



West Bengal
Industrial Development
Corporation

TENDER REFERENCE NO: - WBIDC/IP/HARINGHATA/BW/2023/2(2nd Call)

NOTICE INVITING E-TENDER

FOR

**CONSTRUCTION OF PERIPHERAL BOUNDARY WALL AT HARINGHAT
INDUSTRIAL PARK**

AT

HARINGHATA, NADIA, WEST BENGAL

SEPTEMBER – 2023

WEST BENGAL INDUSTRIAL DEVELOPMENT CORPORATION LIMITED

"Protiti",

23, Abanindranath Tagore Sarani, (Camac Street)

Kolkata - 700017,

West Bengal, India

Email: wbidc@wbidc.com

visit us at: www.wbidc.com

DISCLAIMER

The information contained in this Notice Inviting e-Tender(NIeT) document or subsequently provided to Bidder(s), whether verbally or in documentary form by or on behalf of West Bengal Industrial Development Corporation Limited (WBIDC), is provided to Bidder(s) on the terms and conditions set out in this NIeT document and any other terms and conditions subject to which such information is provided. This NIeT document is not an agreement and is neither an offer nor invitation to any other party. The purpose of this NIeT document is to provide interested Bidder(s) with information that may be useful to them to prepare their proposal including financial offers (the “Bid”) pursuant to this NIeT Document. This specification includes statements, which reflect various assumptions; assessments arrived at by WBIDC in relation to the project. Such assumptions, assessments and statements do not purport to contain all the information each Bidder(s) may require. This NIeT document may not be appropriate for all persons, and it is not possible for WBIDC and their employees or advisors to consider the investment objectives, financial situation and particular needs of each Bidder(s) who reads or uses the NIeT document. The assumptions, assessments, statements and information contained in this NIeT document, may not be complete, accurate, adequate or correct. Each Bidder(s) should, therefore, conduct its own investigations and analysis, and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information in this NIeT document and obtain independent advice from appropriate sources. Information provided in this NIeT document to the Bidder(s) is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. WBIDC, its employees, advisors and technical Consultant/s accepts no responsibility for the accuracy or otherwise for any interpretation or opinion of law expressed herein. WBIDC and their employees, advisors and technical Consultant/s make no representation or warranty and shall incur no liability under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this NIeT document or otherwise, including the accuracy, adequacy, correctness, reliability of completeness of the NIeT document and assessment, assumption, statement or information contained therein or deemed to form part of this NIeT document or arising in any way in this Bid stage. WBIDC, its employees, advisors and technical Consultant/s also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder(s) upon the statements contained in the NIeT document. WBIDC may at their absolute discretion, but without being under any obligation to do, so update, amend or supplement the information, assessment or assumptions contained in this NIeT document.

The issue of this NIeT document does not imply that WBIDC is bound to select a Bidder(s) or to appoint the preferred Bidder(s) for the project and WBIDC reserves the right to reject all or any of the Bidder(s) or Bid without assigning any reason. The Bidder(s) shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by WBIDC or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder(s) and WBIDC shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder(s) in preparation or submission of the Bid regardless of the conduct or outcome of the Bidding Process.

TABLE OF CONTENTS

SECTION DESCRIPTION

- **Section-1:** List of Important Dates, Press Notice, Notice Inviting e-Tender (NIeT)
- **Section – 2:** Background Information
- **Section – 3:** Instructions to Bidders (ITB)
- **Section – 4:** Qualification Information
- **Section – 5:** General Conditions of Contract
- **Section – 6:** Technical Specifications
- **Section – 7:** Tender Drawings
- **Section – 8:** Bill of Quantities
- **Section –9:** Different Forms including Form of Bid

SECTION-1

- **LIST OF IMPORTANT DATES**
- **PRESS NOTICE**
- **NOTICE INVITING e-TENDER (NIeT)**

List of Important Dates of Bids

Name of work:

Construction of peripheral boundary wall at Haringhata Industrial Park.

Date and Time Schedule:

| Sl. No. | Particulars | Date & Time |
|---------|--|--|
| 1 | Date of uploading of N.I.T. & other Documents (online) (Publishing Date) | 29.09.2023 |
| 2 | Documents download/sell start date (Online) | 29.09.2023 at 18.00Hrs |
| 3 | Pre Bid Meeting | 04.10.2023 at 14.00 Hrs |
| 4 | Bid submission start date (On line) | 03.10.2023 at 10:30 Hrs |
| 5 | Bid Submission closing (On line) | 06.11.2023 at 15:00 Hrs |
| 6 | Bid opening date for Technical Proposals (Online) | 08.11.2023 after 16:00 Hrs |
| 7 | Date of uploading list for Technically Qualified Bidder(online) | To be notified later |
| 8. | Date for opening of Financial Proposal (Online) | To be notified later |
| 9. | Overall completion period for work | 08 calendar months (240 days) excluding 12 months defect liability period. (as specified bid document) |
| 10. | Bid validity | 120 (One hundred Twenty) Days from the last date of bid submission |

Press Notice

E-Tender Reference No.: WBIDC/IP/HARINGHATA/BW/2023/2(2nd Call)

West Bengal Industrial Development Corporation (WBIDC) proposes to selection of contractor for construction of peripheral boundary wall including twelve (12) months defect liability period at Haringhata Industrial Park, Haringhata, Nadia.

| SI No. | SUBJECT | DESCRIPTION |
|--------|--|---|
| 1. | Place | Haringhata Industrial Park, Haringhata, Nadia, West Bengal, Pincode:741249 |
| 2. | Name of work | Construction of peripheral boundary wall at Haringhata Industrial Park. |
| 3. | Overall Time allowed for completion | 08 calendar months (240 days) excluding 12 months defect liability period. (as specified bid document) |
| 4. | Document download | The total Tender Document can be downloaded from the e-procurement portal https://wbtenders.gov.in/nicgep/app from 29.09.2023 at 18:00 Hrs. |
| 5. | Last date and time for submission of Online Tender | 06.11.2023; 15:00 hrs |

NOTICE INVITING e-TENDER

The Chairman & Managing Director, West Bengal Industrial Development Corporation Limited (WBIDCL) invites proposal through e-tenders from renowned and eligible Contractors for undertaking the following work:

| Sl. No. | SUBJECT | DESCRIPTION |
|---------|----------------------------|--|
| 1 | Name of work | Construction of peripheral boundary wall at Haringhata Industrial Park. |
| 2 | Location of work | Haringhata Industrial Park, Haringhata, Nadia, West Bengal, Pincode:741249 |
| 3 | Estimated cost of the Work | Rs. 10,64,91,715.00.00 (Rupees ten crore sixty four lakh ninety one thousand seven hundred fifteen only). This estimate has been prepared based on current PWD schedule and considering 18 % GST and 1% LWC. |
| 4 | Time of completion | 08 calendar months (240 days) excluding 12 months defect liability period. (as specified bid document) |
| 5 | Qualification criteria | <p>The bidder must be a reputed and reliable construction company having the following credentials:</p> <p>a) Intending tenderers should produce credentials of single completed work comprising of RCC Frame work / Boundary Wall of the minimum value of 30% (thirty percent) of the estimated amount during 5 (five) years prior to the date of issue of the tender notice for which the bid is invited for Govt. /semi Govt. /Statutory bodies . The works have to be executed as prime Contractor. The work must be under a single contract anywhere in India with State or Central Government / Autonomous body;</p> <p style="text-align: center;">or,</p> <p>b) Intending tenderers should produce credentials of 2 (two) completed work comprising of RCC Frame work / Boundary Wall of the minimum value of 25% (twenty five percent) of the estimated amount during 5 (five) years prior to the date of issue of the tender notice for which the bid is invited for Govt. /semi Govt. /Statutory bodies . The works have to be executed as prime Contractor. The work must be under a single contract anywhere in India with State or Central Government / Autonomous body.</p> <p>c) Certificates for work issued by Executive Engineer/ Divisional Engineer / Competent Authority to be produced clearly stating that the work entrusted to him has been successfully completed.</p> <p>Having no adverse measure (Punishment, Hon'ble Court's, Verdict) taken by client, if any, by any authority/ client on any account against their organization/ firm for any project or similar nature or otherwise executed during last 5(five) years working.</p> <p>d) A declaration to that effect will have to be submitted in the form of Affidavit in non-judicial stamp paper duly Notarized.</p> <p>e) Bidder should not be black listed with any Govt. /semi Govt. /Statutory bodies.</p> <p>f) The bidder shall have a minimum average yearly turnover of at least Rs. 5 Crores for the last five years.</p> <p>g) The bidder must have an organizational set up consisting of qualified engineers. Organisation should have minimum one (01) Degree Civil Engineer and two (02) Diploma Civil Engineer. Proof of the same need to be submitted at the time of tender submission.</p> |

| Sl. No. | SUBJECT | DESCRIPTION |
|---------|--|---|
| 8 | Availability of Tender Documents | Tender documents will be available w.e.f 29.09.2023 at 18:00 Hrs from the e-procurement portal www.wbtenders.gov.in |
| 9 | Site Visit | Bidders are advised to visit the site before submission of bid. |
| 10 | Submission of tender | Bidding documents, digitally signed by authorized person of the bidder must be uploaded on line from after 03.10.2023 at 10.30 hrs. and must be uploaded on or before 06.11.2023 at 15-00 Hrs.(as per server clock). |
| 11 | Procedure for submission of tender | Bidders are requested to submit their tenders through e-procurement portal https://wbtenders.gov.in/nicgep/app . If required, the bidders may be requested to submit the hard/ original copy of the technical bid at the time of verification of the documents. |
| 12 | Date, time and venue of opening of Technical Bid | 08.11.2023 at Time: 16-00 hours (as per server clock). Place: WBIDC Office board Room |
| 13 | Date of Opening of Financial Bid | To be notified later. |
| 14 | Validity of the bid | 120(One Hundred Twenty) Days from the last date of bid submission |
| 15 | Work Order | Work Order will be issued only after administrative approval and receiving of fund. |
| 16 | Taxation | Taxes applicable if any in respect of this contract whether in vogue or may be imposed in future shall be payable by the contractor and WBIDC will not entertain any claim what so ever in this respect. However any benefit due to reduction of taxes etc. may be passed onto WBIDC. |

NOTE: Other details can be seen in the bidding document. WBIDC reserves to itself the right to reject any or all the tenders received without assigning any reason thereof.

Section – 2

Background Information

1.1 Background

West Bengal Industrial Development Corporation Limited (WBIDC) is setting up Haringhata industrial park, at Haringhata in Nadia, West Bengal. The Park will spread over approx. 358 acres of land. The project site is bound by NH-34 towards North-West side (having a total road frontage of 912 mtr) connecting to Dalkhola, where it meets NH 31, which connects it to Siliguri.

1.2 Advantage

- Only 57.8 km via Barrackpore Trunk Road from center of Kolkata and adjacent to NH-34.
- 53.9 km via NH34 AND 60.5 km via Kalyani Expressway.
- Strategically located with good connectivity to all parts of KMC area.
- Flat topographical conditions are conducive for development.
- Surrounded by major industrial zones of Dairy Industry, Paper Industry etc.
- Nearest Airport - Netaji Subhas Chandra Bose International Airport, Kolkata (41 Km).
- Nearest Railway Station – Naihati Jn. on the Eastern Railway Trunk (16 km).

Section - 3

Instructions to Bidders (ITB)

A. General

1. Scope of Bid

- 1.1 The Employer –“Chairman & Managing Director, West Bengal Industrial Development Corporation Limited” invites sealed e-tenders for construction of peripheral boundary wall at Haringhata Industrial Park.
- 1.2 The successful Bidder will be expected to complete the Works within **08 calendar months (240 days) excluding 12 months defect liability period**. The 12 (twelve) months defect library period to be counted from the date of successful completion of the work. The necessary manpower needed shall be provided by the Contractor during the defect library period. No extra claim shall be entertained for this purpose.
- 1.3 The intending tenderers should make them thoroughly acquainted in the prevailing conditions of the site, facilities and difficulties and together information which might influence in making the offers. They should study all the conditions and information included in the tender documents and gets these verified from actual inspection of site and collect additional information as may be necessary by them.
- 1.4 Extra claims or any concession on the ground of insufficient data or information and absence of knowledge of conditions prevailing at situation arising during the execution of the work shall not be entertained
- 1.5 Throughout these documents, the terms “bid” and “tender “and their derivatives (bidder / tenderer, bid/ tender, bidding /tendering, etc.) are synonymous.
- 1.6 The term ENGINEER will mean the authorized representative(s) from the Client who will overlook all the site activities.

2. Source of Funds

- 2.1 The Employer has decided to undertake the work envisaged in the contract and has provided funds for the same.

3. Invitation to Tender

- 3.1 The Tender Inviting Authority reserves the right to reject all the tenders or the lowest or any other tender which in the judgment of Tender Inviting Authority does not appear to be in its best interest, and the tender shall have no cause of action or claim against the Tender Inviting Authority or its officers, employees, successors or assignees for rejection of the tender.

ANY DEVIATION OF TECHNICAL SPECIFICATION AS WELL AS CONDITIONAL TENDER WILL NOT BE ACCEPTED. EVEN TENDER INVITING AUTHORITY WILL HAVE EVERY RIGHT TO CANCEL THE PARTICULAR OFFER AT ANY STAGE EVEN AFTER ISSUANCE OF ACCEPTANCE WORK ORDER.

4. Pre-Bid Conference

- 4.1 A pre-bid conference is arranged in the office of WBIDC as per Time Schedule mentioned in the Notice. Bidders are advised to attend the same. Technical queries shall preferably be forwarded at least 2 days in advance before the pre-bid conference. Site visit should be undertaken by the bidders before the pre-bid conference.

5. Completeness of Offer

- 5.1 If any item or details of an item are not given in various specifications of the tender documents which are required essentially for the completion of the work, it should be included in the Contractor’s offer so that the offer is complete in all respects. No claim for extra payment will be entertained on the plea that the specification for an item or equipment is not complete in all respect. It is the responsibility of the Tendered to make an offer for the Complete Project. The tenderer is to be guided by the spirit of the project and not by the wording of the specification.

6. Eligible Bidders

- 6.1 This Invitation for Bids is open to all eligible and renowned bidders who have previous experiences of successfully completing similar nature of Works.

Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices by the Central Government, the State Government or any public undertaking, autonomous body, authority whatever name called under the Central or the State Government.

- 6.2 All bidders shall upload all the information as requested in Section 4, Qualification Information along with the Technical Part and Form of Bid (Format given in Section 9) along with the financial part of the Bid Document

6.3 Bids from joint venture are not allowed.

- 6.4 **Sub-Contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria.**

- 6.5 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- (i) Made misleading or false representations in the forms, statements, affidavits and attachments submitted in proof of the qualification requirements; and /or

- (ii) Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays incompletion, litigation history, or financial failures etc.

7. One Bid per Bidder

7.1 Each Bidder shall submit only one Bid for the work. A Bidder who submits more than one Bid will cause the proposals with the Bidder's participation to be disqualified.

8. Cost of Bidding

8.1 The Bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will, in no case, be responsible or liable for those costs.

9. Site Visit

9.1 The Bidder, at his own cost, responsibility and risk, is encouraged to visit, examine and familiarize himself with the Site of Works and its surroundings including source of earth, water, road aggregates etc. and obtain all information that may be necessary for submission of the Bid for the work. The costs of visiting the Site shall be at the Bidder's own expense.

9.2 For site visitor for any clarifications relating to this Tender Document the bidder may contact the person (s) whose contact details are given below:

Mr. Soumitra Sen
Adv.(P), WBIDC
Phone No. 033-22553838
E-mail: soumitra.sen@wbidc.com

Mr. Sourav Pal
EA-IP, WBIDC
Phone No. 033-22553157
E-mail: sourav.pal@wbidc.com

B. Bidding Documents and Evaluation

1. Content of Bidding Documents

1.1. The tenders are to be submitted through online to the website stated in two folders at a time, one is Technical Proposal & the other is Financial Proposal before the prescribe date and time using the Digital Signature (DSC). The documents are to be uploaded virus scanned copy duly digitally signed. The documents will get encrypted.

1.2. PRE QUALIFICATION PROPOSAL

Technical Proposal:

a. Statutory Cover containing the following digitally signed documents:

1. NIEt & Drawings
2. EMD

b. Non Statutory cover containing the following digitally signed documents:

| Sl. No. | Category Name | Sub category Description | Details |
|---------|---------------------------|--------------------------|--|
| 1. | Qualification Information | Section 4 of NIT | Form given in Section 4 is to be filled up, duly signed and stamped |
| 2. | Certificate | Certificate | As per Clause 7.5 (a) Section 3 (a) The Copies of Income Tax Returns of last five years 2017-2018, 2018-2019, 2019-2020,2020-2021, 2021-2022; (b) An affidavit that the information furnished with the bid documents is correct in all respects. (c) Professional Tax clearance Certificate /Sale Tax Clearance Certificate. (d) GST registration certificate. (e) Valid Trade Licence (f) PAN Card (g) Audited balance sheets and Profit and Loss Account for the preceding five years 2017-2018, 2018-2019, 2019-2020,2020-2021, 2021-2022. |
| 3. | Company Details | Company Details | (a) Name of the Organization (b) Address of the Organization (c) Year of Establishment (d) Status of the firm (Whether Company/Firm/Proprietary) (e) Name of Directors/ Partners/Proprietor. (f) Whether registered with the Registrar of Companies/ Registrar of Firms. If so, mention number and date. |

| Sl. No. | Category Name | Sub category Description | Details |
|---------|-----------------------|---|--|
| 4. | Credentials | Credential | Bidder should have at least one construction work comprising of RCC Frame work / Boundary Wall with minimum 30% of the estimated cost or two construction work comprising of RCC Frame work / Boundary Wall with minimum 25% of the estimated cost for which the bid is invited for Govt. /semi Govt. /Statutory bodies. |
| 5. | Financial Information | P/L & Balance Sheets 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022. | a)All balance Sheets And CA certified certificate. |
| 6. | Declaration | Declaration1 | Addenda issued in accordance with Clause Of IT Band /or Minutes of Pre-Bid Meeting Other important documents |

Additional Information: Any additional information may be incorporated in NIeT.

