

Request for Bids

For

Construction of 2x5040 MT Capacity Pre-Engineered Warehouse Building, Internal Road, Office Building & Training center, Cleaning & Grading Yard, Drying Yard, Hamal Shed and ancillary works for Agro Logistic Hub at Shah, Tal -Karanja Lad, Dist. Washim, Maharashtra

National Open Competitive Procurement

(Two envelope Bidding Process with e-Procurement)

April 2026

***Hon. Balasaheb Thackeray Agribusiness
and Rural Transformation (SMART)
Project***

GOVERNMENT OF MAHARASHTRA
Hon. Balasaheb Thackeray Agribusiness and Rural Transformation (SMART)
Project

National Open Competitive Procurement

(Two-Envelope Bidding Process with e-Procurement)

(FOR ITEM RATE CONTRACTS IN CIVIL WORKS)

Sr.No.	Particulars	Details
1	Name of Works	Construction of 2x5040 MT Capacity Pre-Engineered Warehouse Building, Internal Road, Office Building & Training center, Cleaning & Grading Yard, Drying Yard, Hamal Shed and ancillary works for Agro Logistic Hub at Shah, Tal -Karanja Lad, Dist. Washim Maharashtra.
2	Tender fee Rs.	(5000 + 18%GST) = Rs. 5900/-
3	Bid Security EMD	Rs. 621000/-
4	Period of sales / downloading of bidding document	From 30/04/2026 To 29/05/2026 up to 17.00 Hrs
5	Pre-Bid Meeting Date & Time	Date 06/05/2026 Time 12.00 Hrs
6	Last date and time for submission of bids	29/05/2023 up to 17.00 Hrs
7	Date and Time of Opening of Technical Bids online	01/06/2026 at 11:00 Hrs
8	Place of opening of bids	Maharashtra State Warehousing Corporation, 583/B, Market Yard, Gultekadi, Pune 411037. Phone No: 020-24206849, Email id - smart.nodal@mswc.in

OFFICER INVITING BIDS

:

Chairman & Managing Director
Maharashtra State Warehousing
Corporation & Head PIU-MSWC, (SMART
Project)
Pune 411037

REQUEST FOR BIDS

(RFB)

**GOVERNMENT OF MAHARASHTRA PROJECT
REQUEST FOR BIDS (RFB)**

E-Procurement Notice

**National Open Competitive Procurement
(Two-Envelope Bidding Process with e-Procurement)**

Employer: Chairman & Managing Director Maharashtra State Warehousing Corporation & Head PIU-MSWC, (SMART Project) Pune 411037

Contract Title: Construction of 2x5040 MT Capacity Pre-Engineered Warehouse Building, Internal Road, Office Building & Training center, Cleaning & Grading Yard, Drying Yard, Hamal Shed and ancillary works for Agro Logistic Hub at Shah, Tal -Karanja Lad, Dist. Washim, Maharashtra.

Loan No.: P168310

IBRD Agreement No.: 90310

RFB Reference No.: IN-PCMU-SMART-533196-CW-RFB

Date: 30/04/2026

1. The Government of India has received financing from the World Bank toward the cost of the Hon. Balasaheb Thackeray Agribusiness and Rural Transformation (SMART) Project and intends to apply part of the proceeds toward eligible payments under the contract for construction of works as detailed below.
2. Bidding will be conducted through national open competitive procurement using a Request for Bids (RFB) as specified in the World Bank's "Procurement Regulations for IPF Borrowers, July 2016, Revised August 2018, November 2020" ("Procurement Regulations"), and is open to all Bidders as defined in the Procurement Regulations.
3. The Chairman & Managing Director, Maharashtra State Warehousing Corporation (*implementing agency*) now invites online Bids from eligible Bidders for the construction of works detailed below in the table. The bidders may submit bids for any or all of the works indicated therein. Interested bidders may obtain further information and inspect the bidding document at the address given below during office hours. Bidders are advised to note the clauses on eligibility (Section I Clause 4) and minimum qualification criteria (Section III – Evaluation and Qualification Criteria), to qualify for the award of the contract. In addition, please refer to paragraphs 3.14 and 3.15 of the "Procurement Regulations" setting forth the World Bank's policy on conflict of interest.
4. The bidding document is available online on **<https://mahatenders.gov.in>** from **30/04/2026 To 29/05/2026 up to 17.00 Hrs** for a non-refundable fee as indicated in the table below, in the form of online (SBI Net banking only) Bidders will be required to register on the website. The bidders would be responsible for ensuring that any addenda available on the website is also downloaded and incorporated.

5. For submission of the bid, the bidder is required to have Digital Signature Certificate (DSC) from one of the Certifying Authorities authorised by Government of India for issuing DSC. Aspiring bidders who have not obtained the user ID and password for participating in e-procurement in this Project, may obtain the same from the website: <https://mahatenders.gov.in>
6. Bids comprise two Parts, namely the Technical Part and the Financial Part, and both parts must be submitted simultaneously online on **<https://mahatenders.gov.in>** on or before 17.00 hours on **29/05/2026** and the 'Technical Part' of the bids will be publicly opened online on the day **01/06/2026** at 11.00 hours. The "Financial Part" shall remain unopened in the e-procurement system until the second public Bid opening for the financial part. Any bid or modifications to bid (including discount) received outside e-procurement system will not be considered. If the office happens to be closed on the date of opening of the bids as specified, the bids will be opened on the next working day at the same time and venue. The electronic bidding system would not allow any late submission of bids.
7. All Bids must be accompanied by a Bid Security of the amount specified for the work in the table below.
8. A pre-bid meeting will be held on **06/05/2026 at 12.00 hours** at the office of PIU (MSWC) Hon. Balasaheb Thackeray Agribusiness and Rural Transformation (SMART) Project, 583/B, Market Yard, Gultekadi, Pune to clarify the issues and to answer questions on any matter that may be raised at that stage as stated in ITB Clause 7.4 of 'Instructions to Bidders' of the bidding document. Bidders are advised to download the bidding document prior to the pre-bid meeting in order for bidders to have a good understanding of the scope of work under this contract for discussion and clarification at the pre-bid meeting.
9. Other details can be seen in the bidding document. The Employer shall not be held liable for any delays due to system failure beyond its control. Even though the system will attempt to notify the bidders of any bid updates, the Employer shall not be liable for any information not received by the bidder. It is the bidders' responsibility to verify the website for the latest information related to this bid.
10. The address for communication is as under:

PIU-MSWC, (SMART Project)
Maharashtra State Warehousing Corporation.
Head PIU-MSWC, (SMART Project)
583/B, Market Yard, Gultekadi, Pune 411037.
Phone No – 020 – 24206849, Email id - smart.nodal@mswc.in
Web site address - mswarehousing.com

TABLE

Name of Work	Bid Security (EMD)	Tender Fee (Rs.)	Period of Completion	Approximate value of work
Construction of 2x5040 MT Capacity Pre-Engineered Warehouse Building, Internal Road, Office Building & Training center, Cleaning & Grading Yard, Drying Yard, Hamal Shed and ancillary works for Agro Logistic Hub at Shah, Tal -Karanja Lad, Dist. Washim,Maharashtra.	621000/-	5,000/- plus 18% GST	12 Months	Rs.1241.26 Lakhs without GST

Seal of office

Chairman & Managing Director
Maharashtra State Warehousing Corporation &
Head PIU-MSWC, (SMART Project)
583/B, Market Yard, Gultekadi, Pune 411037.
Phone No – 020 – 24206849,
Email id - smart.nodal@mswc.in
Web site address - mswarehousing.com

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PART 1 – Bidding Procedures

Section I - Instructions to Bidders

A. General	
1. Scope of Bid	1.1 In connection with the Specific Procurement Notice - Request for Bids (RFB), specified in the Bid Data Sheet (BDS), the Employer, as specified in the BDS, issues this bidding document for the provision of Works as specified in Section VII, Works' Requirements. The name, identification and number of lots (contracts) of this RFB are specified in the BDS.
	1.2 Throughout this bidding document: (a) the term "in writing" means communicated in written form (e.g. by mail, e-mail, and fax, including if specified in the BDS, distributed or received through the electronic-procurement system used by the Employer) with proof of receipt; (b) if the context so requires, "singular" means "plural" and vice versa; (c) "Day" means calendar day, unless otherwise specified as "Business Day". A Business Day is any day that is a working day of the Borrower. It excludes the Borrower's official public holidays; (d) the term "ES" means environmental and social (including Sexual Exploitation, and Abuse (SEA), and Sexual Harassment (SH)); (e) "Sexual Exploitation and Abuse" "(SEA)" means the following: (i) "Sexual Exploitation" is defined as any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. (ii) "Sexual Abuse" is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions; (f) "Sexual Harassment" "(SH)" is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by the Contractor's Personnel with other Contractor's or Employer's Personnel;

	(g) “Contractor’s Personnel” is as defined in Sub-Clause 1 (ii) of the General Conditions of Contract; and (h) “Employer’s personnel” is as defined in GCC Sub-Clause 1 (nn) of the General Conditions of Contract. A non-exhaustive list of (i) behaviors which constitute SEA and (ii) behaviors which constitute SH is attached to the Code of Conduct form in Section IV.
2. Source of Funds	2.1 The Borrower or Recipient (hereinafter called “Borrower”) specified in the BDS has received or has applied for financing (hereinafter called “funds”) from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called “the Bank”) in an amount specified in the BDS, toward the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this bidding document is issued.
	2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank, and will be subject, in all respects, to the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, equipment, plant, or materials, if such payment or import is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).
3. Fraud and Corruption	3.1 The Bank requires compliance with the Bank’s Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG’s Sanctions Framework, as set forth in Section VI. 3.2 In further pursuance of this policy, bidders shall permit and shall cause their agents (whether declared or not), subcontractors, sub-consultants, service providers, suppliers, and personnel, to permit the Bank to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, bid submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders	4.1 A Bidder may be a firm that is a private entity, or a state-owned enterprise or institution subject to ITB 4.6, or any combination of them in the form of a joint venture (JV), under an existing agreement, or with the intent to enter into such an agreement supported by a letter of intent, unless otherwise specified in the BDS. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution. This authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all members. Unless specified in the BDS, there is no limit on the number of members in a JV. The joint venture agreement shall be registered in the place specified in BDS so as to be legally valid and binding on members.
	4.2 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder: (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or (b) receives or has received any direct or indirect subsidy from another Bidder; or (c) has the same legal representative as another Bidder; or (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or (e) any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the Bid; or (f) any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower as Project Manager (Engineer) for the Contract implementation; (g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly

	controls, is controlled by, or is under common control with that firm; (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the contract, and/or the Bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the contract.
	4.3 A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative Bids. This includes participation as a Subcontractor in other Bids. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member may participate as a subcontractor in more than one Bid.
	4.4 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or sub-consultants for any part of the Contract including related Services.
	4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in Section VI paragraph 2.2 d., shall be ineligible to be prequalified for, initially selected for, bid for, propose for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.
	4.6 Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner

	acceptable to the Bank, that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not under supervision of the Employer.
	4.7 A Bidder shall not be under suspension from Bidding by the Employer as the result of the operation of a Bid-Securing or Proposal-Securing Declaration.
	4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country. When the Works are implemented across jurisdictional boundaries (and more than one country is a Borrower, and is involved in the procurement), then exclusion of a firm or individual on the basis of ITB 4.8 (a) above by any country may be applied to that procurement across other countries involved, if the Bank and the Borrowers involved in the procurement agree. 4.9 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.
5. Eligible Materials, Equipment and Services	5.1 The materials, equipment and services to be supplied under the Contract and financed by the Bank may have their origin in any country subject to the restrictions specified in Section V, Eligible Countries, and all expenditures under the Contract will not contravene such restrictions. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.
B. Contents of Bidding Document	

6. Sections of Bidding Document	6.1 The bidding document consists of Parts 1, 2, and 3, which include all the sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITB 8. PART 1 Bidding Procedures • Section I - Instructions to Bidders (ITB) • Section II - Bid Data Sheet (BDS) • Section III - Evaluation and Qualification Criteria • Section IV - Bidding Forms • Section V - Eligible Countries • Section VI - Fraud and Corruption PART 2 Works' Requirements • Section VII - Works' Requirements PART 3 Conditions of Contract and Contract Forms • Section VIII - General Conditions of Contract (GCC) • Section IX - Particular Conditions of Contract (PCC) • Section X - Contract Forms
	6.2 The Specific Procurement Notice - Request for Bids (RFB) issued by the Employer is not part of this bidding document.
	6.3 Unless obtained directly from the Employer or downloaded from the official website specified in the 'E-Procurement Notice', the Employer is not responsible for the completeness of the bidding document, responses to requests for clarification, the minutes of the pre-Bid meeting (if any), or Addenda to the bidding document in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Employer or downloaded from the official website specified in the 'E-Procurement Notice' shall prevail.
	6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid all information and documentation as is required by the bidding document.
7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting	7.1 The electronic bidding system specified in the BDS provides for online clarifications. A Bidder requiring any clarification on the bidding document may notify the Employer online or raise its inquiries during the pre-Bid meeting if provided for in accordance with ITB 7.4. Clarifications requested through any other mode shall not be considered by the Employer. The Employer will respond to any request for clarification,

	provided that such request is received prior to the deadline for submission of Bids within a period specified in the BDS. Description of clarification sought and the response of the Employer shall be uploaded for information of all Bidders without identifying the source of request for clarification. Should the clarification result in changes to the essential elements of the bidding document, the Employer shall amend the bidding document following the procedure under ITB 8 and ITB 22.2. It is the bidder's responsibility to check on the e-procurement system, for any addendum/ amendment/ corrigendum to the bidding document.
	7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.
	7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
	7.4 If so specified in the BDS, the Bidder's designated representative is invited to attend a pre-Bid meeting and/or a Site of Works visit. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
	7.5 The Bidder is requested, to submit any questions only through the e-procurement portal, not later than one week before the meeting. Clarifications requested through any other mode shall not be considered by the Employer.
	7.6 Minutes of the pre-Bid meeting, if applicable, including the text of the questions asked by Bidders, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be uploaded online on e-procurement system. Any modification to the bidding document that may become necessary as a result of the pre-Bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-Bid meeting. It is the bidder's responsibility to check on the e-procurement system, for any

	addendum/ amendment/ corrigendum to the bidding document. Nonattendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.
8. Amendment of Bidding Document	8.1 At any time prior to the deadline for submission of bids, the Employer may amend the bidding document by issuing addenda.
	8.2 Any addendum issued shall be part of the bidding document and shall be deemed to have been communicated to all the bidders. The addenda will appear on the e-procurement system under "Latest Corrigendum", and Email notification is also automatically sent to those bidders who have started working on the tender, unless otherwise specified in the BDS . The Employer shall not be liable for any information not received by the bidder. It is the bidders' responsibility to verify the website for the latest information related to this bid.
	8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 22.2.
C. Preparation of Bids	
9. Cost of Bidding	9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.
10. Language of Bid	10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in English. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, such translation shall govern.
11. Documents Comprising the Bid	11.1 The Bid shall comprise two Parts, namely the Technical Part and the Financial Part. These two Parts shall be submitted simultaneously. 11.2 The Technical Part shall contain the following: (a) Letter of Bid – Technical Part prepared in accordance with ITB 12 and ITB 14; (b) Bid Security or Bid-Securing Declaration in accordance with ITB 19.1;

	(c) Alternative Bid – Technical Part, if permissible, in accordance with ITB 13, the Technical Part of any Alternative Bid; (d) Authorization: written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.3, and in accordance with ITB 20.4 in case of a JV; (e) Bidder’s Eligibility: documentary evidence in accordance with ITB 17 establishing the Bidder’s eligibility to Bid; (f) Qualifications: documentary evidence in accordance with ITB 17 establishing the Bidder’s qualifications to perform the contract if its Bid is accepted; (g) Conformity: a technical proposal in accordance with ITB 16; (h) Construction methodology as detailed in Para 1.1 of Section III Evaluation Criteria; (i) Contractor Registration certificate (as per RFB); and (j) Any other document required in the BDS. 11.3 The Financial Part shall contain the following: (a) Letter of Bid – Financial Part: prepared in accordance with ITB 12 and ITB 14; (b) Completed Schedules including priced Bill of Quantities in accordance with ITB 12 and ITB 14, as specified in BDS; (c) Alternative Bid - Financial Part: if permissible in accordance with ITB 13; and (d) Any other document required in the BDS. 11.4 The Technical Part shall not include any information related to the Bid price. Where material financial information related to the Bid price is contained in the Technical Part the Bid shall be declared non-responsive. 11.5 In addition to the requirements under ITB 11.2, Bids submitted by a JV (where permitted) shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by

	all members and submitted with the Bid, together with a copy of the proposed Agreement. 11.6 The Bidder shall furnish in the Letter of Bid – Financial Part information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.
12. Process of Bid Submission	12.1 The Letter of Bid – Technical Part, Letter of Bid – Financial Part, Schedules including Bill of Quantities, and all documents listed under Clause 11, shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.3. All blank spaces shall be filled in with the information requested. 12.2 Entire Bid including the Letters of Bid, Schedules and filled-up Bill of Quantities shall be submitted online on e-procurement system specified in ITB 7.1. Details and process of online submission of the tender and relevant documents are given in the website mentioned above. Scanned copies of documents listed in ITB Clauses 11 and 12.3 should also be uploaded on this website. 12.3 Submission of Original Documents: The bidders are required to separately submit (i) original payment documents towards the cost of bid document; and registration on e-procurement website (if applicable); (ii) original bid security or Bid-Securing Declaration in approved form; and (iii) original affidavit regarding correctness of information furnished with bid document, with the office specified in the BDS, before the Bid submission deadline, either by registered/speed post/courier or by hand, failing which the bids will be declared non-responsive and will not be opened. Hard copy of rest of the bid or any other document are not to be submitted.
13. Alternative Bids	13.1 Unless otherwise specified in the BDS, alternative Bids shall not be considered.
	13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the BDS and the method of evaluating different alternative times for completion will be described in Section III, Evaluation and Qualification Criteria.
	13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the bidding document must first price the Employer's design as described in the bidding document and shall further provide all information necessary for a complete evaluation of the

	alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Bidder with the Most Advantageous Bid conforming to the basic technical requirements shall be considered by the Employer.
	13.4 When specified in the BDS , Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be identified in the BDS and described in Section VII, Works' Requirements. The method for their evaluation will be stipulated in Section III, Evaluation and Qualification Criteria.
14. Bid Prices and Discounts	14.1 The prices and discounts quoted by the Bidder in the Letter of Bid –Financial Part and in the Schedules including Bill of Quantities shall conform to the requirements specified below.
	14.2 The Bidder shall submit a Bid for the whole of the Works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section IV - Bidding Forms along with the total bid price (both in figures and words). The Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities. Corrections if any, in the bid can be carried out by editing the information before electronic submission on e-procurement portal.
	14.3 The price to be quoted in the Letter of Bid – Financial Part, in accordance with ITB 12.1, shall be the total price of the Bid, excluding any discounts offered.
	14.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid – Financial Part in accordance with ITB 12.1.
	14.5 Unless otherwise specified in the BDS and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. 14.6 If so specified in ITB 1.1, Bids are invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer discounts for the award of more than one Contract shall specify in their Bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4, provided the Bids for all lots (contracts) are opened at the same time.

	14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the deadline for submission of Bids, shall be included in the rates and prices and the total Bid price submitted by the Bidder. 14.8 Bidders may like to ascertain availability of tax/duty exemption benefits available in India. They are solely responsible for obtaining such benefits which they have considered in their bid and in case of failure to receive such benefits for reasons whatsoever, the Employer will not compensate the bidder (Contractor). The bidder shall furnish along with his bid a declaration to this effect in the Declaration Format provided in Section IV of the bidding document. Where the bidder has quoted taking into account such benefits, it must give all information required for issue of certificates in terms of the Government of India's relevant Notifications as per the declaration format. In case the bidder has not provided the required information or has indicated to be furnished later on in the Declaration Format, the same shall be construed that the goods/construction equipment for which certificate is required is Nil. To the extent the Employer determines the quantities indicated therein are reasonable keeping in view the quantities in bill of quantities, construction program and methodology, the certificates will be issued within 60 days of signing of the contract and no subsequent changes will be permitted. In case of materials pertaining to Variation items and quantities, the certificate shall be issued only on request from the Contractor when in need and duly certified by the Project Manager. No certificate will be issued for items where no quantity/capacity of equipment is indicated in the statement. If the bidder has considered the tax/duty exemption for materials/construction equipment to be bought for the work, the bidder shall confirm and certify that the Employer will not be required to undertake any responsibilities of the Government of India Scheme or the said exemptions being available during the contract execution, except issuing the required certificate. The bids which do not conform to the above provisions or any condition by the bidder which makes the bid subject to availability of tax/duty exemption for materials/construction equipment or compensation on withdrawal of any variations to the said exemptions will be treated as non-responsive and rejected.

	Any delay in procurement of the construction equipment/ machinery/goods as a result of the above shall not be a cause for granting any extension of time.
15.Currencies of Bid and Payment	15.1 The unit rates and prices shall be quoted by the Bidder and shall be paid for, entirely in Indian Rupees.
16.Documents Comprising the Technical Proposal	16.1 The Bidder shall furnish a technical proposal in the Technical Part of the Bid, including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, Bidding Forms, in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work's requirements and the completion time.
17.Documents Establishing the Eligibility and Qualifications of the Bidder	17.1 To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid – Technical Part, included in Section IV, Bidding Forms. 17.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.
18.Period of Validity of Bids	18.1 Bids shall remain valid for 90 days or for the Bid Validity period specified in the BDS . The Bid Validity period starts from the date fixed for the Bid submission deadline (as prescribed by the Employer in accordance with ITB 22.1). A Bid valid for a shorter period shall be rejected by the Employer as nonresponsive.
	18.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 19, it shall also be extended for forty-five (45) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 18.3.
	18.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial Bid validity period, the Contract price shall be determined as follows:

	(a) in the case of fixed price contracts, the Contract price shall be the Bid price adjusted by the factor specified in the BDS; (b) in the case of adjustable price contracts, no adjustment shall be made; or (c) in any case, bid evaluation shall be based on the Bid price without taking into consideration the applicable correction from those indicated above.
19. Bid Security	19.1 The Bidder shall furnish as part of the Technical Part of its Bid, either a Bid-Securing Declaration or a Bid Security as specified in the BDS , in original form and, in the case of a Bid security, for the amount specified in the BDS .
	19.2 A Bid Securing Declaration shall use the form included in Section IV, Bidding Forms.
	19.3 If a Bid Security is specified pursuant to ITB 19.1, the Bid Security shall be a demand guarantee in any of the following forms at the Bidder's option: (a) an unconditional bank guarantee issued by a Nationalized or Scheduled bank located in India; (b) an irrevocable letter of credit issued by a Nationalized or Scheduled bank located in India; (c) a cashier's or certified check or demand draft issued by a Nationalized or Scheduled bank located in India; (d) another security specified in the BDS, In the case of a bank guarantee, the Bid Security shall be submitted using the Bid Security Form included in Section IV, Bidding Forms. The form must include the complete name of the Bidder. The Bid Security shall be valid for forty-five (45) days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 18.2.
	19.4 If a Bid Security or Bid Securing Declaration is specified pursuant to ITB 19.1, any Bid not accompanied by a substantially responsive Bid Security or Bid Securing Declaration shall be rejected by the Employer as non-responsive.
	19.5 If a Bid Security is specified pursuant to ITB 19.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the Contract and furnishing the Performance Security and if required in the

	BDS, the Environmental and Social (ES) Performance Security pursuant to ITB 50.
	19.6 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security.
	19.7 The Bid Security may be forfeited or the Bid-Securing Declaration executed: (a) if a Bidder withdraws/modifies/substitutes its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid - Technical Part and repeated in Letter of Bid - Financial Part, or any extension thereto provided by the Bidder; or (b) if the Bidder does not accept the correction of its Bid Price pursuant to ITB 36; or (c) if the successful Bidder fails to: (i) Sign the Contract in accordance with ITB 49; or (ii) Furnish a Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with ITB 50.
	19.8 The Bid Security or the Bid-Securing Declaration of a JV shall be in the name of the JV that submits the Bid. If the JV has not been constituted into a legally enforceable JV, at the time of Bidding, the Bid Security or the Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent mentioned in ITB 4.1 and ITB 11.2.
	19.9 If a Bid Security is not required in the BDS, pursuant to ITB 19.1, and: (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder in the Letters of Bid or any extended date provided by the Bidder; or (b) if the successful Bidder fails to: sign the Contract in accordance with ITB 49; or furnish a Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with ITB 50; the Borrower may, if provided for in the BDS, declare the Bidder ineligible to be awarded a contract by the Employer for a period of time as stated in the BDS.

20.Format and Signing of Bid	20.1 The Bidder shall prepare the Bid as per details given in ITB 21.
	20.2 Bidders shall mark as “CONFIDENTIAL” information in their Bids which is confidential to their business.
	20.3 The Bid shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be uploaded along with the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature.
	20.4 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives. Documents establishing authority to sign the bid on behalf of the JV shall be uploaded along with the bid. 20.5 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.
D. Online Submission and Opening of Bids	
21.Preparation of Bids	21.1 Bids, both Technical and Financial Parts, shall be submitted online on the e-procurement system specified in BDS 7.1. Detailed guidelines for viewing bids and submission of online bids are given on the website. The Request for Bids under this Project is published on this website. Any citizen or prospective bidder can logon to this website and view the Request for Bids and can view the details of works for which bids are invited. A prospective bidder can submit its bid online; however, the bidder is required to have enrolment/registration in the website, and should have valid Digital Signature Certificate (DSC) in the form of smart card/e-token obtained from any certifying agency authorised by the Government of India (for class of DSC specified in BDS). The bidder should register in the website using the relevant option available. Then the Digital Signature registration has to be done with the e-token, after logging into the website. The bidder can then login the website through the secured login by entering the password of the e-token & the user id/ password chosen during registration. After getting the bid schedules, the Bidder should go through them carefully and submit the specified documents, along with the bid, otherwise the bid will be rejected.

	21.2 The completed bid comprising of documents indicated in ITB 12, should be uploaded on the e-procurement portal along with scanned copies of requisite certificates as are mentioned in different sections in the bidding document and scanned copy of the bid security.
	21.3 All the documents are required to be signed digitally by the bidder. After electronic online bid submission, the system generates a unique bid identification number which is time stamped as per server time. This shall be treated as acknowledgement of bid submission.
	21.4 Physical, e-mail, Telex, Cable or Facsimile bids will be rejected as non-responsive.
22. Deadline for Submission of Bids	22.1 Bids, both Technical and Financial Parts, must be uploaded online no later than the date and time specified in the BDS .
	22.2 The Employer may, at its discretion, extend the deadline for the submission of Bids by amending the bidding document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
23. Late Bids	23.1 The electronic bidding system would not allow any late submission of bids after due date & time as per server time.
24. Withdrawal, Substitution, and Modification of Bids	24.1 Bidders may modify their bids by using the appropriate option for bid modification on e-procurement portal, before the deadline for submission of bids. For this the bidder need not make any additional payment towards the cost of bid document. For bid modification and consequential re-submission, the bidder is not required to withdraw his bid submitted earlier. The last modified bid submitted by the bidder within the bid submission time shall be considered as the bid. For this purpose, modification/withdrawal by other means will not be accepted. In online system of bid submission, the modification and consequential re-submission of bids is allowed any number of times. A bidder may withdraw his bid by using the appropriate option for bid withdrawal, before the deadline for submission of bids, however, if the bid is withdrawn, re-submission of the bid is not allowed (or allowed if specified in BDS).
	24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall not be opened.
	24.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the

	expiration of the period of Bid validity specified by the Bidder on the Letter of Bid or any extension thereof. This will result in the forfeiture of the Bid Security pursuant to ITB 19.7.
E. Public Opening of Technical Parts of Bids	
25. Public Opening of Technical Parts of Bids	25.1 The Employer shall publicly open Technical Parts of all Bids received by the deadline, at the date, time and place specified in the BDS, in the presence of Bidders designated representatives and anyone who chooses to attend, and this could also be viewed by the bidders online. The Financial Parts of the bids shall remain unopened in the e-procurement system, until the subsequent public opening, following the evaluation of the Technical Parts of the Bids. In all cases, original documents submitted as specified in ITB 12.3 shall be first scrutinized, and Bids that do not comply with the provisions of ITB 12.3 will be declared non-responsive and will not be opened. Thereafter, bidders' names, the presence or absence of a Bid Security or Bid Securing Declaration, if one was required, alternative bids – technical parts, if any, and such other details as the Employer may consider appropriate will be notified, online by the Employer at the time of bid opening. In the event of the specified date of bid opening being declared a holiday for the Employer, the bids will be opened at the appointed time and location on the next working day. 25.2 The electronic summary of the bid opening will be generated and uploaded online. The Employer will also prepare minutes of the Bid opening, including the information disclosed and upload the same for viewing online. Only Technical Parts of Bids, and technical parts of Alternative Bids if any, that are opened at technical Bid opening shall be considered further for evaluation.
F. Evaluation of Bids – General Provisions	
26. Confidentiality	26.1 Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until information on Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 45. In cases where ITB 45 is not applicable, such information shall not be disclosed until Notification of Award is transmitted in accordance with ITB 47.

