish all information required for the Bidding Documents or submission of a Bid not substantially responsive to the Bidding Documents in every respect will result in the rejection of the Bid.

#### 6.0 AMENDMENT OF BIDDING DOCUMENTS

- 6.01 At any time prior to the deadline for submission of Bids, the Company may for any reasons, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by Amendment or by issuing corrigendum to the NIT at the website of the company.
- **6.02** The Amendment shall be part of the Bidding Documents, pursuant to Clause 5.01, and the bidder shall hereby agree to have received and taken into consideration of the amendments in their submitted bids hence the same shall be binding on them.
- 6.03 In order to afford prospective Bidders reasonable time in which to take the Amendment into account in preparing their Bids, the Company may, at its discretion, extend the deadline for the submission of Bids.

#### C. PREPARATION OF BIDS

#### 7.0 LANGUAGE OF BID

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and the Company, shall be written in the English Language. Any printed literature furnished by the Bidder may be written in another Language, provided that this literature is accompanied by an English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

#### 8.0 DOCUMENTS COMPRISING THE BID

The Bid prepared and submitted by the Bidder shall comprise the following components:

- (a) Bid Form, Price & other Schedules (STRICTLY AS PER FORMAT).
- (b) All the Bids must be accompanied with the required EMD as mentioned in the Section-I against each tender.

#### 9.0 BID FORM

**9.01** The Bidder shall submit "Original" Bid Form and the appropriate Price Schedules and technical specifications enclosed with the Bidding Documents.



#### 9.02 EMD

Pursuant to Clause 1.04(i) of section-I, the bidder shall furnish, as part of its bid, an EMD as already specified in the Section-I. The EMD is required to protect the Company against the risk of Bidder's conduct which could warrant forfeiture.

The EMD shall be denominated in any of the following form:

- (a) Demand Draft/Pay Order drawn in favour of BSES Rajdhani Power Ltd, payable at Delhi.
- (b) BG from a nationalized/ scheduled bank in favour of BSES Rajdhani Power Limited valid for 6(six) months after last date of receipt of tenders.

The bidders who are not technically qualified, EMD shall be refunded after price bid opening.

Earnest money given by all the bidders who are techno commercially qualified except the lower bidder shall be refunded within 8 (Eight) weeks after award of the work.

The amount of EMD by the lowest bidder shall be returned on submission of CPBG as per tender terms.

The EMD may be forfeited in case of:

- (a) If the Bidder withdraws its bid during the period of bid validity specified by the Bidder in the Bid Form or
- (b) In the case of a successful Bidder, if the Bidder does not
  - (i) Accept the Purchase Order, or
  - (ii) Furnish the required performance security BG.
- (C) Misrepresentation of facts influencing the bidding process.

#### 10.0 BID PRICES

10.01 Bidders shall quote for the entire Scope of work with a break-up of prices for individual items. The tenderer is required, at his expense, to obtain all the information he may require to enable him to submit his tender including necessary visits to the site to ascertain the local conditions, procurement of necessary materials, labour, etc., requirements of the local/government/public authorities in such matters.

Prices quoted by the Bidder shall be "Firm" and not subject to any price adjustment during the performance of the Contract. A Bid submitted with an adjustable price will be treated as non -responsive and rejected.

#### 11.0 BID CURRENCIES

Prices shall be quoted in Indian Rupees Only.



#### 12.0 PERIOD OF VALIDITY OF BIDS

- **12.01** Bids shall remain valid & open for acceptance for a period of 120 days from the date of opening of the Bid.
- **12.02** Notwithstanding Clause 12.01 above, the Company may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and the responses thereto shall be made in writing and sent by Fax/post/courier/e-mail.

#### 13.0 ALTERNATIVE BIDS

Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the Bidding Documents.

#### 14.0 FORMAT AND SIGNING OF BID

- **14.01** The original Bid Form and accompanying documents(as specified in Clause 9.0), clearly marked "Original Bid", must be received by the Company at the date, time and place specified pursuant to Clauses 15.0 and 16.0.
- 14.02 The original copy of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to sign on behalf of the Bidder. Such authorization shall be indicated by written Power-of-Attorney accompanying the Bid.
- 14.03 The Bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the Bid.

#### D. SUBMISSION OF BIDS

#### 15.0 SEALING AND MARKING OF BIDS

- **15.01** Bid submission: One original (hard copies) of all the Bid Documents shall be sealed and submitted to the Company before the closing time for submission of the bid.
- 15.02 The Technical Documents and the EMD shall be enclosed in a sealed envelope and the said envelope shall be super scribed with Technical Bid & Commercial Terms & Conditions ". The price bid shall be inside another sealed envelope with super scribed —"Financial Bid". Both these envelopes shall be sealed inside another big envelope. All the envelopes should bear the Name and Address of the Bidder and marking for the Original. The envelopes should be super scribed with —"Tender Notice No. & due date of opening."
- 15.03 The Bidder has the option of sending the Bids in person. Bids submitted by Email/Telex/Telegram /Fax will be rejected. No request from any Bidder to the Company to collect the proposals from Courier/Airlines/Cargo Agents etc shall be entertained by the Company.



#### 16.0 DEADLINE FOR SUBMISSION OF BIDS

- **16.01** The original Bid, together with the required copies, must be received by the Company at the address specified not later than 3:15 PM on 25.08.2022.
- 16.02 The Company may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with Clause 9.0,in which case all rights and obligations of the Company and Bidders previously subject to the deadline will there after be subject to the deadline as extended

## 17.0 ONE BID PER BIDDER

Each Bidder shall submit only one Bid by itself. No Joint Venture is acceptable. A Bidder who submits or participates in more than one Bid will cause all those Bids to be rejected.

#### 18.0 LATE BIDS

Any Bid received by the Company after the deadline for submission of Bids prescribed by the Company, pursuant to Clause 16.0, will be declared "Late" and rejected and returned unopened to the Bidder.

#### 19.0 MODIFICATIONS AND WITHDRAWAL OF BIDS

19.01 The Bidder is not allowed to modify or withdraw its Bid after the Bid's submission.

#### E. EVALUATION OF BID

#### 20.0 PROCESS TO BE CONFIDENTIAL

Information relating to the examination, clarification, evaluation, comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence the Company's processing of Bids or award decisions may result in the rejection of that Bidder's Bid.

#### 21.0 CLARIFICATION OF BIDS

To assist in the examination, evaluation and comparison of Bids, the Company may, at its discretion, ask the Bidder for a clarification of its Bid. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted.

## 22.0 PRELIMINARY EXAMINATION OF BIDS / RESPONSIVENESS

- 22.01 Company will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in order.
- 22.02 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and



quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

- **22.03** Prior to the detailed evaluation, Company will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.
- **22.04** Bid determined as not substantially responsive will be rejected by the Company and/or the Company and may not subsequently be made responsive by the Bidder by correction of the non -conformity.

#### 23.0 EVALUATION AND COMPARISON OF BIDS

- 23.01 The evaluation of Bids shall be done based on the delivered cost competitiveness basis.
- **23.02** The evaluation of the Bids shall be a stage-wise procedure. The following stages are identified for evaluation purposes: In the first stage, the Bids would be subjected to a responsiveness check. The Technical Proposals and the Conditional ties of the Bidders would be evaluated.

Subsequently, the Financial Proposals along with Supplementary Financial Proposals, if any, of Bidders with Techno-commercially Acceptable Bids shall be considered for final evaluation.

- **23.03** The Company's evaluation of a Bid will take into account, in addition to the Bid price, the following factors, in the manner and to the extent indicated in this Clause:
  - (a) Work completion schedule
  - (b) Conformance to Qualifying Criteria
  - (c) Deviations from Bidding Documents

Bidders shall base their Bid price on the terms and conditions specified in the Bidding Documents. The cost of all quantifiable deviations and omissions from the specification, terms and conditions specified in Bidding Documents shall be evaluated. The Company will make its own assessment of the cost of any deviation for the purpose of ensuring fair comparison of Bids.

**23.04** Any adjustments in price, which result from the above procedures, shall be added for the purposes of comparative evaluation only to arrive at an "Evaluated Bid Price." Bid Prices quoted by Bidders shall remain unaltered.

## F. AWARD OF CONTRACT

#### 24.0 CONTACTING THE COMPANY

**24.01** From the time of Bid opening to the time of contract award, if any Bidder wishes to contact the Company on any matter related to the Bid, it should do so in writing.



**24.02** Any effort by a Bidder to influence the Company and/or in the Company's decisions in respect of Bid evaluation, Bid comparison or Contract Award, will result in the rejection of the Bidder's Bid.

## 25.0 THE COMPANY 'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

The Company reserves the right to accept or reject any Bid and to annul the Bidding process and reject all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Company's action.

#### 26.0 AWARD OF CONTRACT

The Company will award the Contract to the successful Bidder whose Bid has been determined to be the lowest-evaluated responsive Bid, provided further that the Bidder has been determined to be qualified to satisfactorily perform the Contract. Company reserves the right to award order to other bidders in the tender, provided it is required for progress of project & provided he agrees to come to the lowest rate.

## 27.0 THE COMPANY 'S RIGHT TO VARY QUANTITIES

The Company reserves the right to vary the quantity i.e. increase or decrease the numbers/quantities without any change in terms and conditions during the execution of the Order.

## 28.0 LETTER OF INTENT/ NOTIFICATION OF AWARD

The letter of intent/ Notification of Award shall be issued to the successful Bidder whose bids have been considered responsive, techno-commercially acceptable and evaluated to be the lowest (L1). The successful Bidder shall be required to furnish a letter of acceptance within 7 days of issue of the letter of intent /Notification of Award by Company.

#### 29.0 CORRUPT OR FRADULENT PRACTICES

- **29.01** The Company requires that the Bidders observe the highest standard of ethics during the procurement and execution of the Project. In pursuance of this policy, the Company:
  - (a) Defines, for the purposes of this provision, the terms set forth below as follows:
    - (i) "Corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and
    - (ii) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Company, and includes collusive practice among Bidders (prior to or after Bid submission) designed to



establish Bid prices at artificial non -competitive levels and to deprive the Company of the benefits of free and open competition.

- (b) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract.

**29.02** Furthermore, Bidders shall be aware of the provision stated in the Terms and Conditions of Contract.



## SECTION - III: TERMS AND CONDITIONS

## **1.0) DEFINITIONS:**

The following terms shall have the meaning hereby assigned to them except where the context otherwise requires:

- a. Company shall mean BSES Rajdhani Power Limited, having its office at BSES Bhawan, Nehru Place, New Delhi 110019 and shall include its authorized representatives, agents, successors and assigns.
- b. Engineer in Charge (EIC) shall be the person authorized by the Company or from time to time duly appointed by the Company for the purpose of the contract.
- c. Contractor shall mean the successful Tenderer / vendor to whom the contract has been awarded.
- d. Sub-Contractor shall mean the persons, firm or company to whom any part of the contract has been sublet by the Contractor with the prior written consent of the Company.
- e. Contract, shall mean and include the general terms and conditions, technical specifications, drawings, priced bill of quantities, schedule of rates and prices, if any, tender, Company's letter of intent, the work order and any correspondence letters concerned to the tender, when completed.
- f. Site, shall mean the actual place in over or under which, permanent works or temporary works is to be executed by the Contractor.
- g. Contract Price shall mean the sum named in the letter of acceptance, subject to such additions thereto and /or deductions there from as may be made under the provisions hereinafter contained.
- h. Temporary Works shall mean all temporary works of every kind required in or about the execution or maintenance of the works.
- i. Permanent Works shall mean the permanent works to be executed and maintained in accordance with the Contract.
- j. Specifications shall mean specification referred to in the tender and any modification thereof or addition thereto as may, from time to time be instructed by the Company/ the Structural Consultant.
- k. Drawings shall mean the drawings issued along with this tender and any modification in such drawings issued by the Structural Consultant/ the Company from time to time.



l. Approved, shall mean approved in writing by Company including subsequent written confirmation of previous verbal approval and "approval" means approval in writing by Company, including as aforesaid.

#### m. Language and Measurement:

The order issued to the contractor by the company and all correspondence and documents relating to the order placed on the contractor shall be written in English language.

Metric System shall be followed for all dimensions, units etc., the mode of measurement shall be as per IS 1200.

#### n. Cost:

The word "Cost" shall be deemed to be all inclusive, firm price basis and also including overhead costs and all taxes whether on or off the site.

#### o. ENGINEER IN-CHARGE:

The term "Engineer In-Charge" shall mean the Company's nominated representative for the purpose of carrying out the work. For this order Engineer in Charge shall be Addl.V.P (civil) Projects, BRPL or his nominated representative.

#### 2.0) PERFORMANCE BANK GUARANTEE:

- 2.1) The contractor to furnish Security Performance Bank Guarantee issued on behalf of Contractor in the prescribed format within fifteen (15) days from the date of issuance of Work Order for due performance of this Contract. The same shall be released after completion of the job.
- 2.2) The security Performance Bank Guarantee shall be of five percent (5%) of total contract value and shall be valid till completion of contract, plus three (3) months towards claim period.
- 2.3) Performance Bank Guarantee shall be issued from any nationalized bank as per Company format.
- 2.5) The Company shall reserve the right to invoke the performance bond unconditionally and without recourse to the Contractor, if there is failure to perform any part of the Contract for whatsoever reason. This clause is pertaining to performance of contractual obligations and the decision of Company shall be final in this regard.
- 2.6) In the event, in Company's sole judgment, if the Contractor has fulfilled all its obligations under this Contract, Company shall release the performance bank guarantee without interest, within seven (7) days from the last date up to which the performance bank guarantee is to be kept valid or if it is assessed by the Company that Contractor has not fulfilled its obligation,



then the performance bank guarantee shall be extended by the Contractor till that period as requested by the Company.

## **3.0) TERMS OF PAYMENT:**

## 3.1) Payment for works

3.1.1) 90% payment against completion of work on pro-rata basis within 30 days on submission of bills duly certified by Engineer-In-Charge. For Certification of work completion our EIC shall be Addl.V.P (civil) Projects, BRPL or his nominated representative. Running bills can be processed for maximum 90% amount of the order value.

No payment shall be retained for quality control clearance. However, QC department will inspect the site & their clearance is required for declaration of 'completion of work'.

- 3.1.2) Balance 10% of payment would be retained for performance guarantee against defect liability which would be released after 12 months after the completion of the project or on submission of equivalent performance bank guarantee.
- 3.2) After verification by the EIC of the running bills complete along with measurement sheets and required documents submitted by the Contractor, an interim certificate for 80% payment shall be issued stating the amount due to the Contractor taking into account:
  - a) All the works executed under the instructions, acceptance and certified by the EIC and based on the rates and terms of work order/ Contract.
  - b) Payments already made or certified.
  - c) Recovery of materials, water, electricity etc. supplied by Company.
  - d) Recovery of advance payments if any, retention money and any other dues to be recovered from the Contractor under the Contract.
  - e) Contractor shall ensure that all wages related payment are made to the employees in ECS / NEFT / RTGS mode only. (No payment by cash / cheque is allowed).
- 3.3) The Contractor shall submit the final bill along with duly checked final measurements and completion certificate towards the successful completion of the Contract as certified by the EIC.
- 3.4) Payment of final bill shall not be considered conclusive evidence as to the sufficiency of any work or materials, to which it relates, nor shall it relieve as to the sufficiency of work or materials which it related, nor shall it relieve the Contractor from his liabilities arising from any defects, which become apparent during the Defects Liability Period.

## 4.0) TAXES & DUTIES:

Prices are inclusive of all taxes and duties except GST leviable by State or Central Government or local bodies including any duties which may be levied by the Govt. during



currency of this order. IT as per applicable rate will be deducted from your bills as Tax Deduction at Source (TDS).

However GST as applicable shall be paid extra on submission of GST Registration and self declaration on your letter head stating that you have deposited/or will deposit the Tax as per the applicable GST laws.

Any statutory variations i.e. increase/decrease in Taxes / Duties introduces by central Govt. / State Govt. of shall be reimbursed/recovered to/from Contractor against documentary evidence and proof.

- 4.1) As Per Notification No. 39/2021 Central Tax dated 21st December, 2021 w.e.f 01/01/2022 registered person (ie, Recipent/Purchaser) can avail tax credit on those invoices only which have been reflected in GSTR 2A or GSTR2B (it means 100% matching of invoice is required). Also, GST has to be deposited by Supplier/Contractor by filing of GSTR-1 and GSTR-3B.
- 4.2) In view of above, if the same is not complied with by the supplier/contractor and the Recipient/Purchaser is not in position to avail / utilize Input Tax Credit due to non-compliance or non-filing of GSTR-1 and GSTR-3B for the month/quarter (as applicable) in which the supply was made, then Recipient/Purchaser has right to hold 100% GST amount from next payment due of the subsequent month till the time default is not cured.
- 4.3) For releasing of the payment kept on hold on account of GST supplier shall submit payment proof i.e GST Portal screenshot reflecting name of Recipient/Purchaser alongwith GSTR-1 and GSTR-3B for month/quarter (as applicable) in which the same has been discharged. Payment shall not be released, till the time proof of payment of GST as mentioned above is not submitted.
- 4.4) further, the recipient/purchaser shall also be entitled to recover any financial loss incurred (including tax, interest and penalty) due to non-compliance or non-filing of GSTR-1 and GSTR-3B by the supplier.
- 4.5) In case where delivery of goods is being made on FOR site basis, the Supplier is responsible to comply with rules applicable for E-way bill. Any violation in provision of E-way Bill will attract penalty and seizure of Transit Material. Any Penalty and Pre-Deposit due to violation of rules/provision shall be paid and borne by Supplier. Also, Supplier is responsible for releasing of goods from Authority whether CGST/SGST. Delay in supply due to seizure of goods shall attract liquidated damages as per Order / Contract provisions.

#### 5.0) TENDER RATES & PRICES ALL INCLUSIVE:

5.1) The prices/rates quoted for each item/work in the BOQ shall be inclusive of all direct and indirect costs, insurances, statutory charges, statutory fees, royalties, taxes on quarried items, duties, only GST shall be shown separately. i.e. incidental charges, cost of complying to other local authorities etc., and any other costs that may be involved in completing the works as required, fulfillment of all obligations under the Contract and to the satisfaction of the Company.



- 5.2) The rates quoted for each item/work in the BOQ by the Contractor shall remain firm until the successful completion of the Contract as certified by the Engineer In Charge including any extension (s) of time that may have been granted to the contractor under the scope of this Contract and shall not be subject to escalation on any account. The rates quoted for each item/work in the BOQ shall be deemed to include and cover all cost, expenses and liabilities to every description and all risk of every kind to be taken in executing, completing and handing over the work to the satisfaction of the Company.
- 5.3) The Contractor shall on his own and at his own expense obtain all necessary permits and permissions to execute the job, including required registrations, agent's etc. to perform its obligation under this Contract and shall indemnify the Company in all related matters.

## 6.0) MATERIALS & WORKMANSHIP:

## 6.1) Quality Assurance Programme:

The Contractor before the start of work shall submit for approval a quality assurance programme to the EIC indicating measures that he proposes to implement to ensure that the quality of work shall be in accordance with requirements, specifications laid down in the Contract. The Contractor shall strictly adhere to this programme and any failure attributable to the Contractor shall attract the penal provisions determined by the EIC.