Financial Proposal:

The Financial Proposal contains the following documents:

- (i) Form of Bid as specified in Section 9;
- (ii) Priced bill of quantities for items (filled in BOQ).

[Note: In case any discrepancy, the amount which is quoted in BOQ will be considered.]

N.B.: Submission of Statutory and Non Statutory covers are compulsory for acceptance of the bid.

1.3. The bidder is expected to examine carefully all instructions, conditions of contract, forms, terms and specifications, forms and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk. Pursuant to clause E/4 hereof, bids, which are not substantially responsive to the requirement so the Bid Documents, shall be rejected.

2. Clarification of Bidding Documents and Pre-bid Meeting

2.1. Prospective Bidder requiring any clarification of the bidding documents may raise the query /queries at the Pre-bid Meeting. Copies of the Employer's response will be uploaded to the website, including a description of the inquiry, but without identifying its source.

2.2. The bidder or his authorized representative is invited to attend the pre-bid meeting on 04.10.2023 at WBIDC office at 14.00 HRS.

2.3. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage. Bidders are advised to attend the same. Technical queries shall preferably be forwarded at least 2 days in advance before the pre-bid conference.

2.4. **The bidder is requested to submit any question in writing or by mail so as to reach the Employer not later than 48 hours (Two working days) before the meeting.**

2.5. Minutes of the meeting, including the text of the questions raised (without identifying the source of the enquiry) and the responses given will be uploaded in the official website of WBIDCL. Any modifications of the bidding documents listed in this document of ITB, which may be commence as necessary result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause of ITB and not through the minutes of the pre-bid meeting.

2.6. Non- attendance at the pre-bid meeting will not be cause for disqualification of a bidder.

3. Amendment of Bidding Documents

3.1. Before the deadline for submission of bids, the Employer may modify the bidding documents by uploading the addenda in the website.

3.2. Any addendum thus uploaded shall be part of the bidding documents

C. Preparation of Bids

1. Language of Bid

1.1. All documents relating to the Bid shall be in English.

2. Documents Comprising the Bid

- 2.1. The following documents, which are to be digitally signed on every page by the bidder and submitted with the technical bid, will be deemed to be part of the bid.

| Section | Particulars |
|---------|--|
| 1 | Notice inviting Tender |
| 2 | Instruction to the bidders |
| 3 | Qualification Information (Conditions of Contract) |
| 4 | Tender Drawings |

3. Bid Prices

- 3.1. The Contract shall be for the whole Works, as described in Clause 1.1 of ITB, based on the priced Bill of Quantities submitted by the Bidder.
- 3.2. The quantities of the various items mentioned are approximate and may vary up to any extent or be deleted altogether. The quoted rate, however, remain firm and fixed for the total duration of the project. The Contractor, in his own interest, should get an indication of the probable extent of the work to be executed under any particular item in the schedule, before undertaking any preliminary and enabling work or purchasing bought-out components related to the work.
- 3.3. The rate quoted by the Contractor shall be deemed to be inclusive of all taxes of Central and State Governments, local bodies and authorities.
- 3.4. The rates and prices quoted by the Bidder shall be fixed for the duration of the Contract and shall not be subject to adjustment.

4. Currencies of Bid

- 4.1. The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees.

5. Bid validity

- 5.1. Bids shall remain valid for a period 120 (One hundred twenty) days after the dead line date for bid submission Specified in Clause of ITB. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- 5.2. In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders 'responses shall be made in writing or by cable. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of the Bank Guarantee for a period of extension and in compliance with Clause C/6 of ITB in all respects.

6. Earnest Money Deposit

- 6.1. **Earnest money of Rs. 21,29,834.00 (Rupees twenty one lakh twenty nine thousand eight hundred thirty four only) to be submitted only through online during submission of bid.**
- 6.2. **The scanned copy of the earnest money details with duly stamped and signed must be uploaded at the time of submission of bid through e-tender. The bid stands cancelled in its entirety, if the EMD is not provided. No exemption regarding submission of EMD will not be entertained at any instant case.**
- 6.3. Any bid not accompanied by an acceptable Earnest Money, shall be ejected by the Employer as non-responsive.
- 6.4. The Earnest Money of unsuccessful bidders will be returned automatically into their account.
- 6.5. The Earnest Money of the successful Bidder will be converted into initial security deposit and will be discharge after successful completion of the defect liability period after signed the Agreement and furnished the required Performance Security.
- 6.6. The Earnest Money may be forfeited:
- If the Bidder withdraws the Bid after bid opening (technical bid) during the period of Bid validity.
 - If the bidder does not accept the correction of Bid Price pursuant to clause E/4.
 - In the case of a successful Bidder, if the Bidder fails within the specified time limit to:
 - Sign the Agreement; and/or
 - Furnish the required Performance Security.

7. Alternative Proposals by Bidders:

7.1. Alternative proposals will be rejected as non-responsive.

8. Format and Signing of Bid:

8.1. The Bidder shall submit online one set of the bid comprising of the documents as described in Clause of ITB.

8.2. The Bid shall be digitally signed by a person or persons duly authorized to sign on behalf of the Bidder. All pages of the Bid shall be signed by the person or persons signing the Bid.

8.3. The Bid shall contain no overwriting, alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the Bidder, in which case such corrections shall be made by scoring out the cancelled portion, making the correction, initial with date by the person or persons signing the Bid.

9. Evaluation of Tenders

Conditional Tender shall be summarily rejected.

The Financial Bid offered by the technically qualified bidder will only be opened.

10. Department's Right To Split Package And Accept Part Offer

The Department reserves the right to split the package and accept or reject any part/ item(s) of the offer from the scope of work without assigning any reason.

11. Withdrawal Of Submitted Tender

Tender once submitted cannot be withdrawn before the scheduled validity date. If any tenderer desires to withdraw his tender before such time, entire Earnest Money Deposit shall be forfeited without assigning any reason.

D. Submission of Bids

1. Submission of Bids

1.1. The Bidder shall upload his bid on or before the last date of submission of bid within the stipulated time.

2. Deadline for Submission of Bids:

2.1. The last date of uploading of Bids 06.11.2023 at 15.00hrs, (as per server clock)

3. Late Bids:

3.1. Bids after the last date of submission cannot be uploaded.

E. Bid Opening and Evaluation

1. Bid Opening

1.1. The Employer will online open the bids received at the time, date and place as specified in the event of the specified date for the opening of bids being declare as holiday for the Employer, the Bids will be opened at the appointed time and location on the next working day.

1.2. Evaluation of the technical bids shall be taken up and completed and a list will be drawn up of the responsive bids whose financial bids are eligible for consideration.

1.3. The date of Financial Bid Opening will be notified to the technically qualified bidders at a later date. In the event of the specified date being declared a holiday for the Employer, the bids will be opened at the appointed time and location on the next working day.

2. Process to be Confidential

2.1. Information relating to the examination, clarification, evaluation, and 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 until the award to the successful Bidder has been announced .Any attempt by a Bidder to influence the Employer's processing of bids onward decisions may result in the rejection of his Bid.

3. Clarification of Bids and Contacting the Employer

3.1. No Bidder shall contact the Employer on any matter relating to its bid from the time of the bid opening to the time the contract is awarded.

3.2. Any attempt by the bidder to influence the Employer's bid evaluation, bid comparison or contract award decision may result in the rejection of his bid.

4. Correction of Errors

4.1. Bids which are determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

- a) Where there is a discrepancy between the rates in figures and in words, the rate in words will govern.
 - b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
- 4.2. The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, the Bid will be rejected and the Earnest money shall be forfeited in accordance with Clause C/6.7(b) of ITB.

5. Evaluation and Comparison of Bids

- 5.1. In evaluating the bids, the Employer will determine for each Bid the evaluated Bid price by adjusting the Bid price by making correction, if any, for errors pursuant to Clause E/4 of ITB.
- 5.2. If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause F/3 of ITB be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract. The amount of the increased performance security shall be decided at the sole discretion of the Employer, which shall be final, binding and conclusive on the bidder

F. Award of Contract

1. Employer's Right to Accept any Bid and to Reject any or all Bids

- 1.1. The Employer reserves the right to accept or reject any Bid, and to cancel the bidding process and reject all bids ,at any time prior to the award of Contract, without incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Employer' section.

1.2. Work Order will be issued only after administrative approval and receiving of fund.

2. Notification of Award and Signing of Agreement.

- 2.1. The bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity.
- 2.2. The notification of award will constitute the formation of the Contract, subject only to the furnish in performance security in accordance with the provisions of Clause F/3.
- 2.3. The Agreement will incorporate all agreements between the Employer and the successful Bidder. It will be signed by the Employer and the successful Bidder after the performance security is furnished.
- 2.4. Upon the furnishing by the successful Bidder of the Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful.

3. Performance Security / Security Deposit

- 3.1. The earnest money deposited by the Contractor shall be converted into initial Security Deposit and a deduction @ 8% (eight percent) will be deducted from each R.A. bill shall be made to build an amount equivalent to 10% of the executed value of the work. The security Deposit thus deducted shall be refunded to the contractor after successful completion of defect liability period of twelve months from the date of commencement of the work certified by the Engineer –in- Charge.

4. Cost of Downloaded Tender Document

- 4.1. In terms of Government Order No.199-CRC/2M-10/2012 dated 21.12.2013, the cost of tender document is exempted for e-tendering process.

5. Corrupt or Fraudulent Practices

- 5.1. The Employer requires the bidders /Contractors to strictly observe the laws against fraud and corruption in force in India, namely, Prevention of Corruption Act, 1988.

Section 4 - Qualification Information

Notes on Form of Qualification Information

The information to be filled in by bidders in the following pages will be used for purposes of accessing the techno commercial capability of the bidder- as provided for in Clause 7 of the Instructions to Bidders. Attach additional pages as necessary.

1. Individual Bidders:

| | | |
|-----|--|--|
| 1.1 | Constitution or legal status of Bidder Place of registration: Principal place of business: Power of attorney of signatory of Bid | [attach copy] _____ _____ [attach] |
| 1.2 | Total annual volume of civil engineering construction work executed and payments received in the last five years preceding the year in which bids are invited. (Attach certificate from Chartered Accountant). | (Rs. In lakhs) 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022. |

1.3 Work performed as prime Contractor (in the same name and style) on construction works of a similar nature and volume over the last five years.

| Project Name | Name of Employer | Description of work | Value of Contract | Contract No. | Date of Issue of Work Order | Stipulated Date of Completion | Actual Date of Completion | Remarks (explaining reasons for delay, if any) |
|--------------|------------------|---------------------|-------------------|--------------|-----------------------------|-------------------------------|---------------------------|--|
|--------------|------------------|---------------------|-------------------|--------------|-----------------------------|-------------------------------|---------------------------|--|

Separate sheets to be attached

| | | | | |
|---------------------------------------|--|--|--|--|
| 1.4 | Availability of Major items of Contractor's Equipment proposed for carrying out the Works. List all information requested below. Refer also to Clause 7.2 (g) and Clause 4.5 (b) of the Instructions to Bidders. | | | |
| | Item of Equipment | Description, make, and age (Years), and capacity | Condition (new, good, poor) and number available | Owned, leased (from whom?), or to be purchased |
| Separate sheets to be attached | | | | |

| | | | | |
|---------------------------------------|--|------|---------------|---------------------|
| 1.5 | Qualifications of technical personnel proposed for the Contract. Refer also to Clause 7.2(d) of the Instructions to Bidders and Clause 9.1 of Part-1 General Conditions of Contract. | | | |
| | Position | Name | Qualification | Years of experience |
| | | | | Construction works |
| Separate sheets to be attached | | | | |

1.6 Financial reports for the last five years: balance sheets, profit and loss statements, auditors' reports, etc. List below and attach copies.

1.7 Name, address, and telephone, telex, and facsimile numbers of banks that may provide references if contacted by the Employer.

1.8 Information on current litigation in which the Bidder is involved.

| Name of Other party(s) | Cause of dispute | Litigation where (Court/arbitration) | Amount involved |
|-------------------------------|-------------------------|---|------------------------|
| | | | |

Section - 5

General Conditions of Contract

A. General

1. Definitions

1.1. Terms which are defined in the Contract are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

The Dispute Review Expert is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in Clause 27.

Bill of Quantities means the priced (as quoted by the bidder) and completed Bill of Quantities forming part of the Bid.

Compensation Events are those defined in Clause 43 hereunder.

The Completion Date is the date of completion of the Works as certified by the Engineer, in accordance with Clause 51.1.

The Contract is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in Clause 2.2

The Contractor is a person, company or corporate body who's Bid to carry out the Works has been accepted by the Employer.

The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer as per the instructions of the Tender Document.

The Contract Price is the price stated in the Letter of Intent/ Work Order and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; **months** are calendar months.

Defect is any part of the Works not completed in accordance with the Contract.

The Defects Liability Certificate is the certificate issued by Engineer, after the Defect Liability Period has ended and upon correction of Defects by the Contractor.

The Defects Liability Period is 12 months (twelve months) from the date of issue of Completion Certificate.

Drawings/Documents include calculations and other information provided or approved by the Engineer for the execution of the Contract.

The Employer is the party as defined below, who employs the Contractor to carry out the Works. The Employer may delegate any or all functions to a person or body nominated by him for specified functions.

The Employer is

**The Chairman & Managing Director
West Bengal Industrial Development Corporation Limited (WBIDCL)
Address: 23, Abanindranath Tagore Sarani (Camac Street)
Kolkata-700 017**

The Engineer is a competent person/Organization appointed by the Employer for providing Project Management Consultancy (PMC) Services and notified to the Contractor who is responsible for supervising the Contractor, administering the Contracts, certifying payments due to the Contractor, issuing and valuing Variations to the Contract and awarding extension.

PMC AND PMC'S REPRESENTATIVE

PMC's Duties and Authority

- a. The Employer shall appoint a PMC and inform the same to the Contractor to deal with all the matters related to the execution and operation of Contract.
- b. PMC or his representative shall supervise the all the works carried out at site. PMC shall ensure the best quality of workmanship, materials, etc.

However, the Employer / Employer's representative reserves the right in checking / tests checking of the operation of the contract in respect of quality, testing, and measurement of Works either directly or through a separate agency or both.

PMC's Representative:

The PMC's Representative shall be appointed by and be responsible to the PMC and shall carry out such duties and exercise such authority as may be delegated to him by the PMC as mention below.

PMC's Authority to Delegate:

The PMC may from time to time delegate to the PMC's Representative any of the duties and authorities vested in the PMC. Any such delegation shall be in writing and shall not take effect until a copy thereof has been delivered to the Contractor. Any communication given by PMC's Representative to the Contractor in accordance with such delegation shall have the same effect as though it had been given by the PMC, provided that;

- a. Any failure of the PMC's Representative to disapprove any work, materials or Plant shall not prejudice the authority of the PMC to disapprove such work, materials or Plant and to give instructions for the rectification thereof; and
- b. If the Contractor questions any communication of the PMC's Representative he may refer the matter to the PMC who shall confirm, reverse or vary the contents of such communication.

1.2. **Instructions in Writing :**

Instructions given by the PMC shall be in writing, provided that, if for any reason the PMC considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Confirmation in writing of such oral instruction given by the PMC, whether before or after carrying out of the instruction shall be deemed to be an instruction within the meaning of this Sub-Clause. Provided further that if the Contractor, within 7 days, confirms in writing to the PMC any oral instruction of the PMC and such confirmation is not contradicted in writing within 7 days by the PMC, it shall be deemed to be an instruction of the PMC. The provisions of this Sub-Clause shall equally apply to instructions given by the PMC's Representative and any assistants of the PMC or the PMC's Representative appointed pursuant as mentioned above.

PMC to Act Impartially:

Wherever, under the Contract, the PMC is required to exercise his discretion by;

- a. giving his decision, opinion or consent, or
- b. expressing his satisfaction or approval, or
- c. determining value, or
- d. otherwise taking action, which may affect the rights and obligations of the Employer or the Contractor.

He shall exercise such discretion impartially within the terms of the Contract and having regard to all the circumstances. Any such decision, opinion, consent, expression of satisfaction, approval, determination of value or action may be opened up, reviewed or revised as provided in Clause 22.0.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The Initial Contract Price is the Contract Price listed in the Employer's Letter of Intent/Work Order.

The Intended Completion Date is the date on which it is intended that the Contractor shall complete the Works. **The Intended Completion Date is 08 calendar months (240 days) from the start date.** The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

The **Start Date** is 15 days from the date of issue of Work Order/Letter of Intent to contractor. It does not necessarily coincide with any of the Site Possession Dates.

Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works.

Plant is any integral part of the Works that shall have a mechanical, electrical, electronic, chemical, or biological function.

Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer.

A **Sub-Contractor** is a person, company or corporate body who has a Contract with the Contractor to carry out a part of the construction work in the Contract, which includes work on the Site.

Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

A **Variation** is an instruction given by the Engineer, which varies the Works.

The **Works**, as defined in the Scope of Work in ITB, are what the Contract requires the Contractor to construct, install, maintain, and turn over to the Employer. The Construction Power and Water has to be arranged by the Contractor.

2. Interpretation

- 2.1. In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about these Conditions of Contract.
- 2.2. The following documents forming the contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies, the Engineer's decision shall be final and binding on the Contractor.
 - a) Agreement,
 - b) Notice to Proceed with the Work (Letter of Intent / Work Order)
 - c) Contractor's Bid,
 - d) Conditions of Contract
 - e) Specifications,
 - f) Drawings,
 - g) Bill of Quantities, and
 - h) Any other document if required or as advised by Engineer.

3. Language and Law

- 3.1. The language of the Contract is English and the law governing the Contract is the law of Union of India.

4. Engineer's Decisions

- 4.1. Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer.
- 4.2. Except as expressly stated in the Contract, the Engineer shall not have any authority to relieve the Contractor of any of his obligations under the contract.