	26.2 Any effort by a Bidder to influence the Employer in the evaluation of the Bids or Contract award decisions may result in the rejection of its Bid.
	26.3 Notwithstanding ITB 26.2, from the time of Bid opening to the time of Contract award, if a Bidder wishes to contact the Employer on any matter related to the Bidding process, it shall do so in writing.
27. Clarification of Bids	27.1 To assist in the examination, evaluation, and comparison of the Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid giving a reasonable time for a response. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 36.
	27.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.
28. Deviations, Reservations, and Omissions	28.1 During the evaluation of Bids, the following definitions apply: (a) "Deviation" is a departure from the requirements specified in the bidding document; (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and (c) "Omission" is the failure to submit part or all of the information or documentation required in the bidding document.
29. Nonmaterial Nonconformities	29.1 Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid which do not constitute a material deviation, reservation or omission.
	29.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price or substance of the Bid. Failure of the

	Bidder to comply with the request may result in the rejection of its Bid.
	29.3 Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or nonconforming item or component in the manner specified in the BDS.
G. Evaluation of Technical Parts of Bids	
30.Evaluation of Technical Parts	30.1 In evaluating the Technical Parts of each Bid, the Employer shall use the criteria and methodologies listed in this ITB and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted.
31.Determination of Responsiveness	31.1 The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11. 31.2 A substantially responsive Bid is one that meets the requirements of the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that: (a) if accepted, would: (i) Affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or (ii) Limit in any substantial way, inconsistent with the bidding document, the Employer's rights or the Bidder's obligations under the proposed Contract; or (b) If rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.
	31.3 The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 16, in particular, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.
	31.4 If a Bid is not substantially responsive to the requirements of the bidding document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

32. Qualification of the Bidder	32.1 The Employer shall determine to its satisfaction whether the eligible Bidders that have submitted substantially responsive Bid - Technical Parts meet the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
	32.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the bidding document), or any other firm different from the Bidder.
	32.3 If a Bidder does not meet the qualifying criteria specified in Section III, Evaluation and Qualification Criteria, its Bid shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.
	32.4 Only Bids that are both substantially responsive to the bidding document, and meet all Qualification Criteria shall have the Financial Parts of their Bids opened at the second public opening.
33. Subcontractors	33.1 Unless otherwise stated in the BDS, the Employer does not intend to execute any specific elements of the Works by subcontractors selected in advance by the Employer. 33.2 The subcontractor's qualifications shall not be used by the Bidder to qualify for the Works unless their specialized parts of the Works were previously designated by the Employer in the BDS as can be met by subcontractors referred to hereafter as 'Specialized Subcontractors', in which case, the qualifications of the Specialized Subcontractors proposed by the Bidder may be added to the qualifications. 33.3 Bidders may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified in the BDS. Subcontractors proposed by the Bidder shall be fully qualified for their parts of the Works.
H. Public Opening of Financial Parts of Bids	
34. Public Opening of Financial Parts	34.1 Following the completion of the evaluation of the Technical Parts of the Bids, and the Bank has issued its no objection (if applicable), the Employer shall notify in writing those Bidders whose Bids were considered non-responsive to the bidding document or failed to meet the Qualification Criteria, advising them of the following information:

	(a) the grounds on which their Technical Part of Bid failed to meet the requirements of the bidding document; (b) their Financial Part of Bid shall not be opened; and (c) Notify them of the date, time, and location for public opening of Financial Parts of the Bids.
	34.2 The Employer shall, simultaneously, notify in writing those Bidders whose Technical Part have been evaluated as substantially responsive to the bidding document and met all Qualifying Criteria, advising them of the following information: (a) their Bid has been evaluated as substantially responsive to the bidding document and met the Qualification Criteria; (b) their Financial Part of Bid will be opened at the public opening of the Financial Parts; and (c) notify them of the date, time and location for public opening of the Financial Parts of the Bids, as specified in the BDS.
	34.3 The opening date should allow Bidders sufficient time to make arrangements for attending the opening. The Financial Part of the Bids shall be opened publicly in the presence of Bidders designated representatives and anyone who chooses to attend, and this could also be viewed by the bidders online. The bidder's names, the Bid prices, per lot (contract) if applicable, including any discounts and Alternative Bid - Financial Part if any, and such other details as the Employer may consider appropriate, will be notified online by the Employer at the time of bid opening. In the event of the specified date of bid opening being declared a holiday for the Employer, the bids will be opened at the appointed time and location on the next working day.
	34.4 The electronic summary of the bid opening will be generated and uploaded online. The Employer will also prepare minutes of the Bid opening, including the information disclosed and upload the same for viewing online. Only Financial Parts of Bids, Financial Parts of Alternative Bids, and discounts that are opened at Bid opening shall be considered further for evaluation.
I. Evaluation of Financial Parts of Bids	

35.Evaluation of Financial Parts	35.1 To evaluate the Financial Part, the Employer shall consider the following:
	(a) the Bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities for admeasurements contracts, but including Day work ¹ items, where priced competitively;
	(b) price adjustment for correction of arithmetic errors in accordance with ITB 36.1;
	(c) price adjustment due to discounts offered in accordance with ITB 14.4;
	(d) Not used;
	(e) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 29.3; and
	(f) The additional evaluation factors are specified in Section III, Evaluation and Qualification Criteria.
	35.2 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
	35.3 If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the contract combinations, including any discounts offered in the Letter of Bid – Financial Part, is specified in Section III, Evaluation and Qualification Criteria
36.Correction of Arithmetical Errors	36.1 In evaluating the Financial Part of each Bid, the Employer shall correct arithmetical errors on the following basis: (a) only for admeasurement contracts, if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected;

¹ Day work is work carried out following instructions of the Project Manager and paid for on the basis of time spent by workers, and the use of materials and the Contractor's equipment, at the rates quoted in the Bid. For Day work to be priced competitively for Bid evaluation purposes, the Employer must list tentative quantities for individual items to be costed against Day work (e.g., a specific number of tractor driver staff-days, or a specific tonnage of Portland cement), to be multiplied by the Bidders quoted rates and included in the total Bid price.

	(b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
	36.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 36.1 shall result in the rejection of the Bid and the Bid Security may be forfeited in accordance with ITB Sub-Clause 19.7.
37. Conversion to Single Currency	37.1 Not used.
38. Margin of Preference	38.1 Not applicable
39. Comparison of Financial Parts	39.1 The Employer shall compare the evaluated costs of all responsive and qualified Bids to determine the Bid that has the lowest evaluated cost.
40. Abnormally Low Bids	40.1 An Abnormally Low Bid is one where the Bid price, in combination with other constituent elements of the Bid, appears unreasonably low to the extent that the Bid price raises material concerns as to the capability of the Bidder to perform the Contract for the offered Bid price. 40.2 In the event of identification of a potentially Abnormally Low Bid, the Employer, unless otherwise specified in the BDS, shall seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the bidding document. 40.3 After evaluation of the price analyses, in the event that the Employer determines that the Bidder has failed to demonstrate its capability to perform the Contract for the offered Bid Price, the Employer shall reject the Bid.
41. Unbalanced or Front-Loaded Bids	41.1 If the Bid for an admeasurement contract, which results in the lowest evaluated cost is, in the Employer's opinion, seriously unbalanced or, front-loaded, the Employer may require the Bidder to provide written clarifications. Clarifications may include detailed price analyses (with breakdown of unit rates) to demonstrate the consistency of the Bid prices with the

	scope of works, proposed methodology, schedule and any other requirements of the bidding document. 41.2 After the evaluation of the information and detailed price analysis presented by the Bidder, the Employer may as appropriate: (a) accept the Bid without any additional Performance Security; or (b) require that the amount of the Performance Security be increased at the expense of the Bidder to a level not exceeding twenty percent (20%) of the Contract Price to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract; or (c) Reject the Bid if the risk cannot be mitigated through additional performance security.
42. Most Advantageous Bid	42.1 Having compared the evaluated costs of Bids, the Employer shall determine the Most Advantageous Bid. The Most Advantageous Bid is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be: (a) substantially responsive to the bidding document; and (b) The lowest evaluated cost.
43. Employer's Right to Accept Any Bid, and to Reject Any or All Bids	43.1 The Employer reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all documents submitted and specifically, Bid securities, shall be promptly returned to the Bidders.
44. Standstill Period	44.1 Standstill Period shall not apply.
45. Notice of Intention to Award	45.1 Not used.
J. Award of Contract	
46. Award Criteria	46.1 Subject to ITB 43, the Employer shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid as specified in ITB 42.
47. Notification of Award	47.1 Prior to the expiration of the Bid Validity Period, the Employer shall transmit the Letter of Acceptance to the

	successful Bidder. The Letter of Acceptance shall specify the sum that the Employer will pay the Contractor in consideration of the execution of the contract (hereinafter and in the Conditions of Contract and Contract Forms called “the Contract Price”). 47.2 Within ten (10) Business Days after the date of transmission of the Letter of Acceptance, the Employer shall publish the Contract Award Notice which shall contain, at a minimum, the following information: (a) name and address of the Employer; (b) name and reference number of the contract being awarded, and the selection method used; (c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated; (d) names of all Bidders whose Bids were rejected either as nonresponsive or as not meeting qualification criteria, or were not evaluated, with the reasons therefor; and (e) The name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope.
	47.3 The Contract Award Notice shall be published on a National website (GoI website https://mahatenders.gov.in or on the Employer’s website, and on the e-procurement system.
	47.4 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.
48. Debriefing by the Employer	48.1 Not used.
49. Signing of Contract	49.1 Promptly upon Notification of Award, the Employer shall prepare the Contract Agreement, and keep it ready in the office of the Employer for the signature of the Employer and the successful Bidder, within 21 days following the date of Letter of Acceptance. The Contract Agreement shall incorporate all agreements between the Employer and the successful Bidder.

	49.2 Within twenty-eight (28) days of receipt of the Letter of Acceptance, the successful Bidder shall (a) furnish the performance security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with ITB Clause 50 and revised construction methodology; (b) if the successful bidder is a JV, it shall also furnish the JV agreement duly signed by all the members, if it had submitted only a letter of intent to execute the JV agreement along with the bid; and (c) shall sign, date and return the Agreement to the Employer along with the documents stated at (a) and (b) above.
50. Performance Security	50.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall furnish the Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with the General Conditions of Contract, subject to GCC 54.1 ITB 41.2 (b), using for that purpose the Performance Security and ES Performance Security Forms included in Section X, Contract Forms. The performance security and if required in the BDS, the Environmental and Social (ES) Performance Security of a Joint Venture shall be in the name of the Joint Venture specifying the names of all members.
	50.2 Failure of the successful Bidder to submit the above-mentioned Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Employer may award the Contract to the Bidder offering the next Most Advantageous Bid. 50.3 Upon the successful Bidder's signing the Agreement and furnishing of the Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security pursuant to ITB Clause 50.1, the Employer shall promptly notify the name of the winning bidder to each unsuccessful bidder and shall discharge the Bid Securities of the bidders pursuant to ITB Clause 19.5 and 19.6.
51. Adjudicator	51.1 The Employer proposes the person named in the BDS to be appointed as Adjudicator under the Contract, at the daily fee specified in the BDS, plus reimbursable expenses (actual boarding, lodging, travel and other incidental expenses). If the Bidder disagrees with this proposal, the Bidder should so state in his Bid. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated in

	the Particular Conditions of Contract (PCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

Section II - Bid Data Sheet (BDS)

The following specific data for the Works to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Reference	A. General
ITB 1.1	The Employer is: Chairman & Managing Director, Maharashtra State Warehousing Corporation & Head PIU-MSWC, (SMART Project) The reference number of the Request for Bids (RFB) is IN-PCMU-SMART-533196-CW-RFB The name of the RFB is: Construction of 2x5040 MT Capacity Pre-Engineered Warehouse Building, Internal Road, Office Building & Training center, Cleaning & Grading Yard, Drying Yard, Hamal Shed and ancillary works for Agro Logistic Hub at Shah, Tal -Karanja Lad, Dist. Washim, Maharashtra.
ITB 1.2	The Employer shall use the e-procurement system specified in BDS 7.1.
ITB 2.1	The Borrower is: Government of India. The sub-Borrower is Government of Maharashtra acting through Hon. Balasaheb Thackeray Agribusiness and Rural Transformation (SMART) Project, 270, Sheti Mahamndal Bhavan, Senapati Bapat Road, Gokhale Nagar, Pune - 411016. Loan or Financing Agreement amount: 210 million US\$ The name of the Project is: Hon. Balasaheb Thackeray Agribusiness and Rural Transformation (SMART) Project.
ITB 4.1	Bids from Joint ventures <i>are not acceptable</i> .
ITB 4.5	A list of debarred firms and individuals is available on the Bank's external website: http://www.worldbank.org/debarr .
B. Contents of Bidding Document	
ITB 7.1	Electronic – Procurement System The Employer shall use the following electronic-procurement system to manage this Bidding process: <i>https://mahatenders.gov.in</i> under organization – Co-Operation & Marketing Textile, Mumbai. Requests for clarification should be received by the Employer no later than: 14 days prior to the deadline for submission of bids.

ITB 7.4	A pre-bid meeting will be held on 06/05/2026 at 12.00 hours at the office of the PIU (MSWC), SMART Project, Maharashtra State Warehousing Corporation, 583/B, Market Yard, Gultekadi, Pune- 37.
ITB 8.1	At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addenda. The addendum will appear on the e-procurement system under https://mahatenders.gov.in as <i>Latest Corrigendum</i>. In addition, any changes to bidding document, pre-bid clarifications, extension of deadline for the submission of bids, addendum and corrigendum to the tender shall be published online in the e- Procurement portal. The Employer shall not be liable for any information not received by the bidder. It is the bidders' responsibility to verify the website for the latest information related to this bid."
ITB 8.2	Replace the second sentence second half of clause ITB 8.2 with following: Email notifications shall not be sent automatically to the bidders. The addenda will be uploaded on the e-procurement system under "Latest Corrigendum", and on official website of MSWC under Tender Notice.
C. Preparation of Bids	
ITB 11.2	The Technical Part shall contain the following scanned copy of Original Documents OR Attested documents: 1) Copy of online payment slip made towards Tender fee 2) Bid security (EMD) in the amount of Rs. 621000/- in the form of Bank guarantee or Demand Draft . 3) Goods & Service Tax (GST) Registration Certificate 4) Copy of Affidavit on Rs. 500/- stamp paper (Proforma is attached) in respect of genuineness of documents. 5) Bid capacity calculation sheet issued by Chartered Accountant firm along with UDIN & relevant documents 6) Form ELI -1.1: Bidder Information Form with attachments 7) Form CON-2: Historical Contract Non-Performance, Pending Litigation and Litigation History 8) Form CON-3: ESHS Performance Declaration 9) Form CCC: Current Contract Commitments / Works in Progress 10) Form FIN-3.1: Financial Situation and Performance with attachments 11) Form FIN- 3.2: Average Annual Construction Turnover 12) Form FIN- 3.3: Financial Resources 13) Form EXP- 4.1: General Construction Experience 14) Form EXP-4.2 (a): Specific Construction Contract Management Experience 15) Form EXP - 4.2(b): Construction Experience in Key Activities

	16) Form EXP - 4.2(c): Specific Experience in Managing ES Aspects 17) Letter of Bid - Technical Part 18) Form PER -1: Key Personnel Schedule 19) Form PER-2: Resume and Declaration 20) Forms for Equipment 21) Construction methodology
d	The priced Bill of Quantities shall be submitted with the bid as part of Financial proposal.
ITB 11.3 (d)	The Bidder shall submit the following additional documents in its Bid: - Nil
ITB 12	Note for Bidders: Bidders have to submit the bids on the e-procurement portal along with the relevant required documents. For this purpose, the bidders shall fill up online, the forms that are available for online filling on the e-portal. The rest of the forms shall be download by the bidders and filled up. The filled-up pages shall then be scanned and uploaded on the e-procurement portal along with the scanned copies of the supporting documents.
ITB 12.3	For submission of original documents, the Employer's address is: Project Implementation Unit (PIU) MSWC, SMART Project, Maharashtra State Warehousing Corporation, 583/B, Market Yard, Gultekadi, Pune- 37 Country: INDIA
ITB 13.1	Alternative Bids <i>shall not be</i> permitted.
ITB 13.2	Alternative times for completion <i>shall not be</i> permitted.
ITB 13.3	Not Applicable
ITB 13.4	Alternative technical solutions shall not be permitted for any parts of the Works.
ITB 14.7	The rates quoted by the contractor shall be deemed to be inclusive of all taxes, duties, cess, that the contractor will have to pay for performance of this contract. The employer will perform such duties in regard to the deduction of such taxes at sources as per applicable law. Rates should be exclusive of GST.
ITB 18.1	The Bid validity period shall be 120 days.
ITB 19.1	The Bidder shall furnish a Bid Security (EMD) in the form of Bank guarantee. or Demand Draft.
ITB 19.3 (d)	<i>Not Applicable</i>
ITB 19.9	3 Years
ITB 20.3	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: legally enforceable valid power of attorney duly attested by a Notary.
D. Online Submission and Opening of Bids	

ITB 21.1	Class of DSC required is: Class –III Bidders shall submit their Technical and Financial bids online on the e-procurement system.
ITB 22.1	Bidders have to submit their bids electronically on https://mahatenders.gov.in as per the date specified in the procurement notice.
ITB 24.1	Re-submission of the bid is not allowed, if withdrawn.
E. Public Opening of Technical Parts of Bids	
ITB 25.1	The online Bid opening of Technical Parts of Bids shall take place at: Place: The Chairman & Managing Director, Maharashtra State Warehousing Corporation & Head PIU-MSWC (SMART Project), 583/B, Market Yard, Gultekadi City: Pune PIN/Postal Code: 411037. Country: India Date and time as mentioned in the tender notice.
F. Evaluation of Bids – General Provisions	
ITB 29.3	The adjustment shall be based on the highest price of the item or component as quoted in other substantially responsive Bids, subject to a maximum of the estimated price of the item. If the price of the item or component cannot be derived from the price of other substantially responsive Bids, the Employer shall use its best estimate.
G. Evaluation of Bids - Technical Parts	
ITB 33.1	At this time the Employer does not intend to execute certain specific parts of the Works by subcontractors selected in advance.
ITB 33.2	<i>Not Applicable</i>
ITB 33.3	<i>Not Applicable</i>
H. Public Opening of Financial Parts	
ITB 34.2 (c)	Following the completion of the evaluation of the Technical Parts of the Bids, the Employer will upload results of technical evaluation and shall

	notify all Bidders of the date, time, and location of the public opening of Financial Parts. https://mahatenders.gov.in The online bid opening of Financial Parts of Bids shall take place at: The Chairman & Managing Director, Maharashtra State Warehousing Corporation & Head PIU-MSWC (SMART Project), 583/B, Market Yard, Gultekadi City: Pune PIN/Postal Code: 411037. Country: India

I. Evaluation of Bids - Financial Parts

ITB 40.2	The successful bidder as specified in GCC/ PCC 54.1 In the event of identification of a potentially Abnormally Low Bid, the following procedure shall be followed: 1. Seeking Clarifications: The Employer shall seek written clarifications from the Bidder, including detailed price analysis of its Bid price in relation to the subject matter of the contract, scope of work, proposed methodology, work schedule, allocation of risks and responsibilities, and compliance with all requirements of the bidding document. 2. Evaluation of Justification: The Employer shall examine the detailed breakdown, supporting documents, and explanations furnished by the Bidder to determine whether the Bidder has the capability and resources to perform the contract at the quoted price. 3. Additional Performance Security: If the justification is found acceptable but the Bid is still considered Abnormally Low, the Employer may require the Bidder to submit Additional Performance Security in an amount determined by the Employer, as a condition for award of the contract. The additional Performance security is as follows <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; padding: 5px;">If the offer submitted is up to 10 % below estimated cost</td><td style="padding: 5px;">1 % of the estimated cost put to tender</td></tr> <tr> <td style="padding: 5px;">for offer more than 10 % below up to 15 % below the estimated cost</td><td style="padding: 5px;">1% of the estimated cost put to tender plus an amount equal to the percentage by which the offer is below 10% of the estimated cost put to tender. [e.g.1- if the offer is 14.50% below, the Performance Security will be 1% + (14.50-10.00=4.5) 4.5= 5.5 % of the estimated cost put to tender.] [e.g if the offer is 15.00% below, the Performance Security will be 1% + (15.00-10.00=5) 5= 6.00 % of the estimated cost put to tender.]</td></tr> </table>	If the offer submitted is up to 10 % below estimated cost	1 % of the estimated cost put to tender	for offer more than 10 % below up to 15 % below the estimated cost	1% of the estimated cost put to tender plus an amount equal to the percentage by which the offer is below 10% of the estimated cost put to tender. [e.g.1- if the offer is 14.50% below, the Performance Security will be 1% + (14.50-10.00=4.5) 4.5= 5.5 % of the estimated cost put to tender.] [e.g if the offer is 15.00% below, the Performance Security will be 1% + (15.00-10.00=5) 5= 6.00 % of the estimated cost put to tender.]
If the offer submitted is up to 10 % below estimated cost	1 % of the estimated cost put to tender				
for offer more than 10 % below up to 15 % below the estimated cost	1% of the estimated cost put to tender plus an amount equal to the percentage by which the offer is below 10% of the estimated cost put to tender. [e.g.1- if the offer is 14.50% below, the Performance Security will be 1% + (14.50-10.00=4.5) 4.5= 5.5 % of the estimated cost put to tender.] [e.g if the offer is 15.00% below, the Performance Security will be 1% + (15.00-10.00=5) 5= 6.00 % of the estimated cost put to tender.]				

	for offer more than 15 % below the estimated cost	2 % of the estimated cost put to tender plus an amount equal for to the percentage by which the offer is below 15 % of the estimated cost put to tender. e.g. 1- if the offer is 16 % below, the performance security will be $(16-15=1 \times 2=2)$ $6+2=8$ % of the estimated cost put to tender. e.g. 2- if the offer is 19 % below, the performance security will be $(19-15=4 \times 2=8)$ $6+8=14$ % of the estimated cost put to tender. e.g. 3- if the offer is 25 % below, the performance security will be $(25-15=10 \times 2=20)$ $6+20=26$ % of the estimated cost put to tender. e.g. 4- if the offer is 26.25 % below, the performance security will be $(26.25-15=11.25 \times 2=22.50)$ $= 6+22.50= 28.50$ % of the estimated cost put to tender.	
	4.		
J. Award of Contract			
ITB 50.1 and 50.2	The successful Bidder shall also be required to submit an Environmental and Social (ES) Performance Security. Throughout this bidding document the term ‘performance security’, unless the context clearly indicates otherwise, means and includes both the Performance Security (2%) and an Environmental and Social (ES) Performance Security (1%) and there to be submitted by the successful bidder in the amounts specified in GCC/ PCC 54.		
ITB 51	The Adjudicator proposed by the Employer is: The Adjudicator will be appointed jointly by the Employer and the Contractor, at the time of dispute.		

Section III - Evaluation and Qualification Criteria

This section contains all the criteria that the Employer shall use to evaluate Bids and qualify Bidders through post-qualification. No other factors, methods or criteria shall be used other than specified in this bidding document. The Bidder shall provide all the information requested in the forms included in Section IV, Bidding Forms.

Table of Criteria

1 Technical Part

2 Financial Part

I. Technical Part

1.1 Adequacy of Technical Proposal

Evaluation of the Bidder's Technical Proposal will include

(i) an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, material sourcing, and quality control/ assurance in sufficient detail and fully in accordance with the requirements stipulated in Section VII, Works' Requirements.

For this purpose, the Bidder should also submit:

A detailed note outlining its proposed methodology and program of construction including Contractor's Environmental and Social, Health Management Strategies and Implementation Plans (ES-MSIP), backed with equipment, materials and manpower planning and deployment, duly supported with broad calculations and quality control system/assurance procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.

(ii) Deleted

(iii) Deleted

1.2 Alternative Technical Solutions for specified parts of Works (ITB 13.4) – Not Applicable

1.3 Specialized Subcontractors

Not applicable

2.1 Qualification Criteria

Pursuant to ITB 32.1, the Employer shall assess each Bid against the following Qualification Criteria. Requirements not included in the text below shall not be used in the evaluation of the Bidder's qualifications.

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
1. Eligibility							
1.1	Nationality	Nationality in accordance with ITB 4.4	Must meet requirement	N/A	N/A	N/A	Forms ELI – 1.1 with attachments
1.2	Conflict of Interest	No conflicts of interest in accordance with ITB 4.2	Must meet requirement	N/A	N/A	N/A	Letter of Bid
1.3	Bank Eligibility	Not having been declared ineligible by the Bank, as described in ITB 4.5.	Must meet requirement	N/A	N/A	N/A	Letter of Bid
1.4	State-owned enterprise or institution of the Borrower country	Meets conditions of ITB 4.6	Must meet requirement	N/A	N/A	N/A	Forms ELI – 1.1 with attachments
1.5	United Nations resolution or Borrower’s country law	Not having been excluded as a result of prohibition in the Borrower’s country laws or official regulations against commercial relations with the Bidder’s country, or by an act of compliance with UN Security Council resolution, both in accordance with ITB 4.8 and Section V.	Must meet requirement	N/A	N/A	N/A	Forms ELI – 1.1 with attachments
1.6	Contractor Forwarding letter	Contractor Forwarding letter with address, mobile number, Email Id and stating that tender is unconditional.	Must meet requirement	N/A	N/A	N/A	

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
2. Historical Contract Non-Performance							
2.1	History of Non-Performing Contracts	Non-performance of a contract did not occur as a result of contractor default since 1 st January 2020	Must meet requirement	N/A	N/A	N/A	Form CON-2
2.2	Suspension Based on Execution of Bid/ Proposal Securing Declaration by the Employer or withdrawal of the Bid within Bid validity period	Not under suspension based on execution of a Bid/ Proposal Securing Declaration pursuant to ITB 4.7 or withdrawal of the Bid pursuant ITB 19.9	Must meet requirement	N/A	N/A	N/A	Letter of Bid
2.3	Pending Litigation	Bidder’s financial position and prospective long-term profitability sound according to criteria established in 3.1 below and assuming that all pending litigation will be resolved against the Bidder	Must meet requirement	N/A	N/A	N/A	Form CON – 2
2.4	Litigation History	No consistent history of court/arbitral award decisions against the Bidder since 1 st January 2020	Must meet requirement	N/A	N/A	N/A	Form CON – 2

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
2.5	Declaration: Environmental and Social (ES) past performance	Declare any contracts that have been suspended or terminated and/or performance security called by an employer for reasons of breach of environmental, or social (including Sexual Exploitation, and Abuse) contractual obligations in the past five years.	Must make the declaration.	N/A	N/A	N/A	Form CON-3 ES Performance Declaration
3. Financial Situation and Performance							
3.1	Financial Capabilities	(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements of minimum Rs. 3.75 Cr for the subject contract(s) net of the Bidder's other commitments	Must meet requirement	N/A	N/A	N/A	Form FIN – 3.1, with attachments Form Fin 3.3
		(ii) The Bidders shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.	Must meet requirement	N/A	N/A	N/A	Form FIN – 3.1, with attachments Form Fin 3.3

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
		(iii) The audited balance sheets for the financial years, 2020-2021, 2021-22,2022-23,2023-24,2024-25 shall be submitted and must demonstrate the current soundness of the Bidder's financial position and indicate its prospective long-term profitability.	Must meet requirement	N/A	N/A	N/A	Form FIN – 3.1, with attachments Form Fin 3.3
3.2	Average Annual Construction Turnover for the last five years	Minimum average annual construction turnover of Rs.12.42 Cr , calculated as total certified payments received for contracts in progress and/or completed within the last five financial years including, divided by last five years (i.e.2020-2021, 2021-22, 2022-23, 2023-24, 2024-25)	Must meet requirement	N/A	N/A	N/A	Form FIN – 3.2
3.3	GST	Goods & Service Tax (GST) Registration Certificate	Must meet requirement	N/A	N/A	N/A	GST registration certificate
4. Experience							
4.1	General Construction Experience	Experience under construction contracts (indicate details of acceptable similar works/building work) in the role of prime contractor.	Must meet requirement	N/A	N/A	N/A	Form EXP – 4.1 (along with for Govt &semi Govt work done -Work done certificate, Quantity Certificate. For Private work done -Work order, Completion Certificate, Form TDS 26AS or other relevant documents.)

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
4.2 (a)	Specific Construction & Contract Management Experience	The Bidder must have successfully completed similar type of building works as a contractor during the period from 1st April 2020 up to the last date of bid submission. - Three completed similar works / building work each costing not less than the amount equal to Rs. 497 Lakh (Without GST). OR - Two completed similar works /building work each costing not less than the amount equal to Rs. 745 Lakh (Without GST). OR - One completed similar works /building work costing not less than the amount equal to Rs. 994 Lakh. (Without GST). Note – similar nature of work means PEB warehouse bldg./ PEB industrial bldg.	Must meet requirement	N/A	N/A	NA	Form EXP 4.2(a)

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements									
				All members Combined	Each Member	At least one Member										
4.2 (b)	Construction Work	For the above and any other contracts substantially completed or under implementation as a contractor, joint venture member, or sub-contractor during the period from 1st April 2020 up to the last date of bid submission, the Bidder must demonstrate minimum construction experience in the following key activities of similar works as specified under Clause 4.2(a) and successfully completed during the same period: Execution of minimum quantities of major components of work in <table><tr><th>Sr. No.</th><th>Items</th><th>Quantity</th></tr><tr><td>1.</td><td>Pre-engineered building</td><td>1680 Sq. Meter or Minimum cap.3000MT PEB Warehouse</td></tr><tr><td>2.</td><td>Concrete work of</td><td>600 Cubic Meter</td></tr></table>	Sr. No.	Items	Quantity	1.	Pre-engineered building	1680 Sq. Meter or Minimum cap.3000MT PEB Warehouse	2.	Concrete work of	600 Cubic Meter	Must meet requirements	N/A	N/A	NA	Form EXP – 4.2 (b)
Sr. No.	Items	Quantity														
1.	Pre-engineered building	1680 Sq. Meter or Minimum cap.3000MT PEB Warehouse														
2.	Concrete work of	600 Cubic Meter														

No.	Subject	Requirement			Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
						All members Combined	Each Member	At least one Member	
			grade M-25 and above grade						
		3	TMT Steel - FE - 500	39 MT					
		4	BBM - Burnt Brick masonry	208 Cubic Meter					
4.2 (c)	Specific Experience in managing ES aspects				Not Mandatory	--	--	--	Form EXP – 4.2 (c)
4.2 (d)	Bid Capacity	Available Bid Capacity should be more than value of the Contract applied for			Must meet requirement	N/A	N/A	N/A	C.A. Certification with UDIN number
4.3	Declaration on agency letter head	Must meet requirement			Must meet requirement	N/A	N/A	N/A	Form No.4.3
4.2 (d)	Bid Capacity: The available bid capacity will be calculated as under: Assessed Available bid capacity = (A*N*2-B) Where, A = Maximum value of civil engineering works executed in any one year during the last five years (updated to the price level of the financial year at the rate of 10% per year w.r.t. 2024-25 will be considered as base year) (taking into account the completed as well as works in progress). N = Number of years prescribed for construction (excluding any maintenance/ operations period) of the works for which bids are invited								

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
	(period up to 6 months to be taken as half-year and more than 6 months as one year). B = Value, at the current price level, of existing commitments and on-going works to be completed during the period of completion of the works for which bids are invited. Note: the statements in Section IV showing the value of existing commitments of on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer in charge, not below the rank of an Executive Engineer or equivalent. The same should be demonstrated by letter of CA with UDIN number.						

3.1 Key Personnel

The Bidder must demonstrate that it will have suitably qualified (and in adequate numbers) minimum Key Personnel, as described in the Table below, that are required to perform the Contract.