## 6.2) Quality of materials and workmanship and tests:

## 6.2.1) TEST CERTIFICATE & QUALITY ASSURANCE:

The Contractor shall procure all equipment from genuine sources as approved by the Company & as per Company specifications.

- (a) For Detailed specifications of construction materials, petty electrical items contractor shall follow Annexure-VI attached with this tender document or the applicable IS codes/CPWD specifications.
- (b) Contractor shall submit Laboratory testing report for the applicable tests as per the instructions of EIC/Quality Dept.

All testing should be done through following labs only:

**SOUTH Circle** 

- 1. NSIZ Material Testing Services, Okhla
- 2. MSME Testing Centres, Okhla

**WEST Circle** 

- 1. RK Inspection & Testing Services (Mayapuri Industrial Area)
- 2. Advance Inspection & Testing Lab (Mayapuri Industrial Area)

Sampling to be done in presence of QA representative/EIC.

The cost for testing shall be borne by the contractor and no additional payment shall be made by BRPL in this regard.



(c)Contractor shall submit duly approved Quality Check sheets along with final bill and the same shall be integral part of final Quality Clearance. QA Check sheets format attached with this tender document as Annexure-VII.

6.2.2) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer-in-Charge's instructions and shall be subjected from time to time to such tests as the Engineer-in-Charge may direct at the place of manufacture or fabrication or on the site or at such other places as may be specified in the Contract, or at all or any of such places. The Contractor shall provide at no additional cost to the Company such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the works for testing as may be selected and required by the EIC.

## 6.3) Cost of samples and tests:

All samples shall be supplied to Company if required by the Contractor at his own cost. The Contractor shall take approval of the EIC prior to start the work for all samples of materials including mix design of concrete to be utilized for the works to be executed. The mix design of concrete, testing of reinforcement steel and structural steel shall be carried out by an external agency approved by the Company. The cost of all such tests carried out by the external agencies or consultants shall be borne by the Contractor at his own cost and are deemed to be included in the unit rates quoted in the BOQ.

## 6.4) Sampling and Testing Concrete on Site

The Contractor can also have cubes tested in an approved laboratory in lieu of a testing machine at site but at his own cost and with the prior written consent of the Company.

## 6.5) <u>Inspection of operations</u>:

The Engineer-in-Charge/QC department or any person authorized by them shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the Contractor shall afford every facility for and every assistance in or in obtaining the right to such access.

## 6.6) Examination of work before covering up:

No work shall be covered up or put out of view without the approval of the EIC or his representative and the Contractor shall afford full opportunity to the EIC or his representative to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the EIC or his representative whenever any such work or foundations is or are ready or about to be ready for examination and the EIC or his representative shall, without unreasonable delay, unless he considers it unnecessary, attend for the purpose of the examining such foundations.



## 7.0) MOBILISATION:

The Contractor shall have to mobilize their Plants & Equipments, Tools & Tackles, Work Labour Force, project team including Engineering Staff and materials required for execution of work within seven days (7) of receipt of LOI or Work Order whichever is earlier.

## 8.0) DEFECT LIABLITY PERIOD:

The defects liability period shall be 12 (Twelve) calendar months from the date of the successful completion of the contract as certified by the EIC including any extension (s) of time that may have been granted to the Contractor under the scope of this Contract. In case any defect in the work is observed during the defect liability period, the same shall be rectified by the Contractor at own cost including supply of all materials, labour, equipments and any other appliance in this regards (as per prevailing rates) for the fulfillment of all obligations under the Contract and to the satisfaction of the Company.

#### 9.0) DAMAGE OF PRIVATE PROPERTIES / LIFE:

The Contractor shall be responsible for all risk to the works to be performed under its obligation under the Contract and for trespassers, and shall make good at his own expenses all losses and damages whether to the works, themselves, or to any other property of the company or the lives, persons or property of other forms, whatsoever cause, in connection with the works, although all reasonable and proper precautions may have been taken by the contractor, and in case Company is called upon to make good any such costs, loss or damages or to pay compensation to any person(s) sustaining damages by reason of any act, or any negligence or omission on the part of the Contractor, the amount of any costs or charges (including costs and charges towards legal proceedings) which the Company may incur in reference thereto, shall be charged to the Contractor. The Contractor shall reimburse such costs immediately to the Company.

## 10.0) APPROACHES:

The Contractor shall have to make his own arrangements for all approaches to the site required for transporting his men and material to site of work. The Company shall entertain no payment or claims on account of "Making of Approaches".

#### 11.0) SITE OFFICE AND SITE FACILITIES:

The Contractor shall also make his own arrangement for the accommodation/conveyance requirements for its staff. He shall be provided at site the adequate open space for construction of site store for storing the materials, tools, tackles etc. All the Contractor's storage will be within the site premises in a manner affording convenient access for identification and inspection at all times. The storage of arrangements shall be subject to IS: 4082. All the incoming and outgoing materials, equipment, tools, tackles and any other items



related to said work shall be entered into the register kept for this purpose and shall be in the safe custody of Contractor, however company does not hold any responsibility for any loss or damage caused to Contractor's material etc.

- 11.1) The Contractor shall strictly control the labour so that the site is not polluted, made dirty or littered with debris, wastes or the likes.
- 11.2) Any person, labour found creating mess or litter or pollution shall be removed from the site immediately at the Contractors cost and shall also be subject to penalty at the discretion of the EIC.

#### 11.3) Water & Power:

Water and Electricity Power shall be arranged by the Contractor at his own.

It shall be the responsibility of the Contractor to make arrangements at his own expense for supply of water for construction and other uses. The Contractor can install pumps, construct temporary storage tanks and distribute the water to various points in works site as required. The Contractor at his own expense shall make arrangement for operating and maintaining pumps & distribution lines, connections, which are installed by him for water arrangement.

## 11.4) Watching & Lighting:

The Contractor shall in connection with the works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary for the protection of works, or for the safety and convenience of the public or others. The care, housekeeping and safety of the materials and works within the works site shall be sole responsibility of the Contractor.

#### 12.0) TIME & PERIOD:

Time is the essence of this Project and the Project shall be completed within 120 days from the date of issue of Letter of Intent or Work Order whichever is earlier, including mobilization period and monsoon.

The Contractor shall within 7 (seven) days of the issue of letter of intent or work order whichever is earlier provide a detailed execution program regarding the Project taking into account the following including restricted working hours due to residential area for the approval of the Company:

The Contractor shall carryout the works as per the approved schedule / program of work.

## 13.0) LIQUIDATED DAMAGES:

In the event of the Contractor's failure to complete the work or any part thereof within the Contract Period including the interim milestone dates, the Contractor shall be liable to pay the Company liquidated damages calculated at the rate of 1 (one) % of the contract value per



week of delay or part thereof subject to a maximum of 10 (ten) % of the contract value, for the period between the Date for Contractual Completion and the Date of Actual Completion as certified by the EIC.

The Company may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies in its possession, which are due or which may become due to the Contractor. The levy payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works on time or from any other part of his obligation and liabilities under the Contract. Once the maximum is reached, the Company reserves the right for termination of contract without any liabilities to the Company.

In the event of an extension of time being granted by the EIC, in writing for the Completion of the works, this clause shall be applicable after the expiry of such an extended period.

## 14.0) EXTENSION OF TIME LIMIT & TIME OVER RUN:

If delay is not attributable to the Contractor, the extension of time may be considered at the discretion of the Company without prejudice to the right of the Company for recovery of liquidated damages. This is also subject to the Contractor having taken sufficient precautions to mitigate the delay and submitted to the Company a full-detailed particular of any extension of time to which he may consider himself entitled within 10 days after such work has been commenced or such circumstances have arisen. The extension of time may be granted but without any financial increment in the contract price to the Company.

#### 15.0) RELEASE OF INFORMATION AND CONFIDENTIALITY:

The Contractor shall not communicate or use in advertising, publicity, sales release or in any medium photograph or reproduction of the works under this contract, or description of the site, dimensions, quantity or any other information concerning the works unless prior written permission is obtained from Company. The Contractor shall keep all the information obtained directly or indirectly through appointment of this contract confidential and shall not reveal the same to any other party without the prior written permission of the Company. The technical information, drawing and other related documents forming part of order and the information obtained during the course of execution under this order shall be the Company's exclusive property and shall not be used for any other purpose except for the execution of the order. The technical information, drawings, records and other documents shall not be copied, transferred, or divulged and/or disclosed to third party in full/part, not misused in any form whatsoever except to the extent for the execution of this order.

This technical information, drawing and other related documents shall be returned to the Company with all approved copies and duplicates including drawing/plans as are prepared by the Contactor during the execution of this order, if any, immediately after they have been used for agreed purpose.

In the event of any breach of these provisions, the contractor shall indemnify the Company against any loss, cost or damage or claim by any party in respect of such breach.



## 16.0) SITE REPRESENTATIVE, SITE SUPERVISION AND ADVANCE INTIMATION:

- 16.1) The Contractor shall have to appoint and authorize a Site In Charge/ Project Manager (PM) along with its project team, who shall be available always at site till the completion of the contract as certified by the Company's Engineer In Charge (EIC).
- 16.2) The Contractor shall be responsible for supervising the works by employing competent and experienced engineers and support teams to inspect the work and check the quality of work to ensure that the work is carried out in accordance with the drawings, specifications and instructions of the EIC. Such inspection and supervision shall not relieve the Contractor from any of his obligations towards use of material, workmanship, sequence of working and completion of project as per the stipulated period.
- 16.3) On receipt of the LOI or Work Order whichever is earlier, the Contractor shall furnish to the Company, for approval, the proposed site setup with list of Engineers, Supervisors and other staff to be deployed by him with their dates of joining.
- 16.4) The Contractor's Project Manager shall obtain the written approval and instructions from the EIC prior to commencement of any works at site. The PM shall give written advance intimation to EIC for approval of all activities including deployment of resources, procurement of materials, concrete pours etc.

#### 17.0) AWARD / SUBLETTING OF CONTRACT:

The Company reserves the right to reduce/ award consolidated order or separate orders for one or more parts against above work.

The Contractor will not be permitted to sublet his job in whole or Part.

#### **18.0) SITE LOCATION:**

The Contractor must see the site of the work, surrounding locality, local traffic rules, site approaches etc. carefully. No claim of any sort shall be entertained on account of any site conditions. If any approach from main road is required or existing approach is to be improved and maintained, for cartage of materials by the contractor, the same shall be provided, improved and maintained by him at his own cost.

#### 19.0) SAFETY REGULATIONS:

- 19.1) The Contractor shall ensure adequate safety precautions at site as required under the law of the land and shall be entirely responsible for the complete safety of their workmen as well as other workers at site and premises.
- 19.2) The Contractor shall indemnify the Company from any consequence arising due to contractor's failure in respect to safety compliance.



- 19.3) First Aid facilities at easily accessible place shall be provided by the Contractor at his own cost as per provisions of Labour act or as advised by the Company wherever works are carried out.
- 19.4) All critical injuries shall be reported promptly to the Company. The report shall cover type, nature, cause, physician's report and actions for prevention of those types again.
- 19.5) To ensure effective enforcement of the rules and regulations relating to safety precautions, arrangements made by the Contractor shall be open to inspection by the Company.
- 19.6) The cost so incurred by the Contractor in providing for safety standards and requirements as above shall be deemed to be included in the rates quoted for various items under the scope of Contract and no extra amounts shall be payable to the contractor on this account.
- 19.7) The Contractor shall furnish to the Company within seven days from issue of LOI or Work Order whichever is earlier, for approval of Company, the proposed safety programme on how it intends to implement the safety procedures and precautions to ensure that the site is accident free.

## 20.0) CO-ORDINATION WITH OTHER AGENCIES:

The Contractor shall execute the work in strict consultation with the Company and in coordination with other agencies appointed by the Company who will also simultaneously execute the components of work allotted to them.

The Contractor at his own cost shall also extend their site facilities, plant and equipments on written request of the Company/ EIC for use by other contractors appointed by the Company.

#### 21.0) MAINTENANCE OF WORK:

The Contractor shall maintain in perfect condition all works executed till the completion of the entire work allotted to him. Where phased handing-over of completed portion of the work is required, the provisions mentioned herein will apply to each phase.

## **22.0) TESTING OF MATERIALS:**

All materials received at site shall be accompanied by the Test certificate of the manufacturer. The Engineer-In-Charge reserves the right to instruct any material to be further tested in an approved laboratory for which the Contractor shall make no additional claims. Where ever test requirements are not specified in the specifications, relevant IS code of practice shall govern.

#### 23.0) STATUTORY OBLIGATIONS:



The Contractor shall take all steps as may be necessary to comply with the various applicable laws/rules including the provisions of contract labour (Regulation & Abolition Act) 1970 as amended, Minimum wages Act, 1984, Workman Compensation Act, ESI Act, PF Act, Bonus Act and all other applicable laws and rules framed there under including any statutory approval required from the Central/State Governments, Ministry of Labour. Broadly, the compliance shall be as detailed in **ANNEXURE I** enclosed.

Before issue of Work order it would be mandatory for the Contractor to furnish the Company the permanent PF code no, ESI registration, registration under W.C.T Act.

The bidder for carrying out any construction work, must get themselves registered with the Registering Officer under Section 7 of the Building and Other Construction Workers Act, 1996 and rules made thereto by the concerned State Govt and submit certificate of Registration, issued from the Registering Officer of the concerned State Govt. (Labour Dept.). As per this Act, the tenderer shall be levied a cess @1% of cost of construction work, which would be deducted from each bill. Cost of material, when supplied under a separate schedule item, shall be outside the purview of cess The Tender shall also comply with all provisions of the said Act applicable to him.

## **24.0) MEASUREMENT OF WORK:**

Unless specifically mentioned elsewhere, the work shall be measured for payment as per the provisions of IS 1200.

#### 25.0) ENVIRONMENTAL, HEALTH & SAFETY PLAN:

Contractor will ensure that the Environment, Health & Safety (EHS) requirements are clearly understood and faithfully implemented at all levels at site as per instruction of Company. Contractors must comply with these requirements:

- a) Comply with all of the elements of the EHS Plan and any regulations applicable to the work.
- b) Comply with the procedures provided in the interests of Environment, Health and Safety.
- c) Ensure that all of their employees designated to work are properly trained and competent.
- d) Ensure that all plant and equipment they bring on to site has been inspected and serviced in accordance with legal requirement and manufacturer's or suppliers' instructions.
- e) Make arrangements to ensure that all employees designated to work on or visit the site, present themselves for site inspection prior to commencement of work.
- f) Provide details of any hazardous substances to be brought onsite.
- g) Ensure that a responsible person accompanies any of their visitors to site.

All Contractor/workers are accountable for the following:



- 1. Use the correct tools and equipment for the job and use safety equipment and protective clothing supplied, e.g. helmets, goggles, ear protection, etc. as required/instructed.
- 2. Keep tools in good condition.
- 3. Report to the Supervisor any unsafe or unhealthy condition or any defects in plant or equipment.
- 4. Develop a concern for safety for themselves and for others.
- 5. Prohibit horseplay.
- 6. Not to operate any item of plant unless they have been specifically trained and are authorized to do so.
- i. ID CARD: No contractor will issue any ID cards to their staff on their own .All ID Cards for the workforce will be issued by BRPL Security ID Card Cell only. Contractors should maintain the records of Identity Cards of their employees and whenever any employee quits / is removed then his/her Identity card should be collected & submitted to BRPL Security ID Card Cell. Penalty will be imposed on the vendor in case of violation of the above rule.Contractors shall submit the detail list of the employees that they are going to be hire to BRPL Security before start of the contract.

BRPL may review/revise ID card Policy including penalty which would be implemented during the tenure of contract. This shall be at the sole discretion of BRPL and contractor shall fully comply with this at every stage.

# CLEANLINESS & PRECAUTIONS TO BE TAKEN WHILE DOING WORK AT SITE TO PREVENT DUST POLLUTION:

All debris shall be removed and disposed of at assigned areas on daily basis. Surplus excavated earth shall be disposed of in an approved manner. In short, the contractor shall be fully responsible for keeping the work site clean at all times. In case of non-compliance, company shall get the same done at Contractor's risk and costs.

While carrying out any civil work including road/ pit digging, plinth/ fence making, road restoration etc contractor shall adhere to below mentioned guidelines.

- 1. No construction material/debris shall be stored on metalled road.
- 2. Wind breakers of appropriate height on all sides of ear marked area using CGI sheets shall be raised to ensure that no construction material dust fly outside ear marked area.



- 3. The construction material i.e. coarse sand, stone aggregates, excavated earth, cement and any other material to and from the site shall be transported under wet and covered condition to ensure their non-slippage en-route to avoid air contamination.
- 4. The contractor shall provide mask and helmet to every worker working on the construction site and involved in loading/unloading and carriage of construction material and construction debris to prevent inhalation of dust particles.
- 5. Over loading of vehicles shall be strictly prohibited
- 6. The construction material at site shall be stored under wet and covered condition.
- 7. The dumping sites for temporarily storing the excavated earth shall be properly levelled, watered and rehabilitated by plantation to avoid flying of dust.
- 8. The worker at the site shall be sensitized to adopt / observe the dust controlled measures in true spirit.
- 9. If any C&D waste is generated at site the same will be transported to the C&D waste site only and the record for the same will be maintained by the agency.
- 10. Wet jet in grinding and stone cutting is being permitted at site.
- 11. The necessary record for dust control is being maintained by the department on day to day basis and being monitored regularly.

The Execution vendors shall be responsible for all the preventive and protective environmental steps as per guidelines. Any violations from the above guidelines have been viewed very seriously by the authorities. Concerned agency is liable for the penalties / other action by the authorities, The Agency shall indemnify BRPL from all liabilities on this account.

#### **26.0) GENERAL CONDITIONS:**

- 26.1) No idle labour charges will be admissible in the event of any suspension of work by the Company or stoppage caused in the work due to any other reason resulting in contractors' labour or equipments being rendered idle at any time during the duration of contract.
- 26.2) In the event of any ambiguity, the work order shall supersede LOI & all other correspondence and conditions of contract if furnished earlier.
- 26.3) If the Contractor needs to carry out any work or rework due to change in drawings or structural consultants instructions, the Contractor shall take the prior permission of the Company/ EIC before commencing such works. The Contractors quoted price shall include such rework or incidentals due to quantity variation, or methodology to carry out the works, wherever required and shall not be entitled for any extra payment or extension of time.



- 26.4) The Company reserves the right to claim and recover from the security deposit the damages/ losses incurred due to non-compliance to work, delay in the progress of work by the Contractor as agreed upon. The decision of the Company in this regard shall be final and binding.
- 26.5) The Contractor agrees to abide by other terms and conditions stipulated by the Company from time to time in addition to the above for the proper and satisfactory performance of their obligations under this Contract.