5. Delegation

- 5.1. The Engineer, with the approval of the Employer, may delegate any of his duties and responsibilities to other people, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

6. Communications

- 6.1. All certificates, notices or instructions to be given to the contractor by Employer/Engineer shall be sent on the address or contact details given by the Contractor in Section 9 – Form of Bid. Communications between parties that are referred to in the conditions shall be writing. The Notice sent by registered Post or Speed Post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service.

7. Subcontracting

- 7.1. The Contractor may subcontract work only with the approval of the Employer in writing, up to a percentage of the contract price, as decided by the Engineer but will not assign the Contract. Subcontracting shall not alter the Contractor's obligations.
- 7.2. The Contractor shall not be required to obtain any consent from the Employer for:
 - a) The sub-contracting of any part of the Works for which the Sub-Contractor is named in the Contract;
 - b) The provision for labour, or labour component.
 - c) The purchase of Materials which are in accordance with the standards specified in the Contract provided the purchase is from sources approved by the Engineer.
- 7.3. Beyond what has been stated in clauses 7.1 and 7.2, if the Contractor proposes sub-contracting any part of the work during execution of the Works, because of some unforeseen circumstances to enable him to complete the

Works as per terms of the Contract, the Engineer / Employer will consider the following before according approval.

- a) The Contractor shall not sub-contract the whole of the Works.
 - b) The Contractor shall not sub-contract any part of the Work without prior consent of the Employer. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any his sub-Contractor, his agents or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents and workmen.
- 7.4. The Engineer should satisfy himself before recommending to the Employer whether
- a) The circumstances warrant such sub-contracting; and
 - b) The sub-Contractor so proposed for the Work possess the experience, qualifications and equipment necessary for the job proposed to be entrusted to him in proportion to the quantum of Works to be sub-contracted.

8. Other Contractors

8.1. Not Applicable

9. Personnel

- 9.1. The Contractor shall employ for the construction work the technical personnel who are technically qualified to execute these types of jobs and get their CVs approved by the Engineer. The Engineer will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel initially proposed by the contractor and accepted by the Employer.
- 9.2. If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within three days and has no further connection with the Works in the Contract.
- 9.3. The Contractor shall not employ any retired Gazetted officer who has worked in the Engineering Department of the Employer and has either not completed two years after the date of retirement or has not obtained Employer's permission to work with the Contractor.

10. Employer's and Contractor's Risks

- 10.1. The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

- 11.1. The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works - the risks of war, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot, commotion or disorder (unless restricted to the Contractor's employees), natural calamities and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

12. Contractor's Risks

- 12.1. All risks of loss of or damage to works, physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks, referred to in clause 11.1, are the responsibility of the Contractor

13. Insurance

- 13.1. The Contractor at his cost shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles as per rules/ as decided by the Employer for the following events which are due to the Contractor's risks:
 - a) Loss of or damage to the Works, Plant and Materials;
 - b) Loss of or damage to Equipment;
 - c) Loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
 - d) Personal injury or death.

- 13.2. Insurance policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in Indian Rupees to rectify the loss or damage incurred.
- 13.3. If the Contractor does not provide any of the policies and certificates required, the Employer will have the right to effect the insurance which the Contractor should have provided and recover the premiums the Employer has to pay from payments otherwise due to the Contractor or, if no payment is due, the payment of the premium shall be a debt due.
- 13.4. Alterations to the terms of insurance shall not be made without the approval of the Engineer.
- 13.5. Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports

- 14.1. The Contractor, in preparing the Bid, shall rely on his own survey and site investigation for submitting The Bid.

15. Queries about the Bid Document

- 15.1. Will be addressed in the Pre-Bid Meeting

16. Contractor to Construct the Works

- 16.1. The Contractor shall construct, and install and maintain the Works in accordance with the Specifications and Drawings.
- 16.2. The Contractor shall construct the works to ensure the quality of works as per specifications. The Contractor shall deploy the equipment and machinery as was proposed by the Contractor and Accepted by the Employer, as a minimum.

17. The Works to Be Completed by the Intended Completion Date

- 17.1. The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Programme submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

18. Approval by the Engineer

- 18.1. The Contractor shall submit Specifications and Drawings (with calculations) showing the proposed Temporary Works, whenever they are required, to the Engineer for his approval. The temporary works shall be taken up only after Engineer's approval of designs and drawings for such temporary works.
- 18.2. The Contractor shall be responsible for design of Temporary Works.
- 18.3. The Engineer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 18.4. The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 18.5. All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

19. Safety

- 19.1. The Contractor shall be responsible for the safety of persons and of all activities on the Site. He shall adopt all necessary safety precautions in implementing the works.

20. Discoveries

- 20.1. Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

21. Possession of the Site

- 21.1. The Employer shall hand over complete or part possession of the site to the Contractor in advance of construction programme.

22. Co-Operation With Other Agencies

Full co-operation and coordination shall be accorded to other agencies working simultaneously for successful completion of the work.

23. Site Office

23.1. The contractor shall construct suitable temporary site office for execution work for supervisory Engineer, staff etc. of the contractor as well as of the Department/ Consultant. The contractor will arrange to provide furnish, equip, clean and maintain the site office. The contractor shall make necessary arrangement for water, semi-permanent W.C. and electricity for officials/ office. The contractor shall provide lights and fans, etc. along with necessary new furniture as required. The site offices shall be erected, furnished and be ready for occupation before start of work. There shall be 2 (two) rooms with a common toilet allotted for Employer and/or his representatives (Consultant) of 25SqM. area with necessary office furniture. On completion of work and as directed by Engineer-in-Charge the site office has to be demolished at his own cost and labour.

Condition for Supply for Water & Construction power : Contractor shall make his own arrangements for water & Construction power at sites by drilling and energizing the tube wells. Water quality standards shall conform to the clauses laid down in latest revisions of relevant IS Codes/ BIS code. Water samples to be used for construction as well as drinking shall be got tested from any reputed govt. authority before to start of the work and every three months thereafter. The test reports shall be submitted to the Engineer-in-charge immediately after the same is received from the laboratory. Agency will bear the cost of water sample test. Water used for drinking shall be disinfected by using permitted disinfectants before use.

24. Mobilization Advance

No Mobilization advance to be paid to the contractor

25. Access to the Site

25.1. The Contractor shall allow access to the Site and to any place where work in connection with the contract is being carried out, or is intended to be carried out to the Engineer and any person/ persons/ agency authorized by:

- a. The Engineer
- b. The Employer and anybody else authorized by the Employer.

26. Instructions

26.1. The Contractor shall carry out all of the instructions of the Engineer, which comply with the applicable laws where the Site is located.

27. Disputes

27.1. In case of any dispute which may not be settled amicably between the contractor and WBIDC, the matter may be referred to the Chairman & Managing Director of WBIDC whose opinion shall be prevailed as final and binding on all the parties and shall be subject to Kolkata jurisdiction only. This clause is applicable only after successful execution of agreement.

B. Time Control

28. Programme

28.1. Within the time stated in the Contract Document, the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works, along with monthly cash flow forecasts for the construction of works, 7 days in advance of the start of construction programme.

28.2. The Contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel (and their CVs) being deployed, the list of equipment being placed in field laboratory and the location of field laboratory along with the programme. The Engineer shall cause these details to be verified at each appropriate stage of the programme.

28.3. An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.

28.4. The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the Contract Document. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

28.5. The Engineer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may be required to revise the Programme and submit it to the Engineer again at any time. A revised Programme shall

show the effect of Variations and Compensation Events and Contractor's proposed steps to complete the work in time.

29. Extension of the Intended Completion Date

- 29.1. The Engineer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining Works, which would cause the Contractor to incur additional cost.
- 29.2. The Engineer shall decide whether and by how much time to extend the Intended Completion Date within 21 days of the Contractor asking the Engineer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.
- 29.3. The Engineer shall within 14 days of receiving full justification from the Contractor for extension of Intended Completion Date refer to the Employer for his decision. The Employer shall in not more than 21 days communicate to the Engineer the acceptance or otherwise of the Engineer's decision. If the Employer fails to give his acceptance, the Engineer shall not grant the extension and the Contractor, if he feels the decision is wrong, may refer the matter to the Dispute Review Expert under Clause 27.1.

30. Delays Ordered by the Engineer

- 30.1. The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works. Delay / delays total of more than 30 days will require prior written approval of the Employer.

31. Management Meetings

- 31.1. The Engineer may require the Contractor to attend management meetings. The business of a management meeting shall be to review the plans for the remaining Works and to deal with matters raised in accordance with early warning procedure, by which the Contractor warns the Engineer at the earliest of specific likely future events that may affect the cost or completion time of the Works.
- 31.2. The Engineer shall record the business of management meetings and provide copies of the record to those attending the meeting. The responsibility of the parties for actions to be taken shall be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all those who attended the meeting.

C. Quality Control

32. Identifying Defects

- 32.1. The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.

33. Tests/ Results/ Site Registers etc.

- 33.1. For carrying out mandatory tests as prescribed in the specifications, the contractor shall establish field laboratory at the location decided by Engineer. The field laboratory will have at least the minimum equipment as required. The contractor shall be solely responsible for:
 - a) Carrying out the mandatory tests prescribed in the specifications
 - b) For the correctness of the test results, whether preformed in his laboratory or elsewhere.
- 33.2. The Engineer may instruct the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the Contractor shall carry out the test at his cost and pay for any samples.
- 33.3. The Engineer may instruct the Contractor to carry out any test from any Govt. approved agencies for the interest of the project and the Contractor shall carry out the test at his cost.
- 33.4. The Contractor will be required to maintain the following registers at site of work and should produce the same for inspection of the Employer whenever desired by him.

Typical Proforma of registers are enclosed (refer tables below):

| | |
|------------|---|
| Table I | Proforma for Cement Register. |
| Table II | Proforma for Steel Register. |
| Table III | Proforma for bulkage test of sand Register. |
| Table IV | Proforma for slump test Register. |
| Table V | Proforma of Brick test Register. |
| Table VI | Proforma of Sieve analysis of fine & coarse aggregate Register. |
| Table VII | Proforma of Concrete cube tests Registers. |
| Table VIII | Proforma of Hindrance Register. |
| Table IX | Reconciliation Register |

Note: The Engineer may instruct the Contractor to carry out any other tests required for the project during the construction period and the contractor shall abide the same.

TABLE - I
CEMENT REGISTER

Name of work :

Name of Contractor :

Agreement No. :

| Date of Receipt | Source of Receipt with reference to S.O./Indent. | Quantity Received | Progressive total | Date of issue | Quantity issued | Item of work for which issued | Quantities returned at the end of the day |
|-----------------|--|-------------------|-------------------|---------------|-----------------|-------------------------------|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |

| Total Issued | Daily balance at hand | Contractor's initials | Consultant's Initial | Initial of WBIDC Engineer | Remarks |
|--------------|-----------------------|-----------------------|----------------------|---------------------------|---------|
| (9) | (10) | (11) | (12) | (13) | (14) |

TABLE – II
STEEL REGISTER

Name of work :

Name of Contractor :

| Date of Receipt | Source of receipt with reference to S.O./Indent | Consumption as per measurement M.B. No. & Page No. or issue to other works and their T.E. Nos. | Tor Steel (in mm) | | | | | Total | Initial of Contractor | Initial of Consultant | Initial of WBIDC Engineer |
|-----------------|---|--|-------------------|----|-----|-----|-----|-------|-----------------------|-----------------------|---------------------------|
| | | | 6ϕ | 8ϕ | 10ϕ | 12ϕ | 16ϕ | | | | |
| (1) | (2) | (3) | (4) | | | | | (5) | (6) | (7) | (8) |

N.B.: No. of diameters given is only illustrative. Open more columns for other diameters wherever needed.

TABLE – III
BULKAGE TEST OF SAND REGISTER

| Sl. No. | Date of Test | Values of dust sand in cylinder | Value of inundated sand in cylinder | Percentage of Bulkage | Signature of Contractor | Signature of Consultant | Signature of WBIDC |
|---------|--------------|---------------------------------|-------------------------------------|-----------------------|-------------------------|-------------------------|--------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |

TABLE – IV
SLUMP TEST REGISTER

| Sl. No. | Date of test | Type of work for which slump taken. | Specified slump | | Slump obtained | | Signature of Contractor | Signature of Consultant | Signature of WBIDC |
|---------|--------------|-------------------------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|-------------------------|--------------------|
| | | | When Vibrators are used | When Vibrators are not used | When Vibrators are used | When Vibrators are not used | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |

TABLE - V

BRICK TEST REGISTER

| Sl. No. | Date of collection of sample | Identification mark | Size of brick in Cms. | Area in Cm ² | Date of Initial Curing. | Date of filling of frog | Date of testing | Time of curing |
|---------|------------------------------|---------------------|-----------------------|-------------------------|-------------------------|-------------------------|-----------------|----------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |

| Test Results | | Standard strength in per Kg./Cm ² | Sample sanding ref. | Signature of Contractor | Signature of Consultant | Signature of WBIDC |
|---|--|--|---------------------|-------------------------|-------------------------|--------------------|
| Compressive resistive strength for each brick in M.T. | Average strength in Kg/Cm ² | | | | | |
| (10) | (11) | (12) | (13) | (14) | (15) | (16) |

TABLE - VI

SIEVE ANALYSIS OF FINE & COARSE AGGREGATE REGISTER

| Sl. No. | Date of Testing | Weight of materials to be tested | Nominal size of aggregate | I.S. Sieve designation | Standard % passing for graded aggregate of nominal size. |
|---------|-----------------|----------------------------------|---------------------------|------------------------|--|
| (1) | (2) | (3) | (4) | (5) | (6) |

| Test Results | % obtained passing | Signature of Contractor | Signature of Consultant | Signature of WBIDC | Remarks |
|--------------|--------------------|-------------------------|-------------------------|--------------------|---------|
| (7) | (8) | (9) | (10) | (11) | (12) |

TABLE – VII

REGISTER OF CUBE TEST OF CONCRETE

- 01. Name of work.....
- 02. Name of Contractor.....
- 03. Agreement No
- 04. Sample No
- 05. Compressive strength specified
 - I. 7 days.....Kg/Cm²
 - II. 28 days.....Kg/Cm²
- 06. Identification No
- 07. Portion of work and quantity
- 08. Date & time of casting cubes

7 Days Test

- 01. Due date of test.....
- 02. Actual date of test.....
- 03. Actual Compressive Strength
 - Cube No. 1 a) Min :
 - Cube No. 2 b) Max :
 - Cube No. 3 c) Average :
- 04. Average of Max & Min:.....

Compressive Strength

- 05. 15% of average strength.....
- 06. Difference between 3 (a) and 3 (b).....
- 07. Is 6 less than 5?
- 08. If the answer to 7 is 'Yes' Acceptable

28 Days Test

- 01. Due date of test.....
- 02. Actual date of test.....
- 03. Delay in testing.....
- 04. Increase in strength
1.50Kg/Cm² per day of delay.....
- 05. Anticipated compressive strength
(min specified – 4)
- 06. Actual Compressive Strength
 - Cube No. 4 a) Min:
 - Cube No. 5 b) Max:
 - Cube No. 6 c) Average:
- 07. Is Compressive strength equal to or
Yes / No More than specified/anticipated strength?
- 08. If the answer to 7 is 'Yes' Acceptable

TABLE – VIII
HINDRANCE REGISTER

Name of work..... Date of Start of work.....

Name of Contractor..... Period of completion.....

Agreement No..... Actual Completion of work.....

| Sl. No. | Nature of Hindrance | Date of occurrence of hindrances | Date on which hindrance was removed | Period of which hindrance existed | Initial of Contractor | Initial of Consultant | Initial of WBIDC Engineer | Remarks |
|---------|---------------------|----------------------------------|-------------------------------------|-----------------------------------|-----------------------|-----------------------|---------------------------|---------|
| (1) | (2) | (3) | (4) | (5) | (6) | (6) | (6) | (7) |

TABLE – IX
RECONCILIATION REGISTER
(FOR ANY KIND OF MATERIAL)

| Sl.No. | Material | Location/ Chainage | Structure Name | Production QTY/Cum | As per Drawing Theoretical QTY | Difference b/w production and theoretical Qty | Percentage of difference | Remarks |
|--------|----------|--------------------|----------------|--------------------|--------------------------------|---|--------------------------|---------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |

34. Correction of Defects (including those noticed during the Defect Liability Period)

- 34.1. The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Document. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 34.2. Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the length of time specified by the Engineer's notice.
- 34.3. The Engineer may issue notice to the Contractor to carry out removal of defects, if any noticed in his inspection, or brought to his notice. The Contractor shall remove the defects within the period specified in the notice and submit to the Engineer a compliance report.

35. Uncorrected Defects

- 35.1. If the Contractor has not corrected a Defect pertaining to the Defect Liability Period these Conditions of Contract, to the satisfaction of the Engineer, within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor shall pay this amount, on correction of the Defect.

D. Cost Control

36. Bill of Quantities

- 36.1. The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning, maintaining works to be done by the Contractor.
- 36.2. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work done at the rate in the Bill of Quantities for each item for the construction of roads.

37. Variations

37.1. The Engineer shall, having regard to the scope of the Works and the sanctioned estimated cost, have power to order, in writing, Variations within the scope of the Works he considers necessary or advisable during the progress of the Works. Such Variations shall form part of the Contract and the Contractor shall carry them out and include them in updated programmes produced by the Contractor. Oral orders of the Engineer for Variations, unless followed by written confirmation, shall not be taken into account.

38. Payments for Variations

38.1. If rates for Variation items are specified in the Bill of Quantities, the Contractor shall carry out such work at the same rate. No increase in rates of any item specified in BOQ will be allowed due to variation in quantities.

38.2. If the rates for Variation are not specified in the Bill of Quantities, the Engineer shall derive the rate from similar items in the Bill of Quantities.