The Bidder shall provide details of the Key Personnel and such other Key Personnel that the Bidder considers appropriate, together with their academic qualifications and work experience. The Bidder shall complete the relevant Forms in Section IV, Bidding Forms.

The Contractor shall require the Employer's consent to substitute or replace the Key Personnel (reference the Particular Conditions of Contract 9.1).

Key Personnel

Item No.	Position/ specialization	Relevant academic qualifications	Minimum years of relevant work experience	In case of JV, to be proposed by
1	Project Manager & Team Leader	B E /B.Tech (Civil or equivalent)	7 Years	Any Member
2	Site Engineer	B.E.(Civil or equivalent)	5 Years	Any Member
3	Site supervisor	ITI or Diploma	3 Years	Any Member

The Bidder must not have in his employment:

[i] the near relations (defined as first blood relations, and their spouses, of the bidder or the bidder's spouse) of persons of the following Government Departments.

[ii] without Government permission, any person who retired as gazette officer within the last two years.

[Note:

The managerial and technical competence of a contractor is largely related to the key personnel on site. The extent to which the Bidder should demonstrate having staff with extensive experience should be limited to those requiring critical operational or technical skills. The criteria should therefore refer to a limited number of such key personnel, for instance, the project or contract manager and others working under the project manager who will be responsible for major

components (e.g. specialized in dredging, piling, earthworks, ES obligations, as required for each particular project). Criteria of acceptability should be based on:

- (a) a minimum number of years of experience in a similar position; and
- (b) a minimum number of years of experience and/or number of comparable projects carried out in a specified number of preceding years.]

4.1 Equipment

The Bidder must demonstrate that it will have access to the key Contractor's equipment listed hereafter:

Sl. No.	Type of Equipment	Capacity	Number required	Own/ Hired
1	Poclaim/ JCB Excavator	---	1	Hired
2	Water Tanker	--	1	Owned
3	Dump Truck	--	2	Owned
4	Concrete Mixer with Integral Weigh Batching Facility (Ajax or any self-loading concrete Mixture)	2 to 4 Cum	1	Owned
5	Hydra	--	1	Hired
6	Vibratory roller	Min 10 MT	1	Hired
7	Auto-Level with Micrometer	--	1	Owned

[NOTE:

Based on the studies, carried out by the Project Manager the minimum suggested major equipment to attain the completion of works in accordance with the prescribed construction schedule is shown in the above list. The bidders should, however, undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with layout and necessary drawings and calculations (detailed) as stated in Section IV to allow the employee to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.]

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section IV.

5.1 Multiple Contracts: 'Not Applicable'

II Financial Part

The Employer shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid. The Most Advantageous Bid is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be: Substantially responsive to the bidding document; and The lowest evaluated cost. (cost of all items together)

2.1 Margin of Preference - Not Applicable

2.2 Multiple Contracts - Not Applicable

2.3 Sustainable procurement (Section VII - Specifications) – Not Applicable

2.4 Alternative Completion Times (ITB 13.2) - Not Applicable

2.5 Alternative Technical Solutions for specified parts of the Works (ITB 13.4) - Not Applicable

2.6 Other criteria (if permitted under ITB 35.1(f)): - Not Applicable

Section IV - Bidding Forms

Letter of Bid – Technical Part

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

The Bidder must prepare this Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Note: All italicized text is to help Bidders in preparing this form.

Date of this Bid submission: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *[insert number of RFB process]*

To: *[insert complete name of Employer]*

We, the undersigned, hereby submit our Bid, in two parts, namely:

- (a) the Technical Part, and
- (b) the Financial Part

In submitting our Bid, we make the following declarations:

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including Addenda issued in accordance with ITB 8;
- (b) **Eligibility:** We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) **Bid-Securing Declaration:** We have not been suspended nor declared ineligible by the Employer based on execution of a Bid-Securing Declaration or Proposal-Securing Declaration in the Employer's Country in accordance with ITB 4.7
- (d) **Conformity:** We offer to execute in conformity with the bidding document the following Works: *[insert a brief description of the Works]*
- (e) **Bid Validity Period:** Our Bid shall be valid for a period specified in BDS ITB 18.1 (or as amended if applicable) from the date fixed for the Bid submission deadline specified in BDS 22.1 (or as amended if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) **Performance Security:** If our Bid is accepted, we commit to obtain a performance security in accordance with the bidding document;
- (g) **One Bid Per Bidder:** We are not submitting any other Bid(s) as an individual Bidder or as a subcontractor, and we are not participating in any other Bid(s) as a Joint Venture member, and meet the requirements of ITB 4.3, other than alternative Bids submitted in accordance with ITB 13;

- (h) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Employer's Country laws or official regulations or pursuant to a decision of the United Nations Security Council;
- (i) **State-owned enterprise or institution:** We are not a state-owned enterprise or institution/ We are a state-owned enterprise or institution but meet the requirements of ITB 4.6¹;
- (j) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (k) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Bid, the Most Advantageous Bid or any other Bid that you may receive; and
- (l) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption; and
- (m) **Adjudicator:** We accept to appoint adjudicator jointly by the Employer and the Contractor, at the time of dispute.

Name of the Bidder: **[insert complete name of person signing the Bid]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder: ***[insert complete name of person duly authorized to sign the Bid]*

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing]* **day of** *[insert month]*, *[insert year]*

*****: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

******: Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid

¹ Use one of the two options as appropriate

Technical Proposal

Technical Proposal Forms

- **Key Personnel Schedule**
- **Equipment**
- **ES Management Strategies and Implementation Plans**
- **Code of Conduct for Contractor's Personnel (ES)**
- **Bidder's Qualification**
- **Form of Bid Security - Bank Guarantee/ *Demand Draft***
- **Form of AFFIDAVIT**
- **Form of DECLARATION OF THE CONTRACTORS**

Appendix to Technical Part: Personnel

Forms for Personnel

Form PER – 1: Key Personnel Schedule

Bidders should provide the names and details of the suitably qualified Key Personnel to perform the Contract. The data on their experience should be supplied using the Form PER-2 below for each candidate.

Key Personnel

1.	Title of position:	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
2.	Title of position:	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
3.	Title of position:	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>

Appendix to Technical Part

Form PER-2: Resume and Declaration

Key Personnel

Name of Bidder		
Position [#1]: <i>[title of position from Form PER-1]</i>		
Personnel information	Name:	Date of birth:
	Address:	E-mail:
	Professional qualifications:	
	Academic qualifications:	
	Language proficiency: <i>[language and levels of speaking, reading and writing skills]</i>	
details	Address of employer:	
	Telephone:	Contact (manager / personnel officer):
	Fax:	
	Job title:	Years with present employer:

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Project	Role	Duration of involvement [From - To]	Relevant experience
<i>[main project details]</i>	<i>[role and responsibilities on the project]</i>	<i>[time in role]</i>	<i>[describe the experience relevant to this position]</i>

Declaration

I, the undersigned Key Personnel, certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

I confirm that I am available as certified in the following table and throughout the expected time schedule for this position as provided in the Bid:

Commitment	Details
Commitment to duration of contract:	<i>[insert period (start and end dates) for which this Key Personnel is available to work on this contract]</i>
Time commitment:	<i>[insert the number of days/week/months/ that this Key Personnel will be engaged]</i>

I understand that any misrepresentation or omission in this Form may:

- (a) be taken into consideration during Bid evaluation;
- (b) result in my disqualification from participating in the Bid;
- (c) result in my dismissal from the contract.

Name of Key Personnel: *[insert name]*

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Bidder:

Signature: _____

Date: (day month year): _____

Appendix to Technical Part: Equipment

Forms for Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder. The Bidder shall provide all the information requested below, to the extent possible. Fields with asterisk (*) shall be used for evaluation.

Type of Equipment*		
Equipment Information	Name of manufacturer,	Model and power rating
	Capacity*	Year of manufacture*
Current Status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment	

The following information shall be provided only for equipment not owned by the Bidder.

Owner	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental / lease / manufacture agreements specific to the project	

Appendix to Technical Part

Site Organization

[insert Site Organization information]

Appendix to Technical Part

Method Statement

[insert method Statement – A detailed note should be submitted outlining bidders proposed methodology and program of construction including Contractor’s Environmental and Social, Health Management Strategies and Implementation Plans (ES-MSIP), backed with equipment, materials and manpower planning and deployment, duly supported with broad calculations and quality control system/assurance procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones]

Appendix to Technical Part

Mobilization Schedule

[insert Mobilization Schedule]

In accordance with the Particular Conditions, Sub-Clause 16.2, the Contractor shall not carry out mobilization to Site unless the Project manager gives consent that appropriate measures are in place to address environmental and social risks and impacts, which as a minimum shall include applying the Management Strategies and Implementation Plans (MSIPs) and Code of Conduct for Contractor's Personnel, submitted as part of the Bid and agreed as part of the Contract.

Appendix to Technical Part

Construction Schedule

[insert Construction Schedule]

The construction schedule shall include the following key milestone - No-objection to the Code of Conduct for Contractor's Personnel and Contractor's MSIPs, which collectively form the C-ESMP, in accordance with the Particular Conditions of Contract Sub-Clause 16.2.

Appendix to Technical Part

Environmental and Social, Health Management Strategies and Implementation Plans

(ES-MSIP)

The Bidder shall submit comprehensive and concise Environmental and Social Management Strategies and Implementation Plans (ES-MSIP) as required by ITB 11.2 (j) of the Bid Data Sheet. These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Contractor.

In developing these strategies and plans, the Bidder shall have regard to the ES provisions of the contract including those as may be more fully described in the Works Requirements in Section VII.

Appendix to Technical Part

Code of Conduct for Contractor's Personnel (ES) Form

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We are the Contractor, *[enter name of Contractor]*. We have signed a contract with *[enter name of Employer]* for *[enter description of the Works]*. These Works will be carried out at *[enter the Site and other locations where the Works will be carried out]*. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse and sexual harassment.

This Code of Conduct is part of our measures to deal with environmental and social risks

Note to the Bidder:

The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified. However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Bidder shall initial and submit the Code of Conduct form as part of its bid.

related to the Works. It applies to all our staff, laborers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as “**Contractor's Personnel**” and are subject to this Code of Conduct.

This Code of Conduct identifies the behavior that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Contractor's Personnel shall:

1. carry out his/her duties competently and diligently;
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. maintain a safe working environment including by:

- a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
 - b. wearing required personal protective equipment;
 - c. using appropriate measures relating to chemical, physical and biological substances and agents; and
 - d. following applicable emergency operating procedures.
4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
6. not engage in Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
8. not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation, and Abuse (SEA) and Sexual Harassment (SH);
11. report violations of this Code of Conduct; and
12. Not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism.

RAISING CONCERNS

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the Contractor's Social Expert with relevant experience in handling gender-based violence, or if such person is not required under the Contract, another individual designated by the Contractor to handle these matters*] in writing at this address [] or by telephone at [] or in person at []; or
2. Call [] to reach the Contractor's hotline (*if any*) and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Contractor's contact person with relevant experience*] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Contractor:

Signature: _____

Date: (day month year): _____

ATTACHMENT 1: Behaviors constituting Sexual Exploitation and Abuse (SEA) and behaviors constituting Sexual Harassment (SH)

ATTACHMENT 1 TO THE CODE OF CONDUCT FORM
BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND BEHAVIORS
CONSTITUTING SEXUAL HARASSMENT (SH)

The following non-exhaustive list is intended to illustrate types of prohibited behaviors:

(1) Examples of sexual exploitation and abuse include, but are not limited to:

- A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
- A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favor.
- A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) Examples of sexual harassment in a work context

- Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
- When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor's Personnel.
- A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

Others
Appendix to Technical Part
Sub-Contracting
(Deleted)

Appendix to Technical Part

Bidder's Qualification

To establish its qualifications to perform the contract in accordance with Section III (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder

Appendix to Technical Part

Form ELI -1.1: Bidder Information Form

Date: _____

RFB No. and title: _____

Page _____ of _____ pages

Bidder's legal name
In case of Joint Venture (JV), legal name of each member:
Bidder's actual or intended country of registration: <i>[indicate country of Constitution]</i>
Bidder's actual or intended year of incorporation:
Bidder's legal address [in country of registration]:
Bidder's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.4. ☐ Authorization to represent the firm or JV named in above, in accordance with ITB 20. ☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. ☐ In case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing: • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not under the supervision of the Employer 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Appendix to Technical Part

Form CON – 2: Historical Contract Non-Performance, Pending Litigation and Litigation History

[to be completed for the Bidder and for each member of a Joint Venture]

Bidder's Name: _____

Date: _____

Joint Venture Member's Name: _____

RFB No. and title: _____

Page _____ of _____ page

Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria			
☐ Contract non-performance did not occur since 1 st January 2020 <i>specified</i> in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.1.			
☐ Contract(s) not performed since 1 st January 2020 specified in Section III, Evaluation and Qualification Criteria, requirement 2.1			
Year	Non-performed portion of contract	Contract Identification	Total Contract Amount (Rs.)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for non-performance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
Pending Litigation, in accordance with Section III, Evaluation and Qualification Criteria			
☐ No pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3.			
☐ Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3 as indicated below.			

Year of dispute	Amount in dispute (Rs.)	Contract Identification	Total Contract Amount (Rs.)
<i>[insert year]</i>	<i>[insert amount]</i>	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Employer" or "Contractor"]</i> Status of dispute: <i>[Indicate if it is being treated by the Adjudicator, under Arbitration or being dealt with by the Judiciary]</i>	<i>[insert amount]</i>
<i>[insert year]</i>	<i>[insert amount]</i>	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Employer" or "Contractor"]</i> Status of dispute: <i>[Indicate if it is being treated by the Adjudicator, under Arbitration or being dealt with by the Judiciary]</i>	<i>[insert amount]</i>
Litigation History in accordance with Section III, Evaluation and Qualification Criteria			
☐ No Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4.			

☐ Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4 as indicated below.			
Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (Rs.)
<i>[insert year]</i>	<i>[insert percentage]</i>	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Employer" or "Contractor"]</i> Reason(s) for Litigation and award decision <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>

Appendix to Technical Part

Form CON – 3: Environmental and Social (ES) Performance Declaration

[The following table shall be filled in for the Bidder, each member of a Joint Venture and each Specialized Subcontractor]

Bidder's Name: _____ *[insert full name]*

Date: _____ *[insert day, month, year]*

Joint Venture Member's or Specialized Subcontractor's Name: _____ *[insert full name]*

RFB No. and title: _____ *[insert RFB number and title]*

Page _____ *[insert page number]* of _____ *[insert page number]* pages

Environmental and Social Performance Declaration in accordance with Section III, Qualification Criteria, and Requirements			
☐ No suspension or termination of contract: An employer has not suspended or terminated a contract and/or called the performance security for a contract for reasons related to Environmental or Social (ES) performance since the date specified in Section III, Qualification Criteria, and Requirements, Sub-Factor 2.5.			
☐ Declaration of suspension or termination of contract: The following contract(s) has/have been suspended or terminated and/or Performance Security called by an employer(s) for reasons related to Environmental or Social (ES) performance since the date specified in Section III, Qualification Criteria, and Requirements, Sub-Factor 2.5. Details are described below:			
Year	Suspended or terminated portion of contract	Contract Identification	Total Contract Amount (Rs.)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s) e.g. for gender-based violence; sexual exploitation or sexual abuse breaches]</i>	<i>[insert amount]</i>

<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
...	...	<i>[list all applicable contracts]</i>	...

Performance Security called by an employer(s) for reasons related to ES performance

Year	Contract Identification	Total Contract Amount (Rs.)
<i>[insert year]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for calling of performance security: <i>[indicate main reason(s) e.g. for gender-based violence; sexual exploitation or sexual abuse breaches]</i>	<i>[insert amount]</i>

Appendix to Technical Part

Form CCC: Current Contract Commitments / Works in Progress

Bidders and each member of a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

(A) Existing commitments and on-going works:

Description of Work	Place & State	Contract No. & Date	Name and Address of Employer	Value of Contract (Rs. equivalent in million)	Stipulated period of completion	Value of works ¹ remaining to be completed (Rs. equivalent in million)	Anticipated date of completion	Average Monthly Invoicing Over Last Six Months (Rs. /month) Equivalent in millions)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

(B) Works for which bids already submitted and likely to be awarded – expected additional commitment.

¹ Attach certificate(s) from the Engineer(s)-in-Charge.

Description of Work	Place & State	Name and Address of Employer	Estimated value of Works (Rs. equivalent in million)	Stipulated period of completion	Date when decision is expected	Remarks, if any
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Appendix to Technical Part

Form FIN – 3.1: Financial Situation and Performance

[To be completed by the Bidder and by each member of a Joint Venture]

Bidder's Legal Name: _____

Date: _____

JV Member Legal Name: _____

RFB No. and title: _____

Page _____ of _____ pages

1. Financial data

Type of Financial information in (Rs.)	Historic information for previous 5 years, (Amount in Rs.)				
	Year 1 2024-25	Year 2 2023-24	Year 3 2022-23	Year 4 2021-22	Year 5 2020-21
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					
This information should be extracted from the Annual Financial Statements/ Balance sheets, which should be enclosed. Year 1 will be the latest year for which audited financial statements are available. Year 2 shall be the year immediately preceding year 1 and year 3 shall be the year immediately preceding Year 2.					

2. Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount (Rs.)
1		
2		
3		

3. Financial documents

The Bidder and its parties shall provide copies of financial statements for **Five** years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.2. The financial statements shall:

- (a) reflect the financial situation of the Bidder or in case of JV member, and not an affiliated entity (such as parent company or group member).
- (b) be independently audited or certified in accordance with local legislation. In case of Indian bidders, the financial statements shall be audited by a certified chartered accountant.
- (c) be complete, including all notes to the financial statements.
- (d) correspond to accounting periods already completed and audited.

☐ Attached are copies of financial statements⁴ (balance sheets, including all related notes, and income statements) for the 5 years required above; and complying with the requirements

⁴ If the most recent set of financial statements is for a period earlier than 12 months from the date of bid, the reason for this should be justified.

Appendix to Technical Part

Form FIN - 3.2: Average Annual Construction Turnover

Bidder's Legal Name: _____

Date: _____

Joint Venture Member's Legal Name.....

RFB No. and title: _____

Page _____ of _____ pages

Annual turnover data (construction only)	
Year	Amount in Rs.
<i>[indicate year]</i>	<i>[insert amount]</i>
Year-1: 2020-21	
Year-2: 2021-22	
Year-3: 2022-23	
Year-4: 2023-24	
Year-5: 2024-25	
Average Annual Construction Turnover *	

* See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2. Annual construction turnover calculated as total certified payments received for work in progress or completed, for 5 years. **This should be certified by a Chartered Accountant with UDIN.**

Appendix to Technical Part

Form FIN - 3.3: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specified in Section III, Evaluation and Qualification Criteria.

Source of financing	Amount (Rs.)
1.	
2.	
3.	
4.	

FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CASH FLOW

[To be given from a Nationalized or Scheduled Bank in India]

Clause 3.1(ii) of Section III – Qualification Criteria

(1) AVAILABILITY OF CASH FLOW (WORKING CAPITAL)

This is to certify that M/s. _____ is a reputed company with a good financial standing.

If the contract for the works, namely _____ [funded by the World Bank] is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. equivalent _____ to meet their capital requirements for executing the above contract.

-- Sd. --

Name of Bank Manager

Senior Bank Manager

Address of the Bank

Change the text as follows for Joint venture:

This is to certify that M/s. who has formed a JV with M/s.

..... and M/s. for participating in this bid, is a reputed company with a good financial standing.

If the contract for the work, namely[funded by the World Bank] is awarded to the above Joint Venture, we shall be able to provide overdraft/credit facilities to the extent of Rs. to meet the working capital requirements for executing the above contract.

[This should be given by the JV members in proportion to their financial participation.]

-- Sd. --

Name of Bank Manager

Senior Bank Manager

Address of the Bank

Appendix to Technical Part

Form EXP - 4.1: General Construction Experience

[The following table shall be filled in for the Bidder and for each member of a Joint Venture]

Bidder's Legal Name: _____

Date: _____

Joint Venture Member's Legal Name _____

RFB No. and title: _____

Page _____ of _____ pages

[Identify contracts that demonstrate continuous construction work over the past [5] years pursuant to Section III, Qualification Criteria and Requirements, Sub-Factor 4.1. List contracts chronologically, according to their commencement (starting) dates.]

Starting Month/ Year	Ending Month/ Year	Contract Identification	Role of Bidder <i>["Contractor" or "JV Member" or "Subcontractor" or "Contract"]</i>
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	

Appendix to Technical Part

Form EXP - 4.2(a): Specific Construction and Contract Management Experience

[The following table shall be filled in for contracts performed by the Bidder, each member of a Joint Venture, and specialist sub-contractors]

Bidder's Legal Name: _____

Date: _____

Joint Venture Member's Legal Name _____

RFB No. and title: _____

Page _____ of _____ pages

Work performed as prime Contractor or JV Member or Sub-Contractor or Management Contractor (in the same name and style) on construction works of a similar nature and volume over the last five years⁵.
[Attach certificate from the Engineer-in-charge.]

Similar Contract No.	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount	Rs. *			
If member in a JV or subcontractor, specify participation in total Contract amount			*	
Employer's Name:				
Address:				
Telephone/fax number				
E-mail:				

⁵ Immediately preceding the financial year in which bids are received.

Appendix to Technical Part
Form EXP - 4.2(a) (cont.)
Specific Construction and Contract Management Experience (cont.)

Similar Contract No.	Information
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:	
1. Amount	
2. Physical size of required works items	
3. Complexity	
4. Methods/Technology	
5. Construction rate for key activities	
6. Other Characteristics	

Appendix to Technical Part

Form EXP - 4.2 (b): Construction Experience in Key Activities

[The following table shall be filled in for contracts performed by the Bidder, each member of a Joint Venture, and specialist sub-contractors]

Bidder's Legal Name: _____

Date: _____

Joint Venture Member's Legal Name _____

RFB No. and title: _____

Page _____ of _____ pages

1. Key Activity No One: _____

	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount	Rs.			
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year in the last 5 years	Total quantity in the contract (i)	Percentage participation (ii)	Actual Quantity Performed (i) x (ii)	
Year 1				
Year 2				
Year 3				
Year 4				
Year 5				

	Information
Employer's Name ⁶ :	
Address:	
Telephone/fax number	
E-mail:	

2. Activity No. Two

3.

	Information
Description of the key activities in accordance with Sub-Factor 4.2(c) of Section III:	

⁶ Attach certificate from the Engineer-in-charge

Appendix to Technical Part

Form EXP - 4.2(c)

Specific Experience in Managing ES aspects

[The following table shall be filled in for contracts performed by the Bidder, and each member of a Joint Venture]

Bidder's Name: _____

Date: _____

Bidder's JV Member Name: _____

RFB No. and title: _____

Page _____ of _____ pages

1. Key Requirement no 1 in accordance with 4.2 (c): _____

Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Subcontractor ☐
Total Contract Amount			Rs.	
Details of relevant experience				

2. Key Requirement no 2 in accordance with 4.2 (c): _____

3. Key Requirement no 3 in accordance with 4.2 (c): _____

...

Form 4.3
DECLARATION OF THE CONTRACTORS

NAME OF WORK: -

DECLARATION OF THE CONTRACTORS

I/We hereby declare that I/we have made myself/ourselves thoroughly conversant with the sub-soil conditions, the local conditions regarding all materials (such as stone, murum, sand, etc.) and labour of which I/we have based my/our rates for this work. The specifications, conditions, bore results and lead of materials on this work have been carefully studied and understood by me/us before submitting this tender. I/We undertake to use only the best material approved by the **Maharashtra State Warehousing Corporation, Pune** or his duly authorized assistant, before starting the work and to abide by this decision.

I/We hereby certify that the responsibility for the defect liability period of the work to be executed under this tender process, as well as the warranty and guarantee for the equipment to be installed, will remain with us throughout the defect liability period.

I/We hereby further declare that my/our tender is unconditional in every manner of whatsoever in nature.

I/We hereby undertake to pay the laborers engaged on the work as per Minimum Wages Act, 1948 applicable to the zone concerned.

I/We have quoted my /our offer in percentage rate for work in words as well as in figures. I/We further undertake to enter into contract with Maharashtra State Warehousing Corporation, Pune.

Name and Signature of Contractor(s) / Power of attorney holder with complete address.

Appendix to Technical Part

Form....

(Name of the Project)

(Declaration regarding tax/duty exemption for materials/construction equipment bought for the work)

(Bidder's Name and Address)

To:

(Name of the Employer & address)

Dear Sir:

Re: [Name of Work]

Certificate for Import/Procurement of Goods/Construction Equipment
Government Order/Circular Number under which tax/duty Exemption is being sought:

1. We confirm that we are solely responsible for obtaining tax/duty waivers which we have considered in our bid and in case of failure to receive such waivers for reasons whatsoever, the employer will not compensate us.
2. We are furnishing below the information required by the Employer for issue of the necessary certificates in terms of the Government of India's relevant Notifications.
3. The goods/construction equipment for which certificates are required are as under:

Items (modify the list suitably for each specific work)*	Make /Brand Name	Capacity [where applicable]	Quantity	Value	State whether it will be procured locally or imported [if so from which country]	Remarks regarding justification for the quantity and their usage in works.
Goods						
[a] Bitumen						
[b] Cement						
[c] Steel						
Construction Equipment						

4. We agree that no modification to the above list is permitted after bids are opened.
5. We agree that the certificate will be issued only to the extent considered reasonable by the Employer for the work, based on the Bill of Quantities and the construction program and methodology as furnished by us along with the bid.

6. We confirm that the above goods and construction equipment will be exclusively used for the construction of the above work and the construction equipment will not be sold or otherwise disposed of in any manner for a period of five years from the date of acquisition.

Date: _____

Place: _____

(Signature) _____

(Printed Name) _____

(Designation) _____

(Common Seal) _____

[This certificate will be issued within 60 days of signing of contract and no subsequent changes will be permitted.]

Appendix to Technical Part: Bid Security

Form of Bid Security - Bank Guarantee *[Guarantor letterhead or SWIFT identifier code]*

Bank Guarantee No..... [insert guarantee reference number]

Date..... [insert date of issue of the guarantee]

WHEREAS, _____ [name of Bidder]* (hereinafter called "the Applicant") has submitted his Bid dated _____ [date] or will submit his Bid for the construction of _____ [name of Contract] (hereinafter called "the Bid") under Request for Bids No..... [insert number] (hereinafter called "the RFB")

KNOW ALL PEOPLE by these presents that We _____ [name of bank] of _____ [name of country] having our registered office at _____ (hereinafter called "the Bank") are bound unto _____ [name of Employer] (hereinafter called "the Employer") in the sum of _____**for which payment well and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 20____.

THE CONDITIONS of this obligation are:

(1) If after Bid opening the Applicant (a) withdraws his bid during the period of Bid validity specified in the Letter of Bid, ("the Bid Validity Period"); or (b) does not accept the correction of the Bid Price pursuant to ITB 36;

Or

(2) If the Applicant having been notified of the acceptance of his bid by the Employer during the period of Bid validity:

- (a) fails or refuses to execute the Contract Agreement in accordance with the Instructions to Bidders, if required; or
- (b) fails or refuses to furnish the Performance Security and if required, the Environmental and Social (ES) Performance Security, in accordance with the Instruction to Bidders.

we undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the four conditions, specifying the occurred condition or conditions.

* Insert name of the Bidder, which in the case of a joint venture shall be (a) the name of the joint venture that submits the bid if the JV has been constituted into a legally enforceable JV, or (b) the names of all future members of the JV as named in the letter of intent to execute the JV Agreement submitted by the bidder along with its bid.

** The Applicant should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 19.1 of the Instructions to Bidders.

This Guarantee will remain in force up to and including the date _____
*** days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE _____ SIGNATURE OF THE BANK _____ WITNESS

_____ SEAL _____

[signature, name, and address]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

*** 45 days after the end of the validity period of the Bid.

AFFIDAVIT
(On 500 Rs. Stamp Paper)
Tender Notice No. -----

Name of Work: --

मी वय
वर्षे राहणार या सत्यप्रतिज्ञा लेखाद्वारे
लिहून देतो की मी या कंपनीचा
/फर्मचा प्रोप्रायटर/ भागीदार असून “(Name of work)” या कामासाठी
निविदा सादर केली आहे. त्या निविदेच्या लिफाफा क्र. 1 मध्ये जी कागदपत्रे सादर केली आहेत
ती खरी, बरोबर व पूर्ण आहेत. त्यामध्ये कोणत्याही त्रुटी, चुका नाहीत, याची मी खात्री केलेली
असून असे शपथपूर्वक खालील अटी व शर्तीसह मान्य करीत आहे. या कागदपत्रांमध्ये काही
चुकीची, दिशाभूल करणारी, खोटी व तसेच अपूर्ण माहिती आढळ्यास मी भारतीय दंडसंहिता
अंतर्गत कायदेशीर कार्यवाहीस पात्र राहीन.

1. जर कंत्राट कालावधीदरम्यान, मी माझ्या कार्यालयाने किंवा माझ्या कर्मचाऱ्यांनी
..... वखार महामंडळाला खोटी माहिती किंवा देयकासमवेत तसेच पत्रव्यवहारात
खोटी/बनावट साहित्य खरेदीची कागदपत्रे सादर केली असल्यास मी भारतीय दंडसंहिता अंतर्गत
कायदेशीर कार्यवाहीस पात्र राहीन.

2. जर कंत्राट कालावधीदरम्यान आणि काम समाप्ती नंतर, अंतिम देयक देण्याच्या
तारखेपर्यंत सादर केलेले कोणतेही कागदपत्रे खोटी/बनावट किंवा फसवी आढळ्यास मी मी
भारतीय दंडसंहिता अंतर्गत कायदेशीर कार्यवाहीस पात्र राहीन.

3. जर काम समाप्तीनंतर दोष दायित्व कालावधी दरम्यान किंवा त्यानंतर कोणत्याही वेळी,
कोणतीही माहिती किंवा कागदपत्रे खोटी/बनावट किंवा फसवी आढळ्यास मी मी भारतीय
दंडसंहिता अंतर्गत कायदेशीर कार्यवाहीस पात्र राहीन.