#### 27.0) INSURANCE:

The Contractor at its own cost shall also arrange, secure and maintain the following insurance covers:

#### **27.1) WORKMEN COMPENSATION:**

The Contactor shall take at his own cost insurance policy under the Workman Compensation Act to cover such workers who are not covered under ESI and PF by the CONTRACTOR however engaged to undertake the jobs covered under this order and a copy of this insurance policy will be given to Company for reference and records. This insurance policy shall be kept valid at all times. In case there are no worker involve other than those who are covered under ESI and PF by the CONTRACTOR, the CONTRACTOR shall certify for the same.

The CONTRACTOR shall keep the COMPANY indemnified at all times, against all claims of compensation under the provisions of Workmen Compensation Act 1923 as amended from time to time or any compensation payable under any other law for the time being involving workmen engaged by the CONTRACTOR in carrying out the job involved and against costs and expenses, if any, incurred by the COMPANY in connection therewith and without prejudice to make any recovery.

The COMPANY shall be entitled to deduct from any money due to or to become due to the CONTRACTOR, moneys paid or payable by way of compensation as aforesaid or cost or expenses in connection with any claims thereto and the CONTRACTOR shall abide by the decision of the COMPANY as to the sum payable by the CONTRACTOR under the provisions of this clause.

#### **27.2 THIRD PARTY INSURANCE:**

Before commencing the execution of the work the CONTRACTOR shall take third party insurance policy at his own cost to insure against any damage or loss or injury which may occur to any property or to any person or any employee or representative of any outside Agency/ the COMPANY engaged or not engaged for the work of the COMPANY, by or arising out of the execution of the



work or temporary work or in carrying out of this Agreement. For third party insurance policies, the contractor shall be responsible for settlement of claims with the underwriters without any liability on the purchaser / owner and will arrange replacements / rectification expeditiously without a waiting settlement by insurance claim at contractor's own cost.

#### 27.3 TERM INSURANCE COVER FOR LOSS OF LIFE

Before commencing the execution of the work the CONTRACTOR shall take TERM INSURANCE POLICY for the staff engaged by them for this work to insure against any loss of life. The policy shall have coverage of Rs. 10 Lakhs. The Contractor shall be responsible for on the spot same day claim settlement with the victim's legal heirs without waiting for settlement by insurance claim without any liability on BRPL.

The premium amount for such life cover policy shall be borne by the contractor. The contractor shall furnish copy of policy when demanded by BRPL.

## 28) GUIDELINES FOR WORKING IN COVID19 SITUATION:

Looking to the present Covid19 situation, contractor shall ensure that the work carried out in the field by their staff shall be as per the guidelines issued by BRPL & MHA from time to time. Further, the contractor shall be required to provide to their staff masks/ sanitizers/ all PPE required for working in Covid19 situation. The contractor shall further ensure to work as per the guidelines of BRPL Engineer in charge.

#### 29.0 TERMINATION OF CONTRACT:

If in case the Contractor;

- a) becomes bankrupt or insolvent, has a receiving order issued against it compounds with its creditors, or if the Contractor is a corporation a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction) a receiver is appointed over any part of its undertaking or assets or if the Contractor takes or suffers any other analogous action in consequence of debt.
- b) Assigns or transfers the Contract or any right or interest therein in violation of the provision of given work to sub-contractor.
- c) In the judgment of the Company, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this Sub-clause

"Corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in Contract execution.



"Fraudulent practice" means misrepresentation of facts in order to influence a procurement process or the execution of a Contract detriment to Company and includes collusive practice among Tenderers (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition.

- d) Has abandoned or repudiated the Contract
- e) Has without valid reason failed to commence work on the Facilities promptly or has suspended days after receiving a written instruction from the Company to proceed.
- f) Persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause.
- g) Refuses or is unable to provide sufficient materials, services or labour to execute and complete the Facilities in the manner specified in the program furnished and at rate of progress that give reasonable assurance to the Company that the Contractor can attain completion of the Facilities by the time for completion.

The Company may, without prejudice to any other rights it may possess under the Contract, give a notice to the Contractor stating the nature of the default and requiring the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice the Company may terminate the Contract forthwith by giving a notice of termination to the Contractor.

In case, Contractor fails to carry out the work as specified in the schedule or left in between, it will be got done through any other agency at contractors' risk and cost, the same shall be recovered from the amount payable to the Contractor.

In case the Contractor fails to start work / to carry out the work within the specified period i.e. mutually agreed schedule and the work is not found to be satisfactory, the Company reserves the right to terminate the contract, at any stage without assigning any reasons thereof. In such case, the Company shall have the right to forfeit the entire / part amount of EMD / Security Deposit.

## **Termination by Employer for Convenience**

The Employer shall, in addition to any other right enabling it to terminate the Contract, have the right to terminate the Contract at any time by giving a written notice to the Contractor. The Contract shall stand terminated on receipt of such notice but such termination shall be without prejudice to the rights of the Parties accrued on and before the date of termination.

#### **30.0) SETTLEMENT OF DISPUTES/ ARBITRATION:**

30.1) To the best of their ability, the parties hereto shall endeavor to resolve amicably between themselves all disputes arising in connection with this work order. If the same remain unresolved



within thirty (30) days of the matter being raised by either party, either party may refer the dispute for settlement by arbitration. The arbitration shall be undertaken by sole arbitrator jointly appointed by the parties. In case failure by the parties in appointing the sole arbitrator, the same shall be appointment under the provisions of Arbitration and Conciliation Act 1996 and the award of the said sole arbitrator shall be final and binding upon the parties. The arbitration proceeding shall be conducted in accordance with the provisions of the Indian Arbitration & Conciliation Act, 1996 and the venue of such arbitration shall be in the city of Delhi only. The language of Arbitration shall be English.

## 31.0) QUANTITIES IN THE BOQ:

Company reserves the right of deletion of any item in full or in part or to reduce, increase or to modify the Scope of Work. The rates quoted by the Contractor shall remain firm even if there are any variations in the quantities mentioned in the Bill of Quantities, or due to any idling of resources due to non availability of fronts, details, etc.

#### **32.0) VARIATIONS AND EXTRA ITEMS:**

- 32.1) The Contractor shall carry out and complete the works in every respect in accordance with this Contract and in accordance with the directions and to the satisfaction of the Engineer in charge.
- 32.2) The Engineer In Charge may, at his discretion, from time to time, issue further drawings and/ or written instructions, details, directions and explanations which are herein after referred to as "EIC's Instructions" in regard to:
  - a) The variation or modification of the design, quality, specification or quantity of works or the omission or substitution of any work.
  - b) The timing or sequencing of work.
  - c) Any discrepancy between the drawing and / or the Bill of Quantities and / or Specifications.
  - d) The removal from the site of any materials/ equipment/ resources brought thereon by the Contractor and the substitution of the same thereof.
  - e) The Execution of additional works of any kind necessary of the completion of the work.
  - f) The removal and /or re-execution of any works executed by the Contractor.
  - g) The substitution from the site of the works of any person employed there upon.
  - h) The amending and making good of any defects under clause "Defects Liability"
  - i) The opening up for inspection of any work covered up.
  - i) Changes in lines, levels, positions and dimensions of any part of the Work.
- 31.3) The Contractor shall forthwith comply with and duly execute any work comprised in such EIC's instructions provided always that verbal instructions, directions and explanations given to the Contractor or his supervisor upon the works by the Engineer In Charge shall if involving a variation be confirmed in writing by the Contractor within seven days and the Engineer in charge's written approval is obtained.



- 31.4) If compliance with the Engineer In Charge's Instructions as aforesaid involves work beyond that contemplated by the Contract, then unless the same were issued owing to some breach of this Contract by the Contractor, the EIC shall pay to the Contractor the cost of the said work as an extra to be valued and as hereinafter provided.
- 31.5) No such variation shall in any way vitiate or invalidate the Contract but the value, if any, of all such variations shall be taken into account in ascertaining the amount of the final certification.
- 31.6) No such variations shall be carried out by the Contractor without instructions, in writing from the Engineer in charge. Provided that no instructions in writing shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an instruction given under this clause, but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities. If the Engineer in charge shall consider it desirable to give any instructions verbally, the Contractor shall comply with such an instruction and any confirmation in writing of such verbal instruction given by the Engineer in charge whether before or after the carrying out of such work, shall be deemed to be an instruction in writing within the meaning of this clause. Provided further that if the Contractor shall within 7 days confirm in writing to the Engineer in charge and such confirmation shall not be contradicted in writing within 30 days by the Engineer in charge, it shall be deemed to be an instruction in writing by the Engineer in charge.
- 31.7) All extra or additional work done on the instructions of the Engineer In Charge shall be valued at the rates and prices set out in the Contract. If the Contract does not contain any rates or prices applicable to the extra or additional work, then suitable rates or prices shall be agreed upon between Company and the Contractor as per the following, in the order of preference:
  - (i) The rate shall be derived from any one of the quoted rates for similar items of work in the tender
  - (ii) In case similar items are not available in the tender, then rates shall be worked out as per the following:
    - a) The direct cost of labour including indirect charges thereon. The labour components shall be computed wherever possible from the related BIS Codes and the quantity of materials to be based on consumption factor as per standard norms or as accepted by the EIC.
    - b) The material cost inclusive of taxes, levies, fees, duties etc. as delivered to the site. Proof of cost in form of an invoice to be submitted along with the extra work claim along with other working documents.
    - c) The Plant & Equipment cost inclusive of hire charges of plant & equipment and operational charges as per standard norms or as accepted by the EIC.
    - d) In addition the Contractor shall be entitled to payment towards overheads and profit.



- 31.8) In cases where the items of works are not accepted as complete, or not fully in accordance with the Specification, the Engineer in Charge shall make payments of such items at such reduced rates, as he may consider reasonable in approval of Interim Bills and the Final Bill.
- 31.9) In all cases the Contractor shall furnish detailed Rate Analysis along with necessary details as and when required by the Engineer in Charge. The Engineer in Charge on establishing the validity of such claims shall certify the amount payable for such work and rates so determined shall be final and binding on the Contractor.
- 31.10) The quantities of the various kinds of work to be done and materials to be furnished under this Contract as listed in the Bill of Quantities are estimated and approximate only and shall be subject to re-measurement upon completion. The Contractor shall make no claim for anticipated profits, for loss of profits or for damages because no work is ordered under certain items or because of a difference between the quantities of the various kinds of work to be done or materials actually delivered and the estimated quantities set forth in the Bill of Quantities.
- 31.11) The rate/ prices quoted by the Contractor in the Bills of Quantities shall be firm irrespective of any variation in the quantities of individual items of work and / or in the Total Contract Sum.

## 32.0) EXECUTION OF ADDITIONAL WORKS:

The Contractor shall be bound to carry out any items of work necessary for the completion of the works even though such items may not be part of his offer. Such works shall be instructed in writing by the Engineer in Charge and formal amendment to the work order will be made.

## **33.0) FORCE MAJEURE:**

If either Party is unable to carry out his obligations under this Contract due to an Act of God, war, riot, blockade, strike (i.e. national/ state or city), lockout, flood or earthquake or Government orders/ restrictions not within the control of the parties hereto which results in an inability, in spite of due diligence of either party in performing its obligation in time, this Contract shall remain effective, but the obligation which the affected party is unable to carry out shall be suspended for a period equal to the duration of the relevant circumstances provided that:

- a) The non-performing party shall give the other Party prior written notice describing particulars of the inability including but not limited to the nature of occurrence with its expected duration and the steps which the non-forming parties is taking to fulfill its obligation.
- b) Upon receipt of such notice, the other party shall discuss the matter with the non-performing party with a view to help the non-performing party to fulfill its obligations. This clause does not envisage financial assistance.



c) If in any event the Force Majeure situation continues for a period of three weeks, both the parties shall meet again and discuss whether the Contract can be amended to overcome the Force Majeure situation so that Project can proceed further.

Notwithstanding anything contained to the contrary it is clarified that economic hardship, non-availability of material, labour and transport shall not constitute Force Majeure. The overall responsibilities and obligations of the parties shall not be excused by reasons of Force Majeure situation.

Notwithstanding the above if the Force Majeure continues for a period of three months or more in that event without prejudice to the rights of the parties, the Company shall have the right thereafter to terminate this contract.

### **34.0) INDEMNITY:**

Contractor shall indemnify and save harmless Company against and from any and all liabilities, claims, damages, losses or expenses arising due to or resulting from:

- 34.1) any breach, non-observance or non-performance by contractor or its employees or agents of any of the provisions of this Contract.
- 34.2) any act or omission by contractor or its employees or agents.
- 34.3) any negligence or breach of duty on the part of contractor, its employees or agents including any wrongful use by it or them of any property or goods belonging to or by Company or any other third party at site including adjoining neighbors.
- 34.4) Contractor shall at all times indemnify Company against all liabilities to other persons, including employees or agents of Company or other contractors for bodily injury, damage to property or other loss which may arise out of or in consequence of the execution or completion of Project and against all costs charges and expenses that may arise.

### 35.00 RISK & COST:

If the Contractor fails to execute the work as per specification / as per the direction of Engineer's Inchange within the scheduled period and even after the extended period, the contract shall got cancel and company reserves the right to get the work executed from any other source at the Risk & Cost of the Contractor. The Extra Expenditure so incurred shall be debited to the Contractor.

### **36.00 SECRECY CLAUSE:**

36.1 The technical information, drawing and other related documents forming part of this Work Order and the information obtained during the course of investigation under this Work Order shall be the Company's exclusive property and shall not be used for any other purpose except for the



execution of this Work Order. The technical information drawing, records and other document shall not be copied, transferred, or divulged and/or disclosed to third party in full/part, not misused in any form whatsoever except to the extent for the execution of this Work Order.

- 36.2 These technical information, drawing and other related documents shall be returned to the Company with all approved copies and duplicates including drawing/plans as are prepared by the Contractor during the executions of this Work Order, if any, immediately after they have been used for agreed and approved purpose.
- 36.3 In the event of any breach of this provision, the Contractor shall indemnify the Company against any loss, cost or damage or claim by any party in respect of such breach.
- 36.4 The provisions of this Clause shall remain effective for a period of five (5) years from the expiry or termination of this Work Order.
- 36.5 The Contractor shall not use the name of the Company in any manner either for credit arrangement or otherwise and it is agreed that the Company shall not in any way be responsible for the debts, liabilities or obligations of the Contractor and/or his employees.

#### **37.00 NOTICE:**

All notices, requests, consents, waivers or other communication required or permitted hereunder shall be in writing and in English and shall be deemed properly served: (i) if delivered by hand and received by an authorized employee or officer of the Party, (ii) 3 days after being given to a reputed courier with a reliable system for tracking delivery, (iii) upon receipt of confirmation receipt when sent by facsimile; or (iv) 14 days after the date of dispatch by certified or registered mail, postage prepaid, return receipt requested; (v) when sent by electronic mail. All notices and other communication shall be addressed as follows:

A Party may change its address and/or addressee for notification purposes at any time during the term hereof by giving the other Party written notice in accordance with the terms hereof and the date on which such change will become effective.

## 38.00 VENDOR CODE OF CONDUCT:

Contractor confirms to have gone through the Policy of BRPL on legal and ethical code required to be followed by vendors encapsulated in the "Vendor Code of Conduct" displayed on the official website of BRPL (www.bsesdelhi.com) also, which shall be treated as a part of the WO.

Contractor undertakes that he shall adhere to the Vendor code of Conduct and also agrees that any violation of the Vendor Code of Conduct shall be treated as breach of the WO.

In event of any such breach, irrespective of whether it causes any loss/damage, company (BRPL) shall have the right to recover loss/damage from Contractor.



The Contractor herby indemnifies and agrees to keep indemnified the company (BRPL) against any claim/litigation arising out of any violation of Vendor Code of Conduct by the Contractor or its officers, agents & representatives etc.

### 39.00 ACCEPTANCE:

Acceptance of the tender implies and includes acceptance of all terms and conditions enumerated in the tender in the technical specification and drawings made available to Contractor consisting of general conditions, detailed scope of work, detailed technical specification & detailed equipment, drawing. Complete scope of work and the Contractors and Company contractual obligation are strictly limited to the terms set out in the tender. No amendments to the concluded tender shall be binding unless agreed to in writing for such amendment by both the parties.



# SECTION-IV: SPECIAL CONDITIONS OF CONTRACT

# 1.0 GENERAL REQUIREMENT

- 1.1. This chapter includes the technical requirements for 33kV Switching Sub-station at DTC Sukhdev Vihar & DTC Kalkaji for execution of all associated civil works. This chapter deals mainly with technical specifications for supervision and construction of complete civil & structural works.
- 1.2. The specifications are intended for general description of work, quality and workmanship. The specifications are not however exhaustive to cover minute details and the work shall be executed according to relevant latest Indian Standards/IRC specifications/CPWD specifications. In the absence of the above, the work shall be executed according to the best prevailing practices in the trade, recommendations of relevant American or British Standards or as per the instructions of Engineer. The IS standards/IRC specifications/CPWD specifications to be followed are mentioned in the technical specifications attached hereto. They shall be latest editions/ version of the same. The Contractor is expected to get him clarified on any doubts about the specifications, BOQ, etc. before bidding of the Tender.
- 1.3. The work shall be carried out according to the design / drawings provided by Owner.
- 1.4. The Contractor shall take all necessary precautions to protect all the existing equipments, structures, facilities & buildings, etc. from damage. In case any damage occurs due to the activities of the Contractor on account of negligence, ignorance, accidental or any other reason whatsoever, the damage shall be made good by the Contractor at his own cost to the satisfaction of the Engineer. The Contractor shall also take all necessary safety measures, at his own cost, to avoid any harm / injury to his workers and staff from the equipment & facilities of the power station.
- 1.5. During the progress of work, the Engineer will exercise supervision of the work to ensure that the technical provisions of the contract are being followed and the work is being executed accurately and properly. However, such supervision shall in no way relieve the Contractor of the responsibility for executing the work in accordance with the specifications.
- 1.6. Before submitting the bid, the Contractor shall inspect and examine the site and its surroundings and shall satisfy himself as to the nature of the ground and subsoil, the availability of materials necessary for completion of the work, means of access to site and in general shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect his offer. No extra claim consequent on any misunderstanding or otherwise shall be allowed.
- 1.7. In view of pandemic, the Contractor shall be bound to follow all guidelines issued by the Government & other statutory bodies, take all necessary arrangements & precautions for his workers & staff.

## 2.0 SITE PREPARATION

2.1. Scope



2.1.1. This clause covers the execution of the work and site preparation such as clearing of the site, the supply and compaction of fill material as per requirement upto desired formation levels, excavation and compaction of backfill for foundations, drainage, trenches, etc..

## 2.2. General

- 2.2.1. The Contractor shall give all help in instruments, materials and personnel to the Owner for checking the detailed layout and shall be solely responsible for the correctness of the layout and levels.
- 2.2.2. The Contractor shall develop the site area to meet the requirements of the intended purpose.
- 2.2.3. If fill material is required, the fill material shall be suitable for the above requirement. The fill shall be designed to prevent the erosion by wind and water of material from its final compacted position or the in-situ position of undisturbed soil.