38.3. If the rate for Variation item cannot be determined in the manner specified in Clause 39.1 or 39.2, the Contractor shall, within 14 days of the issue of order of Variation work, inform the Engineer the rate which he proposes to claim, supported by analysis of the rates. The Engineer shall assess the quotation and determine the rate based on prevailing market rates within on the claim by the Contractor. As far as possible, the rate analysis shall be based on the standard data book and the current schedule of rates of the district public works division. The decision of the Engineer on the rate so determined shall be final and binding on the Contractor.

39. Cash Flow Forecasts

39.1. When the Programme is updated, the Contractor shall provide the Engineer with an updated cash flow Forecast.

40. Payment Certificates

40.1. The payment to the contractor will be as follows for construction work:

- a) The Contractor shall submit to the Engineer monthly statements of the value of the work executed less the cumulative amount certified previously, supported with detailed measurement of the items of work executed.
- b) The Engineer shall check the Contractor's monthly statement within 14 days and certify the amount to be paid to the Contractor.
- c) The value of work executed shall be determined, based on measurements by the Engineer.
- d) The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities, completed to the satisfaction of the Engineer.
- e) The value of work executed shall also include the valuation of Variations, if any.
- f) The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- g) The payment of final bill shall be governed by the provisions of clause 53 of GCC.

41. Payments

41.1. Payment for the work done by the Contractor will be based on measurements recorded at various stages of the work. The Contractor or his authorized agent or representative shall be present at the time of recording of each set of measurements and sign the measurement and sign the measurement book or level / field book of their acceptance.

41.2. If for any reason the Contractor or his authorized agent is not available, and the work may be suspended by the Engineer-in-Charge/ Consultant to avoid recording of measurements during the absence of the Contractor or his authorized representative, the Employer shall not entertain any claim from the Contractor for any loss incurred by him on this account. If the Contractor or his authorized agent or representative does not remain present at the time of such measurements after the Contractor has been given a three-day's notice in writing, such measurements may be taken in his absence and shall be deemed to be accepted by the Contractor

41.3. Total payment shall be made against progressive Bills/ Invoices. Each Bill / Invoice shall be raised as per progress of work / supply. Only one (01) R/A bill can be raised in every month only after the billing amount reaches a minimum 6 (six) percent of the total contract value in general.

41.4. While claiming payment the contractor shall submit Bill / Invoice, Inspection / Test Report of materials/equipment and other documents as required, to the Engineer-in-Charge in triplicate duly certified by the Consultant.

41.5. Payments shall be adjusted for deductions for advance payments, security deposit, other recoveries in terms of the Contract and taxes at source, as applicable under the law. The Engineer shall pay the Contractor the amounts he had certified within about 30 days of the date of each certificate.

41.6. Items of the Works for which no rate or price has been entered in the Bill of Quantities, will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract. Also refer Clause 39.

42. Compensation Events

42.1. Not Applicable

43. Tax

The estimate has been prepared by considering 18% GST and 1% LWC. The rates quoted by the Contractor shall be deemed to be inclusive of the all taxes of Central and State Governments, local bodies and authorities except GST.

44. Currencies

All payments will be made in Indian Rupees.

45. Retention

45.1. The Employer shall retain 8 percent (8%) of the billed amount as retention money from each payment of the contractor until completion of the whole construction work.

45.2. The total amount retained as retention money will be repaid to the contractor when the defect liability period has expired and the Engineer has certified that all defects notified by the Engineer to the contractor before the end of this period have been corrected.

45.3. The additional performance security for unbalanced bids as detailed in these documents is repaid to the contractor when the defect liability period has expired.

45.4. The performance security equal to the two percent of the contract price is repaid to the contractor when the Defect Liability Period is over and the Engineer has certified that the contractor has satisfactorily carried out defects removal in the Defects Liability Period.

46. Force Majeure

46.1. Any calamity like earthquake, lightning strikes, cyclones, volcanic eruptions, war, hostilities (whether declared or not), civil disturbances, acts of foreign enemies, riots, strikes, lockouts, ionizing radiation or contamination by radio activity, natural floods except accumulation of water due to rainfall which cause delay in the execution of the work, will be considered by the WBIDC for the grant of extension of time only for the completion of the work after producing documentary proof. No other claim whatsoever will be entertained by the WBIDC.

47. Site Order Book:

47.1. The Contractor shall within 7 (Seven) days from the written order to commence work, supply at his own cost, a site order book to be kept at the site of work under the custody of the Assistant Engineer or his authorized representative. The site order book shall have numbered pages in triplicate, which will be initiated by the Engineer-in-charge. The directions or instructions from the Dept. Officers to be issued to the Contractor will be entered (in triplicate) in the site order book (except when such directions are given by separate letters). The contractor or his authorized representative / agent shall regularly note the entries in the site order book and also record therein the action taken or being taken by him in compliance with such directions or instructions including any other relevant point relating to the work.

47.2. The Contractor or his authorized representative / agent may take away the duplicate pages of the site order book for his own record. A duly authorized representative's agent of the contractor shall receive such instructions as above.

48. Discrepancies

48.1. Should any discrepancy appear in any of the documents and drawings included in this contract or between different parts of the same documents or any ambiguity or insufficiency of information the contractor shall point out the same to the Tender Inviting authority in writing and receive his instructions, explanations or decision in the matter. Decision of Tender Inviting authority is final and binding on the Contractor.

49. Liquidated Damages

49.1. The Contractor shall pay liquidated damages to the Employer at the rate of 1% of the contract price per week for each week that the Completion Date is delayed, for the inefficiency/fault on the part of the contractor, than the

Intended Completion Date (for the whole of the works or the milestones as specified) subject to a maximum of 10% of the Contract Price. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's other liabilities.

49.2. If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate.

49.3. The Employer may, without prejudice to any other method of recovery deduct the amount of such damages from any monies due or to become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligations to complete the Works or from any other of his obligations and liabilities under the Contract.

50. Advance Payment

Deleted

51. Securities

51.1. The Performance Security including additional security for unbalanced bids shall be provided to the Employer no later than the date specified in the Letter of Intent/Work Order and shall be issued in the form given in the form of an unconditional Bank Guarantee and by a Bank acceptable to the Employer.

52. Cost of Repairs

52.1. Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at his cost unless such damage arises from Employer's acts or omissions.

E. Finishing the Contract

53. Completion

53.1. The Contractor shall request the Engineer to issue a certificate of Completion of the Works, and the Engineer will do so upon deciding that the Works is completed and all defects have been remedied by the Contractor.

54. Taking Over

54.1. The Employer shall take over the Site and the Works within seven days of the Engineer's issuing a certificate of Completion.

55. Final Account

55.1. The Contractor shall supply the Engineers with a detailed account of the total amount that the Contractor considers payable for works under the contract within 21 days of issue of certificate of completion of construction of works. The Engineer shall issue a defect liability certificate and certify any payment that is due to the Contractor for works within 42 days of receiving the Contractor's account if it is correct and complete. If the account is not correct or complete, the Engineer shall issue within 42 days a statement that states the scope of the corrections or additions that are necessary. If the Account is still unsatisfactory after it has been resubmitted, the Engineer shall decide on the amount payable to the Contractor and issue a payment certificate within 28 days of receiving the Contractor's revised account. The payment of final bill for construction of works will be made within 14 days thereafter, and shall be binding on the Contractor.

55.2. In case the account is not received within 21 days of issue of Certificate of Completion as provided in Clause above, the Engineer shall proceed to finalize the account and issue a payment certificate within 28 days.

55.3. The payment of final bill for construction of works will be made within 14 days thereafter.

56. Termination

56.1. The Employer may terminate the Contract if the Contractor causes a fundamental breach of the Contract.

56.2. Fundamental breaches of Contract shall include, but shall not be limited to, the following:

- a) The Contractor stops work for 28 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
- b) The Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
- c) The Engineer gives Notice to correct a particular Defect and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;

- d) The Contractor does not maintain Safety and Security, which is required;
- e) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in clause 47.1;
- f) The Contractor fails to provide insurance cover as required under clause 13;
- g) If the Contractor, in the judgment of the Employer, has engaged in the corrupt or fraudulent practice in competing for or in executing the Contract. For the purpose of this clause, “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in Contract execution.
- h) “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 Employer and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid process at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.
- i) If the Contractor has not completed at least thirty percent of the value of construction Work required to be completed after half of the completion period has elapsed;
- j) If the Contractor fails to set up a field laboratory with the prescribed equipment, within 21 days from the start date; and
- k) Any other fundamental breaches like if the contractor has contravened Cl 7.1 and Cl 9 of Part-1 General Conditions of Contract.
- l) If the Contractor fails to deploy machinery and equipment or personnel as specified in the Contract at the appropriate time.

56.3. Notwithstanding the above, the Employer may terminate the Contract for convenience.

56.4. If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

57. Payment upon Termination

57.1. If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less liquidated damages, if any, less advance payments received up to the date of issue of the certificate, less recoveries due in terms of contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the value of the work not completed, as indicated in the Contract, if the total amount due to the Employer exceeds any payment due to the contractor, the differences shall be recovered from the security deposit, and performance security. If any amount is still left un-recovered it will be a debt payable to the Employer. The percentage to apply to the value of the work not completed representing the Employer’s additional cost for completing the Works shall be 25 % percent.

57.2. If the Contract is terminated at the Employer’s convenience, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, and the Contractor’s costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the Contract, and less taxes due to be deducted at source as per applicable law.

58. Property

58.1. All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer for use for completing balance construction work if the Contract is terminated because of the Contractor’s default, till the Works is completed after which it will be transferred to the Contractor and credit, if any, given for its use.

59. Release from Performance

59.1. If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of the Employer or the Contractor, the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

F. Other Conditions of Contract

60. Labour

60.1. The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

60.2. The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site, Equipment and such other information as the Engineer may require.

60.3. No claim for idle labour would be entertained under any circumstances.

60.4. No labour below the age of eighteen years shall be employed on the work.

61. Compliance with Labour Regulations

61.1. During continuance of the Contract, the Contractor and his sub-Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given in Appendix to Part I General Condition of Contract. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications /bye laws /Acts /Rules/ regulations including amendments, if any, on the part of the Contractor, the Engineer /Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

62. Drawings and Photographs of the Works

62.1. The contractor shall do photography of the site firstly before the start of the work, every month (preferably on the same date) thereafter showing the execution of different sections and stages of work and lastly after the completion of the work. The Contractor shall submit 2 copies and the originals of photographs. No separate payment will be made to the contractor for this.

62.2. The Contractor shall not disclose details of Drawings furnished to him and works on which he is engaged without the prior approval of the Engineer in writing. No photograph of the works or any part thereof or plant employed thereon, except those permitted under clause 58.1, shall be taken or permitted by the Contractor to be taken by any of his employees or any employees of his sub-Contractors without the prior approval of the Engineer in writing. No photographs / Video photography shall be published or otherwise circulated without the approval of the Employer/Engineer in writing.

63. The Apprentices Act 1961

63.1. The Contractor shall duly comply with the provisions of the Apprentices Act 1961 (III of 1961), the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so he shall be subject to all liabilities and penalties provided by the said Act and said Rules.

- a) Workmen Compensation Act 1923: -The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) Payment of Gratuity Act 1972: - Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed the prescribed minimum years (say, five years) of service or more or on death the rate of prescribed minimum days'(say, 15 days) wages for every completed year of service. The Act is applicable to all establishments employing the prescribed minimum number (say, 10) or more employees.
- c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the Employer plus workers at the rate prescribed (say, 10% or 8.33%). The benefits payable under the Act are:
 - i. Pension or family pension on retirement or death as the case may be.
 - ii. Deposit linked insurance on the death in harness of the worker.
 - iii. Payment of P.F. accumulation on retirement/death etc.

- d) Maternity Benefit Act 1951: - The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- e) Contract Labour (Regulation & Abolition) Act 1970: - The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer.
- f) The Act is applicable to the establishments or Contractor of Principal Employer if they employ prescribed minimum (say 20) or more contract labour.
- g) Minimum Wages Act 1948: - The Employer is to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of buildings, roads, runways is scheduled employment.
- h) Payment of Wages Act 1936: - It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- i) Equal Remuneration Act 1979: - The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against female employees in the matters of transfers, training and promotions etc.
- j) Payment of Bonus Act 1965: - The Act is applicable to all establishments employing prescribed minimum (say, 20) or more workmen. The Act provides for payments of annual bonus within the prescribed range of percentage of wages to employees drawing up to the prescribed amount of wages, calculated in the prescribed manner. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. States may have different number of employment size.
- k) Industrial Disputes Act 1947: - The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- l) Industrial Employment (Standing Orders) Act 1946: - It is applicable to all establishments employing prescribed minimum (say, 100, or 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get these certified by the designated Authority.
- m) Trade Unions Act 1926: - The Act lays down the procedure for registration of trade unions of workmen and Employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- n) Child Labour (Prohibition & Regulation) Act 1986: - The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations of employment of children in all other occupations and processes. Employment of child labour is prohibited in building and construction industry.
- o) Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act 1979: - The Act is applicable to an establishment which employs prescribed minimum (say, five) or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as Housing, Medical-Aid, Travelling expenses from home up to the establishment and back etc.
- p) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996: - All the establishments who carry on any building or other construction work and employs the prescribed minimum (say, 10) or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the building or construction work and other welfare measures, such as canteens, first-aid facilities, ambulance, housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- q) Factories Act 1948: - The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering

information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing the prescribed minimum (say, 10) persons or more with aid of power or another prescribed minimum (say, 20) or more persons without the aid of power engaged in manufacturing process.

64. Labour Act

64.1. The Contractor should obtain the license under the provision of the contract labour (Regulation and Abolition) Act, 1970 and the contract labour (Regulation and Abolition) General Rules, 1971 including the provisions of amendments vide govt. (West Bengal) Notification No. 10134 / IW / II – 1675 dated 24th of October, 1975 and submit the same to the office of WBIDC latest before commencement of the work.

65. Loss And Damage

65.1. Neither the department nor the Engineer-in-Charge or his representative shall be answerable or accountable in any manner for any loss or damage that may happen to the work or any part thereof or to any of the materials or other things used in performing the work, or for injury to any person, either a workman or any member of the public, or for damage to any property for any cause which might have been provoked by the Contractor. The Contractor shall properly guard against all these injuries or damages to persons or property resulting from his operations under this contract at any time before issuance of the certificate of completion and maintenance. He shall indemnify and save harmless the Department from all suits or actions of every description brought for, or on account of, any injury or damage received or sustained by any person or persons by reason of the construction of the work, negligence in guarding the same, the use of improper materials or of any act of omission or deviation from the contract.

66. Clearance Of Site On Completion

66.1. On the completion of the works (as per Scope) the Contractor at his cost shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind, and level the whole of the site and works clean and in a workman like condition to the satisfaction of the Engineer-in-Charge.

66.2. The Contractor at his cost shall take care for cleaning the working site from time to time for easy access to work site and also from safety point of view.

67. Accident or Injury to Workmen

67.1. The Employer shall not liable for or in respect of any damages or compensation payable at law in respect or inconsequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor, have and except any accident or injury resulting from any act or default of the employer, his agents, or servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, save and except as aforesaid and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

68. Insurance against Accident etc. to Workmen:

68.1. The Contractor at his cost shall insure against all liabilities indicated in clause 40, 41 and 42 with an insurer approved by the Employer, and shall continue such insurance during the whole of the time that any person is employed by him on the works and shall, when required, produce to the Engineer-in-Charge or his representative such policy of insurance and the receipts for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy, but the Contractor shall require such sub-contractor to produce to the Engineer-in-Charge when required, such policy of insurance and the receipt for the payment of the current premium.

69. Inspection Facilities

69.1. The Contractor shall provide necessary facilities for inspection of work for quality control by the Engineer for the purpose and carrying his instructions as may be recorded in writing in Site Order Book.

SECTION-6
Technical Specifications

1. Work under this scope shall be carried out strictly in accordance with specifications attached and all relevant latest Indian standards, National building code (NBC) and any other statutory bodies.
2. Items not covered under these specifications shall be carried out as per specifications of the latest Indian standards, National building code (NBC) with latest amendments as applicable in the contract.
3. In the event of the works not covered by Indian standards, British / American Standards shall be followed.