कंत्राटदाराची सही व शिक्का

**Letter of Bid - Financial Part
(Deleted)**

Appendix to Financial Part:

Schedules

Bill of Quantities

(The financial bid should be submitted online in Excel sheet)

MAHARASHTRA STATE WAREHOUSING CORPORATION

(A Govt. Public Sector Undertaking)

583/B, MARKET YARD, GULTEKADI, PUNE-411037

Name of work: - Construction of 2x5040 MT Capacity Pre-Engineered Wh. Building, Internal Road, Office Building & Training center, Cleaning & Grading Yard, Drying Yard, Hamal Shed and ancillary works for Agro Logistic hub at Shah, Tal -Karanja Lad, Dist. Washim, Maharashtra.

Total amount of Schedule - 'B'

A B S T R A C T

	PART- A		
	S.W. I: - PEB & Civil Work For 2x5040 MT Cap Wh. Building, Internal Road, Office Building & Training center, Cleaning & Grading Yard, Drying Yard, Hamal Shed.	Rs.	120499000.00
	PART A Total	Rs.	120499000.00
	PART -B		
	S.W. II: - LAB TESTING	Rs.	235760.00
	S.W. III: - ROYALTY CHARGES	Rs.	3391771.00
	PART B Total	Rs.	3627531.00
	Grand Total	Rs.	124126531.00
In Words: -	Rupees Twelve Crore Forty-One Lakh Twenty-Six Thousand Five Hundred Thirty-One and Paise Nil Only		
Note	In Part B, royalty and lab testing charges shall remain the same. The bidder shall not quote above or below the specified amounts for royalty and testing charges in the tender; both amounts must be quoted at par.		

SCHEDULE - 'B'

Memorandum showing Items of work to be carried out by the contractor

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
1	2	3	4	5	6
		S.W. I: - PEB & Civil Work For 2x5040 MT Cap Wh. Building, Internal Road, Office Building & Training center, Cleaning & Grading Yard, Drying Yard, Hamal Shed.			
1	19294.00	Clearing grass and removal of rubbish around the Warehouse, Cleaning Grading yard and Drying yard and disposing the material outside complex as Directed-By-Engineer in charge.		One Square Meter	
2	1892.00	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift up to 1.5 meter.) By Mechanical Means.		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
3	325.00	Excavation for foundation in hard murum including removing the excavated material beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift up to 1.50 meter) By Mechanical Means		One Cubic Meter	
4	203.00	Excavation for foundation in hard murum including removing the excavated material beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift 1.50 to 3.00 meter) By Mechanical Means.		One Cubic Meter	
5	273.00	Excavation for foundation in hard murum and boulders including removing the excavated material beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift 1.50 to 3.00 meter) By Mechanical Means.		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
6	2.00	Excavation for foundation in soft rock and old cement or lime masonry foundations including removing the excavated material beyond the building area and stacking as directed, including dewatering, preparing the bed for the foundation and necessary back filling with available earth/murum, ramming, watering including shoring and strutting etc. complete. (Lift from 1.50 to 3.00 meter.) By Mechanical Means		One Cubic Meter	
7	6497.54	Excavation in plinth/Roadway in earth soil of all types of sand or gravel or soft murum including dressing section to the required grade, cambers & side slope & conveying the excavated materials with lead of 50 Meter and spreading for embankment or stacking as directed		One Cubic Meter	
8	301.40	Providing & laying dry /trap rubble stone metal soling 15 to 20 Centimeter thick including hand packing and compacting etc. complete.		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
9	224.00	Providing and laying Cast in situ/Ready Mix cement concrete in Mix-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)		One Cubic Meter	
10	362.00	Providing second class Burnt Brick masonry with conventional/ Indian Standard. type bricks in cement mortar 1:6 in foundations and plinth of inner walls/ in plinth external walls including bailing out water manually, striking joints on unexposed faces, raking out joints on exposed faces and watering etc. Complete.		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
11	323.00	Providing and laying in situ /Ready Mix cement concrete Mix-25 of trap / granite /quartzite/ gneiss metal for Reinforced cement concrete work in foundations like raft, strip foundations, grillage and footings of columns and steel stanchions etc. including bailing out water, Steel centering formwork, laying/pumping cover blocks, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade).		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
12	187.00	Providing and laying Cast in situ/Ready Mix cement concrete Mix-25 of trap / granite /quartzite/ gneiss metal for Reinforced cement concrete columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Crushed sand VSI Grade).		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
13	302.00	Providing and laying Cast in situ/Ready Mix cement concrete Mix-25 of trap / granite /quartzite/ gneiss metal for Reinforced cement concrete beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control and Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)		One Cubic Meter	
14	10.90	Providing and laying Cast in situ/Ready Mix cement concrete Mix-25 of trap/ granite/ quartzite/ gneiss metal for Reinforced cement concrete chajja as per detailed design and drawings including steel centering, formwork, cover blocks, laying/pumping, compacting and roughening the surface if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel). without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control and Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
15	80.30	Providing and laying Cast in situ/Ready Mix cement concrete Mix-25 of trap/ granite / quartzite/ gneiss metal for Reinforced cement concrete slabs and landings as per detailed designs and drawings including steel centering , formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
16	9.00	Providing and laying Cast in situ /Ready Mix cement concrete in Mix -25 of trap /quartzite /granite /gneiss metal for Reinforced cement concrete Waist slab, and steps of staircases as per detailed design and drawings or as directed including steel centering, plywood/ steel formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with cement mortar. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. Complete. (Excluding reinforcement, including cover block). (Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc.) without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control and Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)		One Cubic Meter	
17	331.45	Providing second class Burnt Brick masonry with conventional/ Indian Standard type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete (Crushed sand VSI Grade)		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
18	62.00	Providing second class Burnt Brick masonry with conventional. type bricks in cement mortar (1: 4) in half brick thick wall including longitudinal reinforcement of 2 bars of 6 milli meter diameter / 2 hoop iron strips 25 milli meter x 1.6 milli meter at every III course properly bent & bounded at ends scaffolding, racking out joints and watering complete. (Crushed sand VSI Grade)		One Square Meter	
19	176.00	Providing and laying Cast in situ/Ready Mix cement concrete in Mix-20 of trap/ granite/quartzite/gneiss metal for bed blocks, foundation blocks and such other items including bailing out water, Steel centering, formwork, laying/ pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
20	119.61	Providing and fixing in position Thermo Mechanically Treated – Ferrous (TMT Fe) - 500 bar reinforcement of various diameters for Reinforced cement concrete pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required etc. complete.		One Metric Ton	
21	2259.00	Providing outside cement plaster single coat 20 Millimeter thick in Single coats in cement mortar 1:4 outside without Neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc. Complete. (Crushed sand VSI Grade)		One Square Meter	
22	2435.00	Providing internal cement plaster single coat 20 Millimeter thick in Cement Morter 1:4 inside with Neeru & smooth finish to concrete or brick surface in all positions including scaffolding curing etc. complete as directed (Crushed sand VSI Grade)		One Square Meter	
23	3057.00	Providing outside up to plinth cement plaster single coat 20 Millimeter thick in Cement Morter 1:4 outside plinth with smooth cement finish to concrete or brick surface in all positions including scaffolding curing etc. complete as directed (Crushed sand VSI Grade)		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
24	2435.00	Providing & applying Oil bound distemper two coats on plastered or masonry surface including scaffolding & preparing the surface by brushing & brooming down complete.		One Square Meter	
25	3031.00	Providing and applying two coats of exterior acrylic emulsion paint confirming to corresponding Indian Standard of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc. complete.		One Square Meter	
26	205.00	Providing & applying oil painting in two coats of Deep orange colour & shade to flooring for marking stack lines including preparing the surfaces & primer coat etc. complete.		One Square Meter	
27	55.00	Providing & applying oil painting nameboard with three coats with background of approved colour & shade including scaffolding etc. complete.		One Square Meter	
28	29.00	Providing sills of polished Kota stone 25 to 30 Millimeter thick, on a bed of 1:4 cement mortar including cement float, filling joints with slurry, curing, moulding edges, polishing and cleaning etc. complete.		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
29	56.00	Providing and laying telephone black / Amba White / Cadbury brown / Ruby red / Ocean Brown granite stone of 18 to 20 Millimeter thick for door frame/ dado/ window boxing etc. On cement mortar 1:6 including filling joints with polymer base filler nosing/moulding the sharp edges wherever necessary, curing, etc. complete.		One Square Meter	
30	58.00	Providing and fixing in position 60x60 Centimeter Aluminium openable ventilators of section 2.5"x1.5" (inches) as per detailed drawing and as directed by Engineer in charge with all necessary Aluminium sections with powder coating including necessary fixtures and fastening with 5-Millimeter-thick float glass etc. complete. (Note While arriving at the rate of item of item weight at 6.90 kilogram/Square meter is considered for only Aluminium ventilators) and with Galvanized iron wire mesh of 18 Gauge, 6 Millimeter square mesh fixed to outside the frame of ventilator and grill of 12 Millimeter square bars in vertical directions at 10 Centimeters Center/Center fixed to outside surface of the frame and approved quality and type fixtures, fittings including red oxide & oil painting three coats. As per detailed drawing and as directed.		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
31	120.00	Providing and fixing rolling shutter fabricated from corrugated cold rolled coil (CRC) Mild Steel/Galvanized Iron Steel laths of minimum thickness 0.9 Millimeter with lock plate of 3.15 Millimeter thickness reinforced with 35 x 35 x 5 Millimeter angle section fitted with sliding bolts and two handles for both sides, deep Mild Steel channel section of side guide of height 2.55 Meter & depth and thickness not less than 75 Millimeter and 3.15 Millimeter respectively with hold fast 4 Numbers to each side i.e. 16 Numbers holdfast arrangements, Mild Steel Bracket plate 300 x 300 x 3.15 Millimeter minimum size and shape, welded with side guide & fixed on Reinforced cement concrete beam with help of J hooks anchored with reinforcement of beam, suspension shaft of minimum 50 Millimeter diameter, hood cover of Mild Steel/Galvanized Iron sheet not less than 0.90 Millimeter thickness and of any size at top and safety devices with one coat of red lead primer and two coats of oil paints of approved deep orange shade and locking arrangement with central lock etc. complete. as directed by Engineer in charge.		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
32	12.00	Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.90 Millimeter with lock plate of 3.15 Millimeter thickness reinforced with 35 x 35 x 5 Millimeter angle section fitted with sliding bolts and handles for both sides, deep Mild steel channel section of depth and thickness not less than 65 Millimeter and 3.15 Millimeter respectively with hold fast arrangements, Mild steel. Bracket plate 300 x 300 x 3.15 Millimeter minimum size and shape with square bar, suspension shaft of minimum 32 Millimeter diameter, hood cover of Mild steel sheet not less than 0.90 Millimeter thickness and of any size at top and safety devices including mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade cast iron or mild steel and one coat of red lead primer and two coat of oil paints of approved deep orange shade etc. complete. (Indian standard. 62481979) (With mechanical gear)		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
33	120.00	Providing & fixing Mild steel grided rolling shutter fabricated from Mild Steel rod of 6 Millimeter dia. zig zag shape(grill work size 2.10 x 1.70 Meter) with side guides prepared out of 3.00 Millimeter thick Mild Steel Plate & Provided with holdfast 25 x 6 Millimeter @ 1.00 Meter Center to center throughout the height on both sides , bottom rails & Strips 3.00 Millimeter thick Mild Steel Plate with Mild Steel Angle 35x35x6 Millimeter, bracket rail & strip with 10.00 Millimeter square bar suspension shaft 32.00 Millimeter diameter best quality , rolling springs High tensile tested steel (coiled spring) 45 Centimeter length 2 Numbers, Mild Steel laths of 7.6 Centimeter wide prepared out of best quality 22 gauge locking arrangements with not less than 6 Millimeter thick strip as per specifications, housing box prepared out of 20 G sheets at the top, handles prepared out of 6 Millimeter thick flats, with one coat primer and applying two coats of oil paint of approved colour & shade of deep orange shade etc. complete.		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
34	12.00	Providing & fixing Mild steel grilled rolling shutter fabricated from Mild steel rod of 6 Millimeter diameter zig zag shape (grill work size 2.10 x 1.70 meter) with side guides prepared out of 3.00-Millimeter-thick Mild steel Plate & Provided with holdfast 25 x 6 Millimeter @ 1.00-meter Center to center throughout the height on both sides, bottom rails & Strips 3.00-Millimeter-thick Mild steel. Plate with Mild steel Angle 35x35x6 Millimeter, bracket rail & strip with 10.00 Millimeter square bar suspension shaft 32.00 Millimeter diameter best quality , rolling springs High tensile tested steel (coiled spring) 45 centimeter length 2 Number, Mild steel laths of 7.6 centimeter wide prepared out of best quality 22 gauge locking arrangements with not less than 6 Millimeter thick strip as per specifications, housing box prepared out of 20 Gauge sheets at the top, handles prepared out of 6 Millimeter thick flats, with one coat primer and applying two coats of oil paint of approved colour & shade of deep orange shade etc. complete.(With mechanical gear)		One Square Meter	
35	691.00	Filling in plinth with approved excavated stuff obtained from departmental land including watering, compacting etc. complete as directed.		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
36	10385.00	Filling in plinth and floors with contractors' material/brought from outside and approved by Engineer in charge in layers of 15 to 20 Centimeter including watering and compaction etc. complete [Only compacted thickness is payable]		One Cubic Meter	
37	2328.00	Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at Optimum Moisture Content, carriage of mixed Material to work site, spreading in uniform layers with motor grader/ Paver on prepared surface and compacting with vibratory roller to achieve the desired density, complete as per clause 401 -- Plant Mix Method and Grading - I Material.		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
38	1089.00	Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to Indian Standard: 383, the size of coarse aggregate not exceeding 25 Millimeter, , cement content not to be less than 150 kilogram/ Cubic meter, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Megapascal at 7 days, mixed in a batching plant/ Weigh batch mixer, transported to site with all leads and lifts, laid with a paver with electronic sensor /by suitable means as approved by Engineer-in-charge , compacting with vibratory roller, finishing, curing and including preparation of subgrade surface if required etc. complete.(Crushed sand VSI Grade)		One Cubic Meter	
39	5167.00	Providing and laying in situ Trimix Cement Concrete Mix -20 with Trimix treatment for 150 Millimeter thickness for flooring with groove cutting of 4 Millimeter wide and 20 Millimeter deep at every 4.00-meter center to center both sides after 24 hours of casting with necessary refilling with bitumen, etc. complete as directed by Engineer Incharge.With fine aggregate (Crushed sand VSI Grade finely washed etc.)		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
40	7.53	Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete.(Platform channel-Deep orange paint)		One Metric Ton	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
41	3.00	Providing and fixing lightening conductor system comprising of erecting Air-Termination consisting of tubular copper rod of 25 Millimeter diameter 1.20 Millimeter thick with multiple points head 1.2 meter long (Heavy Duty) welded or clam ped to Galvanized Iron pipe pole B grade 50 Millimeter diameter of required length with Mild Steel. round base plate 25 Centimeter diameter and 10 Millimeter thick at bottom embedded in cement concrete 1:3:6 foundation of size 45 Centimeter diameter x 45 Centimeter Height and providing earthing with copper earth plate of size 60 x 60 x 0.30 Centimeter with cadmium plated nut bolts to fix earthing strip buried in specially prepared earth pits 1.5 meter below ground level with 40 kilogram charcoal and salt with alternate layers of charcoal and salt and Galvanized Iron pipe 40 Millimeter diameter 2 meter length buried in earth up to earthing plate remining portion above ground level for watering and refilling complete (Note- Copper strip from lightening conductor is considered in this item) (Oham is necessary).		One Number	
42	0.90	Providing and fixing 60 x 45 Centimeter Marble plate engraving 10 Centimeter. Height letter, figures including painting the letters/figures with approved colour and shade complete		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
43	1014.00	Providing pre-constructional anti termite treatment as per Indian standard 6313 (Part-II) by treating the bottom surface of excavation at the rate of 5 liters of emulsion concentrate of 1.0 percent of chlorpyrifos per square meter of surface area covering 10 years guarantee on bond paper.		One Square Meter	
44	2904.00	Providing pre constructional antitermite treatment as per Indian standard 6313 (Part-II) treatment by treating the backfill in immediate contact with foundation at the rate of 5 liters of emulsion concentrate of 1.0 percent of chlorpyrifos per One Square Meter of vertical surface area covering 10 years guarantee on bond paper.		One Square Meter	
45	5170.00	Providing pre-constructional antitermite treatment as per Indian standard 6313 (Part-II) by treating the top surface of plinth filling at the rate of 5 liters of emulsion concentrate at 1.0 percent of chlorpyrifos per One Square Meter of surface area covering ten years guarantee on bond paper		One Square Meter	
46	5.00	Providing Patti / band 75 to 100 Millimeter wide on plastered surface 12 to 15 Millimeter thick in Cement mortar 1:4 line and level including neat finishing scaffolding curing making groove at weather shed etc. complete.		One Running Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
47	1.00	Providing and fixing board displaying information, such as 'Name of department, Name of work, Location, SMART Tranche, Project code, Project cost, Name of Contractor, Date of commencement and Schedule date of completion etc. having rectangular shape of 1.80 meter x 1.20 meter size made out 18 gauge (1.25millimeter) thick mild steel sheet painted with one coat of Zinc chromate stoving primer and two coats of enamel paint on front side and grey stove enamel on back side and border / messages / symbols etc. with approved colour shade of yellow background and letter in black colour including painting SMART Logo complete, on Mild steel angle of size 35 x 35 x 3 millimeter frame with properly cross braced Mild steel angles of size 35x35x3 millimeter duly painted including Two Mild steel angle iron posts of size 65x65x6 millimeter, 3.65 meter long painted with alternate black and white bands of 25 Centimeter width including all fixtures etc. and fixing the boards in 1:4:8 concrete block of size 60x60x 75 Centimeter including, excavation, refilling, transportation, and labour etc. complete. As directed by Engineer in Charge		One Number	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
48	75.00	Providing and laying in trenches 25-millimeter diameter. chlorinated polyvinyl chloride (CPVC) pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipeline if necessary and conveying and stacking the same as directed etc. complete.		One Running Meter	
49	5.00	Providing & fixing 25-Millimeter diameter. Screw down wheeled stop tap of gun metal / brass including necessary socket / union nuts etc. complete.		One Number	
50	5.00	Providing & laying in situ cement concrete Mix-15 of trap metal for foundation & bedding including dewatering if necessary, compacting, curing etc. complete.		One Cubic Meter	
51	40.00	Providing & filling brick bat in excavated pit as directed by Engineer- in -charge.		One Cubic Meter	
52	15.00	Providing & filling Sand in excavated pit of approved quality including watering compaction complete.		One Cubic Meter	
53	59.00	Providing & laying Polyvinyl chloride (PVC) PIPES 110-millimeter diameter on the top of pit to drain the rain water inside the pit as directed by Engineer- in - charge.		One Running Meter	
54	1.00	Management strategies and implementation plan (MSIP) to manage the environmental, social, health and safety (ESHS) risks and ESHS code of conduct		One Number	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
55	50.00	Providing and laying in trenches 50-millimeter diameter chlorinated polyvinyl chloride (CPVC) pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same as directed by Engineer-in-charge. Etc. complete.		One Running Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
56	170.00	Providing cement-based water proofing treatment to terraces (Indian water proofing or alike) with brick bats laid in required slope to drain the water for any span after cleaning the base surface. Applying a coat of cement slurry admixed with approved water proofing compound and laying the brick bats on bottom layer in Cement mortar.1:5 admixed with approved water proofing compound filling up to half depth of brick bats, curing this layer for 3 days, applying cement slurry over this layer joints of brick bats with Cement mortar.1:3 admixed with approved water proofing compound and finally top finishing with average 20 millimeter. thick layers of same mortar added with jute fiber at 1 Kilogram per bag including finishing the surface smooth with cement slurry admixed with approved water proofing compound. Marking finished surface with false squares of 300 x 300 millimeter. making the junctions at the parapet rounded and tapered top for required height, with drip mould at the junction of plaster and parapet and curing and covering 10 years Guarantee against leak proofness on Court fees stamp paper of Rs.500/- including ponding test etc. complete.		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
57	28.00	Providing and Fixing mat finish stainless steel (of 302 grade) railing with top pipe of 50 millimeter diameter and vertical pipe of 38 millimeter diameter at 0.60 meter center to center or as required and horizontal pipes of 25 millimeter diameter in three rows, all pipes of 2 millimeter thick including buffing , fabricating fixtures and fastening including pipe base of appropriate diameter and ball base of 75 millimeter diameter above newel post of 75 millimeter diameter etc. complete (Prior approval of sample and brand by Executive .Engineer is necessary before use)		One Running Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
58	7.00	Providing and fixing position, Single shuttered aluminium extruded powder coated openable door of overall size 1.0 x 2.10 meter with aluminium door frame of powder coated section 101.60x44.75 millimeter, 3.18 millimeter thick and shutter comprising of powder coated section having bottom and lock rail of size 150x44.5x3.00 millimeter thick top rails 47.62x44.45x3.00 millimeter thick, vertical style 47.62x44.45 millimeter, 3.00 millimeter thick and for shutter plain glass panes 5 millimeter thick for top panels and 12 millimeter thick both side a laminated phenol bonded particle board panels for bottom panels etc., Indian Standard. Mark, heavy duty, Hydraulic floors spring of 150 Kilogram capacity, having heavy duty concealed lock, necessary beading, glazing clips, Polyvinyl chloride (PVC) gaskets, 250-millimeter length tower bolts, 150-millimeter diameter. pad handle, etc. as per detailed design and drawing or as directed by engineer in charge including all materials, labors, and equipment etc. Complete		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
59	10.00	Providing and fixing Country cut teak wood single leaf panelled door shutter without fanlight and 25 millimeter thick as per drawing consisting of Tick wood. top rail size 100 x 25 millimeter and bottom lock rail 200 x 25 millimeter insert panel 12-millimeter-thick commercial ply faced Tick wood. particle board with phenol formaldehyde synthetic resin (Generally confirming to Indian standard institute 3097) excluding frame, including stainless steel fixture and fastening and Tick wood. beading to junctions of panelled inserts and as instructed by the Engineer in charge including 3 coats of oil painting etc. complete		One Square Meter	
60	8.00	Providing and fixing collapsible steel gate in one/two leaves with hot rolled vertical channels of 18x9x3 millimeter minimum size, crossings of Mild Steel. flats of size 18 x 5 milli meter T or E section for runner of minimum 40 x 6 milli meter size for flange, Mild Steel. flat for top runner of minimum size 40x12 millimeter with roller wheels confirming to grade F.G.150 fitted with snap headed rivets of minimum size 6-millimeter max. spacing of vertical channels be 100-millimeter enclosed gate position and clear space of 150 millimeter between two sets of crossings with holdfasts, stoppers, spaces, handles, locking arrangement and one coat of red lead primer and two coat oil painting etc. complete.		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
61	44.00	Providing & fixing Mild Steel grillwork for windows & ventilators up to 15 kilogram/square meter as per drawing including fixtures necessary welding and painting one coat of anticorrosive paint & two coats of oil painting complete as directed		One Square Meter	
62	177.00	Providing hard Murum, cohesive non swelling materials in plinth in layers of 20 Centimeter etc. complete as directed. [Only compacted thickness is payable]		One Cubic Meter	
63	171.00	Providing & fixing in position for flooring, of vitrified tiles of approved quality & make 600 x 600-millimeter size & 8 to10 millimeter thickness. for flooring width on 1: 4 cement mortar including cement float filling cement joints with neat cement slurry, curing, rubbing polishing & cleaning complete.		One Square Meter	
64	15.00	providing & fixing in position skirting or dado of vitrified tiles of approved quality & make 600 x 600-millimeter size & 8 to10 millimeter thickness. for flooring width on 1: 4 cement Mortar including cement float filling cement joints with neat cement slurry, curing, rubbing polishing & cleaning complete.		One Square Meter	
65	22.00	Providing and laying matt finish ceramic tiles of having size 30 x 30 centimeter confirming to Indian standard.15622/2006 (group D II-A) and 7 to 8 millimeter thick for flooring in required position laid on a bed of 1:4 cement mortar including cement float, filling joint with white/colour cement slurry cleaning curing etc. complete		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
66	42.00	Providing and laying ceramic tiles of having size 30 x 30 centimeter. and confirming to corresponding Indian standard. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.		One Square Meter	
67	3.00	Providing & fixing Indian type white glazed Orissa type earthenware 580 x 440 millimeter water closet pan including S trap white earthenware foot rest cast iron soil & vent pipe up to the outside face of the wall 1:2:4 brickbat lime concrete bedding 10 Litre fibre high level tank flushing cistern with fittings, inlet pipe with stop tap, bracket for fixing the cistern 32 millimeter diameter Polyvinyl chloride (PVC) pipe with fittings & clamps 20 millimeter diameter Galvanized Iron Over flow pipe with mosquito proof capping Galvanized Iron Chain pull, painting of cistren & exposed pipes & fittings & making good walls & floor with enameled tank & Polyvinyl chloride (PVC) pipe as directed		One Number	
68	1.00	Providing and fixing European type white glazed earthenware coupled closet symphonic trap with symphonic low level white glazed 10litres cistern with black back lite seat with all necessary pipe connection etc. complete.		One Number	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
69	3.00	Providing and fixing White glazed earthenware Wash Hand Basin of 45x30 centimeter size including cold water pillar tap/cold and hot water pillar tap brackets, rubber plugs and brass chain, stop tap and necessary pipe connection including Polyvinyl chloride (PVC) waste pipe and trap up to the outside face of the wall. Making good the damaged surface, testing etc. complete.		One Number	
70	7.00	Providing & fixing 15 x 10-centimeter salt glazed stoneware gully trap in Cement Concrete. 1:4:8 outside the building including cast iron grating in the sink, connecting glazed stoneware pipe, brick masonry chamber and cast-iron lead & cast-iron grating for gully trap.		One Number	
71	7.00	Providing & constructing brick masonry inspection chamber 60 x 45 Centimeter including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round Glazed stoneware (GSW) pipes, brick masonry, plastering from inside with frame fixed in cement concrete etc. complete with Reinforced Cement Concrete cover.		One Number	
72	3.00	Providing Soak pit including excavating and filling with brickbat etc. complete.		One Number	
73	3.00	Providing & fixing hume pipe septic tank 900-millimeter diameter with vent pipe and cap including necessary fittings (excluding excavation)		One Number	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
74	30.00	Providing & laying 110-millimeter diameter Unplasticized polyvinyl chloride (UPVC) SOIL / VENT / WASTE pipe salt glazed stoneware pipe including fittings such as bends, tees, single junction, double junction laying, jointing (including excavation & refilling the trenches) complete		One Running Meter	
75	2.00	Providing & fixing stainless steel sink 600 x 510 x 200 millimeter including all connection of the Galvanized Iron. supply and lead waste pipes up to the outside face of the wall, cold water chromium plated screw down bib tap, rolled steel on Cast Iron brackets, rubber plug with chain and stop tap etc. complete.		One Number	
76	10.00	Providing and laying in trenches 15-millimeter diameter. medium grade having embossed as Indian standard institution Mark galvanized iron pipes of 1.25 Kilogram/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.		One Running Meter	
77	30.00	Providing and laying in trenches 15millimeter diameter chlorinated polyvinyl chloride (CPVC) pipe including necessary excavation, fittings. Refilling trenches etc. Complete Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.		One Running Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
78	20.00	Providing and laying in trenches 20-millimeter diameter. chlorinated polyvinyl chloride (CPVC) pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.		One Running Meter	
79	20.00	Providing and fixing on walls/ceiling/floor 15-millimeter diameter. chlorinated polyvinyl chloride (CPVC) pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.		One Running Meter	
80	1.00	Providing and fixing on walls/ceiling/floor 25-millimeter diameter. chlorinated polyvinyl chloride (CPVC) pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.		One Running Meter	
81	1.00	Providing and fixing on walls/ceiling/floor 20-millimeter diameter. chlorinated polyvinyl chloride (CPVC) pipe with necessary fittings, remaking good the demolished portion etc. Complete. Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.		One Running Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
82	4.00	Providing & fixing in position 45 x 55- centimeter-high class mirror over wash hand basin including all accessories, and necessary fittings etc. Complete as directed.		One Number	
83	22.00	Providing & fixing in position cast iron oxidized brackets mounted on country cut teak wood plank of size 90 x10 x 2.5 centimeter duly polished & fixed on wall properly etc. complete		One Number	
84	12000.00	Providing and fixing High density polyethylene container one-piece moulded water tank made out of high density polythylene and built corrugated inclusive of delivery up to destination hoisting and fixing of accessories such as inlet, outlet overflow pipe inclusive of all tank's capacity between 200 to 1000 Liters.		One Liter	
85	11.00	Providing & fixing 15-millimeter diameter screw down bib / stop tap of brass including necessary socket, union, nuts complete.		One Number	
86	1.00	Providing, construction and erecting in position flag post as per drawing and design as directed by Engineer in charge		One Number	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
87	45.00	Providing and fixing in position (as per 1868 / 1982) Aluminium sliding window of three tracks with rectangular pipe 95 x 38.10 x 0.90 millimeter at weight 0.637 Kilogram/One Running Meter. with window frame bottom track section 92 x 31.75 x 1.30 millimeter at weight 1.070 Kilogram/One Running Meter. Top and side track section 92 x 31.75 x 1.30 millimeter at weight 0.933 Kilogram/Running meter. The shutter should be of bearing bottom 40 x 18 x 1.25 millimeter at weight 0.417 Kilogram/One Running Meter. Inter locking section 40 x 18 x 1.10 millimeter at weight 0.469 Kilogram/Running meter. and handle and top section 40 x 18 x 1.25 millimeter at weight 0.417 Kilogram/Running meter. As per detailed drawings and as directed by Engineer in charge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self-locking catch fitted in vertical section of shutter including 5 mm thick plain glass and aluminium mosquito net shutter with stainless steel jail with all required screws and nuts etc. complete. With powder coating with box		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
88	2.00	Providing and fixing in position V1 & V2 ventilators as per detailed drawing and as directed by Engineer in charge with all necessary fixtures and fastening with 5-millimeter-thick float glass etc. complete. and with Galvanized Iron wire mesh of 18 Gauge, 6-millimeter square mesh fixed to outside the frame of ventilator and grill of 12-millimeter square. bars in vertical directions at 10-centimeter center to center fixed to outside surface of the frame and approved quality and type fixtures, fittings including red oxide & oil painting three coats. As per detailed drawing and as directed.		One Square Meter	
89	0.50	Providing structural steel work in single stanchions composed of Rolled steel joist Channel etc. with caps, bases, mild steel plated, angle brackets, cleats, gusset plates, anchor bolts etc. as per detailed designs and drawings or as directed including cutting, fabrication, hoisting, erecting fixing in position, making riveted/ bolted/ welded connection and one coat of anticorrosive paint and over it two. coats of oil painting approved quality and shade etc. complete.		One Metric Ton	
90	3.00	Providing & fixing 15-millimeter diameter. Screw down wheeled stop tap of gun metal / brass including necessary socket / union nuts etc. complete.		One Number	
91	5.00	Providing & fixing 20-millimeter diameter. Screw down wheeled stop tap of gun metal / brass including necessary socket / union nuts etc. complete.		One Number	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
92	1.00	Providing and fixing screw down for 50-millimeter diameter. wheeled stop tap of brass including necessary sockets/ union nut complete		One Number	
93	18.00	Providing & fixing 20-millimeter diameter aluminium powder coated palemat rod including fixtures as directed.		One Running Meter	
94	4.00	Providing & fixing white glazed earthenware semi stall type Urinals without cistern with inlet pipes stop tap, Unplasticized polyvinyl chloride (UPVC) flush pipe, with fittings and flushing arrangement including Unplasticized polyvinyl chloride (UPVC) soil pipe, Unplasticized polyvinyl chloride (UPVC) trap and soil pipe connection up to the outside face of the wall, making good to damaged surface testing etc. complete. (Prior approval of sample and brand by Ex. Engineer is necessary be for use.) (Spec.No.: As directed by Engineer - in – Charge)		One Number	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
95	1.00	Providing and laying Cast in situ/ Ready Mix cement concrete in Mix-25 of trap / quartzite/ granite /gneiss metal for Reinforced cement concrete. newel posts of staircase as per detailed design and drawings including steel centering, plywood / steel formwork, steel props, laying/ pumping, finishing uneven and honeycombed surface with cement mortar.1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement, including cover block). (Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc.) without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control and Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)		One Cubic Meter	
96	2.00	Providing & fixing chromium plated towel rod 16-millimeter diameter. and 75 Centimeter in length including all accessories etc. complete (As directed by Engineer in charge)		One Number	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
97	20.00	Providing & fixing polyvinyl chloride (PVC) Soil / vent / waste pipe 75-millimeter diameter. Of approved make with standing min. pressure of 4 Kilogram. / Centimeter. Square. from standard manufactures with necessary fixture and fittings such as bend, tees, single junction, double junction, slotted vent offsets on walls or in the ground including excavation, laying refilling the trench etc. complete. As directed by Engineer in charge		One Running Meter	
98	20.00	Providing 25x30 millimeter thick portions of polished black Kadapa stone slab of approved shapes, quality and colour for platform urinals, including cutting holes of required sizes in the appropriate places to receive pipes etc., fixing in cement mortar 1:3 curing and cleaning complete.		One Square Meter	
99	3.00	Providing and fixing solid core flush door shutter in single leaf 32 Millimeter thick decorative type of exterior grade as per detailed drawings approved face veneers 3 Millimeter thick on both faces or as directed, all necessary beads, mouldings and lipping, wrought iron hold fasts, chromium plated fixtures and fastenings , with brass mortise lock, chromium plated handles on both sides , including door frame of CCT Wood of size 60 X 100 Millimeter and finishing with French Polish etc. complete.		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
100	5.00	Providing & fixing Country teak wood single leaf, second class fully panelled door, with ventilator as per detailed drawing including Iron Oxidized fixtures and fastenings and finishing the wood work with one coat of primer etc. including door frame 60 x 100 Millimeter complete.		One Square Meter	
101	7.00	Providing & fixing 10 Centimeter Rigid Cast Iron Nahanni trap including Cast Iron Grating bend & piece of Cast Iron Pipe up to the outside face of the wall complete		One Number	
102	4.00	Free Standing Table @ 1500 Lengthx600 Width x750Height Providing and fixing Table of Size 1500x600x750 millimeter. Top: made from 25-millimeter Prelaminated Particle board. All edges are covered by 2 Millimeters. Thick. PVC edge bands glued by hot melt glue applied by auto edge banding machine. Legs: C Shape made from Cold Rolled Closed Annealed (CRCA) Sheet with Powder Coat finish. Modesty panel: Made from 18 millimeter both side pre laminated particle boards. All ledges are covered by 0.8-millimeter Polyvinyl chloride (PVC) edge bands glued by hot melt glue applied by auto edge banding machine. KEYBOARD TRAY (WITHOUT MOUSE TRAY): - Metal Powder Coated - Black Colour, Central processing unit (CPU) TROLLEY: - Metal Powder Coated - Black Colour, 3 DRAWER PEDESTAL UNIT having overall size 392Lx450Dx680Ht. millimeter. with central lock and key. Drawers and body are complete metal with powder coat finish, facia in 18 millimeter prelaminated particle board.		One Number	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
103	6.00	Providing & Arrangement of Mid Back chair, ECO Centre tilt synchro (CTS) Mechanism, Fixed Armrest, Gas lift for Seat height adjustment, Standards- prong P/ Nylon Base with Fabric Upholstery		One Number	
104	6.00	Stool for Lab and Class-IV Providing and fixing 4-legged Lab stool, Legs made of 16Guage 45-millimeter Outer dimension Mild steel Pipe, duly painted, With a 304 Grade Stainless steel 12-inch-wide seat with a 1inch collar, Height adjustment via a screw. as per design and drawing and instructions of Engineer in charge.		One Number	
105	4.00	Full Height Steel Storage @ 750Length x450Weidth x2100 Hight millimeter Providing and fixing Openable Steel Storage of 750x 450x 2100Hight, with 4 adjustable shelves, Complete body & shutter made in 0.8 millimeter thick & Top in 2 millimeter thick Cold Rolled Close Annealed (CRCA),4 Shutter to be mounted with the help of cuphinges,and 4 adjustable levelers, entire storage in powder coated finish with 60 to 80 microns as per drawing.		One Number	
106	10.00	Providing earth work in embankment with approved materials obtained from departmental land up to lead of 50 meter. including all lifts, laying in layers of 20 to 30 centimeter. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller to achieve not less than 97 % of standard proctor density etc. complete (Material obtained from departmental Land)		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
107	1915.00	Providing earth work in embankment with approved materials obtained from other sources up to lead of 50 meters. including all lifts, laying in layers of 20 to 30 centimeter. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete (Material obtained from other sources)		One Cubic Meter	
108	332.00	Wet Mix Macadam-Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including pre mixing the Material with water at Optimum Moisture Content (OMC) in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well-prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver.		One Cubic Meter	
109	2213.00	Prime coat - Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including cleaning of road surface and spraying, primer at the rate of 0.60 kilogram/square meter using mechanical means.		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
110	2071.00	Providing and constructing 75 Millimeters. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40 Millimeters. stone layers metal 100% crusher broken metal with conical crusher plant, heating and spraying the bitumen of specified grade @ 2 kilogram/square meter, spreading 12 Millimeters. Size chips compacting with three-wheel static roller having weight 8 to 10 Metric Tonne. to achieve the desired degree of compaction as per Technical Specification Clause 506 etc. Complete, including applying tack coat of specified grade of bitumen at the rate of 0.30-kilogram square meter. on existing bitumen surface. (Viscosity Grade (VG-30) bulk bitumen rates are considered to arrive at rates)		One Square Meter	
111	104.00	DENSE BITUMINOUS MACADAM: Proving and laying dense bituminous macadam using crushed aggregates of Grading 1, premixed with bituminous binder of specified grade of Bitumen @ 4.50 per cent by weight of total mix and filler, transported to site with Vessel Traffic Service (VTS) , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired density for 76-100 millimeter compacted thickness .USING Batch mix type hot mix plant without Supervisory Control And Data Acquisition (SCADA), Sensor Paver, Vibratory roller with Stone Dust filler.(Viscosity Grade (VG-30) bulk bitumen rates are considered to arrive at rates)		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
112	4042.00	Providing and applying tack coat on the prepared surface heating by fumes in Boiler and spraying bitumen set footed in bitumen Boller on B.T. surface 2.5 kilogram/10 square meter. (Viscosity Grade (VG-30) bulk bitumen rates are considered to arrive at rates)		One Square Meter	
113	52.00	BITUMINOUS CONCRETE:- Providing and laying bituminous concrete using crushed aggregates of grading 1, premixed with bituminous binder @ 5.20 per cent by weight of total mix and filler, transported to site with Vessel Traffic Service (VTS) , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50 millimeter compacted thickness with specified grade of Bitumen, Excluding prime / tack coat. For Bitumen of specified grade -- USING Batch mix type hot mix plant without Supervisory Control and Data Acquisition (SCADA), Sensor Paver, Vibratory roller with Stone Dust filler. (Viscosity Grade (VG-30) bulk bitumen rates are considered to arrive at rates)		One Cubic Meter	
114	353.00	Supplying hard murum/ kankar at the road site, including conveying and stacking complete.		One Cubic Meter	
115	353.00	Spreading hard murum/ soft murrum/ gravel or kankar for side width complete		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
116	767.00	Compacting the hard murum side widths including laying in layers on each side with vibratory roller including artificial watering etc. complete.		One Square Meter	
117	1153.00	Providing and fixing stream lined Mix-20 grade Reinforced Cement Concrete guard stone including mild steel bar reinforcement etc. complete.		One Number	
118	100.00	Supplying & erecting Galvanized Iron pipe 'A' class 75-millimeter diameter. Erected for enclosing PVC armoured cable on wall/pole as per specification		One Running Meter	
119	200.00	Providing and fixing heavy duty inter locking concrete grey paving blocks of 80-millimeter thickness of having a strength of 300 Kilogram/Square. centimeter. of approved quality and shape on a bed of crushed sand of 25 to 30 millimeter thick including skirting joints and cleaning etc. complete.		One Square Meter	
120	200.00	Providing and casting in situ or precast tapering Reinforced Cement Concrete. Mix-20 Barrier type Kerb without gutter (as per Indian Road Congress (IRC) 86 1983) embedded 125 millimeter below ground level over Mix-10 Plain cement concrete finished neatly with cement mortar 1:2, setting the same in cement mortar 1:2, including the required excavation in any strata and removing the excavated stuff anywhere in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant		One Running Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
121	4837.00	Providing and laying 125-micron Low Density Polyethylene (LDPE) sheet confirming to IS 3395: 1997 below concrete pavement including all materials and labour complete.		One Square Meter	
122	950.00	Providing and laying in-situ Mix 40 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement ,coarse and fine aggregate conforming to Indian Standard 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver, compacted and finished in a continuous operation, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6 meter X 0.6 meter center to center, admeasuring 80 millimeter at bottom and 40 millimeter at top with depth of 75 millimeter and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.(Crushed sand VSI Grade/Natural sand)		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
123	689.00	Providing and fixing in position Thermo Mechanically Treated Ferrous- 500, 25-millimeter diameter dowel bars precoated with anticorrosive epoxy paint of required Diameter. 60 centimeters. Long and at 30.00 centimeter. center to center and wherever directed including handling, straightening, necessary cutting supported by Thermo Mechanically Treated Ferrous-500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half-length with bituminous paint as directed etc. complete.		One Number	
124	1674.00	Providing and fixing in position Thermo Mechanically Treated Ferrous- 500, tie bars precoated with anti-corrosive epoxy paint of 12-millimeter diameter. 70-Centimeter-long spacing at 30 Centimeter center to center along length of road wherever directed including handling, straightening wrapping with paper of approved quality for half length, necessary cutting, handling, straightening, supported by assembly of Thermo Mechanically Treated Ferrous- 500, chairs with proper alignment etc. complete.		One Number	
125	1344.00	Cutting transverse contraction joints 3 to 4 millimeter wide and depth 60 millimeter in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay /slab etc complete including subsequent widening of the groove 8 to 10 millimeter. wide at top having depth of 15 millimeter. as directed by Engineer in charge.		One Running Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
126	1344.00	Providing to contraction joints polysulphide sealant (Pouring grade) confirming to BS:5212-1989 in to sawed groove widened at top for sealant reservoir of specified size and shape as per detailed drawing including fixing Polyethylene foam backer rod of required diameter (approx. 25% larger than the initial 3 m to 4-millimeter joint) over laid with bond breaking tape as per detailed drawing. Item includes cleaning the joints with water jet/ air compressor and allowing joint to become thoroughly dry before sealant is applied and applying primer. (A) Contraction and longitudinal joints (15-millimeter-deep x 8-millimeter. Wide)		One Running Meter	
127	10.00	Providing and laying cement concrete pipe of Indian standard 458:2003 Non pressure (NP)-2 class of 600 milli meter diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.		One Running Meter	
128	307.00	Conveying materials obtained from road cutting including all lifts, laying in layers of 20 to 30 Centimeter. breaking clods, dressing to the required lines, curves, grades and section, watering and compacting to not less than 97% of standard Proctor density for a lead of over 50 meters. to 300 meters. inclusive from the site of excavation to the site of deposition as directed.		One Cubic Meter	
129	1443.00	Conveying materials obtained from road cutting including all lifts, for a lead of up to 3 kilo meters. from the site of excavation to the site of deposition outside of w h complex as directed.		One Cubic Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
130	234.00	Providing, fabricating and erecting in position Pre Engineered Steel Building for Cleaning and Grading yard having clear height of 10.00 meters from plinth level to eaves level as per approved drawing and design including fabrication of primary and secondary members, painting with approved colour and Smoke Gray (G-6134) shade, supply and erection of steel members, providing and fixing Standing Seam profile of 0.50 milli meter Total Coated Thickness (TCT) zincalume Alu-zinc (AZ) 150 profiled sheets, providing and fixing zincalume colour coated 0.50 milli meter Total Coated Thickness (TCT) profiled sheets for wall panels above 3.00 meter from plinth level, providing and fixing canopy of same PEB materials for cladding below the eaves level up to Brick bound masonry. And also provide platform sheets of 2.00 meter wide over the entire length of platforms between two columns, Gutters at eaves level for long walls along with rain water down take pipes made from plain Alu-zinc (AZ) 150 precoated zincalume sheets, supplying & fixing caged steel standard ladder shop fabricated from hot rolled angles, channels etc. complete as directed by Engineer in charge. All other details other than above as per chapter no.10.		One Square Meter	