#### 2.3. Excavation and Backfill

- 2.3.1. Excavation and backfill for foundations shall be in accordance with the relevant code.
- 2.3.2. Whenever water level is met during the excavation, it shall be dewatered and water level shall be maintained below the bottom of the excavation level during excavation, concreting and backfilling. Nothing extra shall be payable by the owner on this account.

## 2.4. Compaction

2.4.1. The density to which fill materials shall be compacted shall be as per, relevant IS and as per direction of Owner. All compacted sand filling shall be confined as far as possible. Backfilled earth shall be compacted to minimum 95% of the Standard Proctor's density at OMC.

### 2.5. Requirement for fill material under foundation

2.5.1. The thickness of fill material under the foundations shall be such that the maximum pressure from the footing, transferred through the fill material and distributed onto the original undisturbed soil will not exceed the allowable soil bearing pressure of the original undisturbed soil. For expansive soils the fill materials and other protections etc. to be used under the foundation has to be approved by the Owner.

### 3.0 CODES AND STANDARDS



All standards, specifications, acts and code of practice (latest revision) shall be followed. In case of conflict between this specification and those (IS standard/ IRC specification/CPWD Specification, etc.) referred to herein, the former shall prevail.

#### 4.0 SUBMISSIONS

The following documents shall be submitted by the Contractor:

- i. As built general arrangement drawings, foundation drawings & detailed erection / construction drawings including R/F drawings for Sub-Station building.
- ii. As built drawing of sewerage system, water supply arrangement etc.

## 5.0 SUB-STATION BUILDING GENERAL REQUIREMENTS

#### 5.1. General

- 5.1.1. The scope includes construction including anti-termite treatment, plinth protection, DPC of buildings including sanitary, water supply, electrification, fire detection system, etc. The building shall be of RCC framed structure of minimum concrete grade M25. The Sub-Station building shall include rooms as specified below:
  - S. No. Facility
    - i. Control Room
    - ii. Panel Room/ Switchgear Room
    - iii. Maintenance Room
    - iv. Pantry
    - v. Toilet
    - vi. Staircase
- 5.1.2. Minimum floor area requirements have been given in tender drawings, which may be increased at the time of detailed engineering to suit project requirements.
- 5.1.3. An open space of 1200 mm minimum shall be provided on the periphery of the rows of panel and equipment generally in order to allow easy operator movement and access as well as maintenance.
- 5.1.4. Plinth level of sub-station building shall be 750mm above the existing slab/road.
- 5.1.5. Substation building shall be constructed as per the approved drawings by Owner. CPWD specification shall be followed in all the building works. The clear height (from floor level to bottom of roof slab) of building shall be minimum 4.5 m each floor (ground & first floor).

## 5.2. Plastering



All internal walls shall have minimum 12 mm / 15 mm thick 1:4 (1 Cement: 4 Coarse Sand) cement sand plaster. The ceiling shall have 6 mm thick 1:3 cement sand plaster.

## 5.3. Finishing

All external surfaces (control room building) shall have washed stone grit/ marble chips plaster with colour pigment (item no.13.72-DSR 2021) with grooves formed over under layer 12 mm thick cement sand plaster 1:4 (1 Cement: 4 Coarse sand) & top layer 15 mm cement plaster 1:1/2:2 (1 Cement: ½ Coarse sand: 2 Stone chipping). Suitable pigment shall be added to render the surface aesthetically pleasing as per directions of Engineer-in-charge.

#### 5.4. Door & Window

The details of doors and windows of the sub-station building shall be as under:

- a) All entrance/external doors including panel room and control room will be 2 hours fire rated doors.
- b) The details for all other doors and windows shall be as per finish schedule Table-I and tender drawings with the relevant IS code.
- c) Floor springs and hydraulic door closer of make Ozone, Hardwyn or equivalent to be provided.
- d) To maintain proper size of opening for doors and windows, contractor shall provide rough round aluminium tube of size 40 x 20 mm around all opening before plaster work.
- e) The contractor shall provide a door and window sill of granite stone of size 18-20 mm.

## 5.5. Plumbing & Sanitation

Two toilets (male & female) have to be provided. Suitable size of pantry with arrangement for water cooler is to be made.

- a) All plumbing and sanitation works shall be executed to comply with the requirements of the appropriate bye-laws, rules and regulations of the Local Authority having jurisdiction over such matters.
- b) PVC Sintex or equivalent make water storage tank of adequate capacity depending on the number of users for 24 hours storage shall be provided. Minimum 1 Nos. 1000 litre capacity shall be provided.
- c) Chlorinated Polyvinyl- chloride (CPVC) pipe shall be used for internal & external plumbing work for water supply.
- d) PVC pipes for all sanitary works.



- e) All sanitary fittings shall be of Hindware / Parryware.
- f) Each toilet shall have minimum fittings
- i) Water closet (European type W.C. pan) 390 mm high (item no. 17.3.1- DSR 2021) with all fittings shall be provided.
- ii) Half Stall Urinal (580 x 380 x 350 mm) with all fittings (item no. 17.5.2- DSR-2021).
- iii) Wash basin (630 x 450 mm) with all fittings (item no. 17.7.1- DSR 2021).
- iv) Bathroom mirror (600 x 450 x 6 mm thick) hard board backing (item no. 17.31- DSR 2021).
- v) CP brass towel rail (600 x 20 mm) with C. P. brass brackets.
- vi) Soap holder and liquid soap dispenser.
- g) 1 No stainless steel A ISI 304(18/8) kitchen sink as per IS 13893 with Drain board (510 x 1040 x 225 mm bowl depth for pantry shall be provided complete with all fittings (item no. 17.10.1.2-DSR 2021).
- h) All fittings, fastener, grating shall be brass chromium plated.
- i) All sanitary fixtures and fittings shall be of approved quality and type manufactured by well known manufacturers. All items brought to site must bear identification marks of the Manufacturer.
- j) Suitable size and load minimum 6 kg pressure unplasticised PVC pipe to be used for soil, waste and drain pipes for underground works for areas not subject to traffic load.

## 5.6. False Ceiling

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 50mm length x 50 mm wide x 3.0 mm thick with flanges of at 1200 mm centre to centre, one flange fixed to the steel truss members and other flange of cleat fixed to the angle hangers of 50x50x3 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. 12.0 mm thick tapered edge calcium silicate board shall be used.

### 6.0 SUB-STATION TRENCHES

- 6.1. The cable trenches and precast removable RCC cover (with lifting arrangement) shall be constructed using RCC of minimum grade M25.
- 6.2. Cable trench covers shall be 50 mm thick. All trench covers shall have desired reinforcement welded to M.S. frame of angle 50 x 50 x 6 mm all round the cover. Size of covers shall be as per site requirement / direction of Engineer-In Charge.
- 6.3. All cable trenches/ slab cutouts inside the buildings shall have covers comprising of 6 mm thick MS chequered plates fixed on angle 40 x 40 x 5 mm frame with arrangement of MS holes for lifting of cover.
- 6.4. Cable trench crossing the road/rails shall be designed for class AA loading of IRC/relevant IS Code and should be checked for transformer/reactor loading.
- 6.5. Cable trenches shall be blocked at the ends if required with brick masonry in cement sand mortar 1:6 and plaster with 12mm/15mm thick 1:4 cement sand mortar.

## 7.0 MISCELLANEOUS GENERAL REQUIREMENTS

- 7.1. Bricks having minimum 100 kg/cm2 compressive strength can only be used for masonry work. Contractor shall ascertain himself at site regarding the availability of bricks of minimum 100 kg/cm2 compressive strength before submitting his offer.
- 7.2. Doors and windows on external walls of the building (other than areas provided, with insulated metal claddings) shall be provided with RCC sunshade over the openings with 150 mm projection on either side of the openings. Projection of sunshade from the wall shall be minimum 600 mm over window & door openings.
- 7.3. Angles 50x50x6 mm (minimum) with lugs shall be provided for edge protection all round cut outs/openings in floor slab, edges of RCC cable/pipe trenches supporting covers, edges of manholes supporting covers, supporting edges of manhole precast cover and any other place where breakage of corners of concrete is expected.
- 7.4. The railing of staircase shall be 0.9 m average height comprising of 20 mm square bars of length 1.05 m and 150 mm centre to centre with teak wood handrail on top of railing including fixing of vertical bars in steps by grouting of required hold fast as per direction of Engineer in Charge.



- 7.5. All buildings shall have 750 mm wide plinth protection all around.
- 7.6. The details given in tender drawings shall be considered along with details available in this section of the specification while deciding various components of the building.

Items/components of buildings not explicitly covered in the specification but required for completion of the project shall be deemed to be included in the scope.

### 8.0 INTERFACING

The proper coordination & execution of all interfacing civil works activities like fixing of conduits in roofs/walls/floors, fixing of lighting fixtures, fixing of supports/ embedment, provision of cutouts, etc for indoor illumination, ventilation & Air conditioning shall be the sole responsibility of the Contractor. He shall plan all such activities in advance and execute in such a manner that interfacing activities do not become bottlenecks and dismantling, breakage etc. is reduced to minimum

## 9.0 FIELD QUALITY PLAN FOR CIVIL WORKS

The field quality plan for all civil works shall be in accordance with CPWD specification and other relevant Indian Standard Codes. All quality checks and procedures shall be followed as per relevant CPWD norms.

### 10.0 WATER SUPPLY

- 10.1. Arrangement of water /electricity for construction work shall be in the scope of Contractor.
- 10.2. The Contractor shall carry out all the plumbing/erection works up to connection point of water supply provided by DTC for required supply of water in Substation building. The contractor should check the feasibility before tendering.
- 10.3. A scheme shall be prepared by the Contractor indicating the layout and details of water supply which shall be got approved from the Owner before actual start of work including all other incidental items not shown or specified but as may be required for complete performance of the works.
- 10.4. The details of tanks, pipes, fittings, fixtures etc for water supply shall be approved by engineer in charge.

### 11.0 SEWERAGE SYSTEM

- 11.1. Sewerage system shall be provided for control room building.
- 11.2. The system shall be designed as per relevant IS Codes.

### 12.0 STATUTORY RULES



- 12.1. Contractor shall comply with all the applicable statutory rules pertaining to factories act (as applicable far the State), Fire Safety Rules of Tariff Advisory Committee. Water Act for pollution control, Energy Conservation Act, etc.
- 12.2. Statutory clearance and norms of State Pollution Control Board shall be followed.
- 12.3. All building/construction materials shall conform to the best quality specified in CPWD specifications if not otherwise mentioned in this specification.
- 12.4. All tests as required in the standard field quality plans of CPWD or as per sound engineering practices.

### 13.0 TESTS FOR MATERIAL / WORKMANSHIP

All tests required for various bought out items, materials, quality of workmanship or any other tests as desired by Project Manager and as specified in technical specification shall be carried out by the Bidder at his own cost through BRPL approved labs.

The Bidder shall submit comprehensive Quality Assurance plan for all materials, equipment, workmanship, services etc. and get it approved from the Engineer. This shall include setting up a test laboratory at site. However, such check list shall in no way limit the liability and responsibility of the Bidder in regard to quality of workmanship as detailed out in the specifications.

The sampling & testing of the construction materials shall be in accordance to latest CPWD Specifications related to all activities of the building and other civil construction works.

**Table 1- Finishing Schedule** 

No	Location	Flooring & Skirting 150mm high	Wall Internal	Ceiling	Doors, Windows, Ventilators
1	Control room	Homogeneous PVC sheet 2 mm thick over 52 mm thick CC flooring with concrete hardener topping (item no. 11.4- DSR 2021) over an under layer of RCC/CC.	Plastic emulsion Paint on smooth surface applied with putty	Oil bound washable distemper on smooth surface applied with putty	Powder coated Aluminium Hindalco/ Jindal or equivalent extruded sections (minimum 3.0 mm thick) as per IS 733 & 1285 for door, windows and ventilators (minimum thickness of powder coating 50 micron of approved colour). Glazing for door, windows and ventilators will be hermetically sealed double glazing (DGU) with (6+12+6) i.e 6 mm clear toughened glass +12 mm air Gap+6 mm toughened glass (Heat reflective colour glass).



2	Reception Lobby/ Maintenance Room	Polished Kota stone	Oil bound washable distemper on smooth surface applied with putty	Oil bound washable distemper on smooth surface applied with putty	Powder coated Aluminium Hindalco/ Jindal or equivalent extruded sections (minimum 3.0 mm thick) as per IS 733 & 1285 for door, windows and ventilators (minimum thickness of powder coating 50 micron of approved colour). Glazing for door, windows and ventilators will be hermetically sealed double glazing (DGU) with (6+12+6) i.e 6 mm clear toughened glass +12 mm air Gap+6 mm toughened glass (Heat reflective colour glass).
3	Toilet	Anti skid Ceramic tiles with white cement.	Ceramic glazed tile toilet, for pantry above working platform up to 750 mm.	Oil bound washable distemper on smooth surface applied with putty	Powder coated Aluminium Hindalco/ Jindal or equivalent extruded sections (minimum 3.0 mm thick) as per IS 733 & 1285 for door, windows and ventilators (minimum thickness of powder coating 50 micron of approved colour). Glazing for door, windows and ventilators will be hermetically sealed double glazing (DGU) with (6+12+6) i.e 6 mm clear toughened glass +12 mm air Gap+6 mm toughened glass (Heat reflective colour glass).
4	Stair	Polished Kota stone	Oil bound washable distemper on smooth surface applied with putty	Oil bound washable distemper on smooth surface applied with putty	Powder coated Aluminium Hindalco/ Jindal or equivalent extruded sections (minimum 3.0 mm thick) as per IS 733 & 1285 for door, windows and ventilators (minimum thickness of powder coating 50 micron of approved colour). Glazing for door, windows and ventilators will be hermetically sealed double glazing (DGU) with (6+12+6) i.e 6 mm clear toughened glass +12 mm air Gap+6 mm toughened glass



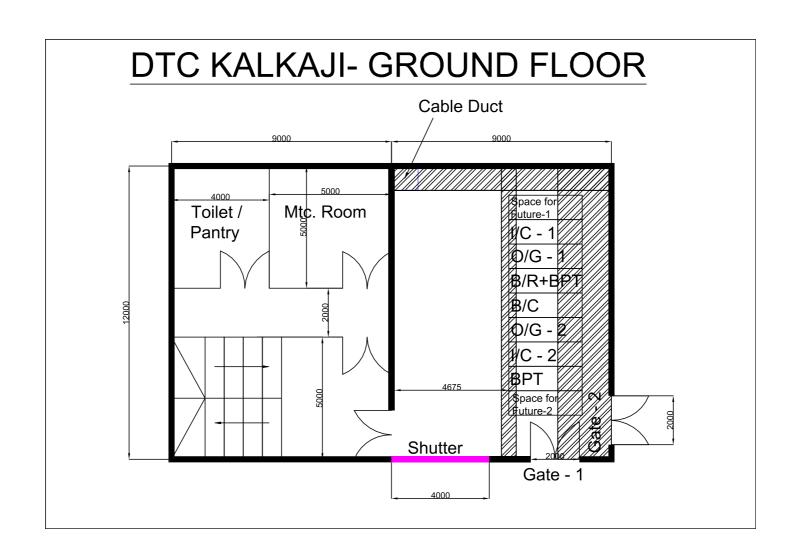
					(Heat reflective colour glass).					
5	Other areas not specified	Vitrified tile of approved size	Oil bound washable distemper on smooth surface applied with putty	Oil bound washable distemper on smooth surface applied with putty						
6	Switchgear Room	52 mm thick CC flooring with concrete hardener topping (item no. 11.4- DSR 2021) with an under layer of RCC/CC.	Oil bound washable distemper on smooth surface applied with putty	Oil bound washable distemper on smooth surface applied with putty	Powder coated Aluminium Hindalco/ Jindal or equivalent extruded sections (minimum 3.0 mm thick) as per IS 733 & 1285 for door, windows and ventilators (minimum thickness of powder coating 50 micron of approved colour). Glazing for door, windows and ventilators will be hermetically sealed double glazing (DGU) with (6+12+6) i.e 6 mm clear toughened glass +12 mm air Gap+6 mm toughened glass (Heat reflective colour glass).					
8		•	_		tone grit/ Wash Marble chip of cement or combination of both.					
9	approved color and quality with color pigments using white / grey cement or combination of both.  External finishing of the building on area other than the area of stone grit/ Wash Marble using Acrylic Smooth exterior paint (painting) shall be of Asian paints or equivalent The paint shade as approved by BRPL									