A. SCOPE OF WORK:

| Sl. No | Description Of Items | Quant ity | Uni t | Rate (Rs.) | Amount | | | |
|--------|---|-----------|-----------|---------------|-----------------|-----------|---------------|------------------|
| 1 | <p>Earth work in excavation of foundation trenches or drains, in all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75 m. as directed. The item includes necessary trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water as required complete.</p> <p>(a) Depth of excavation not exceeding 1,500 mm</p> <p>Area of Pavement :--- Strip Foundation :-</p> <p><u>Columns of Boundary Wall</u> Total Length of B/Wall=5205.867 mtr</p> <p><u>Non-River Side Length of B/Wall=3885.397 mtr</u> <u>River Side Length of B/Wall=1320.47 mtr</u></p> <p><u>(Spacing of Column @2.5 mtr C/C)</u> <u>(Bay/ Span @15.00 mtr C/C)</u></p> <p><u>Non-river Side Portion</u></p> <p>Normal Column</p> <p style="text-align: center;">1556 x 1.90 x 1.90 x 1.275 = 7161.88 M³</p> <p>Double(Joint) Columns</p> <p style="text-align: center;">131 x 1.90 x 1.90 x 1.275 = 602.96 M³</p> <p><u>River Side Portion</u></p> <p>Normal Column</p> <p style="text-align: center;">530 x 1.90 x 1.90 x 1.50 = 2869.95 M³</p> <p>Double(Joint) Columns</p> <p style="text-align: center;">46 x 1.90 x 1.90 x 1.50 = 249.09 M³</p> <p style="text-align: right;">= 10883.88</p> <p>(b) Depth of excavation exceeding 1,500 mm upto 3000mm</p> <p><u>River Side Portion</u></p> <p>Normal Column</p> <p style="text-align: center;">530 x 1.90 x 1.90 x 0.275 = 526.16 M³</p> <p>Double(Joint) Columns</p> <p style="text-align: center;">46 x 1.90 x 1.90 x 0.275 = 45.67 M³</p> <p style="text-align: right;">= 571.82</p> | | | | 10,883 .88 | / % M3 | 11,92 7.00 | 12,98,120 .00 |
| | (b) Depth of excavation exceeding 1,500 mm upto 3000mm | | | | | | | |
| | <p><u>River Side Portion</u></p> <p>Normal Column</p> <p style="text-align: center;">530 x 1.90 x 1.90 x 0.275 = 526.16 M³</p> <p>Double(Joint) Columns</p> <p style="text-align: center;">46 x 1.90 x 1.90 x 0.275 = 45.67 M³</p> <p style="text-align: right;">= 571.82</p> | 571.82 | / % M3 | 19,23 8.00 | 1,10,007. 50 | | | |
| 2 | <p>(A) Filling in foundation or plinth by silver sand in layers not exceeding 150 mm as directed and</p> | | | | | | | |

| Sl. No | Description Of Items | Quantity | Unit | Rate (Rs.) | Amount |
|--------|--|-----------|-------|------------|--------------|
| | consolidating the same by thorough saturation with water, ramming complete including the cost of supply of sand. (payment to be made on measurement of finished quantity) | | | | |
| | <u>River Side Portion</u> Normal Column 530 x 1.90 x 1.90 x 0.50 = 956.65 M ³ Double(Joint) Columns 46 x 1.90 x 1.90 x 0.50 = 83.03 M ³ = 1039.68 | 1,039.68 | /% M3 | 93,621.00 | 9,73,358.81 |
| 3 | Supplying and laying Polythene Sheet (150gm / sq.m.) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches. <u>Non-river Side Portion</u> Normal Column 1556 x 1.65 x 1.65 = 4236.21 M ³ Double(Joint) Columns 131 x 1.65 x 1.65 = 356.65 M ³ <u>River Side Portion</u> Normal Column 530 x 1.65 x 1.65 = 1442.93 M ³ Double(Joint) Columns 46 x 1.65 x 1.65 = 125.24 M ³ <u>Tie Boundary Wall</u> Non-river Side Portion 3885.395 x 0.30 = 1165.62 M ³ River Side Portion 1320.470 x 0.30 = 396.14 M ³ 7722.79 M3 <u>Mark A</u> | 7,722.79 | m2 | 24.00 | 1,85,346.96 |
| 4 | Supplying Sal-bullah piles at work site, including dressing and making one end pointed (iii) 100mm diameter <u>River Side Portion(Double Tie Portion)</u> (Piles per footing=9 Nos.) Single Column 9 x 530 x 5.00 = 23850.00 Mtr Double(Joint) Columns 9 x 46 x 5.00 = 2070.00 Mtr 25920.00 Mtr | 25,920.00 | mtr | 142.00 | 36,80,640.00 |
| 5 | Labour for driving Sal-bullah / Eucalyptus bullah piles by monkey in sorts of soil including | | | | |

| Sl. No | Description Of Items | Quantity | Unit | Rate (Rs.) | Amount |
|--------|--|-----------|------|------------|--------------|
| | hoisting and placing piles in position, protecting the pile head with iron ring and cutting and shaping heads before and after driving and including hire and labour for necessary driving appliances and all tackles. | | | | |
| | (iii) 100mm diameter | | | | |
| | Qty same as Sl.no. 4= 25920.00 Mtr | 25,920.00 | mtr | 83.00 | 21,51,360.00 |
| 6 | (I) Cement concrete with graded stone ballast (40 mm size excluding shuttering) In ground floor (A) [Pakur Variety] (a) 1:3:6 proportion | | | | |
| | Qty same as sl. No. (3). = 7722.79 X 0.075 = 579.21 M3 | 579.209 | M3 | 5,248.44 | 30,39,943.68 |
| 7 | Hire and labour charges for shuttering with centering and necessary staging upto 4 m using approved stout props and thick hard wood planks of approved thickness with required etc. | | | | |
| | (f) 25 mm to 30 mm shuttering without staging in foundation. | | | | |
| | P.C. c | | | | |
| | 1687 x 4 x 1.65 x 0.075 = 835.07 M2 | | | | |
| | <u>Non-river Side Portion(Single Tie Portion)</u> | | | | |
| | <u>Base of Column:</u> | | | | |
| | Single Column | | | | |
| | 1687 x 2 x 1.50 x 0.20 = 1012.20 M2 | | | | |
| | 1687 x 2 x 1.50 x 0.20 = 1012.20 M2 | | | | |
| | 1687 x 4 x 1.00 x 0.30 = 2024.40 M2 | | | | |
| | <u>Tie</u> 3885.395 x 2 x 0.25 = 1942.70 M2 | | | | |
| | <u>River Side Portion(Double Tie Portion)</u> | | | | |
| | P.C. c | | | | |
| | 576 x 4 x 2.72 x 0.075 = 470.45 M2 | | | | |
| | <u>Base of Column:</u> | | | | |
| | Single Column | | | | |
| | 576 x 2 x 1.50 x 0.20 = 345.60 M2 | | | | |
| | 576 x 2 x 1.50 x 0.20 = 345.60 M2 | | | | |
| | <u>1st Tie</u> | | | | |
| | 1320.470 x 2 x 0.25 = 660.24 M2 | | | | |
| | 576 x 4 x 0.30 x 1.60 = 1105.92 M2 | | | | |
| | <u>2nd Tie</u> 1320.470 x 2 x 0.25 = 660.24 M2 | | | | |
| | | 10,459.60 | M2 | 209.00 | 21,86,056.40 |
| | (c) 9 to 12 mm thick approved quality ply board shuttering in any concrete work | | | | |
| | <u>Non-river Side Portion(Single Tie Portion)</u> | | | | |

| Sl. No | Description Of Items | Quantity | Unit | Rate (Rs.) | Amount |
|--------|--|-----------|------|------------|--------------|
| | <u>Col. above Tie</u> 1687 x 4 x 0.30 x 1.80 = 3643.92 M2 <u>River Side Portion(Double Tie Portion)</u> Single Column <u>Col. above Tie</u> 576 x 4 x 0.30 x 1.80 = 1244.16 M2 <u>Top Bands</u> 5205.867 x 2 x 0.15 = 1561.76 M2 5205.867 x 1 x 0.18 = 911.03 M2 Gate Columns 4 x 4 x 0.30 x 1.10 = <u>5.28</u> M2 7366.146 M2 | 7,366.146 | M2 | 369.00 | 27,18,107.87 |
| 8 | Controlled Cement concrete with well graded stone chips (20 mm nominal size) excluding shuttering and reinforcement with complete design of concrete as per IS : 456 and relevant special publications, submission of job mix formula after preliminary mix design after testing of concrete cubes as per direction of Engineer-in charge. Consumption of cement will not be less than 300 Kg of cement with Super plasticiser per cubic meter of controlled concrete but actual consumption will be determined on the basis of preliminary test and job mix formula. In ground floor and foundation.[using concrete mixture] M 25 Grade (i) Pakur Variety <u>Non-river Side Portion(Single Tie Portion) as per drawing</u> <u>Base of Column:</u> Single Column 1687 x 1.50 x 1.50 x 0.20 = 759.15 m3 1687 x 0.30 x 0.30 x 1.00 = 151.83 m3 1687 x 1.80 x 0.30 x 0.30 = 273.29 m3 <u>Tie</u> 3885.395 x 0.25 x 0.30 = 291.40 m3 <u>River Side Portion(Double Tie Portion)</u> <u>Base of Column:</u> Single Column 576 x 1.50 x 1.50 x 0.20 = 259.20 m3 576 x 1.00 x 0.30 x 0.30 = 51.84 m3 <u>1st Tie</u> 1320.470 x 0.25 x 0.30 = 99.04 m3 576 x 0.30 x 0.30 x 1.60 = 82.94 m3 <u>2nd Tie</u> 1320.470 x 0.25 x 0.30 = 99.04 m3 576 x 0.30 x 0.30 x 1.80 = 93.31 m3 <u>Top Bands</u> 5205.867 x 0.30 x 0.15 = 234.26 m3 | | | | |

| Sl. No | Description Of Items | Quant ity | Uni t | Rate (Rs.) | Amount |
|--------|--|-----------|-------|------------|----------------|
| | Gate Columns 4 x 0.30 x 0.30 x 1.10 = <u>0.40</u> m3 2395.69 m3 | 2,395.69 | M3 | 6,303.40 | 1,51,00,942.35 |
| 9 | - Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction. (a)For works in foundation and upto roof of ground floor/upto 4m JSW/JSPL/SHYAM/SRMB 239 = 35.935 5.69 m ³ x 1.50% 0 35.9 = 282.092 MT 35 x 7.85 | 282.09 | MT | 55,306.23 | 1,56,01,334.42 |
| 10 | - Brick work with 1st class bricks in cement mortar (1:6) a) In foundation and plinth <u>Boundary Wall</u> <u>River Side Portion(Double Tie Portion)</u> 1320.470 x 0.25 x 1.60 = 528.19 M3 - - 528.19 M3 | 528.19 | M3 | 5,367.81 | 28,35,223.56 |
| 11 | - 125 mm. thick brick work with 1st class bricks in cement mortar (1:4) in ground floor. <u>Boundary Wall</u> <u>Non-river Side Portion(Single Tie Portion)</u> 3885.395 x 1.80 = 6993.71 m2 <u>River Side Portion(Double Tie Portion)</u> 1320.470 x 1.80 = <u>2376.85</u> m2 - - 9370.56 m2 | 9,370.56 | m2 | 728.56 | 68,27,015.19 |
| 12 | - Earthwork in filling in foundation trenches or plinth with good earth, in layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete.(Payment to be made on the basis of measurement of finished quantity of work). <u>(a) With earth obtained from excavation of foundation.</u> - Qty same as sl. No. 11455.70 (1). = 3 X 0.70 = 8018.99 M3 | 8018.99 | M3 | 7,754.00 | 6,21,870.80 |

| Sl. No | Description Of Items | Quantity | Unit | Rate (Rs.) | Amount |
|--------|--|-----------|------|------------|-------------|
| | | 2000 | | | |
| 13 | - | | | | |
| | Labour for Chipping of concrete surface before taking up Plastering work | | | | |
| | <u>Non-river Side Portion(Single Tie Portion)</u> | | | | |
| | Single Column | | | | |
| | <u>Col. above Tie</u> | | | | |
| | 1556 x 4 x 0.25 x 2.25 = 3501.00 M2 | | | | |
| | Double Column | | | | |
| | <u>Col. above Tie</u> | | | | |
| | 131 x 4 x 0.25 x 2.25 = 294.75 M2 | | | | |
| | <u>River Side Portion(Double Tie Portion)</u> | | | | |
| | Single Column | | | | |
| | <u>Col. above Tie</u> | | | | |
| | 530 x 4 x 0.25 x 2.25 = 1192.50 M2 | | | | |
| | Double Column | | | | |
| | <u>Col. above Tie</u> | | | | |
| | 46 x 4 x 0.25 x 2.25 = 103.50 M2 | | | | |
| | <u>Top Bands</u> | | | | |
| | 5205.867 x 2 x 0.10 = 1041.17 M2 | | | | |
| | 5205.867 x 1 x 0.25 = 1301.47 M2 | | | | |
| | Gate Columns | | | | |
| | 4 x 4 x 0.35 x 3.30 = 18.48 M2 | | | | |
| | <u>2nd Tie</u> | | | | |
| | 3885.395 x 0.25 x 0.15 = $\frac{145.70}{7598.57}$ M2 | | | | |
| | | 7,598.57 | M2 | 21.00 | 1,59,569.97 |
| 14 | - | | | | |
| | Surface Dressing of the ground in any kind of soil including removing vegetation in equalities not exceeding 15 cm. depth and disposal of the rubbish within a lead upto 75 m. as directed.. | | | | |
| | 1 x 5205.87 x 2.00 = $\frac{10411.74}{10411.74}$ m2 | | | | |
| | | 10,411.74 | m2 | 11.00 | 1,14,529.14 |
| 15 | - | | | | |
| | M.S. gate of Jail type as per approved design made of strong M.S. frame work, intermediate stiffeners and round / square bars or angles. M.S. sheet (not less than 14 gauge) gussets, cleats etc. including necessary riveting, bolting, welding, locking and hanging arrangements, fitting and fixing complete as per direction of the Engineer-in -charge. In ground floor. | | | | |
| | 4 x 3.00 x 3.50 = 42.00 m2 | | | | |
| | 42.00 @ 40.0 kg/m2 = 1680 kg | | | | |

| Sl. No | Description Of Items | Quantity | Unit | Rate (Rs.) | Amount |
|--------|--|-----------|----------------|------------|--------------|
| | = 16.8 Qntl | 16.80 | Qntl | 10,090.00 | 1,69,512.00 |
| 16 | - Earthwork in filling in compound, tank, lowland, ditches etc. with good earth, in layers not exceeding 150 mm. including breaking clods and consolidating the same by ramming and dressing complete.(Payment will be made on profile measurement before and after the work) | | | | |
| | (b) (iii) With carried earth arranged by the contract or within a radius exceeding 5 km. but not exceeding 10 km. including cost of carried earth.: = 18288.21 M3 | 18,288.21 | % m3 | 51,236.00 | 93,70,147.28 |
| 17 | - Providing and laying Filter material underneath pitching in slopes complete as per drawing and Technical specification. Avg. Length = 3.00 mtr. 132 x 3.00 x 0.20 = 792.28 m3 0.47 | 792.28 | m3 | 2,033.68 | 16,11,248.06 |
| 18 | - Providing and laying Pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications. II. Cement Concrete Blocks of size 0.3x0.3 x0.3 m cast in cement concrete of Grade M15 132 x 3.00 x 0.30 = 1188.42 m3 0.47 | 1,188.42 | m3 | 6,987.29 | 83,03,835.18 |
| 19 | - Bailing or pumping out water from foundation trenches. 108 83.8 2x sl.no.1= 2 x 8= 21767.76 m3 | 21,767.76 | % m3 | 2,088.00 | 4,54,510.80 |
| 20 | Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (Ground floor).[Excluding cost of chipping over concrete surface (i) With 1:6 cement mortar/ (c) 15 mm thick plaster Boundary Wall 1 x 5205.87 x 2.20 = 11452.91 M ² Gate Column 16 x 0.30 x 1.10 = 5.28 M ² Cop 4 x 5205.87 x 0.05 = 1041.17 M ² la 2 x 5206 x 0.125 = 1301.47 M ² Ban d 2 x 5205.87 x 0.15 = 1561.76 M ² 1 x 5205.87 x 0.25 = 1301.47 M ² 16664.06 M ² | | M ² | | |

| Sl. No | Description Of Items | Quantity | Unit | Rate (Rs.) | Amount |
|--------|--|---|-----------|-----------------------|--------------|
| | | 16,664.06 | | 148.71 | 24,78,112.36 |
| | (i) With 1:6 cement mortar. | | | | |
| | (b) 20 mm. thick plaster. : | | | | |
| | Colm Boundary Wall | 1 x 5205.87 x 2.20 = 11452.91 M ² | | | |
| | | 11452.91 M ² | 11,452.91 | M ² 171.57 | 19,64,976.45 |
| 21 | Neat cement punning about 1.5mm thick in wall, dado, window sill, floor etc. | 2 x 3885.40 x 0.30 = 2331.24 M ² 2 x 1320.47 x 0.30 = 792.28 M ² 3123.52 m ² | 3,123.52 | m ² 32.85 | 1,02,607.64 |
| 22 | M.S. structural works in columns, beams etc. with simple rolled structural members (e.g. joists, angle, channel sections conforming to IS: 226, IS: 808 & SP (6)- 1964 connected to one another with bracket, gussets, cleats as per design, direction of Engineer-incharge complete including cutting to requisite shape and length, fabrication with necessary bolting, metal arc welding conforming to IS: 816- 1969 & IS: 1995 using electrodes of approved make and brand conforming to IS:814- 2004, haulage, hoisting and erection all complete. The rate includes the cost of rolled steel section, consumables such as electrodes, gas and hire charge of all tools and plants and labour required for the work including all incidental chages such as electricity charges, labour insurance charges etc. I) For structural members of specified sections weighing less than 22.5 Kg./ Angle(60x60x6)@5.4kg/m L=(0.3+0.3+2x0.5)=1.6 Angles= 226 3 x 1.60 = 3620.8 mtr 5.4kg/m @ = 3 | 19.55 | MT | 72,603.00 | 14,19,557.09 |
| 23 | Supplying fitting and fixing 600 mm (±30 mm) diametre R.B.T (Reinforced Barbed Tape) Concertina fencing on wall top using concertina coils stretched to approx.6 meters length at site clipped with two nos. of horizontal R.B.T strands which will be tensioned and fixed with the vertical M.S angle iron posts by means of security fasteners (such as 'C' clips, R.B.T clips etc.) | 1 x 5205.87 = 5205.87 mtr | 5,205.87 | mtr 408.00 | 21,23,994.96 |
| 24 | Applying Exterior grade Acrylic primer of approved quality and brand on plastered or concrete surface old or new surface to receive decorative textured (matt finish) or smooth finish acrylic exterior emulsion paint including scraping and preparing the surface throughly, complete as per manufacturer's specification and as per direction of the EIC. (b) Two Coats | | | 4,510.00 | 12,68,075.11 |

| Sl. No | Description Of Items | Quantity | Unit | Rate (Rs.) | Amount |
|--------|--|----------------|---------|-----------------|--------------|
| | 1:6 cement mortar 15 mm thick plaster = 16664.06 1:6 cement mortar 20 mm thick plaster = <u>11452.91</u> 28116.96 m2 | 28,116.96 | %M 2 | | |
| 25 | Protective and Decorative Acrylic exterior emulsion paint of approved quality, as per manufacturer's specification and as per direction of Engineer-in-Charge to be applied over acrylic primer as required. The rate includes cost of material, labour, scaffolding and all incidental charges but excluding the cost of primer. In Ground floor (Two Coat) b) Premium 100% Acrylic Emulsion Qty same as sl. No. (23). = 28116.96 m2 | 28,116.96 | M2 | 84.00 | 23,61,825.04 |
| 26 | (a) Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc. <u>Angles</u> 2263 x 1.60 x 0.30 = 1086.24 m2 <u>Gates</u> 4 x 3.00 x 3.50 = <u>42.00</u> m2 1128.24 m2 | 1,128.24 | m2 | 29.00 | 32,718.96 |
| 27 | (A) Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. Including using of approved putty etc. on the surface, if necessary : (b) On steel or other metal surface : With super gloss (hi-gloss) (iv) Two coats (with any shade except white) Qty same as Sl No. 25 = 1128.24 m2 | 1,128.24 | m2 | 79.00 | 89,130.96 |
| | | Total | | 8,93,53,679.00 | |
| | | Add GSTN @ 18% | | 1,60,83,662.22 | |
| | | Sub total | | 10,54,37,341.22 | |
| | | Add CESS @ 1% | | 10,54,373.41 | |
| | | Grand total | | 10,64,91,714.63 | |
| | | Say | | 10,64,91,715.00 | |

B. METHODOLOGY OF WORK

• Specification of RCC Work:

- Shuttering shall be done using Steel plate or 9 to 12 mm thick approved quality ply board.
- Surface contact with concrete shall be free from adhering grout, nails, splits and other defects.
- All the joints are perfectly closed and lined up.
- The shuttering and framing is sufficiently braced.
- All the props of approved sizes are supported on double wedges and when taken out, these wedges are eased

and not knocked out.