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
131	5366.00	Providing, fabricating and erecting in position Pre-Engineered Steel Building for Warehouse as per detailed specifications given in tender form chapter Number.10 and as directed by Engineer in charge with all necessary Primary members, Secondary members, roofing materials, wall cladding sheets, ridge ventilator, bubble sheet etc. complete as directed.		One Square Meter	
132	8.00	Supply & fixing of turbo ventilator with 22" (inch) Diameter. size throat, having base ring & top plate in stainless steel of 0.8 milli meter thick, rotated using twin bearings of SKF - 600122 & 600322 permanently lubricated & sealed, fixed in Polycarbonate base sheet of 2 milli meter thick. of required width & length to maintain minimum 150 milli meter overlap at both ends.		One Number	
				Total Rs.	
		S.W. II:- LAB TESTING			
1	9.00	Cement - Fineness, Standard Consistency, Setting Time (Initial & Final), Compressive strength, Soundness	3770.00	One Number	33930.00
2	3.00	Concrete Mix-25 grade - Mix Design with all tests on basic materials	13755.00	One Number	41265.00
3	41.00	Concrete Mix-25 grade - Concrete cube compressive strength (Set of 3 Cubes)	690.00	One Number	28290.00

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
4	23.00	Concrete Mix-20 grade-Concrete cube compressive strength	690.00	One Number	15870.00
5	12.00	Crushed metal - Water absorption, Specific gravity, Impact value, Crushing value	2600.00	One Number	31200.00
6	12.00	Crushed metal - Gradation	690.00	One Number	8280.00
7	12.00	Crushed metal - Combined Flakiness & Elongation of single metal	850.00	One Number	10200.00
8	1.00	Metal for road -i) Water absorption, Specific gravity, Impact value, Crushing value	2600.00	One Number	2600.00
9	1.00	ii) Gradation	690.00	One Number	690.00
10	1.00	iii) Combined Flakiness & Elongation of single metal	850.00	One Number	850.00
11	1.00	iv) Stripping Value. (for Bituminous Work)	745.00	One Number	745.00
12	7.00	Brick - Crushing value, Water absorption, & Specific Gravity	2175.00	One Number	15225.00
13	1.00	Masonry Stone - Crushing value, / compressive strength, water absorption, Specific Gravity.	2020.00	One Number	2020.00
14	8.00	Steel - Tensile strength, Yield stress, ultimate tensile stress, %elongation, weight per running meter, Bend/ Rebend test. (Set of 3 Bars)	1275.00	One Number	10200.00

Item No.	Quantity Estimated but may be more or less	Items of work	Rupees in Figures	Unit	Total Amount in Rupees according to estimated quantity
15	1.00	Sand- Fineness Modulus, silt content.	1380.00	One Number	1380.00
16	16.00	Murum - Atterberg Limit	1170.00	One Number	18720.00
17	6.00	Murum - Compaction Test (Proctor Density)	1860.00	One Number	11160.00
18	1.00	Bitumen- Penetration, Softening point, Flash & Fire Point, Specific Gravity	3135.00	One Number	3135.00
				Total Rs.	235760.00
		S.W. III:- ROYALTY CHARGES			
1	15689.57	Royalty Charges for hand broken road metal 40 mm metal & 80mm metal, Murum & Rubble etc. complete.	216.18	One Cubic Meter	3391771.00
				Total Rs.	3391771.00
	In words:-				

Note: Bidders should note the following before submitting the financial bids

1. Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by other rates and prices in the Bill of Quantities. (Refer ITB Cl. 13.2 and Cl. 43.3)
2. Unit rates and prices shall be quoted by the bidder in Indian Rupee [ITB Clause 14.1].
3. Where there is a discrepancy between the rates in figures and in words, the rate in words will govern. [ITB Clause 27.1 (a)].
4. Where there is a discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern [ITB Clause 27.1(b)].
5. **BOQ is in Civil Work, Material Testing, Royalty Charges. i.e. Bidder should quote his rates and amount only in Civil Work Portion only.**
6. **Rates for Royalty and Testing Charges as mentioned are fixed and not to be changed.**
7. The offer of the work will be compared on BOQ, Testing Charges and Royalty.
8. All the work shall be carried out as per Public Works Department (Electrical) Specification for Electrical Work, Department Handbook and Other Specifications of Division or as directed.
9. Rate quoted including clearance of the site (prior to commencement of work and its close) in all respects and goods.

Declaration by Contractor:

1. I/We have seen the PWD Specifications.
2. I/We had gone through the detail's specifications included in the tender and fully conversant with the specifications laid down for concerned items along with IS Code. IE Rules 1956 and NEC.
3. I/We agree to carry out the work as per detail specifications

SCHEDULE - 'C'

ITEM WISE STANDARD SPECIFICATIONS

Specifications for the items of work to be carried out by the Contractor as given below

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
	S.W. I: - PEB & Civil Work For 2x5040 MT Cap Wh. Building, Internal Road, Office Building & Training center, Cleaning & Grading Yard, Drying Yard, Hamal Shed.			
1	Clearing grass and removal of rubbish around the Warehouse, Cleaning Grading yard and Drying yard and disposing the material outside complex as Directed-By-Engineer in charge.	MORTH 201	---	As directed by Engineer in charge
2	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift up to 1.5 meter.) By Mechanical Means.	Bd.A.1	259	As directed by Engineer in charge & the useful excavated materials shall be utilized as directed by the Engineer in Charge.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
3	Excavation for foundation in hard murum including removing the excavated material beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift up to 1.50 meter) By Mechanical Means	Bd.A.2	259	As directed by Engineer in charge & the useful excavated materials shall be utilized as directed by the Engineer in Charge.
4	Excavation for foundation in hard murum including removing the excavated material beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift 1.50 to 3.00 meter) By Mechanical Means.	Bd.A.2	259	As directed by Engineer in charge & the useful excavated materials shall be utilized as directed by the Engineer in Charge.
5	Excavation for foundation in hard murum and boulders including removing the excavated material beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift 1.50 to 3.00 meter) By Mechanical Means.	Bd.A.3	259	As directed by Engineer in charge & the useful excavated materials shall be utilized as directed by the Engineer in Charge.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
6	Excavation for foundation in soft rock and old cement or lime masonry foundations including removing the excavated material beyond the building area and stacking as directed, including dewatering, preparing the bed for the foundation and necessary back filling with available earth/murum, ramming, watering including shoring and strutting etc. complete. (Lift from 1.50 to 3.00 meter.) By Mechanical Means	Bd.A.4	259	As directed by Engineer in charge & the useful excavated materials shall be utilized as directed by the Engineer in Charge.
7	Excavation in plinth/Roadway in earth soil of all types of sand or gravel or soft murum including dressing section to the required grade, cambers & side slope & conveying the excavated materials with lead of 50 Meter and spreading for embankment or stacking as directed	MORTH 301	---	As directed by Engineer in charge & the useful excavated materials shall be utilized as directed by the Engineer in Charge.
8	Providing & laying dry /trap rubble stone metal soling 15 to 20 Centimeter thick including hand packing and compacting etc. complete.	BDA	---	As directed by Engineer in charge.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
9	Providing and laying Cast in situ/Ready Mix cement concrete in Mix-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. E. 1	287	As directed by Engineer in charge.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
10	Providing second class Burnt Brick masonry with conventional/ Indian Standard. type bricks in cement mortar 1:6 in foundations and plinth of inner walls/ in plinth external walls including bailing out water manually, striking joints on unexposed faces, raking out joints on exposed faces and watering etc. Complete.	Bd.G.1	313	1)The brick shall be got tested before use from the Government laboratory at the rate of 1 batch of 15 bricks for every 50,000 bricks or part thereof at contractor's cost for the following: a) Crushing stretch: -Dry Condition - 5 bricks ii) Wet Condition - 5 bricks b) Water absorption- 5 bricks in addition, bricks shall be tested for size, shape and soundness. 3)The proportion of cement mortar shall be 1:6 4) Minimum two drums of water shall be provided to masons for soaking of bricks at each place where masons are working.5) For mixing of mortar steel forms of required size only shall be used. For mixing of mortar steel trough or back platform shall be used.6)The brick work shall be cured for a minimum period of 14 days.7)The joints on both faces shall be raked to a depth of not less than the thickness of joints for affording good bond for plaster.8)Holdfast for door or window frames shall be embedded in cast in situ 1:2:4cement concrete blocks of required size without any extra cost

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
11	Providing and laying in situ /Ready Mix cement concrete Mix-25 of trap / granite /quartzite/ gneiss metal for Reinforced cement concrete work in foundations like raft, strip foundations, grillage and footings of columns and steel stanchions etc. including bailing out water, Steel centering formwork, laying/pumping cover blocks, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade).	Bd.F.3 & B.7	298 & 38	1) The appropriate mix design shall be got approved well in advance from the Government laboratory or laboratory approved by Engineer-in-charge.2) Cement of same grade and quality sent for mix design shall be used for concreting work.3) The minimum cement for reinforced cement concrete / plain cement concrete to ensure durability / strength, shall be as per provisions in the I.S. 456-2000 with latest amendment. If actual cement required / consumed more than the provisions in the IS Code no claim for that shall be entertained and cost for that shall be borne by the contractor.4) Before concreting work cement from each consignment shall be got tested and if the strength of cement varies considerably from the approved mix design, then the mix design shall be got modified according to strength of fresh cement available in the stock and concreting work should be carried out according to redesigned mix.5) From every consignment of the cement a sample shall be got tested as per norms and frequency laid down in the Government Circular. As regards testing of cement it will be entire responsibility of the contractor.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
12	Providing and laying Cast in situ/Ready Mix cement concrete Mix-25 of trap / granite /quartzite/ gneiss metal for Reinforced cement concrete columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Crushed sand VSI Grade).	Bd.F.5 & B-7	300 & 38	1) The appropriate mix design shall be got approved well in advance from the Government laboratory or laboratory approved by Engineer-in-charge.2) Cement of same grade and quality sent for mix design shall be used for concreting work.3)The minimum cement for reinforced cement concrete / plain cement concrete to ensure durability / strength, shall be as per provisions in the I.S. 456-2000 with latest amendment. If actual cement required / consumed more than the provisions in the IS Code, no claim for that shall be entertained and cost for that shall be borne by the contractor.4) Before concreting work cement from each consignment shall be got tested and if the strength of cement varies considerably from the approved mix design, then the mix design shall be got modified according to strength of fresh cement available in the stock and concreting work should be carried out according to redesigned mix.5) From every consignment of the cement a sample shall be got tested as per norms and frequency laid down in the Government Circular. As regards testing of cement it will be entire responsibility of the contractor.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
13	Providing and laying Cast in situ/Ready Mix cement concrete Mix-25 of trap / granite /quartzite/ gneiss metal for Reinforced cement concrete beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.6 & B.7	300 & 38	1) The appropriate mix design shall be got approved well in advance from the Government laboratory or laboratory approved by Engineer-in-charge.2) Cement of same grade and quality sent for mix design shall be used for concreting work.3) The minimum cement for reinforced cement concrete / plain cement concrete to ensure durability / strength, shall be as per provisions in the I.S. 456-2000 with latest amendment. If actual cement required / consumed more than the provisions in the IS Code, no claim for that shall be entertained and cost for that shall be borne by the contractor.4) Before concreting work cement from each consignment shall be got tested and if the strength of cement varies considerably from the approved mix design, then the mix design shall be got modified according to strength of fresh cement available in the stock and concreting work should be carried out according to redesigned mix.5) From every consignment of the cement a sample shall be got tested as per norms and frequency laid down in the Government Circular. As regards testing of cement it will be entire responsibility of the contractor.

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		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
14	Providing and laying Cast in situ/Ready Mix cement concrete Mix-25 of trap/ granite/ quartzite/ gneiss metal for Reinforced cement concrete chajja as per detailed design and drawings including steel centering, formwork, cover blocks, laying/pumping, compacting and roughening the surface if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel). without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control and Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.9 &B.7	303 & 38	1) The appropriate mix design shall be got approved well in advance from the Government laboratory or laboratory approved by Engineer-in-charge.2) Cement of same grade and quality sent for mix design shall be used for concreting work.3)The minimum cement for reinforced cement concrete / plain cement concrete to ensure durability / strength, shall be as per provisions in the I.S. 456-2000 with latest amendment. If actual cement required / consumed more than the provisions in the IS Code, no claim for that shall be entertained and cost for that shall be borne by the contractor.4) Before concreting work cement from each consignment shall be got tested and if the strength of cement varies considerably from the approved mix design, then the mix design shall be got modified according to strength of fresh cement available in the stock and concreting work should be carried out according to redesigned mix.5) From every consignment of the cement a sample shall be got tested as per norms and frequency laid down in the Government Circular. As regards testing of cement it will be entire responsibility of the contractor.

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		Specification No.	Page No.	Additional specification if any
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15	Providing and laying Cast in situ/Ready Mix cement concrete Mix-25 of trap/ granite / quartzite/ gneiss metal for Reinforced cement concrete slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.F.8 &B.7	303 & 38	) The appropriate mix design shall be got approved well in advance from the Government laboratory or laboratory approved by Engineer-in- charge.2) Cement of same grade and quality sent for mix design shall be used for concreting work.3) The minimum cement for reinforced cement concrete / plain cement concrete to ensure durability / strength, shall be as per provisions in the I.S. 456-2000 with latest amendment. If actual cement required / consumed more than the provisions in the IS Code, no claim for that shall be entertained and cost for that shall be borne by the contractor.4) Before concreting work cement from each consignment shall be got tested and if the strength of cement varies considerably from the approved mix design, then the mix design shall be got modified according to strength of fresh cement available in the stock and concreting work should be carried out according to redesigned mix.5) From every consignment of the cement a sample shall be got tested as per norms and frequency laid down in the Government Circular. As regards testing of cement it will be entire responsibility of the contractor.

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		Specification No.	Page No.	Additional specification if any
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16	Providing and laying Cast in situ /Ready Mix cement concrete in Mix -25 of trap /quartzite /granite /gneiss metal for Reinforced cement concrete Waist slab, and steps of staircases as per detailed design and drawings or as directed including steel centering, plywood/ steel formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with cement mortar. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete.(Excluding reinforcement, including cover block).(Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc.)without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	BDF 13A	305	1) The appropriate mix design shall be got approved well in advance from the Government laboratory or laboratory approved by Engineer-in-charge.2) Cement of same grade and quality sent for mix design shall be used for concreting work.3)The minimum cement for reinforced cement concrete / plain cement concrete to ensure durability / strength, shall be as per provisions in the I.S. 456-2000 with latest amendment. If actual cement required / consumed more than the provisions in the IS Code, no claim for that shall be entertained and cost for that shall be borne by the contractor.4) Before concreting work cement from each consignment shall be got tested and if the strength of cement varies considerably from the approved mix design, then the mix design shall be got modified according to strength of fresh cement available in the stock and concreting work should be carried out according to redesigned mix.5) From every consignment of the cement a sample shall be got tested as per norms and frequency laid down in the Government Circular. As regards testing of cement it will be entire responsibility of the contractor.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
17	Providing second class Burnt Brick masonry with conventional/ Indian Standard type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete (Crushed sand VSI Grade)	Bd.G.5	315	1)The brick shall be got tested before use from the Government laboratory at the rate of 1 batch of 15 bricks for every 50,000 bricks or part thereof at contractor's cost for the following: a) Crushing stretch: -Dry Condition - 5 bricks ii) Wet Condition - 5 bricks b) Water absorption- 5 bricks in addition, bricks shall be tested for size, shape and soundness. 3)The proportion of cement mortar shall be 1:6 4) Minimum two drums of water shall be provided to masons for soaking of bricks at each place where masons are working.5) For mixing of mortar steel forms of required size only shall be used. For mixing of mortar steel trough or back platform shall be used.6)The brick work shall be cured for a minimum period of 14 days.7)The joints on both faces shall be raked to a depth of not less than the thickness of joints for affording good bond for plaster.8)Holdfast for door or window frames shall be embedded in cast in situ 1:2:4cement concrete blocks of required size without any extra cost.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
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1	2	3	4	5
18	Providing second class Burnt Brick masonry with conventional. type bricks in cement mortar (1: 4) in half brick thick wall including longitudinal reinforcement of 2 bars of 6-millimeter diameter / 2 hoop iron strips 25-millimeter x 1.6 millimeter at every III course properly bent & bounded at ends scaffolding, racking out joints and watering complete. (Crushed sand VSI Grade)	BDG 7	316	1)The brick shall be got tested before use from the Government laboratory at the rate of 1 batch of 15 bricks for every 50,000 bricks or part thereof at contractor's cost for the following: a) Crushing stretch: -Dry Condition - 5 bricks ii) Wet Condition - 5 bricks b) Water absorption- 5 bricks in addition, bricks shall be tested for size, shape and soundness. 3)The proportion of cement mortar shall be 1:6 4) Minimum two drums of water shall be provided to masons for soaking of bricks at each place where masons are working.5) For mixing of mortar steel forms of required size only shall be used. For mixing of mortar steel trough or back platform shall be used.6)The brick work shall be cured for a minimum period of 14 days.7)The joints on both faces shall be raked to a depth of not less than the thickness of joints for affording good bond for plaster.8)Holdfast for door or window frames shall be embedded in cast in situ 1:2:4cement concrete blocks of required size without any extra cost.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
19	Providing and laying Cast in situ/Ready Mix cement concrete in Mix-20 of trap/granite/quartzite/gneiss metal for bed blocks, foundation blocks and such other items including bailing out water, Steel centering, formwork, laying/ pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control And Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd.E. 5	290	As directed by Engineer in charge.