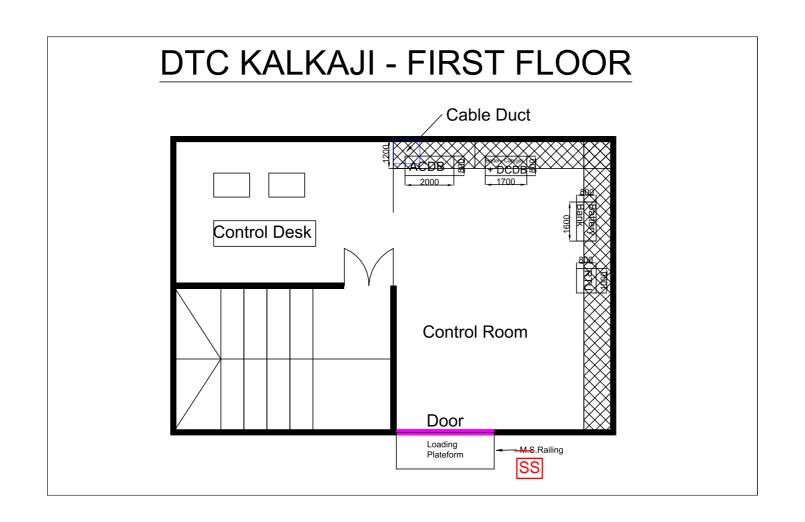


**SECTION V: DRAWING** 



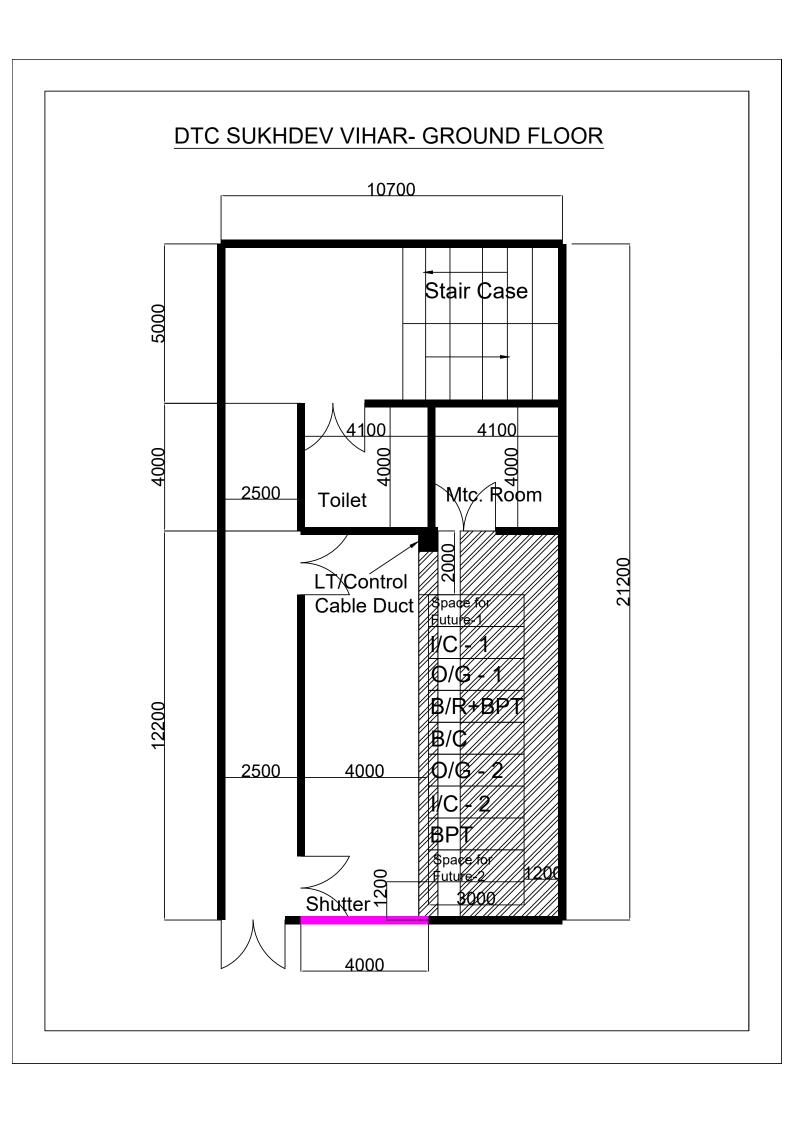
1. DTC KALKAJI

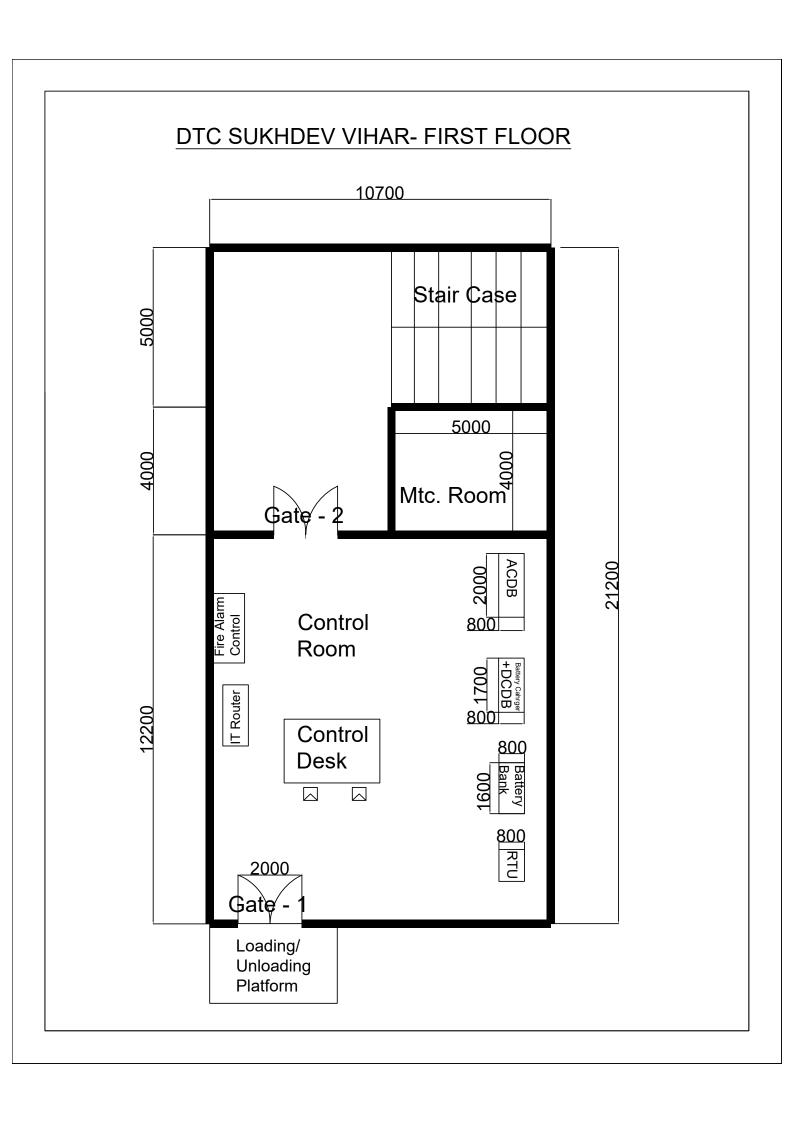






2. DTC SUKHDEV VIHAR







# SECTION VI :BILL OF QUANTITY/PRICE FORMAT

Issue to M/s: -

Estimated cost:-Item Rate Earnest money:-Rs 6.66 Lac. Completion period:-4 months

			QTY				
S. No	Description of item	DTC Kalkaji	DTC Sukhdev vihar	Total "Y"	Unit	Rate "Z"	Amount "Y x Z"
		PAR	ΓA: CIVIL	WORKS			
1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of engineer in charge. Nominal concrete: 1:3:6 or richer mix (i/c equivalent design mix)	82.36	100.80	183.16	Cum		
2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of engineer in charge. Nominal concrete: 1:4:8 or leaner mix (i/c equivalent design mix)	82.36	100.80	183.16	Cum		
3	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-Incharge.	43.20	58.93	102.13	Cum		
4	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-In-charge.	216.00	294.64	510.64	Sqm		
5	Earth work in excavation by mechanical means (hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed: All kinds of soil.	142.03	928.06	1070.09	CUM		



						1	
6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed: Ordinary rock.	85.22	-	85.22	CUM		
7	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed: Hard rock (blasting prohibited)	56.81	-	56.81	CUM		
8	Earth work in excavation by mechanical means (hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil. as directed, within a lead of 50 m. All kinds of soil.	12.62	30.96	43.58	Cum		
9	Excavation work by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50 m: Ordinary rock.	7.57	-	7.57	CUM		
10	Excavation work by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50 m: Hard rock (blasting prohibited).	5.05	-	5.05	CUM		



			1	Г		T	
11	Extra for every additional lift of 1.5 m or part thereof in - All	17.34	-	17.34	CUM		
	kinds of soil.						
12	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating Ea deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 metre. All kinds of soil -Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	30.00	30.00	60.00	Mtr		
13	Filling available excavated earth (excluding rock) in trenches plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating Ea deposited layer by ramming and watering, lead upto 50 m and lift upto 1.5 m	46.39	287.71	334.10	CUM		
14	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	298.36	201.60	499.96	Cum		
15	Disposal of surplus earth by mechanical transport loading, unloading and stacking etc complete for all leads and lifts,	108.25	671.31	779.56	Cum		
16	Disposal of excavated rock by mechanical transport for any lead & lift.(The rates will be applicable to net quantities after deduction of prescribed percentage of voids).	154.65	-	154.65	CUM		
17	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:4:8 (1 Cement : 4 Coarse Sand : 8 Graded stone agg. 40 mm nominal size)	41.06	33.31	74.37	CUM		



	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per					
18	approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. (Note:-Cement content considered in this item is @ 330 kg/cum). All works upto plinth level	107.15	74.71	181.86	CUM	
19	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. (Note:-Cement content considered in this item is @ 330 kg/cum). All works above plinth level upto floor V level	177.94	192.75	370.69	CUM	



20	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centring, shuttering and finishing: 1:2:4 (1 Cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)	0.98	1.07	2.05	CUM	
21	Making plinth protection 50 mm thick of cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	47.95	47.85	95.80	SQM	
22	Centring and shuttering including strutting, propping etc. and removal of form work for: Foundations, footings, bases of columns.	105.30	102.96	208.26	SQM	
23	Centring and shuttering including strutting, propping etc. and removal of form for Lintels, beams, plinth beams, girders, bressumers and cantilevers.	454.42	358.46	812.88	SQM	
24	Centring and shuttering including strutting, propping etc. and removal of form work for Columns, piers, abutments, pillars, posts and struts	53.05	244.40	297.45	SQM	
25	Centring and shuttering including strutting, propping etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform	568.53	586.18	1154.71	Sqm	
26	Centering and shuttering including strutting, propping etc. and removal of form for: Weather shade, Chajjas, corbels etc., including edges	65.93	30.51	96.44	SQM	
27	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at	437.52	453.68	891.20	SQM	



all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured): Suspended floors, roofs, landing, beams and balconies (Plan area to be measured).  Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in cement mortar 1: 61 (ement: 6 coarse sand)  Providing and laying damp-proof course 50 mm thick with cement 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course and releaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement: 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering All work upto plinth level 1:24 (1 cement: 2 Coarse Sand: 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C. work including straightening, cutting, 34 bending, placing in position and binding all complete, cold twisted bars.		44 4		I			1
metre or part thereof (Plan area to be measured): Suspended floors, roofs, landing, beams and balconies (Plan area to be measured):  Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in cement mortar 1: 6 (1 cement: 6 coarse sand)  Providing and laying damp-proof course 50 mm thick with cement coarse sand;  Providing and laying damp-proof course 50 mm thick with cement coarse sand;  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.1 kgp are square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masomy 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 cement mortar 1:4 (1 cement: 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level: 2.2 Coarse Sand: 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
be measured): Suspended floors, roots, landing, beams and balconies (Plan area to be measured).  Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in all shapes and sizes in : Cement: 4.2 (acment: 4.2 coarse sand)  Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in all shapes and surface with brick and supported bricks of class designation 7.5 in superstructure above plinth level upto floor V level in all shapes and finally with a price of cloth lightly solved in kerosene oil.  Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement: 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto pinth level; 2.2 coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
roofs, landing, beams and balconies (Plan area to be measured).  Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in cement mortar 1: 6 (1 cement: 6 coarse sand)  Providing and laying damp-proof course 50 mm thick with cement concrete 1:2:4 (1 Cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kensene oil.  Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in 31 superstructure above plinth level up to floor V level in all shapes and sizes in: Cement mortar 1:4 (1 cement: 4 coarse sand)  Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in 32 superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement: 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of 33 centring and shuttering. All work upto pinth level: 12:2 Coarse Sand: 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete, cold twisted bars							
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of class designation 7.5 in foundation and plinth in cement mortar 1: 6 (1 cement: 6 coarse sand)  Providing and laying damp-proof course 50 mm thick with cement concrete 1:2:4 (1 Cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry 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 cement mortar 1:4 (1 cement: 4 coarse sand)  Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement: 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of cement concrete of specified grade excluding the cost of cass designation 7.5 in specifical grade excluding the cost of cass designation 7.5 in specifical grade excluding the cost of casses and 2.2 of mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
foundation and plinth in cement mortar 1: 6 (1 cement: 6 coarse sand)  Providing and laying damp-proof course 50 mm thick with cement concrete 1:2:4 (1 Cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-I0 of approved quality using 1. To get per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in 32 superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement: 4 coarse sand)  Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in 32 superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement: 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of carring and shuttering. All work upto plinth level 1:2:4 (1 Cement: 2 Coarse Sand: 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars		` ` /					
mortar 1 : 6 (1 cement : 6 coarse sand )  Providing and laying damp-proof course 50 mm thick with cement 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry 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)  Providing and laying in position cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of 3 centring and shuttering. All work upto plinth level 1:2:4 (1 cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars	28		66.60	70.64	137.24	CUM	
Providing and laying damp-proof course 50 mm thick with cement concrete 1:2:4 (1 Cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry 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 cement words (1:4 (1 cement: 4 coarse sand)  Froviding and laying in position cement concrete of specified grade excluding the cost of case case and suttering. All work upto plinth level 1:2:4 (1 cement 2:2 Coarse Sand 4:4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
Providing and laying damp-proof course 50 mm thick with cement 20 concrete 1:22.4 (1 Cement 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masomy with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of 33 centring and shuttering - All work upto plinth level 1:2.24 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
course 50 mm thick with cement concrete 1:2:4 (1 Cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry 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 cement mortar 1:4 (1 cement: 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of 33 centring and shuttering- All work upto plinth level 1:2:4 (1 Cement: 2 Coarse Sand: 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
29 concrete 1:2:4 (1 Cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement: 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement: 2 Coarse Sand: 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
coarse sand : 4 graded stone aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in 32 superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:24 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars	20		6.10	0.00	16.00	COM	
aggregate 20 mm nominal size).  Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in 32 superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars	29		6.10	9.90	16.00	SQM	
Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in 31 superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement : 4 coarse sand)  Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in 32 superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of 33 centring and shuttering-All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of cement concrete of specified grade excluding the cost of cement agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete, cold twisted bars							
VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement: 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement: 2 Coarse Sand: 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars	30		6.10	9.90	16.00	SQM	
with a piece of cloth lightly soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in 32 superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:24 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
soaked in kerosene oil.  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)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
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)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
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)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete, cold twisted bars  CUM  182.88  202.30  385.18  CUM  10.00  20.00  SQM  10.00  20.00  SQM  20.00							
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)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars    182.88   202.30   385.18   CUM     10.00   10.00   20.00   SQM     10.00   10.00   20.00   SQM     10.00   10.00   3.00   6.00   CUM     10.00   3.00   6.00   CUM     10.00   3.00							
Superstructure above plinth level up to floor V level in all shapes and sizes in: Cement mortar 1:4 (1 cement: 4 coarse sand)    Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement: 4 coarse sand)    Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:24 (1 Cement: 2 Coarse Sand: 4 Graded stone agg. 20 mm nominal size)    Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
up to floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement : 4 coarse sand)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars	31		182.88	202 30	385 18	CUM	
and sizes in: Cement mortar 1:4 (1 cement: 4 coarse sand)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement: 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement: 2 Coarse Sand: 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars			102.00	202.50	303.10	00111	
(1 cement : 4 coarse sand)  Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
Half brick masonry with common burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars							
burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  burnt clay F.P.S (non modular) bricks of class designation 7.5 in superstructure above plinth level 10.00 10.00 20.00 SQM  10.00 20.00 SQM  10.00 5QM  10.00 CUM  3.00 6.00 CUM  3.00 3.00 6.00 CUM  3.00 SQM  3.00 3.00 6.00 CUM  3.00 SQM  3.00 3.00 SQM		`					
bricks of class designation 7.5 in superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  bricks of class designation 7.5 in superstructure above plinth level 10.00  10.00  20.00  SQM  3.00  6.00  CUM  3.00  KG							
superstructure above plinth level upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  10.00  10.00  20.00  SQM  3.00  6.00  CUM  3.00  3.00  3.00  6.00  CUM  Title 10.00  SQM  SQM  SQM  SQM  SQM  SQM  SQM  S							
upto floor V level in cement mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  Description:  3.00  3.00  3.00  CUM  Total Communication of the control of the	32		10.00	10.00	20.00	SQM	
mortar 1:4 (1 cement : 4 coarse sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  mortar 1:4 (1 cement : 4 coarse sand)  3.00  3.00  6.00  CUM  TOM  Seminary 1:4 (1 cement : 4 coarse sand)  3.00  3.00  3.00  4.00  CUM  Seminary 1:4 (1 cement : 4 coarse sand)  3.00  3.00  3.00  CUM  Seminary 1:4 (1 cement : 4 coarse sand)  3.00  3.00  CUM  Seminary 1:4 (1 cement : 4 coarse sand)  3.00  3.00  3.00  CUM  Seminary 1:4 (1 cement : 4 coarse sand)  3.00  3.00  3.00  CUM  Seminary 1:4 (1 cement : 4 coarse sand)  3.00  Seminary 1:4 (1 cement : 4 coarse sand)  3.0							
sand)  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars    Sand   Providing in position   Sand							
cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  3.00  3.00  6.00  CUM  3.00  KG		sand)					
grade excluding the cost of centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  3.00  3.00  6.00  CUM  3.00  KG							
33 centring and shuttering- All work upto plinth level 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  3.00 3.00 6.00 CUM  3.00 6.00 KG							
upto plinth level 1:2:4 (1 Cement: 2 Coarse Sand: 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  32067.80  39644.20  71712.00  KG							
: 2 Coarse Sand : 4 Graded stone agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  32067.80 39644.20 71712.00 KG	33		3.00	3.00	6.00	CUM	
agg. 20 mm nominal size)  Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  32067.80  39644.20  71712.00  KG							
Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  Reinforcement for R.C.C work including straightening, cutting, 32067.80 39644.20 71712.00 KG							
including straightening, cutting, bending, placing in position and binding all complete. cold twisted bars  32067.80 39644.20 71712.00 KG							
34 bending, placing in position and binding all complete. cold twisted bars  32067.80 39644.20 71712.00 KG							
binding all complete. cold twisted bars	_		2206-06	2066.55		***	
bars	34		32067.80	39644.20	71712.00	KG	
Providing and laying in position							
		Providing and laying in position					
35 cement concrete of specified 3.00 3.00 CUM	35		3.00	3.00	6.00	CUM	
I legade excluding the cost of legislation		grade excluding the cost of					1



			1	<b>.</b>		ı	T
	centring and shuttering- All work						
	upto plinth level 1:5:10 (1						
	Cement :5 Coarse Sand :10						
	Graded stone agg. 40 mm						
	nominal size)						
26	6mm cement plaster to ceiling of	(04.25	592.72	1100.07	C		
36	mix: 1:3 (1 cement : 3 fine sand).	604.35	583.72	1188.07	Sqm		
	Cement plaster 1:3 (1Cement : 3						
2-	Coarse sand) finished with a float	100.00	<b>7</b> 1.00	15100	_		
37	of neat cement: 12 mm cement	102.08	71.98	174.06	Sqm		
	plaster.						
	12 mm cement plaster of mix 1:4						
38	(1 cement : 4 fine sand)	1054.98	1082.44	2137.42	Sqm		
	,						
20	15 mm cement plaster on rough	50.00	50.00	100.00	C		
39	side of single or half brick wall of	50.00	50.00	100.00	Sqm		
	mix 1:4 (1 cement : 4 fine sand)						
40	Neat cement punning	50.00	50.00	100.00	Sqm		
	Providing and applying white						
	cement based putty of average						
	thickness 1 mm, of approved						
41	brand and manufacturer, over the	1551.78	1613.16	3164.94	sqm		
	plastered wall surface to prepare				- 1		
	the surface even and smooth						
	complete.						
	Distempering with oil bound						
	washable distemper of approved						
40	brand and manufacture to give an	4.5.4.50	1612.16	216404	_		
42	even shade. New work (two or	1551.78	1613.16	3164.94	Sqm		
	more coats) over and including						
	water thinnable priming coat with						
	cement primer						
	Finishing walls with Acrylic						
	Smooth exterior paint of required						
	shade: New work (Two or more						
43	coat applied @ 1.67 ltr/10 sqm	110.00	95.45	205.45	Sqm		
	over and including priming coat				1		
	of exterior primer applied						
	@2.20kg/10 sqm).						
	Washed stone grit plaster on						
	exterior walls height upto 10						
	Meter. above ground level, in two						
	layers, under layer 12 mm cement						
1	plaster 1:4 (1 cement : 4 coarse						
	sand), furrowing the under layer						
	with scratching tool,applying						
	cement slurry on the under layer						
44	@ 2 Kg of cement per square	1281.05	1087.07	2368.12	Sqm		
	metre, top layer 15mm cement						
	plaster 1:1/2:2 (1cement : 1/2						
	coarse sand : 2 stone chipping						
1	10mm nominal size) in panels						
	with groove all around as per						
	approved pattern including						
	scrubbing and washing. the top						
	layer with brushes and water to						
	1ayor with brushes and water to		l				



	armana tha at-u1-i		I		I	I	
	expose the stone chippings, complete as per specification and						
	direction of Engineer-In-Charge						
	(Payment for providing grooves						
	shall be made separately).						
	Simil of made separately).						
	Forming groove of uniform size						
	in the top layer of washed stone						
	grit plaster as per approved pattern using wooden						
	battens, nailed to the under layer						
	including removal of wooden						
45	battens, repair to the edges of	2562.10	2174.14	4736.24	Mtr		
	panels and finishing the groove						
	complete as per specification and						
	direction of the Engineer-In-						
	Charge. 15 mm wide and 15 mm						
	deep groove.						
	Extra for using white cement in place of ordinary cement in the						
46	top layer of the item of washed	384.32	326.12	710.44	Sqm		
	stone grit plaster						
	Extra for using marble chips of						
	size 7 to 10 mm nominal size in	20122	22612		_		
47	place of stone chipping 10 mm	384.32	326.12	710.44	Sqm		
	nominal size in Washed stone grit plaster on exterior walls						
	Extra for providing & mixing the						
48	dark shade pigment in top layer	1281.05	1087.07	2368.12	SQM		
	of washed stone grit plaster.	1201.00	1007107	2500.12	24		
	52 mm thick cement concrete						
	flooring with concrete hardener						
	topping under layer 40 mm thick						
	cement concrete 1:2:4 (1 cement :						
	2 coarse sand : 4 graded stone						
	agrregate 20 mm nominal size) and top layer 12 mm thick						
	Hardcrete cement hardener						
	consisting of mix 1:2 (1 cement						
49	hardener mix : 2 graded stone	199.99	239.36	439.35	Sqm		
	aggregate 6 mm nominal size) by						
	volume with which hardening						
	compound mixed @ 2 litre per						
	50 kg of cement or as per						
	manufacturer's specifications.						
	This includes cost of cement slurry, but excluding the cost of						
	nosing of steps etc. complete						
	Providing and fixing glass strips						
50	in joints of terrazo/cement	426.10	598.60	1024.70	M+		
30	concrete floors 40 mm wide	420.10	398.00	1024.70	Mtr		
	and 4 mm thick.						