- All the framework is removed after 21 days of curing without any shocks or vibrations.
- All reinforcement bars conform IS specifications and are free from rust, grease oil etc.
- The steel grills are perfectly as per detailed specifications.
- The covers to concrete are perfectly maintained as per code.
- Bars of diameter beyond 25mm diameter are bent when red hot.
- The materials proportion should be as per the specifications of the concrete.
- The water to be used in concrete work shall be clean and fresh.
- All reinforcement shall be of steel which shall comply with the standard requirements. All bars shall be placed as per design given by the engineer and utmost care shall be taken to keep them in the same position while packing concrete around them. Before laying the concrete the reinforcement shall be got approved by the engineer.
- The sand to be used shall be clean and coarse and shall be free from any organic or vegetable matter. The sand shall be washed, if there is any trace of earth in it.
- The coarse aggregate shall consists of 67% of black trap metal (known as kapachi) varying in size from 20 mm to 40 mm and 33% of black trap metal (known as grit) varying in size from 20 mm to 6 mm. The coarse aggregate for the concrete work shall be clean and free from impurities such as earth, coal dust and other organic materials. The unclean aggregates shall have to be screened and washed before use.
- The construction and arrangement of formwork shall be such that it can be removed in part as and when required without affecting or damaging the adjoining forms. The surface of formwork shall be oiled before placing of concrete.
- The props to be used for centering shall be of timber bullies. The spacing of bullies shall not be more than 120 cm centre to centre. The bullies shall be supported at the base on 40 mm thick wooden plate having area not less than 0.10 sq m. Necessary wedges shall be provided to maintain level before and during the casting of concrete.
- The centering for the work shall be sufficiently strong and rigid and in good condition so as to turn out a good smooth surface. The framework shall include all the forms of temporary or permanent nature required to be used during to be used during casting of planks or any other suitable material as approved by the engineer.
- The mixing of concrete shall be done in a mechanical mixer or by hand operations depending on the quantity of the concrete which shall be decided by the engineer.
- Centering shall be removed only after obtaining the written permission of the engineer.
- The items of plaster and white or colour wash shall be carried out as per specifications of the corresponding items.
- The cement concrete work shall be kept well- watered for at least 20 days.
- The concrete shall be laid in forms and tapped in such a way that no honeycomb surface appears on removal of the forms. All edges and corners of the concrete surface shall remain unbroken, sharp and straight in line.
- Before starting laying of concrete in position, the centering shall be well watered.

SPECIFICATION FOR GENERAL CIVIL ENGINEERING WORKS.

1. REQUIREMENTS:

1.1. Application of specification and item of work:

This specification forms part of the contract and shall be read in conjunction with other documents forming the contract, viz. Notice inviting e Tender (N.I.eT.), conditions and requirements of tendering, Scope of work and technical information, General conditions of contract, General and Technical Specification, drawings and schedule of probable items of works.

The offered rates must cover the cost of all materials, all taxes & duties in vogue, labour, tools,

machinery, plant, explosives, scaffolding, staging, shoring, props, bamboos, ropes templates, pegs, and all appliances and operations whatever necessary for efficient execution and completion of the work.

All works are to be executed in accordance with descriptions in the schedule of item of works along with the specifications, terms, conditions provided elsewhere in the tender documents.

Item of works and their details, which are not covered by this specification, shall be carried out as per those of P.W. Department, Govt. of West Bengal.

Manner of works not included above, should be carried out as per relevant provisions of Manual on Water Supply and Treatment published by CPHEEO, relevant I.S. specifications and code of practice and as per manufacturer's specification (where ever necessary).

The overall outline of works to be done by the contractor and the detail has been mentioned in the item of works in the schedule and in the specification, drawing and elsewhere in the tender documents. Each scheduled item has to be carried out and completed by the contractor at the accepted rate covering the full extent outlined in the schedule and specification and not withstanding any omission in mentioning of supply and execution of such component of works except in special case specifically mentioned. Items indicated in the schedule are exhaustive. Yet if there by any short fall felt by the tenderer he may include the same while quoting his rate so as to make the item complete in all respect for successful completion of the work.

The contractor's works shall be guided by the total requirement briefly outlined and shall include additional works other than those component of works mentioned in the item to complete the work. The tenderer or the contractor has to completely execute the full requirements ensuring performance guarantee of each component of the works, equipment and machinery so that all the individual components are brought up to the optimum condition for sustained and satisfactory operation individually and collectively.

1.2. Site Condition:

The contractor is to visit the site and ascertain local conditions, traffic restrictions, and obstructions in the area before submission of tender paper to satisfy himself.

1.3. Setting out and leveling:

The contractor is to set out and level the works, and will be responsible for the accuracy of the same; he is to provide all instruments and proper qualified staff required for checking the contractor's work.

1.4. Safety Code:

The contractor shall take adequate precaution to provide complete safety for prevention of accidents on the site.

1.5. Keeping works free from water:

The contractor shall provide and maintain at his own cost, electrically or other power driven pumps and other plant and equipment to keep the site and foundation pits and trenches free from water and continue to do so till the site is handed over to the complete satisfaction of E.I.C.

1.6. Clear Site:

The site during the execution of works should have sober and tidy appearance with everything necessary for the work neatly and systematically arranged.

The contractor at his own cost shall clear the site of all trees, roots and obstructions. Where excavation is required, that should be done strictly upto the required level. Any surplus earth should be spread over the low lands or used in earth filling works for development of site.

After the completion of the work, the entire site shall be cleared satisfactorily with (a) all pits, diggings and trenches properly filled up (b) all surfaces adequately dressed (c) all surplus materials, sheds, tents and all other ancillaries removed from the site at his own cost.

1.7. Bench Marks and Ground Water Gauges:

The contractor shall establish and protect surveyor's benchmarks and base line marks from damage or movement during work at his cost.

1.8. Inspection:

The contractor shall inspect the site of work and ascertain site conditions and the nature of soil to be excavated.

1.9. Contractor's Staff:

The contractor must provide at all times efficient staff of trustworthy, skillful and experienced assistants capable of carrying out the work in accordance with the drawings and specifications and to correct levels.

1.10. Measurement of Work :

The CONTRACTOR shall be available at site at all reasonable times to take joint measurement of work done for the purpose of payment and shall also provide without any extra charges, the necessary measuring instruments and men.

1.11. List of I.S. Code of Practices :

A list of important Indian Standard is given which does not cover all the relevant sides of practices. Wherever reference towards the Indian standards mentioned below or otherwise appears in the specification, it shall be taken as reference to the latest version of the standard.

| SL. NO | IS NO. | DESCRIPTION |
|--------|-------------------|--|
| 1 | IS-8142 : 1976 | Tests for setting time of concrete. |
| 2 | IS 269 – 2015 | Specification for 33,43,53 Grade ordinary portland cement |
| 3 | IS 383-2016 | Specification for coarse and fine aggregate |
| 4 | IS-516 : 1959 | Tests for strength of concrete. |
| 5 | IS 10262 – 1982 | Guide Lines for Concrete Mix Design |
| 6 | IS-9013 : 1978 | Tests for compressive strength. |
| 7 | IS-4031 | Tests for cement. |
| 8 | IS-1786 : 1985 | High yield strength deformed bar (Grade Fe 500) & Tor steel reinforcement. |
| 9 | IS-2751 : 1966 | Welding of reinforcement. |
| 10 | IS-2502 : 1963 | Bending & fixing of bars for concrete reinforcement. |
| 11 | IS-9077 : 1979 | Corrosion protection of steel reinforcement in R.C.C. structure. |
| 12 | IS-2062 : 1992 | Structural steel. |
| 13 | IS-2062 (Grade-A) | Low Carbon structural steel. |
| 14 | IS-800 : 1984 | Use of structural steel in general building construction. |
| 15 | IS-808 : 1989 | Rolled Steel Beams, Channels and angles. |
| 16 | IS-1038 : 1983 | Steel doors, windows & Ventilators. |
| 17 | IS 458 – 1988 | Specifications for pre cast concrete pipes. |
| 18 | IS 3597 – 1985 | Methods of Tests for concrete pipes |
| 19 | IS-780 : 1984 | Sluice valves for water works purposes. (Small dia-50 mm to 300 mm size). |

| SL. NO | IS NO. | DESCRIPTION |
|--------|----------------------------------|---|
| 20 | IS-2906 : 1984 | - Do - (Higher dia-350 mm to 1200 mm size). |
| 21 | IS 2116 – 1980 | Specification for sand for masonry mortar |
| 22 | IS:2720 (Part .I) 1983 | Preparation of dry sample (soil) |
| 23 | IS:2720 (Part .III) 1980 Sect/1 | Determination of water content (moisture content) |
| 24 | IS: 2720 (Part. III) 1980 Sect/2 | Determination of specific gravity of fine-grained soil |
| 25 | IS: 2720 (Part. III) 1980 Sect/2 | Determination of specific gravity of fine, medium & coarse-grained soil |
| 26 | IS:2720 (Part.4) 1985 | Grain size analysis |
| 27 | IS:2720 (Part.5) 1985 | Determination of Liquid and plastic limit |
| 28 | IS: 2720 (Part. VI) 1987 | Determination of shrinkage factors |
| 29 | IS: 2720 (Part. VII) 1980 | Determination of water content - dry density relation using light compaction. |
| 30 | IS:2720 (Part.8) 1983 | Determination of water content - dry density relation using heavy compaction |
| 31 | IS:2720 (Part IX) 1971 | Determination of water content - dry density relation using constant wt. soil method. |
| 32 | IS: 2720 (Part. X) 1991 | Determination of Unconfined compressive strength |
| 33 | IS: 2720 (Part. XIII) 1986 | Direct shear test |
| 34 | IS:2720 (Part.14) 1983 | Determination of Density Index (R.D) of cohesion less soil. |
| 35 | IS:2720 (Part.15) 1986 | Determination of consolidation properties |
| 36 | IS:2720 (Part.17) 1986 | Determination of permeability |
| 37 | IS:2720 (Part.28) 1974 | Determination of dry density of soils, in place by the sand replacement method |
| 38 | IS:2720 (Part.29) 1975 | Determination of dry density of soils, in place by the core-cutter method |
| 39 | IS 2250 – 1981 | Code of practice for preparation and use of masonry mortar |
| 40 | IS-3950 : 1979 | Surface boxes for sluice valves. |
| 41 | IS-13095 : 1991 | Butterfly valves for general purposes. |
| 42 | IS-12969 : 1990 | Method of test for quality characteristics of valves |
| 43 | IS-12992 : 1993 | Spring loaded safety relief valves. |
| 44 | IS-5312 : 1984 | Swing check type reflux valves |

| SL. NO | IS NO. | DESCRIPTION |
|--------|------------------------------------|--|
| 45 | IS-3042 : 1965 | Single faced sluice gate (200 mm – 1200 mm). |
| 46 | IS-1661 : 1972 | Cement & Cement lime plaster finishes. |
| 47 | IS-782 :1978 | Caulking Lead. |
| 48 | IS-11606 | Methods for sampling of C.I. Pipes & Fittings. |
| 49 | IS-10221 : 1982 | Coating & wrapping of underground mild steel pipe lines. |
| 50 | Is-2911 : 1979 (Part-I Section –2) | Design & construction of bored cast in situ concrete piles. |
| 51 | IS-2911 : 1985 (Part –4) | Load test on piles. |
| 52 | IS-816 : 1991 | Use of metal is welding for general construction in mild steel. |
| 53 | IS-1024 : 1979 | Welding in bridge and structure subject to dynamic loading. |
| 54 | IS-822 : 1970 | Procedure for inspection of welds. |
| 55 | IS-814 : 1991 | Electrodes for manual metal arc welding. |
| 56 | IS-3950 : 1979 | Surface boxes for sluice valves. |
| 57 | IS-5312 (Part-I) : 1984 | Swing check type reflux (non-return) (single door) valves. |
| 58 | IS-5312 (Part-II) : 1986 | -do- (Multi door pattern) |
| 59 | IS-5822 : 1994 | Laying of Electrically Welded Steel Pipes for water supply. |
| 60 | IS-823 | Procedures for manual are welding of mild steel. |
| 61 | IS-4353 | Submerged Arc Welding of Mild Steel and Low Alloy Steels. |
| 62 | IS-73-07 (Part – I) | Approved tests for welding procedures (fusion welding of steel) |
| 63 | IS-7310 (Part – I) | Approved tests for welders working to approved welding procedure (Part I: fusion welding of steel). |
| 64 | IS-2595 : 1978 | Code of practice for radiographic testing. |
| 65 | IS-4853 : 1968 | Recommended practice for radiographic examination of fusion welded circumferential joints Steel Pipes. |
| 66 | IS-1182 : 1967 | Recommended practice for radiographic examination of fusion welded butt joints. |
| 67 | SP-34 | Hand book of concrete Reinforcement and detailing. |
| 68 | SP-23 | Hand book of concrete Mix Design. |
| 69 | IRC-SP-63 | Guideline for use of interlocking concrete block pavement. |

All relevant IS code mentioned in the Tender Document to be followed as per latest edition/ addendum.

2. Materials to be Supplied by Contractor

The contractor shall supply all materials required for successful completion of the work. The quality of such materials as stated above shall conform to the requirements of the BIS (Bureau of Indian Standard), P.W.D. or any other approved standard specification. In all cases, the latest modification or revision of such specifications will be applicable for use.

All sampling, testing and transportation of such materials shall take place under the direction of the Engineer-in-Charge at the testing laboratory as may be designated by the Department at the cost of the Contractor. Tests will be made in accordance with the standard methods of testing of the I.S. or other standard specifications. The Engineer-in-Charge has full power to reject or condemn any workmanship or materials that he may deem unsuitable.

All materials not conforming to the requirements of these specifications shall be considered as defective and shall be rejected for use and shall be removed by the Contractor from the site of the work within 24 hrs. at his own cost.

In case of non-compliance with such orders, the Engineer-in-Charge shall have the full authority to cause such removal at the cost and expense of the Contractor and the contractor shall not be entitled to any loss or damage on that account. The Engineer-in-Charge will have full right to inspect the store of materials supplied by the Contractor for the use of this contract work.

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 place or places as may be specified in the contract, or at all or any of such places. The Contractor shall provide 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 materials used and shall supply samples of materials before incorporation in the works for testing as may be selected and required by the Engineer-in-Charge, be it at site or at the manufacturer/Vendor's premises. Contractor will have to procure materials from manufacturers Vendor as may be approved by the E.I.C. No variation will be allowed Contractor will have to furnish original documentary evidence of procurement of the materials from the specified agencies along with their Certificate of Guarantee/Warranty along with two sets of photocopy of the same to the EIC before release of payment. The EIC will keep one set of photo copy with him and send the other set to the Superintending Engineer after due authentication by him. The original document will be returned to the contractor thereafter by the EIC.

In any case if Department will inspect solely than the charges of inspection @ 1% of the cost of materials to be deducted from his Bills. In this regard decision of E-I-C will be final & binding.

Cost of samples – all samples of materials as may be required by the Engineer-in-Charge shall be furnished by the Contractor at the cost and expense of the Contractor.

If the rate for completed items of work are inclusive of supply of stone materials, the Contractor shall arrange for procurement of such stone materials required for the work by his own resources and it shall be clearly understood that the Department Shall not sponsor any traffic movement by wagon for stone materials. The Contractors are therefore, required to quote their rates considering the above situation and no claim whatsoever on this account shall be entertained by the Department.

3. Safety Measures and Public Convenience

The Contractor shall in the course of execution of the work take all necessary precautions for the protection of all persons and property at his cost. The entire site of works shall be well illuminated from sunset to sunrise at his cost.

The Contractor shall take adequate measures to protect the work and prevent accidents during the Project work and prevent accidents during the construction. He shall provide and maintain temporary side-walks access to construction site and where necessary, danger signals, Road closed sign, watchman and necessary appliances for properly safeguarding life and site of work for safety. The lamp must kept bit from sunset till at least one hour after sunrise. He shall protect; all excavations equipment and materials with barricades and danger signals so that no life may be endangered. The contractor shall in include all costs for these works within his rates and no extra claim whatsoever on this account will be entertained.

The Contractor shall so conduct his operation as to cause the least possible obstruction and inconvenience to the other users and contractors in adjacent site. He shall have under construction not more than such amount of work as he can handle properly with due regard to the right of others.