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		Specification No.	Page No.	Additional specification if any
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20	Providing and fixing in position Thermo Mechanically Treated - Ferrous - 500 bar reinforcement of various diameters for Reinforced cement concrete pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required etc. complete.	Bd.F.17	306	1) As per Indian Standard 1786/1985 with latest amendments.2) Various diameters of TMT Fe-500 bars brought on site for the work shall be got tested category wise and lot wise as directed by the Engineer in Charge.3) Testing should be done in Government laboratory
21	Providing outside cement plaster single coat 20 Millimeter thick in Single coats in cement mortar 1:4 outside without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc. complete. (Crushed sand VSI Grade)	Bd.L.4	368	1)The surface to be plastered shall be first cleaned and thoroughly wetted for 24 Hours and got checked from Engineer in charge before starting the new.2)Item includes rounding of all internal and external junctions, corners, jambs, etc. as directed by the Engineerin-charge.3)Finishing shall be plain and in line, level and plumb.4)Curing shall be done by sprinkling water on the surface for minimum period of fourteen days.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
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22	Providing internal cement plaster single coat 20 Millimeter thick in Cement Mortar 1:4 inside with neeru & smooth finish to concrete or brick surface in all positions including scaffolding curing etc. complete as directed (Crushed sand VSI Grade)	Bd.L.4	368	1)The surface to be plastered shall be first cleaned and thoroughly wetted for 24 Hours and got checked from Engineer in charge before starting the new.2)Item includes rounding of all internal and external junctions, corners, jambs, etc. as directed by the Engineerin-charge.3)Finishing shall be plain and in line, level and plumb.4)Curing shall be done by sprinkling water on the surface for minimum period of fourteen days.
23	Providing outside up to plinth cement plaster single coat 20 Millimeter thick in Cement Mortar 1:4 outside plinth with smooth cement finish to concrete or brick surface in all positions including scaffolding curing etc. complete as directed (Crushed sand VSI Grade)	Bd.L.4	368	1)The surface to be plastered shall be first cleaned and thoroughly wetted for 24 Hours and got checked from Engineer in charge before starting the new.2)Item includes rounding of all internal and external junctions, corners, jambs, etc. as directed by the Engineerin-charge.3)Finishing shall be plain and in line, level and plumb.4)Curing shall be done by sprinkling water on the surface for minimum period of fourteen days.
24	Providing & applying Oil bound distemper two coats on plastered or masonry surface including scaffolding & preparing the surface by brushing & brooming down complete.	Bd.P.5	413	As directed by Engineer in charge.

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25	Providing and applying two coats of exterior acrylic emulsion paint confirming to corresponding Indian Standard of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc. complete.	---	---	The two coats of exterior acrylic emulsion paint shall be of approved manufacture and it shall be of approved colour and shade. The contractor shall bring them to the site in original airtight containers with seals intact. Scaffolding, if necessary, shall be double. The surface to be painted shall be prepared as specified by the manufacturer of the paint. The surface shall be thoroughly cleaned free from dirt, dust etc. by brushing and washing down with clean water. Any grease, oil paint, or any other foreign material shall be removed by approved methods like applying the exterior acrylic wall putti. The paint shall be applied by means of brushes and in the manner specified by the manufacturer. The number of coats shall be as mentioned in the wording of the item when more than one coat is ordered, subsequent coats shall be applied after the preceding coat is properly cured and has thoroughly hardened, inspected and approved, and as per manufacturer's specifications. Absorbent surfaces shall be evenly damped so as to give even suction. In dry weather, freshly painted surfaces shall be kept damp for at least 2 days and protected from direct sun. As directed by Engineer in charge

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26	Providing & applying oil painting in two coats of Deep orange colour & shade to flooring for marking stack lines including preparing the surfaces & primer coat etc. complete.	---	---	As directed by Engineer in charge.
27	Providing & applying oil painting nameboard with three coats with background of approved colour & shade including scaffolding etc. complete.	---	---	As directed by Engineer in charge.
28	Providing sills of polished Kota stone 25 to 30 Millimeter thick, on a bed of 1:4 cement mortar including cement float, filling joints with slurry, curing, moulding edges, polishing and cleaning etc. complete.	Bd.M. 29	391	As directed by Engineer in charge.
29	Providing and laying telephone black / Amba White / Cadbury brown / Ruby red / Ocean Brown granite stone of 18 to 20 Millimeter thick for door frame/ dado/ window boxing etc. On cement mortar 1:6 including filling joints with polymer base filler nosing/moulding the sharp edges wherever necessary, curing, etc. complete.	BDM	---	As directed by Engineer in charge.

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30	Providing and fixing in position 60x60 Centimeter aluminium openable ventilators of section 2.5"x1.5" (inches) as per detailed drawing and as directed by Engineer in charge with all necessary aluminium sections with powder coating including necessary fixtures and fastening with 5-Millimeter-thick float glass etc. complete. (Note While arriving at the rate of item of item weight at 6.90 kilogram/Square meter is considered for only aluminium ventilators) and with Galvanized iron wire mesh of 18 Gauge, 6 Millimeter square mesh fixed to outside the frame of ventilator and grill of 12 Millimeter square bars in vertical directions at 10 Centimeters Center/Center fixed to outside surface of the frame and approved quality and type fixtures, fittings including red oxide & oil painting three coats. As per detailed drawing and as directed.	---	---	As directed by Engineer in charge.

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31	Providing and fixing rolling shutter fabricated from corrugated cold rolled coil (CRC) Mild Steel/Galvanized Iron Steel laths of minimum thickness 0.9 Millimeter with lock plate of 3.15 Millimeter thickness reinforced with 35 x 35 x 5 Millimeter angle section fitted with sliding bolts and two handles for both sides, deep Mild Steel channel section of side guide of height 2.55 Meter & depth and thickness not less than 75 Millimeter and 3.15 Millimeter respectively with hold fast 4 Numbers to each side i.e. 16 Numbers holdfast arrangements ,Mild Steel Bracket plate 300 x 300 x 3.15 Millimeter minimum size and shape, welded with side guide & fixed on Reinforced cement concrete beam with help of J hooks anchored with reinforcement of beam, suspension shaft of minimum 50 Millimeter diameter, hood cover of Mild Steel/Galvanized Iron sheet not less than 0.90 Millimeter thickness and of any size at top and safety devices with one coat of red lead primer and two coats of oil paints of approved deep orange shade and locking arrangement with central lock etc. complete. as directed by Engineer in charge.	---	---	As directed by Engineer in charge.

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32	Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.90 Millimeter with lock plate of 3.15 Millimeter thickness reinforced with 35 x 35 x 5 Millimeter angle section fitted with sliding bolts and handles for both sides, deep Mild steel channel section of depth and thickness not less than 65 Millimeter and 3.15 Millimeter respectively with hold fast arrangements, Mild steel. Bracket plate 300 x 300 x 3.15 Millimeter minimum size and shape with square bar, suspension shaft of minimum 32 Millimeter diameter, hood cover of Mild steel sheet not less than 0.90 Millimeter thickness and of any size at top and safety devices including mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade cast iron or mild steel and one coat of red lead primer and two coat of oil paints of approved deep orange shade etc. complete. (Indian standard. 62481979) (With mechanical gear)	---	---	As directed by Engineer in charge.

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		Specification No.	Page No.	Additional specification if any
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33	Providing & fixing Mild steel grilled rolling shutter fabricated from Mild Steel rod of 6 Millimeter dia. zig zag shape(grill work size 2.10 x 1.70 Meter) with side guides prepared out of 3.00 Millimeter thick Mild Steel Plate & Provided with holdfast 25 x 6 Millimeter @ 1.00 Meter Center to center throughout the height on both sides , bottom rails & Strips 3.00 Millimeter thick Mild Steel Plate with Mild Steel Angle 35x35x6 Millimeter, bracket rail & strip with 10.00 Millimeter square bar suspension shaft 32.00 Millimeter diameter best quality , rolling springs High tensile tested steel (coiled spring) 45 Centimeter length 2 Numbers, Mild Steel laths of 7.6 Centimeter wide prepared out of best quality 22 guage locking arrangements with not less than 6 Millimeter thick strip as per specifications, housing box prepared out of 20 G sheets at the top, handles prepared out of 6 Millimeter thick flats, with one coat primer and applying two coats of oil paint of approved colour & shade of deep orange shade etc. complete.	---	---	As directed by Engineer in charge.

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		Specification No.	Page No.	Additional specification if any
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34	Providing & fixing Mild steel grilled rolling shutter fabricated from Mild steel rod of 6 Millimeter diameter zig zag shape (grill work size 2.10 x 1.70 meter) with side guides prepared out of 3.00-Millimeter-thick Mild steel Plate & Provided with holdfast 25 x 6 Millimeter @ 1.00-meter Center to center throughout the height on both sides, bottom rails & Strips 3.00-Millimeter-thick Mild steel. Plate with Mild steel Angle 35x35x6 Millimeter, bracket rail & strip with 10.00 Millimeter square bar suspension shaft 32.00 Millimeter diameter best quality , rolling springs High tensile tested steel (coiled spring) 45 centimeter length 2 Number, Mild steel laths of 7.6 centimeter wide prepared out of best quality 22 guage locking arrangements with not less than 6 Millimeter thick strip as per specifications, housing box prepared out of 20 Guage sheets at the top, handles prepared out of 6 Millimeter thick flats, with one coat primer and applying two coats of oil paint of approved colour & shade of deep orange shade etc. complete.(With mechanical gear)	---	---	As directed by Engineer in charge.

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35	Filling in plinth with approved excavated stuff obtained from departmental land including watering, compacting etc. complete as directed.	Bd.A.10	262	As directed by Engineer in charge.
36	Filling in plinth and floors with contractors' material/brought from outside and approved by Engineer in charge in layers of 15 to 20 Centimeter including watering and compaction etc. complete [Only compacted thickness is payable]	Bd.A.11	263	As directed by Engineer in charge.
37	Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at Optimum Moisture Content, carriage of mixed Material to work site, spreading in uniform layers with motor grader/ Paver on prepared surface and compacting with vibratory roller to achieve the desired density, complete as per clause 401 -- Plant Mix Method and Grading - I Material.	MORTH 401	---	As directed by Engineer in charge.

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38	Construction of dry lean cement concrete Sub-base over a prepared sub-grade with coarse and fine aggregate (VSI grade finely washed crushed sand) conforming to Indian Standard: 383, the size of coarse aggregate not exceeding 25 millimeter, , cement content not to be less than 150 kilogram/ Cubic meter, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Megapascal at 7 days, mixed in a batching plant/ Weigh batch mixer, transported to site with all leads and lifts, laid with a paver with electronic sensor /by suitable means as approved by Engineer-in-charge , compacting with vibratory roller, finishing, curing and including preparation of subgrade surface if required etc. complete.(Crushed sand VSI Grade)	MORTH 601	---	As directed by Engineer in charge.
39	Providing and laying in situ Tremix Cement Concrete Mix -20 with Tremix treatment for 150 Millimeter thickness for flooring with groove cutting of 4 Millimeter wide and 20 Millimeter deep at every 4.00-meter center to center both sides after 24 hours of casting with necessary refilling with bitumen, etc. complete as directed	Bd.M	---	As directed by Engineer in charge.

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	by Engineer Incharge.With fine aggregate (Crushed sand VSI Grade finely washed etc.)			
40	Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete.(Platform channel-Deep orange paint)	Bd.C.2	275	As directed by Engineer in charge.

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41	Providing and fixing lightening conductor system comprising of erecting Air-Termination consisting of tubular copper rod of 25 Millimeter diameter 1.20 Millimeter thick with multiple points head 1.2 meter long (Heavy Duty) welded or clam ped to Galvanized Iron pipe pole B grade 50 Millimeter diameter of required length with Mild Steel. round base plate 25 Centimeter diameter and 10 Millimeter thick at bottom embedded in cement concrete 1:3:6 foundation of size 45 Centimeter diameter x 45 Centimeter Height and providing earthing with copper earth plate of size 60 x 60 x 0.30 Centimeter with cadmium plated nut bolts to fix earthing strip buried in specially prepared earth pits 1.5 meter below ground level with 40 kilogram charcoal and salt with altemate layers of charcoal and salt and Galvanized Iron pipe 40 Millimeter diameter 2 meter length buried in earth up to earthling plate remining portion above ground level for watering and refilling complete (Note- Copper strip from lightening conductor is considered in this item) (Oham test is necessary).	---	---	The item pertains to the provisions and fixing of lightning conductor including the upper terminal. Conductor and the earth plate. Copper tape conductor, 25Millimeter x 3 Millimeters. Solid copper rod upper 19-Millimeter diameter 1.5 meter long with a knob at the end with a conical spike on top. Suitable clamps to fix the conductor to the wall. Copper earth plate 1.5 Millimeter thick and one square meter in area. Charcoal and stand for filling. Cast iron pipe of 60-millimeter diameter including fittings shall conform to I.s. 1230-1968. The upper terminal shall be fixed vertically at the highest point on the building and shall be at least 1.5 meter long. A copper tape of 25-millimeter x 3 millimeter shall then be reveted and soldered to the lower end of the conductor and carried along the stretch up to the spot where the copper plate shall be buried.The other end of the tape shall be connected to the copper earth plate by riveting and soldering. The copper plate shall as far as possible be burried 60 centimeter to one metre below the subsoil water level in the driest season of the year. The earth plate shall be surrounded with charcoal. The copper conductor

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				shall be laid in charcoal and the trench filled with sand. As directed by Engineer in charge.
42	Providing and fixing 60 x 45 Centimeter Marble plate engraving 10 Centimeter. Height letter, figures including painting the letters/figures with approved colour and shade complete	Bd.W.7	586	As directed by Engineer in charge.

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1	2	3	4	5
43	Providing pre constructional antitermite treatment as per Indian standard 6313 (Part-II) by treating the bottom surface of excavation at the rate of 5 litres of emulsion concentrate of 1.0 percent of chlorpyrifos per square meter of surface area covering 10 years guarantee on bond paper.	Bd. W	---	1) The work shall be carried out as directed by Engineer in charge.2) If the use of any chemical is found banned by the Government, proper substitute chemical will be allowed to be used as per manufacturers code of practice. The chemical shall be got approved from Engineer in charge.3) The recoupment of the damages if any found and communicated to the contractor in writing is not made good within two weeks from the date of receipt or of such communication by him, the same shall be carried out departmentally on his behalf and cost thereof shall be met with from sum withheld as aforesaid. In case the sum recoverable from the contractor is more than that of the sum withheld amount, the difference shall stand recoverable as arrears of land revenue from the contractor under Clause20 of original contract. 4) The mode of measurements shall be on litre basis.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
44	Providing pre constructional antitermite treatment as per Indian standard 6313 (Part-II) treatment by treating the backfill in immediate contact with foundation at the rate of 5 litres of emulsion concentrate of 1.0 percent of chlorpyrifos per One Square Meter of vertical surface area covering 10 years guarantee on bond paper.	Bd. W	---	1) The work shall be carried out as directed by Engineer in charge.2) If the use of any chemical is found banned by the Government, proper substitute chemical will be allowed to be used as per manufacturers code of practice. The chemical shall be got approved from Engineer in charge.3) The recoupment of the damages if any found and communicated to the contractor in writing is not made good within two weeks from the date of receipt or of such communication by him, the same shall be carried out departmentally on his behalf and cost thereof shall be met with from sum withheld as aforesaid. In case the sum recoverable from the contractor is more than that of the sum withheld amount, the difference shall stand recoverable as arrears of land revenue from the contractor under Clause20 of original contract. 4) The mode of measurements shall be on liter basis.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
45	Providing pre constructional antitermite treatment as per Indian standard 6313 (Part-II) by treating the top surface of plinth filling at the rate of 5 litres of emulsion concentrate at 1.0 percent of chlorpyrifos per One Square Meter of surface area covering ten years guarantee on bond paper	Bd. W	---	1) The work shall be carried out as directed by Engineer in charge.2) If the use of any chemical is found banned by the Government, proper substitute chemical will be allowed to be used as per manufacturers code of practice. The chemical shall be got approved from Engineer in charge.3) The recoupment of the damages if any found and communicated to the contractor in writing is not made good within two weeks from the date of receipt or of such communication by him, the same shall be carried out departmentally on his behalf and cost there of shall be met with from sum withheld as aforesaid. In case the sum recoverable from the contractor is more than that of the sum withheld amount, the difference shall stand recoverable as arrears of land revenue from the contractor under Clause20 of original contract. 4) The mode of measurements shall be on liter basis.
46	Providing patti/ band 75 to 100 Millimeter wide on plastered surface 12 to 15 Millimeter thick in Cement mortar 1:4 line and level including neat finishing scaffolding curing making groove at weather shed etc. complete.	Bd.L	---	As directed by Engineer in charge.

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		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
47	Providing and fixing board displaying information, such as 'Name of department, Name of work, Location, SMART Tranche, Project code, Project cost, Name of Contractor, Date of commencement and Schedule date of completion etc, having rectangular shape of 1.80 meter x 1.20 meter size made out 18 gauge (1.25millimeter) thick mild steel sheet painted with one coat of Zinc chromate stoving primer and two coats of enamel paint on front side and grey stove enamel on back side and border / messages / symbols etc. with approved colour shade of yellow background and letter in black colour including painting SMART Logo complete, on Mild steel angle of size 35 x 35 x 3 millimeter frame with properly cross braced Mild steel angles of size 35x35x3 millimeter duly painted including Two Mild steel angle iron posts of size 65x65x6 millimeter, 3.65 meter long painted with alternate black and white bands of 25 Centimeter width including all fixtures etc. And fixing the boards in 1:4:8 concrete block of size 60x60x 75 Centimeter including, excavation, refilling, transportation, and labour etc. complete. As directed by Engineer in Charge	MORTH 801	---	As directed by Engineer in charge.

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48	Providing and laying in trenches 25-millimeter diameter. chlorinated polyvinyl chloride (CPVC)) pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipeline if necessary and conveying and stacking the same as directed etc. complete.	Bd.V.5	551	As directed by Engineer in charge.
49	Providing & fixing 25-Millimeter diameter. Screw down wheeled stop tap of gun metal / brass including necessary socket / union nuts etc. complete.	Bd.V.9	555	As directed by Engineer in charge.
50	Providing & laying in situ cement concrete Mix-15 of trap metal for foundation & bedding including dewatering if necessary, compacting, curing etc. complete.	Bd.E.1	555	As directed by Engineer in charge.
51	Providing & filling brick bat in excavated pit as directed by Engineer- in -charge.	---	---	As directed by Engineer in charge.
52	Providing & filling Sand in excavated pit of approved quality including watering compaction complete.	BDA 13	264	As directed by Engineer in charge.
53	Providing & laying Polyvinyl chloride (PVC) PIPES 110-millimeter diameter on the top of pit to drain the rain water inside the pit as directed by Engineer- in - charge.	Bd.V. 60	---	As directed by Engineer in charge.

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1	2	3	4	5
54	Management strategies and implementation plan (MSIP) to manage the environmental, social, health and safety (ESHS) risks and ESHS code of conduct	---	---	As directed by Engineer in charge.
55	Providing and laying in trenches 50-millimeter diameter chlorinated polyvinyl chloride (CPVC) pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same as directed by Engineer-in-charge. etc. complete.	BDV 5	551	As directed by Engineer in charge.

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56	Providing cement-based water proofing treatment to terraces (Indian water proofing or alike) with brick bats laid in required slope to drain the water for any span after cleaning the base surface. Applying a coat of cement slurry admixed with approved water proofing compound and laying the brick bats on bottom layer in Cement mortar.1:5 admixed with approved water proofing compound filling up to half depth of brick bats, curing this layer for 3 days, applying cement slurry over this layer joints of brick bats with Cement mortar.1:3 admixed with approved water proofing compound and finally top finishing with average 20 millimeter. thick layers of same mortar added with jute fiber at 1 Kilogram per bag including finishing the surface smooth with cement slurry admixed with approved water proofing compound. Marking finished surface with false squares of 300 x 300 millimeter. making the junctions at the parapet rounded and tapered top for required height, with drip mould at the junction of plaster and parapet and curing and covering 10 years Guarantee against leak proofness on Court fees stamp paper of Rs.500/- including ponding test etc. complete.	---	---	As directed by Engineer in charge

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
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57	Providing and Fixing mat finish stainless steel (of 302 grade) railing with top pipe of 50 millimeter diameter and vertical pipe of 38 millimeter diameter at 0.60 meter center to center or as required and horizontal pipes of 25 millimeter diameter in three rows, all pipes of 2 millimeter thick including buffing, fabricating fixtures and fastening including pipe base of appropriate diameter and ball base of 75 millimeter diameter above newel post of 75 millimeter diameter etc. complete (Prior approval of sample and brand by Executive Engineer is necessary before use)	BDW	---	As directed by Engineer in charge

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		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
58	Providing and fixing position, Single shuttered aluminium extruded powder coated openable door of overall size 1.0 x 2.10 meter with aluminium door frame of powder coated section 101.60x44.75 millimeter, 3.18 millimeter thick and shutter comprising of powder coated section having bottom and lock rail of size 150x44.5x3.00 millimeter thick top rails 47.62x44.45x3.00 millimeter thick, vertical style 47.62x44.45 millimeter, 3.00 millimeter thick and for shutter plain glass panes 5 millimeter thick for top panels and 12 millimeter thick both side a laminated phenol bonded particle board panels for bottom panels etc., Indian Standard mark , heavy duty, Hydraulic floors spring of 150 Kilogram capacity, having heavy duty concealed lock, necessary beading, glazing clips, Polyvinyl chloride (PVC) gaskets, 250 millimeter length tower bolts, 150 millimeter diameter. pad handle, etc. as per detailed design and drawing or as directed by engineer in charge including all materials, labours, and equipment etc. Complete	BDT	---	As directed by Engineer in charge

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
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59	Providing and fixing Country cut teak wood single leaf panelled door shutter without fanlight and 25 millimeter thick as per drawing consisting of Tick wood. top rail size 100 x 25 millimeter and bottom lock rail 200 x 25 millimeter insert Pannel 12-millimeter-thick commercial ply faced Tick wood. particle board with phenol formaldehyde synthetic resin (Generally confirming to Indian standard institute 3097) excluding frame, including stainless steel fixture and fastening and Tick wood. beading to junctions of panelled inserts and as instructed by the Engineer in charge including 3 coats of oil painting etc. complete	---	---	As directed by Engineer in charge
60	Providing and fixing collapsible steel gate in one/two leaves with hot rolled vertical channels of 18x9x3 millimeter minimum size, crossings of Mild Steel. flats of size 18 x 5-millimeter T or E section for runner of minimum 40 x 6-millimeter size for flange, Mild Steel. flat for top runner of minimum size 40x12 millimeter with roller wheels confirming to grade F.G.150 fitted with snap headed rivets of minimum size 6-millimeter max. spacing of vertical channels be 100-millimeter enclosed gate position and clear space of 150 millimeter between two sets of crossings	BD-T-57	511	As directed by Engineer in charge

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	with holdfasts, stoppers, spaces, handles, locking arrangement and one coat of red lead primer and two coat oil painting etc. Complete.			
61	Providing & fixing Mild Steel grillwork for windows & ventilators up to 15 kilogram/square meter as per drawing including fixtures necessary welding and painting one coat of anticorrosive paint & two coats of oil painting complete as directed	Bd.U.1	537	As directed by Engineer in charge
62	Providing hard Murum, cohesive non swelling materials in plinth in layers of 20 Centimeter etc. complete as directed. [Only compacted thickness is payable]	---	---	As directed by Engineer in charge
63	Providing & fixing in position for flooring, of vitrified tiles of approved quality & make 600 x 600-millimeter size & 8 to 10 millimeter thickness. for flooring width on 1: 4 cement mortar including cement float filling cement joints with neat cement slurry, curing, rubbing polishing & cleaning complete.	Bd.M. 12	385	As directed by Engineer in charge

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		Specification No.	Page No.	Additional specification if any
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64	providing & fixing in position skirting or dado of vitrified tiles of approved quality & make 600 x 600-millimeter size & 8 to 10 millimeter thickness. for flooring width on 1: 4 cement Mortar including cement float filling cement joints with neat cement slurry, curing, rubbing polishing & cleaning complete.	Bd. M-12	385	As directed by Engineer in charge
65	Providing and laying matt finish ceramic tiles of having size 30 x 30 centimeter confirming to Indian standard. 15622/2006 (group D II-A) and 7-to-8-millimeter thick for flooring in required position laid on a bed of 1:4 cement mortar including cement float, filling joint with white/colour cement slurry cleaning curing etc. complete	Bd. M-12	385	As directed by Engineer in charge
66	Providing and laying ceramic tiles of having size 30 x 30 centimeter. and confirming to corresponding Indian standard. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curing etc. complete.	Bd.M.13	386	As directed by Engineer in charge

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67	Providing & fixing Indian type white glazed Orissa type earthenware 580 x 440 millimeter water closet pan including S trap white earthenware foot rest cast iron soil & vent pipe up to the outside face of the wall 1:2:4 brickbat lime concrete bedding 10 Litre fibre high level tank flushing cistern with fittings, inlet pipe with stop tap, bracket for fixing the cistern 32 millimeter diameter Polyvinyl chloride (PVC) pipe with fittings & clamps 20 millimeter diameter Galvanized Iron Over flow pipe with mosquito proof capping Galvanized Iron Chain pull, painting of cistren & exposed pipes & fittings & making good walls & floor with enameled tank & Polyvinyl chloride (PVC) pipe as directed	---	---	As directed by Engineer in charge
68	Providing and fixing European type white glazed earthenware coupled closet symphonic trap with symphonic low level white glazed 10litres cistern with black back lite seat with all necessary pipe connection etc. complete.	---	---	As directed by Engineer in charge

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		Specification No.	Page No.	Additional specification if any
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69	Providing and fixing White glazed earthenware Wash Hand Basin of 45x30 centimeter size including cold water pillar tap/cold and hot water pillar tap brackets, rubber plugs and brass chain, stop tap and necessary pipe connection including Polyvinyl chloride (PVC) waste pipe and trap up to the outside face of the wall. Making good the damaged surface, testing etc. complete.	---	---	As directed by Engineer in charge
70	Providing & fixing 15 x 10-centimeter salt glazed stoneware gully trap in Cement Concrete. 1:4:8 outside the building including cast iron grating in the sink, connecting glazed stoneware pipe, brick masonry chamber and cast-iron lead & cast-iron grating for gully trap.	Bd.V.38	572	As directed by Engineer in charge
71	Providing & constructing brick masonry inspection chamber 60 x 45 Centimeter including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round Glazed stoneware (GSW) pipes, brick masonry, plastering from inside with frame fixed in cement concrete etc. complete with Reinforced Cement Concrete cover.	Bd.V.46	576	As directed by Engineer in charge
72	Providing Soak pit including excavating and filling with brickbat etc. complete.	Bd.V.46	576	As directed by Engineer in charge

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73	Providing & fixing hume pipe septic tank 900-millimeter diameter with vent pipe and cap including necessary fittings (excluding excavation)	BD. V 5	551	As directed by Engineer in charge
74	Providing & laying 110-millimeter diameter Unplasticized polyvinyl chloride (UPVC) SOIL / VENT / WASTE pipe salt glazed stoneware pipe including fittings such as bends, tees, single junction, double junction laying, jointing (including excavation & refilling the trenches) complete	---	---	As directed by Engineer in charge
75	Providing & fixing stainless steel sink 600 x 510 x 200 millimeter including all connection of the Galvanized Iron. supply and lead waste pipes up to the outside face of the wall, cold water chromium plated screw down bib tap, rolled steel on Cast Iron brackets, rubber plug with chain and stop tap etc. complete.	---	---	As directed by Engineer in charge

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76	Providing and laying in trenches 15-millimeter diameter. medium grade having embossed as Indian standard institution Mark galvanized iron pipes of 1.25 Kilogram/meter necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint, 2 coats Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.	BD. V 5	551	As directed by Engineer in charge
77	Providing and laying in trenches 15millimeter diameter chlorinated polyvinyl chloride (CPVC) pipe including necessary excavation, fittings. Refilling trenches etc. Complete Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.	BD. V 5	551	As directed by Engineer in charge
78	Providing and laying in trenches 20-millimeter diameter. chlorinated polyvinyl chloride (CPVC) pipe including necessary excavation, fittings. Refilling trenches etc. complete. Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.	BD.V 5	551	As directed by Engineer in charge

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79	Providing and fixing on walls/ceiling/floor 15-millimeter diameter. chlorinated polyvinyl chloride (CPVC) pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.	BD. V 5	551	As directed by Engineer in charge
80	Providing and fixing on walls/ceiling/floor 25-millimeter diameter. chlorinated polyvinyl chloride (CPVC) pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.	BD. V 5	551	As directed by Engineer in charge
81	Providing and fixing on walls/ceiling/floor 20-millimeter diameter. chlorinated polyvinyl chloride (CPVC) pipe with necessary fittings, remaking good the demolished portion etc. Complete. Including removing existing pipeline if necessary and conveying and stacking the same as directed by engineer in charge etc. complete.	BD. V 5	551	As directed by Engineer in charge
82	Providing & fixing in position 45 x 55-centimeter-high class mirror over wash hand basin including all accessories, and necessary fittings etc. Complete as directed.	---	---	As directed by Engineer in charge