51	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete. 25 mm thick with 12.5 mm nominal size stone aggregate	39.36	31.72	71.08	Sqm	
52	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1:4 (1cement : 4 coarse sand) : 25 mm thick	165.97	239.37	405.34	Sqm	
53	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12mm (average) thick cement mortar 1:3 (1cement : 3coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	40.93	44.08	85.01	Sqm	
54	Providing and fixing ISI marked Fire Escape door shutters with frame of Powder coated GI sheet. Each door leaf with 4 hinges (Make- Dauerhaft/ Hafele/ Equivalent), 1 no.of fire rated Door closure (make- Dauerhaft/ Hafele/ Equivalent), 1 no. of external trim (make- Dauerhaft/ Hafele/ Equivalent), 1 Fire Rated Wired Glass(200x300mm), (Make-Pilkington/ equivalent), 1 no. Three Point Panic Bar (Make-Dauerhaft / Hafele/ equivalent) with necessary screws. Cost includes Supply and installation of door.Cost of making opening for door with alied activities viz. dismantling work, concrete work, brick work, plastering, painting, tile work, false ceiling work, elecrical and furniture dismantling and refixing etc which will be paid separately.	23.83	15.60	39.43	Sqm	



	Durviding and fining alamin'				I	T	
	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						
55	smooth, rust free, straight, mitred and jointed mechanically	367.10	261.36	628.46	Kg		
	and jointed mechanically wherever required including cleat						
	angle, Aluminium snap beading						
	for glazing/panelling,						
	C.P.brass/stainless steel screws,						
	all complete as per architectural						
	drawings and the directions of						
	Engineer-in-charge. (Glazing,						
	panelling and dash fasteners to be						
	paid for separately): For Fixed						
	portion. Anodised aluminium						
	(anodised transparent or dyed to						
	required shade according to IS: 1868, Minimum anodic coating						
	of grade AC 15)						
	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 ie. at top,						
	bottom and sides with required						
56	EDPM rubber/neoprene gasket	193.22	239.76	422.00	V~		
30	etc . Aluminium sections shall be	173.22	239./0	432.98	Kg		
1	smooth, rust free, straight, mitred						
	and jointed mechanically						
	wherever required including cleat						
	angle, Aluminium snap beading						
1	for glazing/panelling, C.P. brass/stainless steel screws, all						
1	complete as per architectural						
	drawings and the directions of			ı			
	Engineer-in-charge. (Glazing						
	panelling and dash fasteners to be						
	paid for separately.) For shutters						
	of doors, windows & ventilators						



	including providing and fixing hinges/pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately.) Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, minimum anodic coating of grade AC 15)					
57	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board confirming to IS 12823 Grade I, Type II in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. Prelaminated particle board with decorative lamination on both sides.	5.60	3.60	9.20	Sqm	
58	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with hermetically sealed double glazing (DGU) with(6+12+6) I,e 06 MM clear toughend glass +12 MM Air Gap+6MM toughend Glass(Heat reflective colour glass) complete as per the architectural drawings and the directions of engineer-incharge.	15.02	39.96	54.98	Sqm	
59	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete: 100x63x3.2 mm	84.00	206.64	290.64	EA	
60	Providing and fixing double action hydraulic floor spring of approved brand and manufacture confirming IS: 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors including cost of cutting floors, embedding in	8.00	3.00	11.00	Ea	



			1			I	I
	floors as required and making						
	good the same matching to the						
	exiisting floor finishing and cover						
	plates with brass pivot and single						
	piece M.S. sheet outer box with						
	slide plate etc. complete as per						
	the direction of Engineer-in-						
	charge. With Stainless Steel						
	cover plate minimum 1.25 mm						
	thickness.						
	Providing and fixing aluminium						
	sliding door bolts ISI marked						
	anodised (anodic coating not less						
61	than gradeAC 10 as per IS:1868)	5.00	6.00	11.00	EA		
	transparent or dyed to required						
	colour and shade with nuts and						
	screws etc. complete: 300x16 mm						
	Providing and fixing aluminium						
	tower bolts ISI marked anodised (						
	anodic coating not less than grade						
62		8.00	2.00	11.00	EA		
02	AC 10 as per IS : 1868 )	8.00	3.00	11.00	EA		
	transparent or dyed to required						
	colour or shade with necessary						
	screws etc. complete: 300x10 mm						
	Providing and fixing aluminium						
	extruded section body tubular						
	type universal hydraulic door						
	closer (having brand logo with						
	ISI, IS: 3564 embosed on the						
63	body, door weight upto 36 kg to	2.00	3.00	5.00	EA		
	80 kg and door width from 701						
	mm to 1000 mm) with double						
	speed adjustment with necessary						
	1 ^						
	complete.						
	Providing and fixing aluminium						
	casement stays ISI marked						
	anodised (anodic coating not less						
64	than grade AC 10 as per IS:	6.00	24.00	30.00	EA		
	1868) transparent or dyed to						
	required colour and shade with						
	necessary screws etc. complete.						
	Structural steel work in single						
	section fixed with or without						
	connecting plate including						
65	cutting, hoisting, fixing in	2545.68	2161.88	4707.56	KG		
	position and applying a priming	20.0.00		., ., .,			
	coat of approved steel primer all						
	complete.						
				<u> </u>			
	Welding by gas or electric plant	1170.00	1.420.00	2600.00			
66	including transportation of plant	1170.00	1430.00	2600.00	Cm		
	at site etc. complete						
	Structural steel work riveted,						
67	bolted or welded in built up	1344.52	859.74	2204.26	KG		
	sections, trusses and framed work						
<u> </u>	<u> </u>		1	<u> </u>		I	<u> </u>



	including outting hairting fining		I			
	including cutting, hoisting, fixing in position and applying a					
	priming coat of approved steel					
	primer all complete.					
	P/F MS chequred plate i/c					
	cutting, straightening, rounding					
68	of edges, making lifting	3429.00	3442.25	6871.25	Kg	
	arrangment & fixing by welding					
	to M.S angle frame etc.					
	Providing and fixing M.S. Sheet					
	of required thickness to M.S					
	frames by welding. (The cost					
60	includes the cost of M.S. sheet,	47.10	47.10	04.20	V.C	
69	cutting, straightening, labour, cartage, welding rods, hire	47.10	47.10	94.20	KG	
	charges of welding machine etc.					
	complete) as per direction of					
	Engineer-In-Charge.					
	Providing and fixing by welding					
	65 mm size M.S. Hinges made					
	out of 5mm thick M.S. sheet i/c					
70	nuts, bolts etc. complete to M.S.	4.00	4.00	8.00	EA	
, ,	angles/channels as approved by					
	Engineer-In-Charge . The cost is					
	inclusive of material, cartage, welding etc. complete job.					
	Cutting holes upto 23x23x25 cm					
	in walls & making good the same					
7.1	after fixing hangers in CC 1 :2	00.00	70.00	160.00	F.4	
71	:4(1 Cement : 2 Coarse sand : 4	90.00	78.00	168.00	EA	
	Graded stone agg. 20 mm					
	nominal size )					
	Supplying and fixing rolling					
	shutters of approved make, made					
	of required size M.S. laths,					
	interlocked together through their entire length and jointed together					
	at the end by end locks, mounted					
	on specially designed pipe shaft					
	with brackets, side guides and					
	arrangements for inside and					
	outside locking with push and					
72	pull operation complete,	14.00	10.50	24.50	SQM	
	including the cost of providing					
	and fixing necessary 27.5 cm long wire springs manufactured					
	from high tensile steel wire of					
	adequate strength conforming to					
	IS: 4454 - part 1 and M.S. top					
	cover of required thickness for					
	rolling shutters. 80x1.25 mm					
	M.S. laths with 1.25 mm thick					
	top cover.					
73	Providing and fixing ball bearing	4.00	4.00	8.00	EA	
	for rolling shutters.					



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74	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade. Two or more coats on new work.	269.36	292.66	562.02	Sqm	
75	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding,buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)	140.00	140.00	280.00	Kg	
76	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations. (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS: 2645 and approved by Engineer -in charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25mm to 115mm size with 50% of cement mortar 1:5 (1cement : 5coarse sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer -in charge over 20 mm thick layer of cement mortar of mix 1:5 (1cement : 5coarse sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer -	222.95	226.84	449.79	Sqm	



	in charge to required slope and treating similarly the adjoining walls upto 300 mm height					
	including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of					
	cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming					
	to IS: 2645 and approved by Engineer -in charge. (d) Finishing the surface with 20					
	mm thick jointless cement mortar of mix 1:4 (1cement :4coarse sand) admixed with water					
	proofing compound conforming to IS: 2645 and approved by Engineer-in-charge					
	including laying glass fibre cloth of apprveod quality in top layer of plaster and finally					
	finishing the surface with trowel with neat cement slurry and making					
	pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a					
	minimum period of two weeks for curing and for final test. All above operations to be					
	done in order and as directed and specified by the Engineer-in-Charge.					
	With average thickness of 120 mm and minimum thickness at khurra as 65 mm					
	Providing and fixing on wall face unplasticised - Rigid PVC rain water pipes conforming to IS:					
77	13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for thermal expansion. (i) Single	38.00	38.00	76.00	Mtr	
	socketed pipes: 110 mm diameter Providing and fixing on wall face					
	unplasticised - PVC moulded fittings/accessories for unplasticised - Rigid PVC rain					
78	water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for	46.00	-	46.00	Ea	
	thermal expansion. Bend 87.5°-75 mm bend.					



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79	Providing and fixing unplasticised- PVC pipe clips of approved design to unplasticised-PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1cement: 4 coarse sand) and making good the wall etc. complete. 110 mm	32.00	32.00	64.00	Ea		
80	Providing and Laying 150mm dia PVC pipe (Heavy duty-working pressure 6Kg/cm2) of Prakash or equivalent make as per required slope for sewer line including jointing etc. complete as per direction of Engineer-in-charge (Wt. of pipe-22 Kg approx).	30.00	30.00	60.00	М		
81	Providing and fixing on wall face unplasticised - Rigid PVC rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for thermal expansion. (i) Single socketed pipes: 150 mm diameter	87.80	88.80	176.60	Mtr		
82	Providing and fixing on wall face unplasticised - PVC moulded fittings/accessories for unplasticised - Rigid PVC rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for thermal expansion. Bend 87.5°-150 mm bend	16.00	16.00	32.00	EA		
83	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diametre and weighing not less than 440 grams.	8.00	10.00	18.00	EA		
84	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed	20.00	36.00	56.00	М		



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	work, including cutting chases and making good the walls: 15						
	mm nominal outer dia Pipes.						
85	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.Internal work - Exposed on wall: 20 mm nominal outer dia Pipes.	50.00	15.00	65.00	M		
86	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.Internal work - Exposed on wall: 25 mm nominal outer dia Pipes.	20.00	25.00	45.00	М		
87	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate of 20mm nominal size) over P.V.C. sheet 1mx 1mx400 micron, finished with 12 mm cement plaster 1:3 (1 cement: 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete.	8.00	8.00	16.00	Ea		
88	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shade except burgundy, bottle green, black of any size as approved by Enigineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of Cement Mortar 1:3 (1 Cement: 3 Coarse sand)	35.28	31.50	66.78	Sqm		



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	and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.						
89	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS: 15622 of apporved make in colours such as white, ivory, grey fume red brown, laid on 20mm thick cement mortar 1:4 (1 Cement: 4 Coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	20.00	16.40	36.40	Sqm		
90	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe with manually controlled device (handle lever), conforming to IS: 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required: W.C. pan with ISI marked white solid plastic seat and lid.	2.00	2.00	4.00	Ea		
91	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS: 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required: Single half stall urinal with 5 litre P.V.C. automatic flushing cistern.	2.00	1.00	3.00	Ea		
92	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: white vitreous china wash basin	2.00	2.00	4.00	Ea		



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	size 630x450 mm with single 15 mm C.P. brass pillar tap						
93	Constructing brick masonry manhole in cement mortar 1:4 (1 cement:4 coarse sand) RCC top slab with 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement: 4 coarse sand: 8 graded stone aggregate 40mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1cement: 3 corse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4(1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design: Inside size 90x80cm and 45cm deep including CI cover with frame(light duty) 455x610mm internal diamensions, total weight of cover and frame to be not less than 38kg (weight of cover 23kg and weight of frame 15kg) With common burnt clay F.P.S (non modular) bricks with class designation 7.5	3.00	3.00	6.00	Ea		
94	Extra for depth for manholes Size 90x80 cm With common burnt clay F.P.S. (non modular )bricks class designation 7.5	3.25	3.25	6.50	Mtr		
95	Providing and fixing square-mouth S.W. gully trap class SP-1complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 Kg. as per standard design: 100x100mm size P type with common burnt clay F.P.S (non modular) bricks of class designation 7.5	3.00	3.00	6.00	Ea		
96	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on	1.00	1.00	2.00	Ea		



	both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete : For pipes 100 to 250 mm diameter					
97	Providing and fixing brass stop cock of approved quality: 20 mm Nominal bore	6.00	6.00	12.00	Ea	
98	Providing and fixing uplasticised PVC connection pipe with brass unions: 45 cm length, 15 mm NB	6.00	6.00	12.00	Ea	
99	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISI: 12701 marked, indicating the BIS License No. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	1000.00	1000.00	2000.00	Per Litre	
100	Providing and fixing C.P. brass bib cock of approved quality conforming to IS: 8931: 15 mm nominal bore.	4.00	4.00	8.00	EA	
101	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	2.00	4.00	EA	
102	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931: 15 mm nominal bore.	6.00	6.00	12.00	EA	
103	P/F stainless steel steel jali (grating) with or with- out hole for wash pipe for floor/nahani trap. 100mm dia (weight not less than 100gms).	6.00	6.00	12.00	EA	
104	Providing/fixing C.P. brass flange cap for bib cock/stop cock.	12.00	12.00	24.00	EA	
105	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors: 100 mm inlet and 100 mm outlet SCI S&S as per IS: 1729.	2.00	2.00	4.00	EA	



106	Providing and fixing 18 mm thick gang saw cut mirror polished premoulded and prepolished, machine cut for kitchen platforms, vanity counters, windows, sills, facias and similar locations of required size of approved shade, colour and texture laid over 20 mm 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 edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade. Area of slab over 0.5 Sqm	3.75	3.75	7.50	SQM	
107	P/F BLACK GRANITE POLISHED STONE PARTITIONS IN URINALS INCLUDING MAKING CHASE IN WALL AND FIXING THE STONE AS PER REQUIRED WITH CC 1:2:4 AS PER INSTRUCTION OF EIC.	2.00	2.00	4.00	EA	
108	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required: Kitchen sink without drain board: 610x460 mm bowl depth 200 mm.	1.00	1.00	2.00	EA	
109	Providing and fixing PTMT Bottle Trap for Wash basin and sink.: Bottle trap 38mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 263gms.	4.00	4.00	8.00	EA	
110	Providing and Fixing bevelled edge mirror of superior quality glass (Modi /Sant Gobain) complete with 6 mm thick hard board fixed to wooden cleats with cp brass screws and washers etc complete.	2.16	2.16	4.32	Sqm	



	[		T	Г		T	T
111	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.  Providing and fixing toilet paper	2.00	2.00	4.00	EA		
112	holder CP brass.	2.00	2.00	4.00	Ea		
113	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet: 150 mm diameter	2.00	2.00	4.00	Ea		
114	P/F CP brass towel rod 20mm dia,600mm long with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of appd quality and colour. ( Jaguar or Equivalent make).	2.00	2.00	4.00	EA		
115	P/F Stair case railing of 0.90m avg. height comprising of 20mm square bar of length 1.05 mtr and 150mm centre to centre with 50mm dia MS pipe on top of railing including fixing of vertical bars in steps by grouting of required hold fast as per direction of Engineer - in - charge and a coat of steel primer etc complete.	24.00	24.00	48.00	М		
116	Providing and fixing circular/hexagonal cast iron or M.S. sheet box for ceiling fan clamp of internal dia 140 mm, 73 mm height, top lid 1.5 mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/ M.S sheet box by mean of 3.3 mm dia round headed screw, one lock at the corners. Clamp shall be made of 12 mm dia m.s bar bent to shape as per standard drawing.	13.00	11.00	24.00	Ea		
117	Providing and fixing homogeneous Polyvinyl chloride sheet /tile in flooring and skirting in approved pattern on a smooth and damp proof base using rubber based adhesives of approved quality and manufacturer like Dunlop S-758, Fevicol SR 998 or equivalent including rolling with light wooden roller weighing 5 Kg all complete as directed by Engineer-In-Charge, in approved	267.54	217.48	485.02	Sqm		



	colour and shade. 2 mm thick					
118	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. all complete including priming coat with approved steel primer all complete. Fixed to steel windows by welding.	1014.00	760.50	1774.50	KG	
119	PROVIDING & FIXING 1.0 H.P. MONO BLOCK SINGLE PHASE BOOSTER PUMP APPROVED MAKE 25MM.X25MM. SUCTION & DELIVERY MOUNTINGS INCLUDING MAKING SUITABLE FOUNDATION & ELECTRICAL CONNECTIONS. COST ALSO INCLUDES FOR MAKING CONNECTIONS OF G.I. SUCTION & DELIVERY LINE, TESTING & COMMISSIONING COMPLETE.	1.00	1.00	2.00	EA	
120	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 50mm length x 50 mm wide x 3.0 mm thick with flanges of at 1200 mm centre to centre, one flange fixed to the steel truss members and other flange of cleat fixed to the angle hangers of 50x50x3 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	171.00	130.54	301.54	Sqm	



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	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 .						
	Boring with hydraulic piling rigs						
	with power units, Providing and						
	installing cast in situ single under						
	reamed piles of specified						
	diameter and length below pile						
	cap in M-25 cement concrete, to						
	carry a safe working load not less						
121	than specified, excluding the cost	_	360.00	360.00	Mtr		
121	of steel reinforcement but		200.00	200.00	1,161		
	including the cost of boring with						
	bentonite solution and the length						
	of the pile to be embedded in pile						
	cap etc. all complete. (Length of						
	pile for payment shall be						
	measured upto to the bottom of						
	pile cap): 450 mm dia piles						
	· · · · · · · · · · · · · · · · · · ·			i .			