4. First-Aid Facilities

The Contractor shall provide at his own cost for medical attention to be promptly available when necessary. He shall for this purpose provide a number of First-Aid stations at suitable location within easy reach of the workmen and other staff engaged in the Works. Each First-Aid station shall be properly equipped and will remain in charge of a suitably qualified person. The Contractor shall also provide for transport of serious case to the nearest hospital. All these arrangements shall be to the approval of the Engineer-in-Charge.

The Contractor shall provide, to the satisfaction of Govt. or Local Authority concerned, adequate medical attendance for his employees and labours.

5. Construction Records

The Contractor shall keep and supply to the Engineer-in-Charge the up-to-date records of the dimensions and positions of all permanent works (showing therein any approved deviation between the drawing and the work as actually executed). The information available from the records must be adequate and complete to enable preparation of completion drawing by the Contractor at his own cost from these records.

6. Insurance against Accident etc. to Workmen:

The Contractor at his cost shall insure against all liabilities indicated in clause 40, 41 and 42 with an insurer approved by the Employer, and shall continue such insurance during the whole of the time that any person is employed by him on the works and shall, when required, produce to the Engineer-in-Charge or his representative such policy of insurance and the receipts for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy, but the Contractor shall require such sub-contractor to produce to the Engineer-in-Charge when required, such policy of insurance and the receipt for the payment of the current premium.

7. Testing & Testing Equipment

Testing of materials to be used in the permanent work or of the quality of finished items shall have to be done from laboratory (approved by the E.I.C) at the expense of the Contractor.

Should the E.I.C. consider it necessary to satisfy himself as to quality of work, the Contractor shall offer sample of work done as necessary, pull down reasonable part of the work required for such inspection and testing. The contractor shall bear the cost of pulling down and shall make good the same at his own cost and to the full satisfaction of the E.I.C. without any extra cost.

The Contractor shall provide at his own cost necessary equipments for such testing which by nature of work may have to be done at work site. These include sufficient number of slump cones, standard 150 mm metal cube moulds, set of I.S. sieves, weighing balances, graduated measuring cylinders, equipment for in-situ density test, holding detector, thermometers and any other miscellaneous equipment that may be required by the Engineer-in-Charge. The Contractor shall also provide at his cost facilities for curing of concrete cubes for testing purpose. The Contractor shall afford at his own cost necessary facilities in providing requisite materials and assistance that may be required by EIC including transportation charges to laboratory.

8. Completion Certificate:

The Engineer-in-Charge will issue certificate of completion of work when all works itemized in the Schedule of work and the entire work as per drawing or otherwise undertaken have been completed in all respect and Maintenance period will start from the date of issue of completion certificate.

The Final Bill for the work shall be paid by EIC on completion of work in all respect including submission of the following documents by the Contractor in quadruplicate.

- a. Material reconciliation statement.
- b. Still photographs of work execution.

9. Safety Requirements:

CONTRACTOR shall use safety belts, whenever his workmen work at a high altitude to avoid risk of any accident or fall Hard Top Hats to be used by the CONTRACTOR's workmen at the places wherever required.

First Aid and other medical facilities to be provided at the work site by the CONTRACTOR.

CONTRACTOR's personnel working at site should have Identity Badges during their stay inside the plant. Prior approval of identity badges or cards by Engineer-in-Charge shall be obtained by the CONTRACTOR.

The CONTRACTOR shall take all precaution for work safety and to prevent accident to men working under him or to other CONTRACTOR's working at site.

10. Approval Of Materials:

Sample of materials in sufficiently large quantity with descriptive data thereof shall be furnished by the contractor to the Engineer-in-charge well before the collection of such materials and equipments so as to permit inspection, testing and approval. The sample shall be properly marked to show the name of the materials, name of manufacturer, place of origin and item for which it is to be used. After approval, the sample shall be available for inspection at all time.

Third party inspection of such materials has to be arranged by the agency as per direction of E.I.C.

11. MATERIALS:

- **Stone Chips:** These should be obtainable by the contractor from Chandil / Pakur, well graded conforming to the standard specifications of P.W.D. for M-10, M-15, M-20, M-25, M-30 etc. as the case may be or approved by the Engineer-in-charge.
- **Sand :** Sand for construction purpose shall have to be collected either from ILLAMBAZAR/ MURARO/ GOPIBALLAVPUR / MOGRA or river bed of Damodar/ Mayurakshi/ Kangsabati or Ajoy and should be coarse, cleaned, screened and washed & of quality conforming to the standard specification of P.W.D/ this Directorate and also to be approved by the Engineer-in-charge.
- **Brick :** Bricks shall be of first class quality, well burnt in kiln, sound hard , true to shape and of the standard dimensions, and to be got approved by the Engineer-in-charge before use.
- **Plasticiser:** Super-Plasticiser of SIKA / Fosroc /Dr. Fixit makes conforming to IS: 2645-1975 & IS: 9103-1974 must be used.
- **Cement:** The cement shall conform to relevant I.S. grade Portland Slag Cement. Cement tests shall have to be carried out at contractor's expenses as and when directed. The contractor shall make arrangement with necessary equipment to carry out crushing strength of 150 cm. Cube concrete blocks for 7 days & 28 days of proper curing. Testing procedure, sample size shall be in accordance with relevant I.S.
- **Steel / Reinforcement:** - Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every inter-section, placing in position etc. must be completed as per drawing and direction.

12. Brick Masonry:

Brickwork shall be laid in English bond with mortar in proportion 4:1 unless otherwise specified. Brick work shall always be carried up regularly in plumb and true to plan and lines, in level along the entire length. No brick work shall be carried up more than one scaffolding height of 1.5 metre in the stage. Bricks are to be well soaked with water before use and brick work shall be kept clean and joints raked out for subsequent pointing or plastering.

Brick work in foundation and superstructure not in contact with water shall be provided with 19 mm and 12 mm thick plaster to rough and fair faces respectively with cement sand mortar in 1:6 proportions. Brick work in contact with water shall be in cement sand mortar in 1:4 proportion 19 mm thick plaster with water proofing compound as per specification including 1.5 mm thick cement punning in the water contact face. 12 mm thick plastering in 1:6 cement sand mortar in the outer face shall be provided. "Cement Brick" will mean brick work in cement sand mortar in proportion as mentioned above.

18.1. Mixing and Laying:

Before pouring the contractor shall have to design of concrete as per IS : 456 and relevant special publications, submission of job mix formula after preliminary mix design after testing of concrete cubes as per direction of Engineer-in charge.

18.2. Mortar and Concrete:

Contractors are particularly warned against the use of inferior materials or use of incorrect proportion of different materials in the make-up of concrete or mortar. Detection of any such practice will lead to rejection of all such works and imposition of penalty. Engineer-in-Charge has the right to reject any mortar or concrete, which does not conform to the specification. Cube test for concrete shall have to be done as per IS: 456-2000 and other relevant codes with all cost bear by the contractor.

The water cement ratio is to be determined by proper slump test or as provision of relevant I.S. Codes.

In case of slump test the slump cones (300 mm dia. At bottom and 100 mm at top) are to be kept at site at the cost of the Contractor.

18.3. Finishing:

If the surface of the concrete is found uneven or spongy in appearance, the Contractor shall have to rectify or reconstruct at his own cost.

Approved quality super Plasticizer in appropriate quantity by weight of cement has to be used as per relevant I.S. Code. The water cement ratio should not exceed 0.45.

All R.C.C. work forming part of water retaining structure shall be done with M20 grade of concrete/ M25 grade of concrete as per IS: 456 with cement content not less than 400 kg. /cu.m. and 420 kg/cu.m of concrete respectively. Approved quality super Plasticizer in appropriate quantity by weight of cement has to be used as per relevant I.S. Code. The water cement ratio should not exceed 0.45.

The concrete shall be cured as per IS: 456-2000.

13. Storage of Materials:

Agency has to arrange for storage of materials at the site as per IS: 4082 (specifications for storage of materials) at his own cost. Storage should be in such a way that any personnel of the WBIDC can access & check the quality of materials (mainly of cement & steel) during the work.

14. Joints in Concrete Structure:

Type of joints, spacing of joints, use of all jointing materials and other features pertaining to the provision of movement joints in liquid-retaining structures shall be as per relevant I.S. Codes.

15. Reinforcement of R.C.C. Works:

The M.S. work should include cutting to sizes, bending, hooking and fabricating including the supply of B.W.G. wire, and all other works according to specification, drawing or otherwise.

The M.S. reinforcement rods if to be procured by the tenderer shall be HYSD bars (Fe-500) as per relevant IS Code. The contractor shall intimate the department regarding the quantity of steel to be procured by him in the works and the same may be supplied at the agreed rate specified in General terms and conditions.

16. Lap Length :

The Lap length of reinforcement shall be provided as given below; unless otherwise specified in drawing.

Compression & Tension members like column, struts beam, slab, wall etc. @ 50 times the dia of bar.

Following Development length/Anchorage length shall be provided.

| | | | |
|--------------------|------------------------|------|------|
| Concrete Grade | M 15 | M 20 | M 25 |
| Development Length | 68 D | 51 D | 46 D |
| Anchorage | As per I.S. – 456-2000 | | |

The reinforcement work will include cutting to sizes, bending, hooking binding with 14 to 18 S.W.G. soft pliable wire etc. as per P.W.D. schedule. The work shall also be inclusive of stirrups, distributors, binders etc.

17. Shuttering And Staging:

The form work shall conform to IS: 4990, code of practice Shuttering in form work shall be either made of steel or plyboard. Surface of shuttering in contact with concrete shall be made smooth & at joints rendered smooth. In every case the joints of the shuttering are to be such as to prevent the loss of liquid from the concrete.

All shuttering form work must be adequately stayed and braced to the satisfaction of the Engineer-in-charge for properly supporting the concrete during the period of hardening. All form works shall be removed without shock or vibration. Before the formwork is stripped, concrete surface shall be exposed when necessary in order to ascertain that the concrete has set and hardened sufficiently.

18. Curing and Finishing:

The joint shall be cleaned off the grey cement slurry with wire/coir brush or trowel to a depth of 2 mm to 3 mm and all dust and loose mortar removed. Joints shall then be flush pointed with white cement. The floor shall then be kept wet for 7 days. After curing the surface shall be washed and finished clean. The finished floor and wall shall not sound hollow when tapped with a wooden mallet.

19. Plastering, Painting & Surface Treatment:

Cement Plaster

19.1. Cement:

It should be fresh Portland cement (not less than grade 43) as specified in relevant I.S. Different Types of cement shall not be mixed together. In case more than one type of cement is used, a record shall be kept showing the location and the types of cement used.

19.2. Sand:

It shall be hard, durable, clean and free from adherent coatings and organic matter and shall not contain the amount of clay, silt and fine dust more than 5% by mass. It shall not also contain any harmful impurities such as iron pyrites, alkalis, salts, coal or other organic impurities, mica, shale or similar laminated materials, soft fragments, sea shale in such a form or in such quantities as to affect adversely the hardening, strength or durability of the mortar. The grading of sand for use in Plaster shall be conforming to I.S.: 1542-1977.

In case the sand is damp at the time of preparation of mortar, its quantity shall be increased suitably to allow for bulorage in conforming to I.S. 2386 (Part-III) 1963.

19.3. Preparation of Mortar:

The materials shall be at first mixed dry thoroughly in suitable proportion as stated in the schedule till uniform colour reaches and then shall be mixed wet adding water slowly and gradually for at least four times to give a uniform paste. The mix as prepared shall be used within 30 minutes. Wherever plasticizer is required to use, the quantity of water shall be reduced in such a proportion that required consistency is achieved.

19.4. Preparation of Surface:

The surface of wall shall be brushed, cleaned, washed, watered and wetted with water before plastering. All the projections extending more than 13 mm from the general face of the masonry should be knocked off so as to maintain thinner plaster layer. All the joints in masonry should be raked for a depth of about 20 mm. In case of plastering on concrete surfaces, the face should be roughened by chipping of about 5 mm. Oily, greasy and efflorescence spots should be removed either by brushing, scrapping or both.

19.5. Laying:

In order to maintain uniform thickness of the plaster, the screeds are formed on the prepared wall surface before actual plastering is started. Patches of plaster 15 cm x 15 cm are first of all applied at an interval of about 2 m both horizontally and vertically over the surface. The two dots lying in vertical strips of mortar are formed between dots. Then the plastering shall be started from the top and worked towards the bottom. The whole surface shall be made flush between the screeds with wooden straight edges and rubbed thoroughly with wooden floats. Rounding of corners if desired by the Engineer-in-charge shall be carried out in one operation.

19.6. Curing :

The plastered surface shall be kept wet by sprinkling water after 12 hours for atleast 7 days and shall be protected from rain or sun.

19.7. Thickness:

Unless otherwise specified or desired by E.I.C. the thickness of plaster shall be as follows:-

- | | | |
|----------------------------------|---|-------|
| a. Plumbed Surface of Brick work | - | 15 mm |
| b. Rough Surface of brickwork | - | 20 mm |
| c. Vertical concrete surface | - | 10 mm |
| d. Ceiling of Roof, Chajja etc. | - | 10 mm |

Cement Pointing to Exposed Brick Facing Where shown on the approved drawings or specified in schedule of work, exposed brick faces shall be cement ruled pointed. The mortar shall be raked out of the joints to a depth of 6 mm. The dust shall be brushed out of the joints.

20. Bolts & Nuts:

Make: GKW / TATA or Equivalent

Bolts and nuts conform to the requirements of turned grade bolts of symbol 4D, 5D and 53 specification - IS : 1363 (latest edition) – Technical supply conditions for threaded fastener. The screw thread shall conform to coarse series – medium class referred in IS : 1367 (latest edition)/.

21. Gaskets:

Gaskets for flange joints shall be made of natural rubber conforming to IS specifications.

22. Lightning Conductor:

Deleted

23. ROOF TREATMENT:

deleted

24. Minimum Plant / Machinery and equipment to be deployed by the contractor

Whereas it is entirely the responsibility of the Contractor to deploy sufficient plant and mechanical equipment to ensure compliance with his obligations under the Contract, the following list is an indicative list of the minimum essential basic holding of plant, machinery and mechanical equipment which the bidder must own or arrange through lease hold agreement:

| Sl. No. | Type of Plant / Machineries / Equipment | Minimum No. & Capacity | |
|---------|--|------------------------|----------------------|
| | | No(s). | Capacity |
| 1. | Mini batching plant/ RM 800 | 1 | Min 8-13 M3 per hour |
| 2. | Dewatering Pump. | 1 (one) No(s). | 5 HP |
| 3. | Internal or Immersion Vibrators. | 2 (two) No(s). | - |
| 4. | Steel reinforcement cutting & bending machine. | 2 (two) No(s). | - |
| 5. | Welding Machine. | 1 (one) No(s). | - |
| 6. | Total Station Survey Equipment. | 1 (one) Set(s). | - |

Successful bidder will have to deploy other requisite machinery and equipment during execution of the work at site as per direction of the Engineer-in-Charge.

Note: Documents in support of machineries (own or arranged) need to be submitted at the time of tender submission.

25. List of Equipment for Testing Laboratory

(1) Balances

- a. 7 Kg. to 10 Kg capacity, semi - self indicating type - accuracy 10 gm.
- b. 500 gm. Capacity. Semi-self-indicating type - accuracy 1gm.
- c. Pan balance - 5 Kg. capacity - accuracy 10 gms.

(2) Sieves: as per IS 460-1962

- a. I.S. sieves – 450 mm internal dia, of sizes 100 mm, 80 mm, 63 mm, 50 mm, 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm. 6.3 mm, 4.75 mm, complete with lid and pan.
- b. I.S. sieves - 200 mm internal dia (brass frame) consisting of 2.36 mm, 1.18 mm, 600 microns, 425 microns, 300 microns. 212 microns. 150 microns. 90 microns, 75 microns, with lid and pan.

- (3) Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly.
- (4) Equipment for slump test - slump cone, steel plate, tamping rod, steel scale, scoop.
- (5) Cube Mould 12 nos.
- (6) Others as per requirement.

Successful bidder will have to provide requisite testing equipment during execution of the work at site as per direction of the Engineer-in-Charge.

26. Field Testing Instruments

- a. Steel tapes – 3 m.
- b. A good quality plumb bob.
- c. Spirit level, Minimum 30 cms long with 3 bubbles for horizontal vertical.
- d. Plastic bags for taking samples.
- e. Others as per requirement.

Successful bidder will have to provide requisite field testing equipment during execution of the work at site as per direction of the Engineer-in-Charge.

Section 8

As per BOQ quantity

DIFFERENT FORMS INCLUDING FORM OF BID**Draft Contract Agreement (required after award of contract)**

THIS AGREEMENT (“Contract Agreement”) is made on the _____ day of, 2023 at Kolkata.

BETWEEN:

West Bengal Industrial Development Corporation Limited, (Govt. of West Bengal undertaking), (hereinafter referred to as “WBIDC”) which expression shall, unless it be repugnant to the context or meaning thereof, include its administrators, successors in office and assigns) of One Part

AND

..... LIMITED, a company incorporated under the provisions of the Companies Act, 1956 and having its registered office at (hereinafter referred to as the “Contractor”) which expression shall, unless it be repugnant to the context or meaning thereof, include its administrators, successors in office) of the Other Part.

Whereas the WBIDC has invited e-Tender, e-Tender Reference No. : WBIDC/IP/HARINGHATA/BW/2023/2for the work “Construction of peripheral boundary wall at Haringhata Industrial Park.”