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		Specification No.	Page No.	Additional specification if any
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83	Providing & fixing in position cast iron oxidized brackets mounted on country cut teak wood plank of size 90 x10 x 2.5 centimeter duly polished & fixed on wall properly etc. complete	---	---	As directed by Engineer in charge
84	Providing and fixing High density polyethylene container one-piece moulded water tank made out of high density polythylene and built corrugated inclusive of delivery up to destination hoisting and fixing of accessories such as inlet, outlet overflow pipe inclusive of all tank's capacity between 200 to 1000 Liters	---	---	As directed by Engineer in charge
85	Providing & fixing 15-millimeter diameter screw down bib / stop tap of brass including necessary socket, union, nuts complete.	Bd.V.8	554	As directed by Engineer in charge
86	Providing, construction and erecting in position flag post as per drawing and design as directed by Engineer in charge	---	---	As directed by Engineer in charge

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		Specification No.	Page No.	Additional specification if any
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87	Providing and fixing in position (as per 1868 / 1982) Aluminium sliding window of three tracks with rectangular pipe 95 x 38.10 x 0.90 millimeter at weight 0.637 Kilogram/One Running Meter. with window frame bottom track section 92 x 31.75 x 1.30 millimeter at weight 1.070 Kilogram/One Running Meter. Top and side track section 92 x 31.75 x 1.30 millimeter at weight 0.933 Kilogram/Running metre. The shutter should be of bearing bottom 40 x 18 x 1.25 millimeter at weight 0.417 Kilogram/One Running Meter. Inter locking section 40 x 18 x 1.10 millimeter at weight 0.469 Kilogram/Running metre. and handle and top section 40 x 18 x 1.25 millimeter at weight 0.417 Kilogram/Running metre. As per detailed drawings and as directed by Engineer in charge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self-locking catch fitted in vertical section of shutter including 5 mm thick plain glass and aluminium mosquito net shutter with stainless steel jail with all required screws and nuts etc. complete. With powder coating with box	---	---	As directed by Engineer in charge

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		Specification No.	Page No.	Additional specification if any
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88	Providing and fixing in position V1 & V2 ventilators as per detailed drawing and as directed by Engineer in charge with all necessary fixtures and fastening with 5-millimeter-thick float glass etc. complete. and with Galvanized Iron wire mesh of 18 Gauge, 6-millimeter square mesh fixed to outside the frame of ventilator and grill of 12-millimeter square. bars in vertical directions at 10 centimeter center to center fixed to outside surface of the frame and approved quality and type fixtures, fittings including red oxide & oil painting three coats. As per detailed drawing and as directed.	---	---	As directed by Engineer in charge
89	Providing structural steel work in single stanchions composed of Rolled steel joist Channel etc. with caps, bases, mild steel plated, angle brackets, cleats, gusset plates, anchor bolts etc. as per detailed designs and drawings or as directed including cutting, fabrication, hoisting, erecting fixing in position, making riveted/ bolted/ welded connection and one coat of anticorrosive paint and over it two. coats of oil painting approved quality and shade etc. complete.	Bd.C.6	277	As directed by Engineer in charge

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90	Providing & fixing 15-millimeter diameter. Screw down wheeled stop tap of gun metal / brass including necessary socket / union nuts etc. complete.	Bd.V.9	555	As directed by Engineer in charge
91	Providing & fixing 20-millimeter diameter. Screw down wheeled stop tap of gun metal / brass including necessary socket / union nuts etc. complete.	Bd.V.9	555	As directed by Engineer in charge
92	Providing and fixing screw down for 50-millimeter diameter. wheeled stop tap of brass including necessary sockets/ union nut complete	Bd.V.9	555	As directed by Engineer in charge
93	Providing & fixing 20-millimeter dia. aluminium powder coated palemat rod including fixtures as directed.	---	---	As directed by Engineer in charge
94	Providing & fixing white glazed earthenware semi stall type Urinals without cistern with inlet pipes stop tap, Unplasticized polyvinyl chloride (UPVC) flush pipe, with fittings and flushing arrangement including Unplasticized polyvinyl chloride (UPVC) soil pipe, Unplasticized polyvinyl chloride (UPVC) trap and soil pipe connection up to the outside face of the wall, making good to damaged surface testing etc. complete. (Prior approval of sample and brand by	Bd.V.26	564	As directed by Engineer in charge

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	Ex. Engineer is necessary be for use.) (Spec.No.: As directed by Engineer -in-Charge)			

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		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
95	Providing and laying Cast in situ/ Ready Mix cement concrete in Mix-25 of trap / quartzite/ granite /gneiss metal for Reinforced cement concrete. Newel posts of staircase as per detailed design and drawings including steel centering, plywood / steel formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with cement mortar.1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finishes to be provided and curing etc. complete. (Excluding reinforcement, including cover block). (Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc.) without fully automatic microprocessor based Programmable Logic Controller (PLC) without Supervisory Control and Data Acquisition (SCADA) enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	Bd. F. 14	---	1) The appropriate mix design shall be got approved well in advance from the Government laboratory or laboratory approved by Engineer-in-charge.2) Cement of same grade and quality sent for mix design shall be used for concreting work.3) The minimum cement for reinforced cement concrete / plain cement concrete to ensure durability / strength, shall be as per provisions in the I.S. 456-2000 with latest amendment. If actual cement required / consumed more than the provisions in the IS Code, no claim for that shall be entertained and cost for that shall be borne by the contractor.4) Before concreting work cement from each consignment shall be got tested and if the strength of cement varies considerably from the approved mix design, then the mix design shall be got modified according to strength of fresh cement available in the stock and concreting work should be carried out according to redesigned mix.5) From every consignment of the cement a sample shall be got tested as per norms and frequency laid down in the Government Circular. As regards testing of cement it will be entire responsibility of the contractor.

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		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
96	Providing & fixing chromium plated towel rod 16-millimeter diameter. and 75 Centimeter in length including all accessories etc. complete (As directed by Engineer in charge)	BDV	---	As directed by Engineer in charge
97	Providing & fixing polyvinyl chloride (PVC) Soil / vent / waste pipe 75-millimeter diameter. Of approved make with standing min. pressure of 4 Kilogram. / Centimeter. Square. from standard manufactures with necessary fixture and fittings such as bend, tees, single junction, double junction, slotted vent offsets on walls or in the ground including excavation, laying refilling the trench etc. complete. As directed by Engineer in charge	---	---	As directed by Engineer in charge
98	Providing 25x30 millimeter thick portions of polished black kadappa stone slab of approved shapes, quality and colour for platform urinals, including cutting holes of required sizes in the appropriate places to receive pipes etc., fixing in cement mortar 1:3 curing and cleaning complete.	Bd.M.35	393	As directed by Engineer in charge

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99	Providing and fixing solid core flush door shutter in single leaf 32 Millimeter thick decorative type of exterior grade as per detailed drawings approved face veneers 3 Millimeter thick on both faces or as directed, all necessary beads, mouldings and lipping, wrought iron hold fasts, chromium plated fixtures and fastenings, with brass mortise lock, chromium plated handles on both sides, including door frame of CCT Wood of size 60 X 100 Millimeter and finishing with French Polish etc. complete.	---	---	As directed by Engineer in charge
100	Providing & fixing Country teak wood single leaf, second class fully panelled door, with ventilator as per detailed drawing including Iron Oxidized fixtures and fastenings and finishing the wood work with one coat of primer etc. including door frame 60 x 100 Millimeter complete.	---	---	As directed by Engineer in charge
101	Providing & fixing 10 Centimeter Rigid Cast Iron Nahanni trap including Cast Iron Grating bend & piece of Cast Iron Pipe up to the outside face of the wall complete	Bd.V.32	567	As directed by Engineer in charge

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1	2	3	4	5
102	Free Standing Table @ 1500 Lengthx600 Width x750Height Providing and fixing Table of Size 1500x600x750 millimeter. Top: made from 25-millimeter Prelaminated Particle board. All edges are covered by 2 Millimeters. Thick. PVC edge bands glued by hot melt glue applied by auto edge banding machine. Legs: C Shape made from Cold Rolled Closed Annealed (CRCA) Sheet with Powder Coat finish. Modesty panel: Made from 18-millimeter both side pre laminated particle boards. All ledges are covered by 0.8-millimeter Polyvinyl chloride (PVC) edge bands glued by hot melt glue applied by auto edge banding machine. KEYBOARD TRAY (WITHOUT MOUSE TRAY):- Metal Powder Coated - Black Colour, Central processing unit (CPU) TROLLEY:- Metal Powder Coated - Black Colour, 3 DRAWER PEDESTAL UNIT having overall size 392Lx450Dx680Ht. millimeter. with central lock and key. Drawers and body are complete metal with powder coat finish, facia in 18 millimeter prelaminated particle board.	---	---	As directed by Engineer in charge
103	Providing & Arrangement of Mid Back chair, ECO Centre tilt synchro (CTS) Mechanism, Fixed Armrest, Gas lift for Seat height adjustment,	---	---	As directed by Engineer in charge

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
	Standards- prong P / Nylon Base with Fabric Upholstery			
104	Stool for Lab and Class-IV Providing and fixing 4-legged Lab stool, Legs made of 16 Gauge 45-millimeter Outer dimension Mild steel Pipe, duly painted, With a 304 Grade Stainless steel 12-inch-wide seat with a 1 inch collar, Height adjustment via a screw. as per design and drawing and instructions of Engineer in charge.	---	---	As directed by Engineer in charge
105	Full Height Steel Storage @ 750 Length x 450 Width x 2100 Height millimeter Providing and fixing Openable Steel Storage of 750x 450x 2100 Height, with 4 adjustable shelves, Complete body & shutter made in 0.8 millimeter thick & Top in 2-millimeter-thick Cold Rolled Close Annealed (CRCA), 4 Shutter to be mounted with the help of cuphinges, and 4 adjustable levelers, entire storage in powder coated finish with 60 to 80 microns as per drawing.	---	---	As directed by Engineer in charge

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
106	Providing earth work in embankment with approved materials obtained from departmental land up to lead of 50 meter. including all lifts, laying in layers of 20 to 30 centimeter. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller to achieve not less than 97 % of standard proctor density etc. complete (Material obtained from departmental Land)	MORTH 305	---	As directed by Engineer in charge.
107	Providing earth work in embankment with approved materials obtained from other sources up to lead of 50 meters. including all lifts, laying in layers of 20 to 30 centimeter. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete (Material obtained from other sources)	MORTH 305	---	As directed by Engineer in charge.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
108	Wet Mix Macadam--Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including pre mixing the Material with water at Optimum Moisture Content (OMC) in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well-prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver.	MORTH 406	---	As directed by Engineer in charge.
109	Prime coat - Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including cleaning of road surface and spraying, primer at the rate of 0.60 kilogram/ square meter using mechanical means.	---	---	As directed by Engineer in charge

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
110	Providing and constructing 75 Millimeters. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40 Millimeters. stone layers metal 100% crusher broken metal with conical crusher plant, heating and spraying the bitumen of specified grade @ 2 kilogram/square meter, spreading 12 Millimeters. Size chips compacting with three-wheel static roller having weight 8 to 10 Metric Tonne. to achieve the desired degree of compaction as per Technical Specification Clause 506 etc. Complete, including applying tack coat of specified grade of bitumen at the rate of 0.30-kilogram square meter. on existing bitumen surface. (Viscosity Grade (VG-30) bulk bitumen rates are considered to arrive at rates)	---	---	As directed by Engineer in charge.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
111	DENSE BITUMINOUS MACADAM: Proving and laying dense bituminous macadam using crushed aggregates of Grading 1, premixed with bituminous binder of specified grade of Bitumen @ 4.50 per cent by weight of total mix and filler, transported to site with Vessel Traffic Service (VTS) , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired density for 76-100 millimeter compacted thickness .USING Batch mix type hot mix plant without Supervisory Control And Data Acquisition (SCADA), Sensor Paver, Vibratory roller with Stone Dust filler.(Viscosity Grade (VG-30) bulk bitumen rates are considered to arrive at rates)	---	---	As directed by Engineer in charge.
112	Providing and applying tack coat on the prepared surface heating by fumes in Boiler and spraying bitumen set footed in bitumen boller on B.T. surface 2.5 kilogram /10 square meter .(Viscosity Grade (VG-30) bulk bitumen rates are considered to arrive at rates)	---	---	As directed by Engineer in charge.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
113	BITUMINOUS CONCRETE:- Providing and laying bituminous concrete using crushed aggregates of grading 1, premixed with bituminous binder @ 5.20 per cent by weight of total mix and filler, transported to site with Vessel Traffic Service (VTS) , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50 millimeter compacted thickness with specified grade of Bitumen, Excluding prime / tack coat. For Bitumen of specified grade -- USING Batch mix type hot mix plant without Supervisory Control and Data Acquisition (SCADA), Sensor Paver, Vibratory roller with Stone Dust filler. (Viscosity Grade (VG-30) bulk bitumen rates are considered to arrive at rates)	MORTH 507	---	As directed by Engineer in charge.
114	Supplying hard murum/ kankar at the road site, including conveying and stacking complete.	---	---	As directed by Engineer in charge.
115	Spreading hard murum/ soft murrum/ gravel or kankar for side width complete	---	---	As directed by Engineer in charge.
116	Compacting the hard murum side widths including laying in layers on each side with vibratory roller including artificial watering etc. complete.	---	---	As directed by Engineer in charge.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
117	Providing and fixing stream lined Mix-20 grade Reinforced Cement Concrete guard stone including mild steel bar reinforcement etc. complete.	CD.20	169	As directed by Engineer in charge.
118	Supplying & erecting Galvanized Iron pipe 'A' class 75-millimeter diameter. Erected for enclosing PVC armoured cable on wall/pole as per specification	---	---	As directed by Engineer in charge.
119	Providing and fixing heavy duty inter locking concrete grey paving blocks of 80-millimeter thickness of having a strength of 300 Kilogram/Square. Centimeter. of approved quality and shape on a bed of crushed sand of 25 to 30 millimeter thick including skirting joints and cleaning etc. complete.	BDM	---	As directed by Engineer in charge.
120	Providing and casting in situ or precast tapering Reinforced Cement Concrete. Mix-20 Barrier type Kerb without gutter (as per Indian Road Congress (IRC) 86 1983) embedded 125 millimeter below ground level over Mix-10 Plain cement concrete finished neatly with cement mortar 1:2, setting the same in cement mortar 1:2, including the required excavation in any strata and removing the excavated stuff anywhere in city and redoing the surface as specified and directed by	MORTH408	---	As directed by Engineer in charge.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
	Engineering In-charge. Using Concrete Batching and Mixing Plant			
121	Providing and laying 125-micron Low Density Polyethylene (LDPE) sheet confirming to IS 3395: 1997 below concrete pavement including all materials and labour complete.	MORTH 602.5	--	As directed by Engineer in charge

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
122	Providing and laying in-situ Mix 40 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement ,coarse and fine aggregate conforming to Indian Standard 383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver, compacted and finished in a continuous operation, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6 meter X 0.6 meter centre to centre, admeasuring 80 millimeter at bottom and 40 millimeter at top with depth of 75 millimeter and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.(Crushed sand VSI Grade/Natural sand)	MORTH 602	--	As directed by Engineer in charge

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
123	Providing and fixing in position Thermo Mechanically Treated Ferrous- 500, 25-millimeter diameter dowel bars precoated with anticorrosive epoxy paint of required Diameter. 60 centimeters. Long and at 30.00 centimeter. center to center and wherever directed including handling, straightening, necessary cutting supported by Thermo Mechanically Treated Ferrous-500, chairs with proper alignment by using properly designed assembly of Bulkheads lubricating half-length with bituminous paint as directed etc. complete.	MORTH 602.6.5	--	As directed by Engineer in charge
124	Providing and fixing in position Thermo Mechanically Treated Ferrous- 500, tie bars precoated with anticorrosive epoxy paint of 12-millimeter diameter. 70-Centimeter-long spacing at 30 Centimeter center to center along length of road wherever directed including handling, straightening wrapping with paper of approved quality for half length, necessary cutting, handling, straightening, supported by assembly of Thermo Mechanically Treated Ferrous- 500, chairs with proper alignment etc. complete.	MORTH 602.6.4.2	--	As directed by Engineer in charge

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
125	Cutting transverse contraction joints 3 to 4 millimeter wide and depth 60 millimeter in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay /slab etc. complete including subsequent widening of the groove 8 to 10 millimeter. wide at top having depth of 15 millimeter. as directed by Engineer in charge.	MORTH 602.6.3 & 602.6.4	---	As directed by Engineer in charge
126	Providing to contraction joints polysulphide sealant (Pouring grade) confirming to BS:5212-1989 in to sawed groove widened at top for sealant reservoir of specified size and shape as per detailed drawing including fixing Polyethylene foam backer rod of required diameter (approx. 25% larger than the initial 3 m to 4-millimeter joint) over laid with bond breaking tape asper detailed drawing. Item includes cleaning the joints with water jet/ air compressor and allowing joint to become thoroughly dry before sealant is applied and applying primer. (A) Contraction and longitudinal joints (15-millimeter-deep x 8-millimeter. Wide)	MORTH 602.6.3 & 602.6.4	---	As directed by Engineer in charge

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
127	Providing and laying cement concrete pipe of Indian standard 458:2003 Non pressure (NP)-2 class of 600-millimeter diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	CD 7	162	As directed by Engineer in charge
128	Conveying materials obtained from road cutting including all lifts, laying in layers of 20 to 30 Centimeter. breaking clods, dressing to the required lines, curves, grades and section, watering and compacting to not less than 97% of standard Proctor density for a lead of over 50 meters. to 300 meters. inclusive from the site of excavation to the site of deposition as directed.	MORTH 305	---	As directed by Engineer in charge.
129	Conveying materials obtained from road cutting including all lifts, for a lead of up to 3 kilometers. from the site of excavation to the site of deposition outside of wh complex as directed.	---	---	As directed by Engineer in charge

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
130	Providing, fabricating and erecting in position Pre Engineered Steel Building for Cleaning and Grading yard having clear height of 10.00 meters from plinth level to eaves level as per approved drawing and design including fabrication of primary and secondary members, painting with approved colour and Smoke Gray (G-6134) shade, supply and erection of steel members, providing and fixing Standing Seam profile of 0.50 millimeter Total Coated Thickness (TCT) zincalume Alu-zinc (AZ) 150 profiled sheets, providing and fixing zincalume colour coated 0.50 millimeter Total Coated Thickness (TCT) profiled sheets for wall panels above 3.00 meter from plinth level, providing and fixing canopy of same PEB materials for cladding below the eaves level up to Brick bound masonry. And also provide platform sheets of 2.00 meter wide over the entire length of platforms between two columns, Gutters at eaves level for long walls along with rain water down take pipes made from plain Alu-zinc (AZ) 150 precoated zincalume sheets, supplying & fixing caged steel standard ladder shop fabricated from hot rolled angles, channels etc. complete as directed by Engineer in	---	---	As directed by Engineer in charge and with reference to chapter 10.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
	charge. All other details other than above as per chapter no.10.			

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
131	Providing, fabricating and erecting in position Pre-Engineered Steel Building for Warehouse as per detailed specifications given in tender form chapter Number.10 and as directed by Engineer in charge with all necessary Primary members, Secondary members, roofing materials, wall cladding sheets, ridge ventilator, bubble sheet etc. complete as directed.	Bd. W	---	As mention in Section VII work requirement: Part A as directed by Engineer in charge and with reference to chapter 10.
132	Supply & fixing of turbo ventilator with 22" (inch) Diameter. size throat, having base ring & top plate in stainless steel of 0.8 millimeter thick, rotated using twin bearings of SKF - 600122 & 600322 permanently lubricated & sealed, fixed in Polycarbonate base sheet of 2 millimeter thick. Of required width & length to maintain minimum 150-millimeter overlap at both ends.	---	---	As directed by Engineer in charge
	S.W. II :- LAB TESTING			

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
1 To 18	Laboratory testing charges for various material required for the construction of work by the contractor on the basis of testing frequency and charges fixed as given below.	---	---	1) The test shall be carried out in accordance as per specification & as directed by Engineer in charge .2) The testing of materials shall be carried out as per the frequency specified through & as directed by engineer in charge approved lab & shall be there responsibility of contractor.3)The material required for testing shall be sent by the contractor to the specified Laboratory at his own risk and cost.4)In case the desired results are not obtained during testing or the material is rejected due to unsatisfactory results the testing charges shall not be paid to the contractor.5)It shall be obligatory on contractor to produce the test result .6)In case additional testing of material found necessary due to change in source, no separate payment shall be made and it shall be the entire responsibility of contractor.7)Testing charges are mentioned in tender and it will be the responsibility of contractor to pay the testing charges to the concerned Laboratory in accordance with the rates finalised. No difference shall be payable to the contractor in case testing charges are revised by the Laboratory.8) Material Testing shall be carried out as directed by Engineer in Charge.

Item No.	Name of Work	Standard Specifications as per Specification Book published by Govt. of Maharashtra Volume I-1979 and Volume -II 1981 Edition		
		Specification No.	Page No.	Additional specification if any
1	2	3	4	5
	S.W. III: - ROYALTY CHARGES			
1	Royalty Charges for hand broken road metal 40 mm metal & 80mm metal, Murum & Rubble etc. complete.	--	--	As directed by Engineer in charge

Section V - Eligible Countries

Eligibility for the Provision of Goods, Works and Non-consulting Services in Bank-Financed Procurement

In reference to ITB 4.8, and 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this Bidding process:

Under ITB 4.8 (a) and 5.1 : *None*

Under ITB 4.8 (b) and 5.1 : *None*

[Note: as and when some country/ countries become ineligible insert the list of such countries following approval by the Bank to apply the restriction]

Section VI - Fraud and Corruption

(Section VI shall not be modified)

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders, (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

a. Defines, for the purposes of this provision, the terms set forth below as follows:

- i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
- iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) Acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.

b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants,

sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;

- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring mis-procurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹ (ii) to be a nominated² sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect³ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

¹ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

² A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

³ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

PART 2 – Works' Requirements

Section VII - Works' Requirements

1. PEB Warehouse building -2 x 5040 MT

- *2 Nos (Size 88 X 29 Meter)*

2. Internal road (5724 Sq Meter)

3. PEB Cleaning Grading civil work

- *(Size 26 X 8 Meter) = 208 Sq Meter*

4. RCC Office building and Training center (G+1 RCC Bldg.)

- *(Size 10.79X 6.56 Meter) =142 Sq Meter*

5. Draying Yard

- *Size 21.33X 29.15 Meter =622 Sq Meter*

6. Hamal shed

- *Size 9 X 6 Meter =54 Sq Meter*

Specifications & Performance Requirements

The detailed specifications are as per Standard Specification Book Volume-I, Edition 1979 and Volume-II Edition 1981 published by the Government of Maharashtra in Public Works, and Specifications for Building / Road and Bridge Works published by the Ministry of Road Transport and Highways 2001 Edition. These specifications shall be read in conjunction with the relevant Indian Standard Specifications. Where the specifications in any of the standards are at variance with the specifications detailed herein, the specifications herein shall govern.

In case of detailed specification, all other specifications not quoted but quoted in Standard Specifications Book as Part-3 are also applicable as and where necessary, even if such specification numbers are not mentioned. For any points not covered by the specifications given in the Specification Book or given as additional specification for respective items, the instructions of the General Manager (Engg) are final and binding on Contractor.

WORK SPECIFICATIONS

The Scope of work for PEB warehouse building include Fabrication of PEB structure above plinth & Civil work up to Plinth along with BBM wall cladding 3.00 m above from plinth (except cleaning grading unit). In civil work RCC design of footing, column, beam, slabs etc. & design of PEB structure, submitted by the bidder, will have to be proof checked from Govt college of Engineering

1. Civil work

- 2) In Civil work includes construction of footing, Column, beam, lintel beam, platform beam, platform slab. Etc.
- 3) M-25 grade concrete should be used for casting of footing, column beam, slab etc.
- 4) Construction of brick work up to plinth 35 cm thick & above plinth 23 cm thick up to 3.00 ht. (except cleaning grading unit).
- 5) for outer peripheral BB masonry in super structure should be constructed with intermediate columns & top beam at 3.00 m height.
- 6) Smooth finish plaster from inside & sand face Plaster from outside should be provided.
- 7) Necessary Rolling shutter, Ventilator, etc. should be as per drawings.
- 8) Filling in plinth should be Murum, Metal, M-10 Concrete & M-20 Trimix Concrete.
- 9) White wash from inside & Apex Paint from outside should be Provided.

2. PEB Structure.

1. Fabrication, supply & erection of PEB Steel warehouse building system as per enclosed GAD drawings & specifications approved by MSWC.
2. Wall cladding & canopies above BB masonry wall as per enclosed drawing & specifications.
3. Roof Sheet (standing seam sheet) along with insulation sheet are as per specifications.
4. Anchors bolt, Ridge Ventilator are as per drawing, design & specification.
5. All primary member shall have coat of three coats oil paint along with one yellow zinc chromatic primer.
6. All secondary members shall have zinc Coating shall be minimum of 120 gsm.
7. All Roof panel shall be factory Roll formed standing seam sheet colour coated Zinalume AZ150 profile sheet.
8. All wall panels shall be colour coated Zinalume (R) AZ 150 Profile sheet.

3. Road Work

All internal roads are as per enclosed drawings.

4. Cleaning & Grading yard (civil+PEB), Office building & Training Centre (RCC), Drying yard (RCC), Hamal Shed (RCC), --Civil work

In Civil work includes construction of footing, Column, beam, lintel beam, platform beam, platform slab. Etc as per drawing and size attached. M-25 grade concrete should be used for casting of footing, column beam, slab etc.

CHAPTER 10.0

FOR PRE-ENGINEERED WAREHOUSE BUILDING

All Tender terms & conditions, instructions to the contractor, declaration of the contractors, general rules, directions for the guidance for contractors, conditions of contract, general instructions to tenderers competency of tenderer, additional conditions etc. mentioned on pages above are applicable to following points of Pre-Engineered warehouse building.

10.1 SCOPE OF WORK

These special conditions of contract are to be read in conjunction with original conditions contained in contract condition. The scope of work for Pre-Engineered steel building system shall include fabrication of PEB structure as per approved drawing, painting, supply and erection of the structural steel members. metal roof standing seam system, wall claddings above 3.00 meter from plinth and accessories, as per drawings and specifications for the completion of the work as per site condition including civil work for foundation, B B masonry, column, beam frame structure, flooring, filling work and electrification work. In civil work RCC design of footing, column, beam, slabs etc. The L1 bidder has to submit the detail design for RCC column, footing, beam along with entire PEB structure i.e. primary & secondary member, eaves gutter, down take pipe, flashing, roof panel, wall panel, anchor bolt, connecting bolt, all bracings, ridge ventilator etc. The design of civil foundation & PEB structure, submitted by the bidder, will have to be proof checked from Govt. College of Engineering as directed by Engineer-in- Charge. In the design, all types of load shall be considered. Fees of the same will be borne by the successful bidder. All the PEB columns should be tied with strut members. STAAD file of design and complete weight calculations needs to be submitted to MSWC.

10.1.1 PRE-ENGINEERED STEEL BUILDING SYSTEM

a) L1 Contractor will have to get prior approval from MSWC before start of PEB bldg. work for selection of PEB Manufacturer having following machineries.

1. Plate Shearing machinery
2. CNC plasma machine
3. H-beam assembly machine
4. C&Z Roll Forming machine for purlins etc.
5. Sheet roll form machine
6. Automatic Down take pipe machine
7. automated sub-merge arc welding machine. etc.

Contractor has to obtain the stability certificate after completion of work of the PEB work from the PEB manufacturer before finalization of work.

- b) Supply and erection- of Pre-fabricated Pre-Engineered steel building system as per GAD drawings approved by MSWC and proof checked from Govt. College Pune as mentioned in 10.1 (scope of work).
- c) Bracing system.
- d) Standing seam Roof sheets, wall cladding and canopies above B.B. Masonry wall as per approved drawings and specifications.
- e) Provision of Ridge ventilators as per description, drawings and specifications
- f) Anchor bolts as per design for foundation of columns.
- g) Painting of all PEB Structural items.
- h) Additional horizontal and vertical members for fixing of Rolling shutters from inside & Grill rolling shutter from outside of building and for fixing of ventilators (V2).
- i) Canopy 0.15 m for V2 ventilators and Canopy of 2.00 meter for platform etc. as per GAD.
- j) Plinth Height: - 1.20 meter high from made up road level / as decided by Engineer – in-charge.
- k) Eaves gutter and rain water down take pipe should be up to apron level with bend, cage ladder, etc.

10.1.2 Mode of measurement :

Payment will be paid on square meter basis of outside distance of brick work of plinth & plinth area of platform. etc. No extra payment shall be made over & above measurements.

10.1.3 MOBILIZATION ADVANCE

No mobilization advance will be paid.

10.1.4 PAYMENT SCHEDULE FOR PEB STRUCTURAL WORK

S. N	Payment Stages	% of Payment	Payment pattern
1	I	70%	70% of the total contract value shall be paid on receipt of complete fabricated materials including primary members, secondary members, roof sheeting, wall cladding, & entire accessories at site in good condition with satisfactory test results as specified in the tender documents. Payments shall be released as follows: (a) Against supply of primary & secondary members, including Anchor bolts, frames, purlins, bracings, etc.: 50% of contract value. Necessary deductions shall be made as per Contract Conditions (b) Against supply of complete Galvalume sheeting, Ridges, roof bubble insulation flashing for roof and wall and all other accessories: 20 % of contract value Necessary deductions shall be made as per Contract Conditions. However, supply of (a) & (b) should not be staggered by more than one week. Before Release of above payment, the contractor has to execute Indemnity Bond for the amount payable by the Corporation non judicial stamp paper of appropriate value to Indemnify the M S W C against any loss due to theft, pilferage, manipulation, damage and other causes. Necessary deductions shall be made as per Contract Conditions

2	II	10%	10 % of the total contract value shall be paid after assembling and erection of pre-fabricated frames. Necessary deductions shall be made as per Contract Conditions
3	III	10%	10% of the total contract value shall be paid after completion of roof sheeting, wall cladding, bracings, , , Flashing etc. complete. Certificate of Engineer-In-Charge regarding completion of work shall be final and binding on Contractor. Necessary deductions shall be made as per Contract Conditions
4	IV	10%	Balance 10% amount as payable of the contract value shall be paid in final bill. Necessary deductions shall be made as per Contract Conditions. (Bill of Stage-IV shall be treated as Final Bill)

1. In case of any discrepancy arising out of the understanding of the drawings / specification and the interpretation of the clause of the contract, the express decision of Gen. Manager (Engg.) of M S W C shall be final and binding on Contractor.
2. If demanded, the Contractor shall produce proof of purchase of all steel materials and accessories confirming to relevant standards including wall cladding / roof sheeting in the form of invoice of the bills/Vouchers / dispatch documents or any other documents applicable in this regard. Also, material test reports shall be provided by contractor.
3. Register for the bills / vouchers / dispatch documents shall be maintained at site by the Contractor which shall be readily available to the Engineer in Charge for inspection.
4. Any other taxes, levies, as applicable shall be paid by Contractor directly. No claim whatsoever in this regard shall be entertained.