122	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by percussion drilling using Direct mud circulation (DMC) or Bailer and chisel technique by tripod and mechanical Winch Machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured up to bottom of pile cap). Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used. 450 mm dia piles	-	180.00	180.00	Mtr	
123	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by percussion drilling using Direct mud circulation (DMC) or Bailer and chisel technique by tripod and mechanical Winch Machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured up to bottom of pile cap). Note: Truck Mounted rotary/TMR/Tubewell boring machine shall not be used. 500 mm dia piles	-	180.00	180.00	Mtr	



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S. No	Description of item  P/F/T/C of PHILIPS make Stellar	DTC Kalkaji	DTC Sukhdev vihar	Total "Y"	Unit	Rate "Z"	Amount "Y x Z"
		FAKI B	QTY	AL WUKK	<u></u>		
		DADT D	SUB-TOTA			WORKS' (P)	
127	Providing and fixing on wall face unplasticised - PVC moulded fittings/accessories for unplasticised - Rigid PVC rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for thermal expansion. Bend 87.5°-110 mm bend.	-	46.00	46.00	Ea		
126	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete: 150x10 mm	-	24.00	24.00	EA		
125	Lateral load testing of single pile in accordance with IS Code of practice IS: 2911 (Part IV) for determining safe allowable lateral load on pile: Upto 50 tonne capacity pile	-	2.00	2.00	Per Test		
124	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by kentledge/Anchor piles method and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer incharge.  Note: 1. Initial and Routine Load Test shall not be carried out by Dynamic method of testing.  Note: 2. Testing agency shall submitt the design of loading platform for the approval of Engineer-in-charge. Single pile upto 50 tonne Safe capacity: Initial test (Test Load 2.5 times the Safe capacity)	-	2.00	2.00	Per Test		



2	Providing and fixing Bulkhead Luminaire of Phillips or equivalent make including the cost of drilling holes in walls/celing pvc gutties screws and making connections etc complete including lamp Cat no NXC 101 1XGLS 60W.  Providing and fixing ceiling Fan	6.00	6.00	12.00	EA	
3	48" of Crompton/approved make. Providing and fixing Exhaust Fan	13.00	11.00	24.00	EA	
4	of size 12" of Crompton make.	5.00	6.00	11.00	EA	
5	Providing and fixing, Testing & commissioning of 450mm dia heavy duty Exhaust Fan with louver of approved make.(crompton greaves)	8.00	7.00	15.00	EA	
6	Providing and fixing five stage Electronic fan regulator of anchor make.	8.00	11.00	19.00	EA	
7	S / F light plug point modular type accessories: Supplying and fixing suitable size Gl 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. painting etc. as required. (For light plugs to be used in non residential buildings).	12.00	26.00	38.00	EA	
8	S / F power plug point modular type accessories: Supplying and fixing suitable size Gl box with modular plate and cover in front on surface or in recess, including providing and .fixing 6 pin 15 / 16 & 5 / 6 amps modular socket outlet and 15 / 1 6 amps modular switch, connection, painting etc. as required.	28.00	38.00	66.00	EA	
9	Point wiring in PVC conduit, with modular type switch: Wiring for light point! fan point! exhaust fan point! call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required. Group B	38.00	46.00	84.00	Point	



	Point wiring in PVC conduit,		I		l	
10	with modular type switch: Wiring for light point! fan point! exhaust fan point! call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required. Group C	40.00	40.00	80.00	Point	
11	Circuit! sub-main wiring in PVC conduit: Wiring for circuit submain wiring alongwith earth wire with the following sizes of PVC insulated copper conductor, single core cable in surface/recessed PVC conduit as required.2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	110.00	80.00	190.00	М	
12	Circuit! sub-main wiring in PVC conduit: Wiring for circuit submain wiring alongwith earth wire with the following sizes of PVC insulated copper conductor, single core cable in surface/recessed PVC conduit as required.2 X 4 sq. mm + 1 X 4 sq. mm earth wire.	60.00	50.00	110.00	М	
13	Circuit! sub-main wiring in PVC conduit: Wiring for circuit submain wiring alongwith earth wire with the following sizes of PVC insulated copper conductor, single core cable in surface/recessed PVC conduit as required.2 X 6 sq. mm + 1 X 6 sq. mm earth wire.	30.00	30.00	60.00	М	
14	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator). 8 way (4 + 24), Double door.	1.00	1.00	2.00	EA	



15	Supply and wiring for light, fan, exhaust fan points etc. with 6A switch controlled using 1.5 sq mm for phase/neutral and 1.0 sq mm for earthing copper conductor PVC insulated 1100 volt grade wires from switch control boxes to point in surface/concealed medium duty rigid PVC conduit including cutting/filling chases, conduit accessories, saddles, M.S./G.I. boxes, together with wiring accessories such as 6A modular type switches, sockets in boxes of suitable size including circuit wiring from DB to first switch	3.00	3.00	6.00	EA	
	board in the circuit and onwards switchboards in the same circuit and 6A socket wiring with 2.5 sq mm for phase/neutral and 1.5 sq mm for earthing PVC insulated copper conductor, chrome plated brass screws, identification ferrules at either ends complete in all respect. (The circuit wiring shall not be paid extra). One light controlled by one switch.					
16	S / F metal boxes: Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc. as required.: 200 mm x 300 mm x 100 mm deep.	5.00	8.00	13.00	EA	
17	S / F TP MCB DB: Supplying and fixing following way, three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/ recess, complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, interconnections, phosphatized and powder painted including earthing etc. as required. (But without MCB / RCCB / Isolator): 4 way (4 + 12), Single door, horizontal type	4.00	4.00	8.00	EA	



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18	S / F 20A SPN MCB industrial socket outlet: Supplying and fixing 20amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps IC' series, SP, MCB, in sheet steel enclosure, on surface. or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	110.00	110.00	220.00	EA		
19	S / F 'C' series. SP MCB: Supplying and fixing 5 amps to 32 amps rating, 240 volts. 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.: Single pole.	31.00	31.00	62.00	EA		
20	S / F TPN RCCB: Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required: 63Amps	4.00	4.00	8.00	EA		
21	Communication system conduiting: Supplying and installiation of following size 2 mm wall thickness rigid PVC conduit of ISI mark in recessed / on surface including all acessories like saddles, M.S. junctions / pull boxes G.I. fish wire fixing hard ware etc. including chaising the walls / floors and plastering the chased portion and making good the damages etc. complete as required 25 mm dia.	110.00	110.00	220.00	М		
22	Supply laying and termination of 8SWG GI earth wire	20.00	20.00	40.00	M		
23	G.I. earth pipe electrode with Salt / charcoal : Earthing with G.I. earth pipe 6 mtr long, 50 mm dia including accessories, and providing masonary enclosure with cover plate having locking	1.00	1.00	2.00	SET		



	arrangement and watering pipe etc. with charcoal and salt as required as per IS3043						
24	Extra down rod 20mm dia:Supplying and fixing of extra conduit down rod of 20 cm length, GI pipe, 15mm dia heavy guage including painting etc as equired (Note: more than 5 cm length shall be round to the nearest 10 cm and 5 cm or less shall be ignored).	8.00	8.00	16.00	EA		
25	S / F MCCB in cubicle panel board : Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections etc. as required : 200 Amp, 25 KA	1.00	1.00	2.00	EA		
26	SFTC of the following luminaries comprising of basic channel, holder, electronic ballast, starter, condenser, control gear box complete with decorative attachments, lamps etc. as per specification and as per catalogue number giving below Recessed mounting light fixture Bajaj Cat no.BZRSQL with 36 W LED.	14.00	12.00	26.00	EA		
27	SFTC of the following luminaries comprising of basic channel, holder, electronic ballast, starter, condenser, control gear box complete with decorative attachments, lamps etc. as per specification and as per catalogue number giving below Recessed mounting light fixture Bajaj DOVEE Cat no.BZSLO with 15 W LED (mounting with the help of 3 mm plyboard).	16.00	12.00	28.00	EA		



	PART C "RECOVERY ITEMS"							
			QTY					
S. No	Description of item	DTC Kalkaji	DTC Sukhdev vihar	Total "Y"	Unit	Rate "Z"	Amount "Y x Z"	
1	Recovery of hard rock.	61.86	-	61.86	cum			
		SUB-TOT	AL PART C	"RECOVER	Y ITEMS"	(U)		
		FINAI	L AMOUNT	i/c GST & l	RECOVE	RY (T-U)		
	All material to be arranged by the contractor and all test certificates are to be furnished by the contractor including cement used for the work.							
	I / We have read the terms and condit work and agree to abide by them.	ions with spe	cifications, sc	hedule of qu	antities and	other relevant de	etails pertaining to	
	I / We agree to carry out the above sa							
S	chedule of quantities.							
	Signature							
	Name & Address							
				•••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		



#### **ANNEXURE-I**

The Contractor must submit the following to Engineer-In-Charge before commencement of work:

- a) An Electrical license. (If applicable)
- b) PF Code No. and all employees to have PF A/c No. under PF every Act, 1952.
- c) All employees to have a temporary or permanent ESI Card as per ESI Act.
- d) ESI Registration No.
- e) PAN No.
- f) GST Registration Number.
- g) Labour License under Contract Labour Act (R & A) Act 1970 (All Engineer-in-charge responsible for execution of the job should obtain a copy of Labour License as per guidelines of HR department before start of the work by the contractor.)

#### The Contractor must follow:

- a) Third party Insurance Policy before start of work.
- b) To follow Minimum Wages Act prevailing in the state.
- c) Salary/ Wages to be distributed in presence of Company's representative not later than 7th of each month and should be disbursed through ECS mode to all workers.
- d) To maintain Wage-cum-Attendance Register.
- e) To maintain First Aid Box at Site.
- f) Latest P.F. and E.S.I. challans pertaining to the period in which work was undertaken along with a certificate mentioning that P.F. and E.S.I. applicable to all the employees has been deducted and deposited with the Authorities within the time Limits specified under the respective Acts.
- g) Workman Compensation Policy. (If applicable)
- h) Labour license before start of work. (If applicable)
- i) TERM INSURANCE POLICY of sum assured of Rs. 10 Lac to be submitted before commencing of work.



## ANNEXURE- II

# **BID FORM**

То					
Head of Department Contracts & Material Deptt. BSES Rajdhani Power Ltd I Floor, "C" Block, BSES Bhawan Nehru Place, New Delhi-110019 Sir,					
1. We understand that BRPL is desirous of carrying out in its licensed distribution network area in Delhi					
2. If our Bid is accepted, we undertake to provide our services as per completion schedule mentioned in the tender document from the date of award of work order/letter of intent					
3If our Bid is accepted, we will furnish a performance bank guarantee as mentioned in the RFQ for due performance of the Contract in accordance with the Terms and Conditions.					
4. We agree to abide by this Bid for a period of 120 days from the due date of bid submission and it shall remain binding upon us and may be accepted at any time before the expiration of that period.					
5. Unless and until Letter of Intent is issued, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.					
6. We understand that you are not bound to accept the lowest, or any bid you may receive.					
There is provision for Resolution of Disputes under this Contract, in accordance with the Laws and Jurisdiction of Contract.					
Dated this day of					
Signature In the capacity of					
CAPITALS)					



#### ANNEXURE-III

#### **FORMAT FOR EMD BANK GUARANTEE**

(To be issued in a Non Judicial Stamp Paper of Rs.50/-purchased in the name of the bank)

Whereas [name of the Bidder] (herein after called the "Bidder") has submitted its bid dated[date of submission of bid] for the supply of [name and/or description of the goods] (here after called the "Bid").

"Bid").	
address],ha called the "Bhawan, NRswhich paym	LL PEOPLE by these presents that WE [name of bank] at [Branch Name and ving our registered office at [address of the registered office of the bank] (herein after Bank"), are bound unto BSES Rajdhani Power Ltd., with it's Corporate Office at BSES ehru Place, New Delhi-110019, (herein after called —the "Purchaser") in the sum of (Rupees
Sealed with	the Common Seal of the said Bank this day of 2022
THE CONI	DITIONS of this obligation are:
1 If th	e Bidder withdraws its Bid during the period of bid validity specified by the Bidder on m; or
2. If the Bid of bid valid	lder, having been notified of the acceptance of its Bid by the Purchaser during the period ity:
(a) (b)	Fails or refuses to execute the Contract Form, if required; or Fails or refuses to furnish the performance security, In accordance with the

(b) Fails or refuses to furnish the performance security, In accordance with the Instructions to Bidders/ Terms and Conditions;

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that is its demand the purchaser will note that amount claimed by it is due to it, owing to the occurrence of one or both of the two condition(s), specifying the occurred condition or condition(s).

This guarantee will remain valid for 6(six) months after last date of receipt of tenders, and any demand in respect thereof should reach the Bank not later than the above date.

(Stamp & signature of the bank) Signature of the witness



#### <u>ANNEXURE – IV</u>

#### **TERMS & CONDITIONS FOR REVERSE AUCTION**

In a bid to make our entire procurement process more fair and transparent, BRPL intends to use the reverse auctions through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as techno commercial qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

Reverse auction shall be governed by following terms and conditions:

- 1. BRPL shall provide the user id and password to the authorized representative of the bidder. (Duly signed authorization letter in lieu of the same shall be submitted along with the bid).
- 2. BRPL will make every effort to make the bid process transparent. However, the award decision by BRPL would be final and binding on the supplier.
- 3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of BRPL, bid process, bid technology, bid documentation and bid details.
- 4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
- 5. Bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of BRPL.
- 6. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder (Part-B) as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out rightly rejected by BRPL.
- 7. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
- 8. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at BRPL site.
- 9. The prices submitted by a bidder during the auction event shall be binding on the bidder. No further communication will be there.
- 10. No requests for time extension of the auction event shall be considered by BRPL.
- 11. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the reverse auction event.



12. In case RA is not conducted/concluded for any reason, a "final no regret" financial bid in a sealed envelope will be called for from all qualified bidders.

## ANNEXURE-V Communication Details

### Bidder should furnish the below details for future communication:-

GENERAL INFORMATION	
NAME OF COMPANY	
POSTAL ADDRESS	

FOR TECHNICAL QUERY:					
CONTACT PERSON & DESIGNATION	NAME	DESIGNATION			
E-MAIL	MOBILE NO	TELEPHONE NO			

FOR COMMERCIAL QUERY:					
CONTACT PERSON & DESIGNATION	NAME	DESIGNATION			
E-MAIL	MOBILE NO	TELEPHONE NO			



# ANNEXURE-VI

# <u>Annexure - A</u> <u>SPECIFICATIONS FOR CONSTRUCTION MATERIALS & PETTY ELECTRICAL ITEMS</u>

<u>Items</u>		Item Description	Specification/Item code	Shortlisted Brands
	1	PPC/OPC-33 grade	33 grade	Ultratech Cement / Shree cement
A. Cement	2	PPC/OPC-43 grade	43 grade	Ultratech Cement Shree cement
	3	PPC/OPC- 53 grade	53 grade	Ultratech Cement Shree cement
Reinforcement steel	4	Cold twisted bar	HSN Code 7214	Rathi
				Kamdhenu
	5	Ceramic wall tiles	HSN CODE 69072100	Kajaria Somani
Tiles Work	6	Ceramic floor tiles	HSN CODE 69072100	Kajaria Somani
	7	Vitrified floor tiles	HSN CODE 6206	Kajaria Somani
	0	Dai nagar plain white markle	USN Code 7292	Pai nagar plain white markle
				Raj nagar plain white marble
D. Marble/Granite				Udaipur green Zebra black
				Kota Stone
				Cateye granite brown
	11.1	cate ye granite brown	11314 COGC 7202	cate ye grante brown
	12	Plywood	HSN CODE 4412	Greenply Century
	13	Flush door shutters	4418	Greenply Century
	14	Hinges	HSN 8302	Godrej Hettich
	15	Tower bolt	HSN 8302	Godrej Hettich
	16	Handle (SS)	HSN 8302	Godrej Hettich Dorset
	17	M.S. sliding door bolts	HSN 8302	Godrej Hettich
Door & Window	18	Floor door stopper	HSN 8302	Godrej Hettich
	19	Hydraulic door closer	HSN 8302	Dorset Hardwyn
	20	Mortice latch & lock	HSN 8302	Dorset Godrej
	21	Laminates	HSN 48239019	Century Merrino
	22	Veneer	HSN 44083120	Century Merrino
	23	Glass	HSN 70049019	Modiguard Tata Continental
	24	Blinds	HSN Code 3925	Mac
	25	Floor spring	HSN 8302	Ozone HARDWIN
	26	Door closer	HSN 8302	Ozone HARDWIN
Aluminium Work	27	Aluminium sections	HSN 7606	Jindal Hindalco
	Cement  Reinforcement steel  Tiles Work  Marble/Granite  Door & Window	Cement   1   2   3   3   3   3   3   3   3   3   3	Cement   2   PPC/OPC-33 grade   2   PPC/OPC-43 grade   3   PPC/OPC-53 grade	Cement