AND WHEREAS the Contractor in Pursuant to that advertisement has participated in the tender process and thus become a successful bidder accordingly and has agreed to execute upon and subject to the conditions set forth herein and Schedule of items and quantities, General Conditions of Contract, Special Conditions of Contract including all other conditions as mentioned in the tender document, specifications and all correspondence exchanged by or between the parties from the submission of tender till the award of work, both letters inclusive, (all of which are collectively hereinafter referred to as “the said conditions”) the work shown upon the said drawings and/or described in the said specification and included in the schedule of items and quantities at the respective rates therein set forth amounting to the sum of Rs..... (Rupees.....only) as therein arrived at or such other sum as shall become payable there under (Hereinafter referred to as “the said Contract amount”)

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. In consideration of the said contract amount to be paid at the times and in the manner set forth in the said conditions, the Contractor shall upon and subject to the said conditions execute and complete the work show upon the said drawings and described in the said specifications and the schedule of items and quantities.
2. The WBIDC shall pay the Contractor the said amount, or such other sum as shall become payable, at the times and in the manner specified in the said conditions.
3. The said conditions and Appendices thereto shall be read and considered as forming part of this Agreement, and the parties hereto shall respectively abide by, submit themselves to the said conditions and perform the agreement on their part respectively in the said conditions contained.
4. Following documents mentioned herein shall form and part this contract:
 - a) e-Tender Document vide ref. No. Date
 - b) Section-1:List of Important Dates, Press Notice, Notice Inviting e-Tender (NIeT)
 - c) Section – 2: Background Information
 - d) Section – 3: Instructions to Bidders (ITB)
 - e) Section – 4: Qualification Information
 - f) Section – 5: General Conditions of Contract
 - g) Section – 6: Technical Specifications
 - h) Section – 7: Tender Drawings
 - i) Section – 8: Bill of Quantities
 - j) Section –9: Different Forms including Form of Bid
 - k) Letter of Acceptance (LoA)/ Work Order vide ref. no. Date
 - l) Any other documents related to this Tender Purpose.
5. The WBIDC reserves to itself the right of altering the drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this contract.
6. Time shall be considered as the essence of this contract and the contractor hereby agrees to commence the work on the day of handing over of the site or within fourteenth days from the date of issue of formal work

order/ LOA whichever is later as provided for in the said conditions and to complete the Defect liability period for 12 months.

7. All payments by the WBIDC under this contract will be made at Kolkata and 30 days from receipt of the bill.
8. In case of any dispute by and between the contracting parties the same shall be referred to the Managing Director of WBIDC whose opinion shall be prevailed as final and binding on all the parties and shall be subject to Kolkata jurisdiction only.
9. The various clause & sub-clause of the tender document along with its annexures and modifications made thereon by WBIDC shall be read and be treated as forming part of this Agreement and parties hereto will respectively be bound thereby and to abide by and submit themselves to the conditions and stipulations and perform the provisions of this Agreement on their parts respectively.
10. That the several parts of this contract have been read by the contractor and fully understood by the contractor.

In witness whereof the Employer and the contractor have set their respective hands to those presents through their duly authorized official and the said two duplicates hereof to be executed on its behalf or the day and year first herein above written.

Signed on behalf of WBIDC
by its duly authorized official

In the presence of:
1. Signature _____
Name with address _____

2. Signature _____
Name with address _____

Signed on behalf of the Contractor

In the presence of:
1. Signature _____
1. Name with address _____

2. Signature _____
Name with address _____

FORMAT OF BANK GUARANTEE AS PERFORMANCE /SECURITY DEPOSIT

To

_____ (Name of the Employer)

_____ (Address of Employer)

WHEREAS _____ (Name and Address of Contractor)

(hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ dated

_____ to execute _____ (Name of Contract and brief description of works) herein after "The Contract."

AND WHEREAS it has been stipulated by you in the said contract that the Contractor shall furnish you with a bank guarantee by a Nationalised Bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE, we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up-to a total of _____ (amount of guarantee) _____ (in words), such sum being payable in the types and proportions of currencies in which the Contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ (amount of guarantee) as aforesaid without your needing to prove or to show grounds or reasons for a demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the works to be performed hereunder or of any of the Contract documents which may be made between you and the Contractor shall in anyway release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This Guarantee shall be valid until a date 45 days after the expiry of defect liability period of twelve months (12) after intended completion date.

Signature and seal of the guarantor _____

Name of Bank _____

Address _____

Date _____

Form of Bid

Form - III

Notes on Form of Bid

The Bidder shall fill in and submit this Bid form with the Bid.

_____ [Date]

To

[Name of Employer]

Authorised Address of communication:

Telephone No. (s): Office:.....

Mobile No.

Facsimile (FAX) No.

Electronic Mail Identification (E-mail ID).....

Description of the Works: _____

1. I/We offer to execute the works described above and remedy any defects therein, in conformity with the Conditions of Contract, specifications, drawings, Bill of Quantities and Addenda for Item Rate Contract of Total Bid Price of Rs. (mentioned in BOQ) (BOTH IN FIGURES AND WORDS).
2. We undertake to commence the works on receiving the Notice to Proceed with work in accordance with the contract documents.
3. This Bid (including all amendments and minutes of pre-bid meeting) and your written acceptance of them shall constitute a binding Contract between us.
4. We understand that you are not bound to accept the lowest or any Bid you receive.
5. We hereby confirm that this Bid complies with the Bid validity and Earnest money required by the bidding documents and specified in the Instructions to Bidders (ITB).

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Bidder: _____

Address: _____

APPROVED VENDOR LIST

A tentative approved Vendor List is appended below. However, WBIDC may change details at a later date if required and the successful Bidder shall abide by the same.

A. Civil

| Sl. No. | Equipment Vendors | Name Of Vendors |
|---------|-------------------------|--|
| 1. | CEMENT | LAFARGE / ULTRATECH / AMBUJA/KONARK/RAMCO |
| 2. | SAND | ILLAMBAZAR/ MURARO/ GOPIBALLAVPUR / MOGRA |
| 3. | REINFORCEMENT STEEL | BALAJI SHAKTI (JAI BALAJI INDUSTRIES LTD) /JSW/ SUL/ SRMB/ELEGANT/ CAPTAIN/ANKIT |
| 4. | STRUCTURAL STEEL | BALAJI SHAKTI (JAI BALAJI INDUSTRIES LTD) /JSW/ SUL/ SRMB/ELEGANT/ CAPTAIN/ANKIT |
| 5. | STONE CHIPS | PAKUR / CHANDIL / RAMPURHAT |
| 6. | WATER PROOFING MATERIAL | FOSROC / SIKA/ DR. FIXIT/ DUPLAST/CERAPLAST |
| 7. | SUPER PLASTICIZER | FOSROC / SIKA/ DR. FIXIT/ DUPLAST/CERAPLAST |
| 7. | PAINT | ASIAN / BERGER |
| 8. | CI PIPES & SPECIALS | ELECTRO STEEL / JINDAL / JAI BALAJI |
| 9. | G.I. PIPES | TATA/ JINDAL / NEZONE |
| 10. | G.I. FITTINGS | R. BRAND |

B. Electrical

| Sl. No. | Equipment Vendors | Name Of Vendors |
|---------|--------------------------|---|
| 1. | MCCB/MPCB | L&T/SIEMENS/SCHNEIDER/ABB/GE-POWER |
| 2. | CONTROL SWITCHES | KAYCEE/ L&T/TELECMECHANIQUE |
| 3. | LIGHT FIXTURES | HAVELLS/PHILLIPS/JAQUAR OR EQV. |
| 4. | FAN FIXTURES | USHA/CROMPTON/HAVELLS OR EQV. |
| 5. | POWER & CONTROL TERMINAL | WAGO/ELMEX/CONNECTWELL |
| 6. | HT MOTOR | BHEL/CGL/KEC/ABB/SIEMENS/ |
| 7. | LT MOTOR | CGL/KEC/ABB/SIEMENS/ BHARAT BIJLEE |
| 8. | HT CABLE | POLYCAB/CCI/GLOSTER/UNIVERSAL CABLE/NICCO |
| 9. | LT CABLE | POLYCAB/GLOSTER/FINOLEX/INCAB |
| 10. | CONTROL CABLES | POLYCAB/GLOSTER/FINOLEX/INCAB |
| 11. | INSTRUMENTS CABLES | DELTON/ KAPP/ CORDS CABLES |

| Sl. No. | Equipment Vendors | Name Of Vendors |
|----------------|--------------------------|----------------------------|
| 12. | CABLE LUGS | CONNECTWELL/ PHONIX/DOWELL |
| 13. | CABLE GLANDS | ELECTROMAG/DOWELL/REPUTED |

C. Electronics

| Sl. No. | Equipment Vendors | Name Of Vendors |
|----------------|--------------------------|----------------------------------|
| 1. | COMPUTER | DELL/ASUS/ LENOVO |
| 2. | PRINTER/SCANNER | HP/EPSON/ CANNON |
| 3. | AIR CONDITIONER | CARRIER/DAIKIN/VOLTAS/VESTAR/ LG |

Note: - Any other make not mentioned above in the vendor's list may be added at a later date if required, subject to approval of WBIDCL.

Tender Drawings

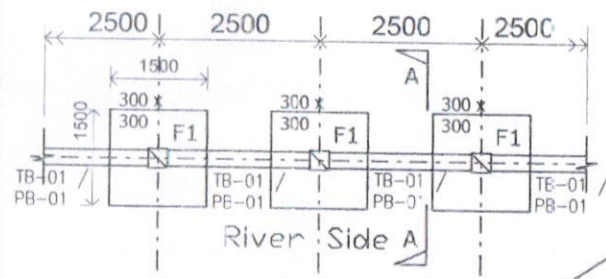
**GOVERNMENT OF WEST BENGAL
PUBLIC WORKS DEPARTMENT**

PERIPHERIAL BOUNDARY WALL AT HARINGHATA
INDUSTRIAL PARK, HARINGHATA, NADIA

SKETCH DRAWING NO:- HWALL-01

NOTES :-

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH PROPER SURVEY DRAWING.
2. ALL DIMENSIONS ARE IN "mm" AND ALL LEVELS ARE IN "m" UNLESS OTHERWISE MENTIONED.
3. GRADE OF CONCRETE FOR R.C.C. M25 CONFORMING TO IS 456 -2000
4. THE REINFORCEMENT SHALL BE OF HIGH YIELD STRENGTH DEFORMED



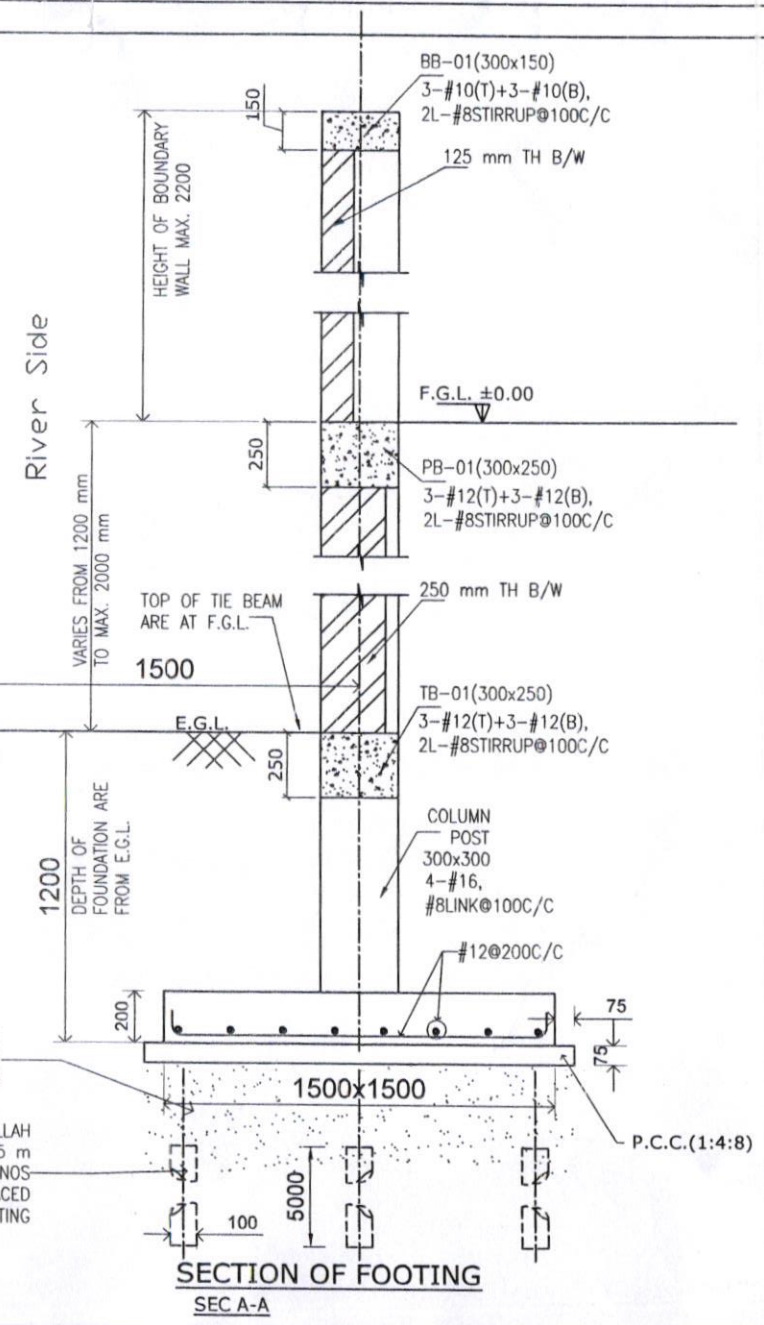
**FOUNDATION LAYOUT PLAN
OF BOUNDARY WALL**

Amal
09/08/2023
Executive Engineer,
Design Division II, P.W.D.
Govt of West Bengal

STONE PITCHING (IF
REQUIRED FOR
PROTECTION OF WALL AS
PER THE DIRECTION
ENGINEER-IN-CHARGE

AVERAGE
500mm SAND
FILLING

100 ϕ SAL BALLAH
OF AVERAGE 5 m
LENGTH, 9 NOS
EQUALLY SPACED
BENEATH FOOTING



**SECTION OF FOOTING
SEC A-A**

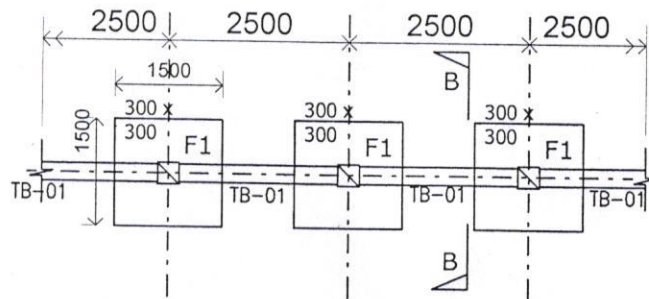
GOVERNMENT OF WEST BENGAL
PUBLIC WORKS DEPARTMENT

PERIPHERIAL BOUNDARY WALL AT HARINGHATA
INDUSTRIAL PARK , HARINGHATA, NADIA

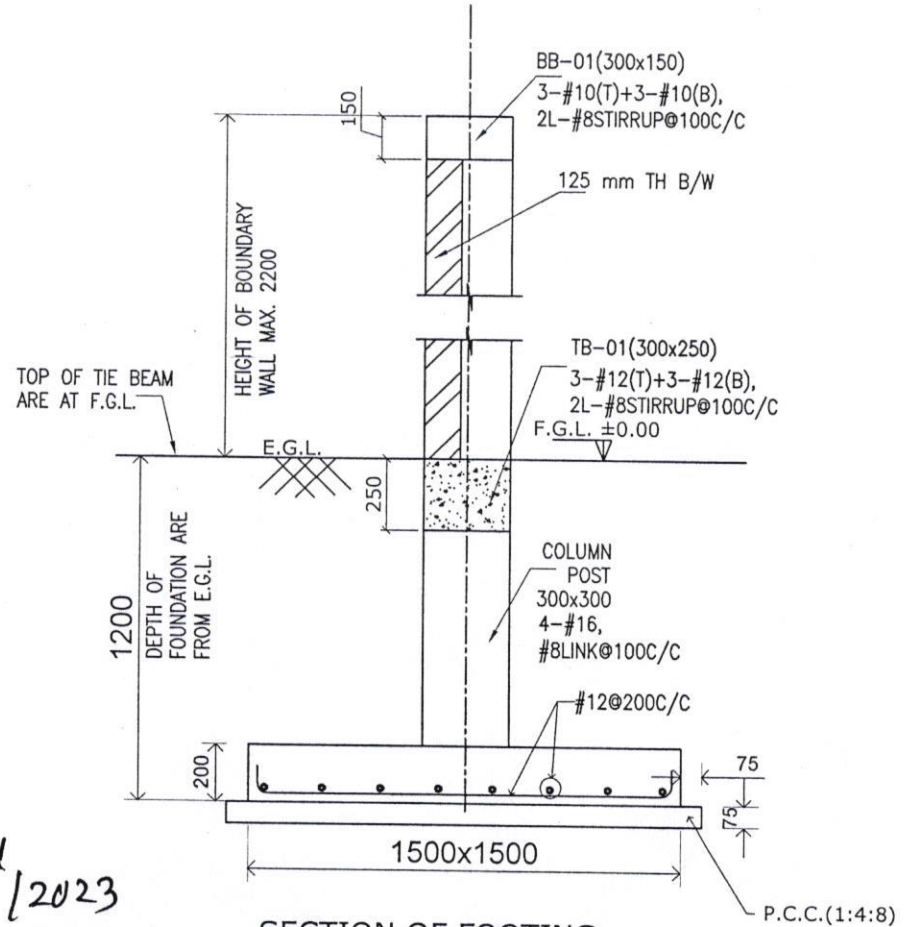
SKETCH DRAWING NO:- HWALL-02

NOTES :-

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH PROPER SURVEY DRAWING.
2. ALL DIMENSIONS ARE IN "mm" AND ALL LEVELS ARE IN "m" UNLESS OTHERWISE MENTIONED.
3. GRADE OF CONCRETE FOR R.C.C. M25 CONFORMING TO IS 456 -2000
4. THE REINFORCEMENT SHALL BE OF HIGH YIELD STRENGTH DEFORMED



FOUNDATION LAYOUT PLAN
OF BOUNDARY WALL
NORMAL GROUND



SECTION OF FOOTING
SEC B-B

Handwritten signature
9/6/2023

Executive Engineer,
Design Division II, P.W.D.
Govt of West Bengal