<u>S. No</u>	<u>Items</u>		Item Description	Specification/Item code	Shortlisted Brands
		28	Angle	HSN 7308	RANA Kamdhenu
			7 tilgic	11314 7 300	RANA
		29			Capital
			I Secton	HSN 7308	RANA RANA
		30	channel	HSN 7308	Kamdhenu
G.	Structural Steel	31			RANA
			Tube	HSN 7308	RANA RANA
		32	IRC jali Mesh	HSN 7308	Kamdhenu
		33			RANA
	-		Flat	HSN 7308	RANA RANA
		34	MS sheet	HSN 7308	Kamdhenu
			Oil bound washable distemper/ Cement primer/ Ready mixed		Asian
		35	acrylic distemper/ Water proofing	L102/0615	Berger
		26	cement paint Red oxide Zinc cromate/ pink or		Asian
		36	grey primer	Dulux - Aquatech Asian- Royal, Dulux velvet	Berger
		37	Plastic emulsion/ Synthetic enamel/ aluminium paint	touch	Asian Berger
н.	Paints & Putty	38	Anti corrossive bitumastic paint		Shalimar
				IS 9077(2001)	Berger JK
		39	POP		Sakrni
		40	M/all putty		Birla JK wall putty
		40	Wall putty	HS Code 3214	Birla putty ACC Birla
		41	White Cement	HS Code 2523	Ultra Tech
					Jindal
		42	GI Pipes	HSN 7306	TATA
		43	GI Fittings	HSN 7306	Uniq, ZOLOTO-M, DRP-M
		44	CPVC pipes for water supply	HSN 3917	Ashirwad, Astral
		45	Rain water pipes & PVC fittings (SWR)	HSN 3917	Supreme, Finolex
	ľ	46	PVC pipes and fittings for	HSN 3917	Supreme,
	-		sanitation works (SWR)		Finolex Supreme,
		47	Upvc pipes	HSN 3917	Finolex
		48	PVC pipes for bore well	HSN 3917	Supreme, Finolex
		49	UPVC doors & Windows	HSN 3917	Fenesta Aluplast
		50	Stainless steel sink	HSN 9403	Neelkanth
	ŀ				Nirali Hindware
		51	Indian type WC	Orissa pattern-CO117	Parryware Hindware
		52	Wall mounted European type WC	Cascade NXT- CO208	Parryware
ı.	Sanitiary and water supplying works	53	Floor mounted European type WC	Cascade NXT- CO217	Hindware Parryware
	2-FE-19 11011/0	54	Urinal	Cascade Classic - CO583	Hindware Parryware
		55	Wash basin		Hindware
				Cascade Classic - CO476	Parryware KGM
		56	MH/ Water tank plastic steps		Pranali
		57	Water storage tanks	ccws	Sintex Neelkamal

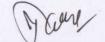
<u>S. No</u>	<u>ltems</u>		Item Description	Specification/Item code	Shortlisted Brands
		58	SFRC Manhole cover & frames	4100416	KK Manholes & Gratings Pragati
		59	RCC pipes	HSN 6810	Ashok Cement pipes Indian hume pipes
		60	15mm CP Brass bib tap	( Jaguar cat no. 039)	Jaquar Hindware
		61	15mm CP Brass Long body bib tap	( Jaquar cat no. 031)	Jaquar Hindware
		62	15mm CP brass angle valve	( Jaquar cat no. 055)	Jaquar Hindware
		63	CP Jali	HSN code 7324	Jaquar Hindware
		64	Galvainised/percoalated iron profile sheet	HSN 4808	TATA JSW
J.	Roofing works	65	Gypsum board	HSN 1301	Gypsum India Saint Gobin
		66	Sections for gypsum ceiling	HSN 1301	Gyp India
		67	False ceiling with armstrong	HSN 1301	hardwyn
		<b>Elect</b>	ricals items (Make /	Type / Specificati	ons)
		1	PVC conduits	HSN Code 3917	Polypack Pestoplast
		2	Switches	HSN Code 8536	Havells Anchor
		3	Sockets	HSN Code 8536	Havells Anchor
		4	Wires	HSN Code 8544	Havells Polycab
		5	Wire for sumersible pump & motor	HSN Code 8544	Finolex
К.	Electrical items	6	МСВ	HSN Code 8536	Havells Anchor
K.	Liectrical items	7	МССВ	HSN Code 8536	Havells Anchor
		8	MCCB box	HSN Code 8536	Havells Anchor
		9	Isolators	HSN Code 8536	Havells Anchor
		10	DB	HSN Code 8536	Havells Legrand
		11	Exhaust Fan	HSN Code 8414	Havells Crompton
		12	Ceiling Fan	HSN Code 8414	Havells Crompton



# ANNEXURE-VII



		QC CHECK LIST FOR EHV 66/33KV	, HOUSING/OFFICE	ES BLDG CO	NSTRUCTIO	N WORKS				
Work or	der/Scheme No.	Myst Chic medicalis								
Name o	f work :-				Name of i	in charge :-				
Circle :-					Name of a	agency :-				
Division	de .	As par College Services								
	and related		A) Con	tractor	B) BRPI	L Execution	n Team	Qu	ality	REMARKS
Sr. No.	Description of points to be checked	References	Responsibility	Documentary Evidence attached	Responsibility	Documentary Evidence attached	Status (Cleared / Not Cleared)	Documentary Evidence attached	Status (Cleared / Not Cleared)	
1	Confirming of building plan as per approved by drawing/Design.	As per approved.		ш		ш		Ш		
2	Excavation of foundation trenches/pits properly dressed/rammed. CPWD specification	As per CPWD specification								
3	Providing and laying Lean concrete 1:5:10 concrete. As per CPWD Specification	As per CPWD specification								
4	Providing and laying Lean concrete 1:4:8 concrete.(40mm NOMINAL SIZE) As per CPWD Specification	As per CPWD specification								





0 13		QC CHECK LIST FOR EHV 66/33KV, H	IOUSING/OFFICE	S BLDG CONST	RUCTION WORK	S		
5	Providing and laying cement concrete specified 1:1.5:3 for footing and column.	As per CPWD specification						
6	Providing and laying cement concrete specified 1:2:4 for footing* and column.	As per CPWD specification						
7	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 as per CPWD specification	As per CPWD specification						
8	Brick work with F.P.S bricks of class designation 7.5 in foundation and plinth	As per CPWD specification						
9	Brick work in superstructure above plinth level upto floor V level	As per CPWD specification						
10	Proper form work/ centering & shuttering as per CPWD specification ( of wooden ply/ steel) provided for RCC/ CC	As per CPWD specification						
	Provided Stimonary Lister on a							

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	I Deleference to the second	QC CHECK LIST FOR EHV 66/33KV	, HOUSING/OFFIC	CES BLDG C	ONS TRUCTIC	N WORKS	 -	
11	Reinforcement cement concrete work in beams, Suspended floors roofs having slope upto 15, landing balconies etc. 1:1.5:3 /RMC M20, M30	As per CPWD specification						
12	Proper water proofing treatment to roofs provided, in sequence as specified in item and & no leakage/ seepage in the slab	As per CPWD specification						
13	provided galvanized iron profile sheets roofing of proper as specified in item.	As per CPWD specification						
14	Sanitiary and water supplying work brand/Make as per Engineer incharge	As per CPWD specification						
15	12mm cement plaster in fine sand as per CPWD specified	As per CPWD specification						
16	15mm cement plaster on the rough side or single in half brick wall of mix as per CPWD spefication	As per CPWD specification						
17	6mm cement plaster for to ceiling as per CPWD spefication	As per CPWD specification						
18	Provided stone grit plaster on exterior walls in layers ( under layer 12mm & top layer 15mm) and in proper ratio as specified	As per CPWD specification						



70 407		QC CHECK LIST FOR EHV 66/33KV,	IOUSING/OFFICES	BLDG CONSTRU	CTION WORKS	-		
19	Providing and fixing cupboard shutter 25mm thick, with prelaminated flat pressed three layer particle board	As per CPWD specification						
20	Providing and fixing cupboard shutter 25mm thick veneered particle board IS: 3097 marked	As per CPWD specification						
21	Provided Anodized aluminum work of approved quality for door and windows as specified in item and weight of the sections in permissible limit  Manufacturer certificate	As per CPWD specification						
22	Steel doors ,windows and ventilators provided as per specified rolled steel sections	As per CPWD specification						
23	Flush door shutters provided of ISI mark with stainless steel hinges as per CPWD specification	As per CPWD specification						
24	IRC welded mesh of appd design and weight in permissible limit as per CPWD specification	As per CPWD specification						
25	Kota stone used for flooring is hard, sound, dense and homogenous texture, free from cracks & machine cut	As per CPWD specification						
26	False ceiling of approved make and quality as specified in item provided on proper grid of steel / aluminum for support.	As per CPWD specification					100	

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		QC CHECK LIST FOR EHV 66/33KV, H	OUSING/OFFICES E	LDG CONSTRUCTI	ON WORKS		
27	Plaster of Paris of approved quality applied in layers of thickness as per CPWD specifications to walls,roofs to achieve an even surface	As per CPWD specification					
28	Providing and applying white cement based putty of average * thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	As per CPWD specification					
29	Wall painting with plastic emulsion paint of approved brand and manufacturer to give and even shade as per specification	As per CPWD specification					
30	Distempering of oil bound washable distemper of approved brand and manufacturer to give an even shade	As per CPWD specification					
31	Finishing walls with Acrylic Smooth exterior paint of required shade: New work (Two or more coat applied @ 1.67 ltr/10 SQM over and including priming coat of exterior primer applied @ 2.20Kg./10 SQM).	As per CPWD specification					

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		QC CHECK LIST FOR EHV 66/33KV, HOL	JSING/OFFICES BLD	CONSTRUCTION WOR	KS	Name and Address of the Owner, where the Owner, which is the Owner, where the Owner, which is the Ow	No. of the last of
32	Painting with synthetic enamel paint of approved brand and manufacturer of required colour to give an even shade	As per CPWD specification					
33	Trench covers/ precast trench provided are of as per item of schedule/ specifications.	As per CPWD specification					
34	ELECTRICAL WORK: Wiring cables which passed through walls were taken through a protectionPVC pipe of sutable size.	As per CPWD specification					acuen-
. 35	Electrical wiring has been done as per nomenclature of item in work order.	As per CPWD specification			33		
36	Electrical fittings like light points, power points, sockets, switch boards, MCBS etc. used are conforming to relevant BIS CODE.	As per CPWD specification					
37	Malba/ debris scrap removed and site is clear as per NGT order.	as per NGT order and site requirement					



		QC CHECK LIST FOR EHV (6/33K	//11KV, HOUSI	NG/DFFICES	MAINT	ENANCE	WORKS			
Work o	rder/Scherne No.									
Name o	f work :-		Name of i	ncharge :-						
Circle :			Name of A	Age ncy :-						
Division										
			A) Co	entractor	В)	B RPLExe Tearn		Qua	ality	REMARKS
Sr. No.	Description of points to be checked	References	Responsibility	Documentary Evidence attaction	Responsibility	Documentary Evidence attached	Status (Cleared / Not Cleared)	Documentary Evidence attached	Status (Cleared / Not Cleared)	
1	Providing and laying Lear conditete 1 5:10 concrete. As per CPVVD Specification	As per CPWD specification								
2	Providing and laying Lear concrete 1 4:8 concrete. As per CPVVD Specification	As: per CPWD specification								
3	Providing and laying cement concrete specified 1:2:4 for footing and column. As per CPWE Specification	As: per CPWD specification								
4	Brick work with F.P.S bricks of class designation 7.5 in foundation and plinth As per CPWD Specification	As: per CPWD specification								





		QC CHECK LIST FOR EHV 66/33KV/11	(V, HOUSING/OFFICES MA	AINTENANCE WORKS	
5	Brick work in superstructure above plinth level upto floor V level As per CPWD Specification	As per CPWD specification			
6	Proper water proofing treatment to roofs provided, in sequence as specified in item and & no leakage/ seepage in the slab	As per CPWD specification			
7	providedgalvainised iron profile sheets roofing of proper as specified in item.	As per CPWD specification			
8	Sanitary and water supplying works as per CPWD specification	As per CPWD specification			
9	12mm cement plaster in fine sand as per CPWD specification	As per CPWD specification			
10	15mm cement plaster on the rough side or single in half brick wall of mix as per CPWD specification	As per CPWD specification			
11	6mm cement plaster for to ceiling as per CPWD specification	As per CPWD specification			
12	Provided grit plaster on exterior walls in layers ( under layer 12mm & top layer 15mm) and in proper ratio as per specified	As per CPWD specification			
13	Providing and fixing cupboard shutter 25mm thick, with prelaminated flat pressed three layer particle board as per IS Code 12823 as per CPWD specification	As per CPWD specification			
14	Providing and fixing cupboard shutter 25mm thick veneered particle board IS: 3097 marked as per CPWD specification	As per CPWD specification			

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		QC CHECK LIST FOR EHV 66/33KV/11	KV, HOUSING/OFFIC	ES MAINTE	NANCE	WORKS		
15	Fixing renewing glass panes with putty as per CPWD specification	As per CPWD specification		I I I I I I I I I I I I I I I I I I I	MANUE	VOINTS		
16	Provided Anodized aluminum work of approved quality for door and windows as specified in item and weight of the sections in permissible limit as per CPWD specification	As per CPWD specification						
17	Steel doors ,windows and ventilators provided as per specified rolled steel sections as per CPWD specification	As per CPWD specification						
18	Flush door shutters provided of ISI mark with stainless steel hinges as specified	As per CPWD specification						
19	IRC welded mesh of appd design and weight in permissible limit as per CPWD specification	As per CPWD specification						
20	Kota stone used for flooring is hard, sound, dense and homogenous texture, free from cracks & machine cut	As per CPWD specification						
21	False ceiling of approved make and quality as specified in item provided on proper grid of steel / aluminum for support.	As per CPWD specification						
22	Plaster of Paris of approved quality applied in layers of thickness as per CPWD specifications to walls,roofs to achieve an even surface	As per CPWD specification						
23	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	As per CPWD specification						
24	Wall painting with plastic emulsion paint of approved brand and manufacturer to give and even shade as per specification	As per CPWD specification						

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		QC CHECK LIST FOR EHV 66/33K	//11KV, HOUSI	NG/OFFICES	MAINTE	NANCE	WORKS		
25	Distempering of oil bound washable distemper of approved brand and manufacturer to give an even shade as per CPWD specification	As per CPWD specification							
26	Finishing walls with Acrylic Smooth exterior paint of required shade: New work (Two or more coat applied @ 1.67 ltr/10 SQM over and including priming coat of exterior primer applied @2.20Kg./10 SQM). As per CPWD specification	As per CPWD specification							
27	Painting with synthetic enamel paint of approved brand and manufacturer of required colour to give an even shade as per CPWD specification	As per CPWD specification							
28	Trench covers/ precast trench provided are of as per item of schedule/ specifications.	As per itom of work							
29	ELECTRICAL WORK:  Wiring cables which passed through walls were taken through a protectionPVC pipe of sutable size.	As per itom of work							
30	ELECTRICAL WORK.  Electrical wiring has been done as per nomenclature of item in work order.	As per itom of work							
31	ELECTRICAL WORK.  Electrical fittings like light points, power points, sockets, switch boards, MCBS etc. used are conforming to relevant BIS CODE.	As per itom of work							
32	Malba/ debris scrap removed and site is clear as per NGT order.	as per NGT order.							

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		QC CHECK LIST FO	R PLINTH MAINTE	NANCE WO	RK					
Work or	rder/Scheme No.	A paronifornian								
Name o	f work :-			Name of in	ncharge :-					
Circle :-	Property and watery and other to	As an O'Was Upravious		Name of v	endor:-					
Division										
		as per CON-D Specific Prior	A) Co	ontractor	B) BRI	PLExecutio	n Team	Qua	lity	REMARKS
Sr. No.	Description of points to be checked	References	Responsibility	Documentary Evidence attached	Responsibility	Documentary Evidence attached	Status (Cleared / Not Cleared)	Documentary Evidence attached	Status (Cleared / Not Cleared)	
	Providing and laying Lean concrete						03		0)	
1	1:5:10 concrete.	As per CPWD Specification								
	Providing and laying Lean concrete	As per CPWD Specification								
2	1:4:8 concrete.	or on PAID SAUDRANAN								
3	Providing and laying cement concrete specified 1:2:4 for footing and column. As per CPWD Specification	As per CPWD Specification								
4	Providing and laying cement concrete specified 1:1.5:3 for footing and column. As per CPWD Specification	As per CPWD Specification								





		QC CHECK LIST FOR I	LINTH MAINT	ENANCE W	ORK			
5	Brick work with F.P.S bricks of class designation 75 in foundation and plinth As per CPWD Specifition	As per CPWD Specification						
6	Proper form work/ centering & shuttering as per CPWD specification ( of wooden ply/ steel) provided for RCC/ CC work	As per CPWD Specification						
7	Reinforcement cement concrete work in beams, Suspended floors roofs having slope upto 15, landing balconies etc. 1:2:4 as per CPWD specification	As per CPWD Specification						
8	12mm cement plaster in fine sand as per CPWD specified	As per CPWD Specification						
9	15mm cement plaster on the rough side or single in half brick wall of mix as per CPWD specification	As per CPWD Specification						
10	IRC welded mesh of appd design and weight in permissible limit as per CPWD specification	As per CPWD Specification						
11	Finishing walls with Acrylic Smooth exterior paint of required shade: New work (Two or more coat applied @ 1.67 ltr/10 SQM over and including priming coat of exterior primer applied @2.20Kg./10 SQM). As per CPWD specification code no. 13.79C	As per CPWD Specification						
12	Painting with synthetic enamel paint	as per CPWD specification		-	-			

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		QC CHECK LIST FOR PL	INTH MAINTENANCE V	WORK		
	of approved brand and manufacturer of required colour to give an even shade as per CPWD specification					
13	Trench covers/ precast trench provided are of as per item of schedule/ specifications.	as per CPWD specification				
14	Malba/ debris scrap removed and site is clear as per NGT order.	as per NGT order.				





		QC CHECK LIST F	OR ROAD RESTO	RATIONWO	RKS					
Nork ord	ler/Scheme No.				14437					
Name of	work :-				Name of in	ncharge :-				
Circle :-		ca per 1407 columbia retro			Name of vendor :-					
Division										
			A) Con	tractor	B) BRP	LExecution	Team	Qua	ality	REMARKS
Sr. No.	Description of points to be checked	References	Responsibility	Documentary Evidence attached	Responsibility	Documentary Evidence attached	Status (Cleared / Not Cleared)	Documentary Evidence attached	Status (Cleared / Not Cleared)	
1	Providing and laying Lean concrete  1:4:8 concrete. As per CPWD  Specification.	As per CPWD specification								
2	Providing and laying Lean concrete  1:5:10 concrete. As per CPWD  Specification.	As per CPWD specification								
3	Providing and laying cement concrete specified 1:1.5:3 for footing and column.	As per CPWD specification								
4	Providing and laying cement concrete specified 1:2:4 for footing and column.	As per CPWD specification								

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		QC CHECK LIST FOR	ROAD RESTORATIONY	VORKS	
5	Proper compaction done by vibrator to RCC/CC work & no loose concrete/ honey combing seen	As per CPWD specification			
6	Malba/ debris scrap removed and site is clear as per NGT order.	as per NGT order and site requirement			