10.2 DETAILED BUILDING SPECIFICATION OF PRE-ENGINEERED STEEL BUILDING SYSTEM OF WAREHOUSES

This specification covers the provision of pre-engineered building for this project. The scope of work for pre-engineered steel building system as defined in the following sections for the manufacture, erection of structural steel system, metal roof system, wall system, trim and accessories as required and as per site conditions.

Type	PRE- ENGINEERED STEEL BUILDING SYSTEM OF WAREHOUSES
Module	Inside clear dimension and these are separate units & adjacent to each other as per enclosed drawing.
Building Width	Inside clear width for storage. i.e. lateral width of inside-to-inside face of steel columns as per enclosed drawing.
Length	Inside clear length for storage i.e. longitudinal width of inside-to-inside face of steel columns (Between inside face of steel columns of gable walls) as per enclosed drawing.
Eave height/ Clear Height	5.60 meters clear from floor level. i.e. The vertical dimension from floor level to the lowest underside point of the rafter as per enclosed drawing.
Width module	As per clear span without intermediate columns as per enclosed drawing.
Roof slope	1:10.
Main column bay spacing	As per enclosed drawing of steel columns in longitudinal direction of the building.
Gable wall column spacing	As per enclosed drawing
Type of End Frame	Fully loaded Rigid frames (Expandable Frame) as per as per enclosed drawing.
Type of Bracing on roof & wall	Rod bracing or any another type of bracing on roof and wall frames as per as per enclosed drawing .
Roof Sheeting	As mentioned in Chapter 10.3.3.1

Self-Drilling Screws (SDS) Fasteners	Mechanically Galvanized washer head self tapping /Drilling fasteners with integral EPDM seals. Self Drilling, Carbon Steel, Case Hardened, Zinc-plated 10-15 microns, Chromate dipped with assembled sealing washer. It is used for attaching panels and trims to girts and purlins, which drill their own holes and eliminate the pre-drilling operation.
Wall Sheeting/ Cladding above 3.00 meter above plinth level to Eaves level	As mentioned in 10.3.3.2
Wall frames	Shall be suitable for proper fitting of aluminum window / Rolling shutter openings as per design
Accessories	Flashing etc. as per as per enclosed drawing or as approved by Engineer-in –charge.
Canopy	An overhanging or projecting roof structure, below the eave level at 3.50meter height from plinth level, supported at one end only. 2.00meter width for Rolling shutter over the length of platform on sides of wh. building in culmination of the roof frames /sheeting with the same material as in cladding & same should be color coated Galvalume sheeting material. Canopy for V2 to prevent rain water entry
Sky Light	Sky Light of 2 mm tk. polycarbonate sheet 0.47 mt clear width and covering for full width of both side roof/wall to match standing seam profile. Approx. one strip for 500 sq.mt roof area. Including all required fixtures and accessories.

Ventilator V2 /louvers Detail specification for Window / Ventilators/ Louvers (Bottom level of ventilator to be provided at 4.30 -meter level from plinth level	Size (1.00 x 0.60 with vertical member at center) to be fixed at height of 4.30 meter from plinth level as per drawing. The use of louvers, suitably positioned in the perimeter walls of a building, in combination with roof ventilators provides continuous circulation of natural air and creates a healthier atmosphere for the building occupants. Stainless steel wire mesh from inside should be provided to prevent birds from entering the building ventilators lowers.
Position of Rolling Shutters	As per enclosed drawing. Fixed position of Rolling shutters is mentioned in drawing along with internal clear dimensions.
M.S. ladder	It is highly recommended that a building contains at least one ladder to provide a safe access to the roof for maintenance purposes. Caged Steel standard ladders are made of vertical members (rails) that are shop fabricated from hot rolled angles, channels or flat bars, and rungs that are made from round bars. Ladders are fixed to the secondary members of the walls and roof by clips and fasteners for easy and quick installation. Flat bar rings welded to the ladder rails provide safety as well as strength and rigidity to the ladder. OR as per approved design
Bead Mastic:	A sealant furnished in a continuous roll, normally used for sealing end laps of roof panels.

Blind Rivet	A small headed pin with an expandable shank for joining light gauge metal. Typically used to attach flashing, etc.
Flashing	A sheet metal closure used to provide weather tightness in a structure.
Gable	The triangular portion of the end wall of a building directly under the sloping roof and above the eave height line.
Gable Trim	A flashing designed to close the opening between the roof panels and end wall panels.
Grout	Non-shrinking sand and cement-based mixture used under base plates to obtain a uniform bearing surface
<u>Step in Eaves Height:</u> (Note :- It is applicable where two modules are attached to each other)	The condition where a lower building is attached to a higher building (Height difference varies from 0.30 meter to 0.60 meter) at the end walls, resulting in one building with different eave heights at each end [sometimes called Roof Transition.] is applicable as directed by Engineer in charge.
<u>Horizontal Life line System</u>	Horizontal life line to protect the workers. This includes erecting and commissioning of rope to avoid the accidents can be prevented by adopting safe method of working at heights like maintenance etc. In such circumstances, TsaF's Life Line systems are next line of safety for fall protection and prevention.
<u>Ridge Ventilators</u>	Ridge vents can have throat sizes ranging from 600 mm diameter. Ridge vents can be 3000 mm long and can be used 7 Nos staggered i.e. one in one bay for one warehouse unit.

	• Ridge vents can be made from Galvalume steel from approved Manufacturer with 0.50 mm BMT (Base Metal Thickness) and 0.55 mm TCT (Total Coated Thickness), Galvalume steel. Zinalume steel coil from approved Manufacturer (TATA/JSW) Standing seam profile. • All other flashing can be 0.55 mm. • The top skin can be PPGI/ PPGL/ BGI 0.5mm TCT • All metal components shall be mill finish/ painted finish in standard Color bond / colour coated protective coating in selected colour. Neoprene separation strips shall be provided at all points where there is possible contact between dissimilar metals. Bird screens of welded mesh with 12.5 mm x 125 mm openings shall be fitted.

10.3 ADDITIONAL CONDITION FOR PRE-ENGINEERED STEEL BUILDING SYSTEM OF WAREHOUSES

- a) The Bidder will quote the rate on square meter basis for Pre –Engineered Steel Building. Payment will be paid on square meter basis of outside distance of brick work of plinth
- b) Necessary provision for fixing of electrical conduits and for suspending of luminaries shall be left in the frame as per the instruction of Engineer in charge from inner and outer face of building
- c) Vertical Fascia at gable wall : Not required
- d) Eaves gutter to both long side, downspouts pipe to each long side column of warehouse building and platform.
- e) Strut member to connect all long side columns at eves level and bracing to connect columns as well as rafters.

The building as specified herein shall consist of all steel columns, rafters, bracings, side and top covering, flashing, trim fasteners and all other required accessories.

- f) The eaves height of the building shall be the dimension from the bottom of base plate to the underside of the knee at eaves.
- g) Roof and walls shall be supported by frames spaced at center to center.
- h) End /partition bay roof and wall sheeting shall be as per enclosed drawing.
- i) Dimension of the Warehouse building as mentioned in schedule B may vary marginally. In that case the payment shall be regulated on the basis of as per square meter with consideration of outer actual clear distance for length & width.
- j) All materials shall be shop cut and fabricated. No welding is permitted at site unless otherwise permitted by Engineer-In-Charge. Any minor correction at site shall be undertaken with prior approval of Engineer-In-Charge on case-to-case basis.

10.4 MATERIAL SPECIFICATION, DESIGNING CRITERIA OF PRE-ENGINEERED STEEL WAREHOUSE BUILDING

a) PRIMARY MEMBERS

Primary members for columns & rafters shall be fabricated from, plates having minimum yield strength of 350 Mpa and should confirm to IS 800:2007, IS: 226-1975, IS:961-1575, IS:2062-1984, IS:8500-1977, Grade E-350 (or) its Equivalent. Primary members of Tubes shall be having minimum yield strength of 350 Mpa and should confirm to I S 4923:1997. Primary members of ISMC & ISMB or as designed shall be having minimum yield strength of 350 Mpa and should confirm to I S 2062:2006 Grade A. The primary members shall be fabricated by continuous shop automated welding using submerged arc welding. Primary members fabricated from plate shall have flanges and webs jointed one side alternate on either side of web by a continuous welding process. All primary members shall have coat of yellow Zinc chromate primer & having minimum thickness is of 6 millimeters.

SECONDARY MEMBERS

The secondary members consist of Z & C Sections, Roof Purlins, and eaves struts etc shall be of Cold formed G. I. Finish steel having minimum thickness of 1.60 mm span up to 5.00m and 1.75mm for span up to 6.5m. The minimum yield strength of 250 Mpa and should conform to IS 2062. Or ASTM A 570 Grade 50 (or) Equivalent. Zinc coating shall be minimum of 120 GSM.

All other secondary steel members (Wind columns, Base angles, Angles, Clips, Brace Rods, Gable angles, Flange stays and other misc items) will be cleaned and painted at factory with the paint same as primary steel paint.

b) SHEETING

I. ROOF PANEL

Supplying & Installation of straight profile of single skin Seam-Roof. Standing seam sheeting made up of Galvalume steel from approved Manufacturer with 0.50 mm BMT (Base Metal Thickness) and 0.55 mm TCT (Total Coated Thickness), Galvalume steel. Zinalume steel coil from approved Manufacturer (TATA/JSW) Standing seam profile shall have 400 to 460 mm effective cover width with two/three stiffeners symmetrically spaced parallel to 45 mm to 79 mm deep rib, fixed to every purlin by means of structural grade GI clip made up of clip minimum 1.20mm thick. The panel overlapping shall be mechanically field seamed using electric seamer tool to achieve increased weather durability and greater resistance to wind uplift. Process of seaming should be such to ensure that roofing sheet is seamed along with GI Clip/halter 360o bend. The profile should be suitable for flat shape to achieve various architectural requirement The steel sheet have minimum yield strength of 550 MPa, metallic coated with Zinc-Aluminium alloy (i.e. 55% Al 43.3% Zinc. 1.6% Si), AZ150 (150gm/m² total on both side) with SDCS (Super Durable Coating System) suitable on both top & bottom side. The paint shall have a total coating thickness of minimum nominal 35 micron, comprising of minimum nominal 20 micron exterior coat on top surface and minimum nominal 5 micron reverse coat over minimum nominal 5 micron primer coat on both surfaces and conforming to

BIS standard 15965. with bubble isolation 8mm thick. No,- erasable liner marking shall be adopted as a mark of premium quality and product genuineness from reputed raw material manufacturers with suitable ridges, flashing, gutter, down take pipe and Roof Bubble Insulation 8 mm Thick etc. complete in all respect.

II. WALL PANEL

Providing and fixing Color coated Zincalume (R) AZ 150 (min 150 grams/square meter total on both side) profiled sheets for wall panel. The feed material is manufactured out of nominal 0.45 Millimeters Base Metal Thickness (BMT) 0.5-Millimeter TCT (Total Coated Thickness), high strength steel with min.550 Megapascal yield strength, metallic hot dip coated with Aluminum-Zinc alloy (55% aluminum 43.4% zinc 1.6% silicon) with Regular modified polyester paint coat. The paint shall have a total coating thickness of nominal 35 microns, comprising of nominal 25 microns exterior coat on top surface and nominal 10 microns reverse coat on back surface. Profile sheet shall have nominal 950-1050 Millimeters effective cover width and nominal 25-30 Millimeters deep ribs with suitable square fluting in the five pans at nominal 180-250 Millimeters Centre-to-center. The end rib shall be designed for anti-capillary groove. & return leg. Zincalume profiled sheets shall have marking at regular interval regarding coil manufacturer's product details. Including fasteners with minimum fastened with minimum 25 microns Zinc-Tin alloy coated, hex head, self-drilling screw etc. complete. All panels can be shipped in any length up to 12.00M or as required. Roof panels shall be lapped at ends not less than 150 Millimeters with laps occurring over purlins and shall be sealed with sealant.

c) ANCHOR BOLTS

Anchor bolts shall be as per ASTM A 36 (or) it's equivalent with one coat of red oxide or as per approved drawing.

d) CONNECTING BOLTS

Connecting bolts shall be as per DIN 933 grade 4.6 (or) its equivalent with or as per approved drawing.

e) CONNECTIONS

1. SITE CONNECTIONS

- All primary bolted connections shall be furnished with galvanized high strength bolts conforming to specifications of IS: 3757 Grade. 8.8, S & 1367 or ASTM-A325.
- All secondary bolted connections shall be furnished with machine bolts conforming to the specifications of Gr. 4. IS: 2367 or ASTM -A307.

2. SHOP CONNECTIONS

All shop connections shall be welded using submerged arc process and welding shall be in accordance with IS standards / A WS D 1198 as applicable.

f) ROOF & WALL BRACINGS

Roof bracings shall have yield strength of 250 Mpa and shall conform to the specification of relevant IS code or ASTM - A36 or ASTM-A570.

g) PAINTING OF STRUCTURAL MEMBERS

All primary members shall be cleaned by wire brushing to remove dirt, grease, oil and loose scales and given one shop coat of zinc' chromate yellow primer and shall have three coats of synthetic enamel paint of approved brand and colour.

Secondary members such as Wind columns, Base angles, Angle, Clips, Brace Rod, Gable angles, Flange stays and other misc items shall be cleaned by wire brushing to remove dirt, grease, oil and loose scales and given one shop coat of zinc' chromate yellow primer and shall have three coats of synthetic enamel paint of approved brand and colour. The secondary members consist of Roof Purlins wall girts and eaves strut. These shall be of Cold formed G. I. Finish

h) SHEETING FASTENERS

Standard fasteners shall be No. 14, Type A, self-tapping sheet metal screws with metal and neoprene, washers which conform to American Standards Association specifications. All screws shall have hex heads, be colour coated to match roof or wall panels and shall be zinc plated steel.

i) RIDGE CAPACITYS

A formed panel of the same material as that of roof sheeting was matching the materials colour slope and profile adjoining rib roof panels shall be provided of required width.

j) FLASHING AND TRIM & SPECIALS

- panel at eaves for full length of the building made out of Regular modified polyester paint coated Galvalume steel substrates shall be provided with suitable flashing at the end of the canopy.
- Flashing matching to wall claddings materials shall be provided at the junction / termination edges of sheeting, vertical corners, barge-roof to wall cladding etc. to ensure neat finish. Foam or other arrangements to be made to avoid bird trouble etc.

k) MINIMUM REQUIREMENTS

1.0 The steel plates used should not be less than 6.00 mm for primary framing including columns, rafters and wall framing & as per enclosed drawing.

1.1 Columns should be either pin based as per most economical design.

1.2 Vertical / horizontal deflections of main frames are as per the latest code.

1.3 Minimum sheet thickness to be used for Z/C cold formed sections shall not be less than 1.60 mm span up to 5.00m span and 1.75mm for span up to 6.5m. Minimum lap at columns/rafters connection shall be 375 Millimeter & minimum Zinc Coating shall be Z120 GSM.

1.4 All welding shall be done in accordance with the practices of relevant A WS / IS code. All welders shall be qualified for the type of welds preformed and the welding will be done using automated sub-merge arc welding machine.

1.5 The building should be estimated and quoted and included as per enclosed all the Tender drawings and all the Annexure strictly following the dimensions for bay spacing and clear heights.

1.6 Minimum steel plate thickness and minimum yield strengths as per design must be followed as mandatory guideline. Thickness and yield stresses higher than mentioned above are permitted without giving any consideration to extra cost involved whatsoever

10.5 DRAWING AND DESIGN

Erection drawings shall be provided for assembly of building structure complete with anchor bolts, setting plans, roof plans, cross-sections, elevations and framing details with part marks clearly shown.

10.6 MANDATORY TESTS FOR PRE-ENGINEERED STEEL SYSTEM

10.6.1 Necessary laboratory tests for all components of Pre-Engineered building system like primary members secondary members, roofing sheets, wall cladding etc. have to be carried out by the tenderer in the presence of M S W C field Engineers .while executing the work and also before the dispatch of materials to the work site, in his own laboratory maintained at his factory, to conduct quality control test as per relevant standards/specifications. If laboratory tests are not arranged at contractor's laboratory, the same shall be got tested from outside laboratory recommend by MSWC at the cost of the contractor.

10.6.2 The testing charges for all Pre-Engineered steel members shall be borne by the contractor including cost of samples as well as transportation of the same up to testing laboratory.

10.7 DEFINITIONS OF STANDARD ABBREVIATIONS AND SYMBOLS AND STANDARDS CODES, SPECIFICATIONS

Sr.No.	Symbol	Definition
1	kN/m ²	Kilo Newton per square meter
2	gms/ sq. mt	Gram per Square Meter
3	M.T.	Metric ton
4	MIN. (min.)	Minimum
5	mm	Millimeter
6	AISC	American Institute of Steel Construction
7	ASTM	American Society for Testing and Materials
8	AWS	American Welding Society
9	DIN	Deutsches Institute für Normung. (German Institute for Standardization)

10	Mpa	Mega Pascal (Strength measuring unit)
11	Um	Micron
12	Girth	Secondary horizontal member attached to main column
13	EPDM	(Ethylene propylene diene monomer)
14	GSM	Grams per Square Meter
15	IS	Indian Standard
16	I.I.T	Indian Institute of Technology
17	PEB	Pre-Engineered Steel Building
18	PWD	Public Works Department
19	AZ	Aluminium-Zinc alloy (Zincalume)
20	MSWC	Maharashtra State Warehousing Corporation
21	TCT	Total Coated Thickness
22	Z120 GSM	In SI units (as per ASTM A 653/A 653M with steel base), the comparable coating mass designations for galvanized sheet are, 120 Gram per Square Meter:
23	(R)	Metal roofing can also be effectively insulated to create air spaces which provide optimal 'R' values (thermal efficiency and internal comfort, plus energy savings!)
24	Engineer-in-charge	Means General Manager (Engineering)
25	ISMB	Indian Standard Medium Beam
26	ISMC	Indian Standard Medium Channel
27	Dia.	Diameter
28	C.M.	Cement Mortar
29	G.I.	Galvanized Iron
30	B.B. Masonry	Brunt Brick Masonry
31	R.C.C	Reinforced cement Concrete
32	TMT.	Thermo mechanically Treated bars

10.8 Roof Bubble Insulation - 8mm Thick

Supplying & laying of 8mm thick bubble insulation as per below terms

1. After completion of framing structure, it will be laying on top of purlins below the roof sheet with maintained the bulge on bubble sheet.
2. After completion of framing structure of wall cladding it will be laying in between purlins and the wall cladding sheet with maintained the bulge on bubble sheet.
3. Details specification of Bubble insulation as given below.

R-Value	1.27m ² .k/w

Emittance (ASTM C 1371)	0.0057
Water Vapour transmission (ASTM E 96) (PERM)	0.00 (before C 1258)
Elevated Temperature and Humidity ASTM C (1258)	Pass
Bleeding and Delamination (ASTM 1224)	Pass
Pliability (ASTM C 1224)	Pass
Fungi Resistance (ASTM C 1338)	Pass
Surface Burning Characteristic (ASTM E 84)	
Flame spread Index	0*(Class A)
Smoke Develop Index	30*(Class A)
Size	8 mm
Bubble Size	10 mm × 4 mm
No. of Rolls	1.25 Mtr × 40 Mtr = 50 Sq. mtr (65 Rolls)
Foil Thickness	12 micron
REFLECTIVITY FOR RADIANT HEAT FROM SOURCE AT 100 DEGREE F	90 PCT
REFLECTIVITY FOR WHITE LIGHT, TUNGSTEN FILAMENT	AMP 85 TO 88 PCT
EMISSION AT 100 DEGREE F	5 PCT
PURITY OF ALUMINIUM FOIL	99.7 PCT

विषय :-शासकीय बांधकामांमध्ये कृत्रिम वाळू(Crushed Sand/ Artificial Sand) चा वापर करणेबाबत.

संदर्भ :- 1) शासन परिपत्रक क्र. संकीर्ण-2009/प्र. क्र. 10/रस्ते-1, दिनांक 23/7/2009.
2) या कार्यालयाचे परिपत्रक जा. क्र. का-2/नियोजन/1504/2013, दि. 8/3/2013.

सार्वजनिक बांधकाम विभागामार्फत मोठ्या प्रमाणात शासकीय इमारतींची बांधकामे तसेच रस्ते व पुलांची बांधकामे हाती घेण्यात येतात. सदर बांधकामातील कॉंक्रीटच्या बाबींचे परिमाणेही खुप जास्त असतात. त्यामुळे कॉंक्रीटच्या घटक भागाचे म्हणजेच या प्रकरणी मुख्यत्वे वाळूच्या मागणीमध्ये प्रचंड प्रमाणात वाढ झाली आहे. बांधकामांसाठी लागणाऱ्या वाळूची मागणी ही उपलब्ध नैसर्गिक वाळूच्या व्यस्त प्रमाणात वाढते आहे. परिणामी वाळूचे बेकायदा उत्खनन वाढून नदी व नाल्यांच्या नैसर्गिक प्रवाहात बाधा पाहोवविण्याचे प्रकार वाढले आहेत. अशा परिस्थितीत नैसर्गिक वाळूचा बांधकामातील वापर कमी करून त्याऐवजी कृत्रिम वाळूचा वापर वाढविणे क्रमप्राप्त असून काळाची गरज आहे.

शासनाच्या दिनांक 23/7/2009 रोजीच्या परिपत्रकामध्ये कृत्रिम वाळूच्या वापराच्या अनुषंगाने मार्गदर्शक सुचना निर्गमित केल्या आहेत. त्यास अनुसरून या कार्यालयाच्या दिनांक 8/3/2013 रोजीच्या परिपत्रकामध्ये क्षेत्रिय कार्यालयांसाठी मार्गदर्शक सुचना निर्गमित केल्या आहेत.

तथापी आता क्षेत्रिय स्तरावर उपलब्ध यंत्रसामुग्री, त्या अनुषंगाने उपलब्ध होऊ शकणारी कृत्रिम वाळू व त्याची गुणवत्ता विषयक मानके तसेच कृत्रिम वाळूच्या वापरासंदर्भात दक्षता व गुणनियंत्रण मंडळाकडून प्राप्त झालेले अभिप्राय इत्यादींचा विचार करता, नव्याने प्रस्तावित शासकीय बांधकामांमध्ये कृत्रिम वाळूच्या वापरा संदर्भात नव्याने मार्गदर्शक सुचना निर्गमित करणे आवश्यक झाले आहे.

उपरोक्त अनुषंगाने शासकीय बांधकामांमध्ये नैसर्गिक वाळू ऐवजी 100 % कृत्रिम वाळू (Crushed Sand / Artificial Sand) वापरण्यास या परिपत्रकान्वये परवानगी देण्यात येत असून, त्याप्रमाणे कृत्रिम वाळू वापरतांना खालील नमुद अटींचे पालन होणे अनिवार्य आहे.

1. बांधकामसाठी वापरात येणारी कृत्रिम वाळू ही IS 383 : 2016 मधील खंड 3.1.2 मध्ये नमुद कृत्रिम वाळूच्या व्याख्येनुसार Automatic Vertical Shaft Impactor या मशिनमधून चांगल्या प्रतीच्या खाणीचा दगड भरडून उत्पादित केलेली असावी.
2. संबंधीत क्षेत्रिय अधिकारी यांनी प्रचलित IS Code 383 - 2016 मधील तक्ता क्र. 9 मध्ये नमुद केलेप्रमाणे fine aggregate चे स्विक्कूटी बाबतच्या ब्रेडींग झोन नुसार वर्गीकरण करून व तशा पध्दतीच्या तपासण्या प्रत्यक्ष बांधकामाच्या जागेवर घेतल्यानंतरच कृत्रिम वाळू वापरण्यास परवानगी देण्यात यावी.
3. बांधकाम सुरू करण्यापुर्वी कृत्रिम वाळूच्या स्रोतास (Source of crushed sand/Artificial Sand) कार्यकारी अभियंता यांनी लिखित स्वरूपात मान्यता देणे बंधनकारक राहील.
4. कृत्रिम वाळूचा वापर करणेपुर्वी अन्य आवश्यक वाचण्यांसह कॉंक्रीटकरीता चे Mix Design शासकीय प्रयोगशाळेतूनच करून घेणे अनिवार्य राहील.
5. Prestressed Concrete च्या बाबींमध्ये कृत्रिम वाळूचा वापर करण्यात येऊ नये.
6. कृत्रिम वाळूचा वापर बांधकामामध्ये करतांना कृत्रिम वाळूच्या वापराबाबतचे विनिर्देश सोबत Annexure I स्वतंत्रपणे या परिपत्रकासोबत जोडण्यात येत आहेत. त्यानुसार त्या कामाच्या निविदेमध्ये Additional General Specification चा अंतर्भाव करण्यात यावा.
8. सद्यस्थितीत प्रगतीपथावर असलेल्या बांधकामांमध्ये कृत्रिम वाळूचा वापर करणे अनिवार्य झाल्यास या बाबत तांत्रिक मान्यता प्रदान करणाऱ्या प्राधिकारी यांना अवगत करण्यात यावे.
9. कृत्रिम वाळूचा वापराबाबत वरील नमुद 1 ते 6 अटींचे तंतोतंत पालन करण्यात यावे. तसेच कृत्रिम वाळू वापरल्यास आरसीसी कामास विहीत प्रमाणापेक्षा जास्त सिमेंट लागल्यास त्याकरीता संबंधीत ठेकेदारास अतिरिक्त मोबदला देण्यात येणार नाही.
10. नैसर्गिक वाळू ऐवजी कृत्रिम वाळूचा वापर ज्या बाबींसाठी प्रस्तावित करण्यात येईल अशा बाबींसाठीच्या कमी दरांबाबत अंदाजपत्रकानुसार दोन्ही साहित्यांच्या बेसिक दर व साहित्यांचे वाहतुकीचे अंतर विचारत घेऊन संबंधित क्षेत्रिय अधिकारी यांनी उचित कार्यवाही करावी. तसेच कामांवर होणाऱ्या एकंदर खर्च विहीत मर्यादेपेक्षा जास्त होणार नाही याची दक्षता संबंधीत क्षेत्रिय अधिकारी यांनी घेण्यात यावी.

Additional Specifications for use of VSI Crushed Sand/ Artificial Sand / Fine Aggregates.

1. VSI Crushed Sand/ Artificially manufactured sand/ Fine aggregates hereinafter referred to as " Crushed Sand " shall be as defined under Clause 3.1.2 of Indian Standard 383-2016.
2. The properties of " Crushed Sand " shall confirm to the provisions of Indian Standard 383-2016.
3. The " Crushed Sand " shall be free of dust and other Deleterious material.
4. The " Crushed Sand " shall be manufactured using " Automatic Vertical Shaft Impactor " type Crusher only.
5. The quantity of Microfines (Particles below 75 microns) in " Crushed Sand " shall not be more than seven percent.
6. The Contractor Shall intimate the Engineer in Charge regarding the source of supply of " Crushed Sand ". The source of supply of " Crushed Sand " shall be got approved by the Executive Engineer (Engineer in Charge) prior to the start of work.
7. Each load of " Crushed Sand " whenever brought on site shall be tested for " Fineness Modulus. Fineness modulus shall be within permissible limits. If it doesn't fall within acceptable limits, it shall be rejected.
8. The Test of Compressive strength of concrete / Mortar using " Crushed Sand " shall be carried out in presence of MSWC, Pune Engineer as given below
 - a) 100 percent cube testing in presence of Junior / Asst./ Sectional Engineer.
 - b) 25 percent cube testing in presence of sub divisional Engineer.
 - c) 5 percent cube testing in presence of Executive Engineer. (Engineer in charge.)
9. The flakiness index and elongation index tests shall be within permissible limits.
10. The Concrete mix design for each grade of concrete using " Crushed Sand " shall be carried out only in Government Quality Control Laboratory and the same Mix design shall be adopted.
11. As far as possible freshly produced " Crushed Sand " shall be used stored " Crushed Sand " shall not be used.
12. For plastering purpose, if the use of " Crushed Sand " is proposed, it shall be used with addition of super plasticizers at the rate of 100 millilitres per bag of cement without any extra cost to Government.
13. The following tests shall be carried out for the use of " Crushed Sand ".
 - a) Sieve analysis
 - b) Specific Gravity
 - c) Water absorption
 - d) Bulk density
 - e) Alkali aggregate reaction

- f) Soundness
 - g) Deleterious Material
 - h) Organic impurities
 - i) Micro fines Content
 - j) Test for Silt and Clay
 - k) Fineness modulus tests.
14. Necessary Bond regarding the use of " Crushed Sand " shall be submitted by the Contractor clearly stating that, if any defects are observed during execution and in defect liability period, the same shall be rectified at his own risk and cost.
15. Grading zone I and II mentioned under clause 6.3 table 9 of aggregates in IS383:2016 shall only be used for concreting.
16. " Manufactured aggregates " shall not be used for per stressed concrete works.

MATERIAL TESTING

A) The Contractor shall set up and get it checked and certified by the Engineer in charge a field laboratory with necessary equipment's for testing of all materials, finished products used in the construction as per requirements of relevant specifications. The testing of all materials shall be carried out by the Engineer in charge or his representative for which the contractor shall make all the necessary arrangements and bear the entire cost.

B) At least 30% of the test of those required as per frequency chart shall be carried out in Government Laboratory or as directed by engineer in charge or MSWC approved lab. All the tests which cannot be carried out in field laboratory shall be carried out 100% at contractors cost in Government laboratory or approved lab by MSWC. Accordingly, payment against testing charges done in Government laboratory or approved lab by MSWC will be paid as per SCHEDULE "B ". And if some tests are mandatory as per site situation or as per specification and these tests are not mentioned in schedule "B", in that case these tests are binding to contractor at his own cost. No separate payment will be made on this account.

FREQUENCY CHART FOR TESTING OF MATERIALS

Sr. No	Material	Test	Frequency of Testing (Gen. Manager (Engg.) may increase or decrease the number of test as per site situations)	Remark
1	Sand	i)Fineness Modulus ii) Silt Content	At the beginning and if there is change in source.	
2	Metal	i) Crushing value ii) Impact value iii)Abrasion value iv)Water absorption v) Flakiness Index vi) Stripping value vii)Gradation	One test per200 Cu.M. or part thereof. or as directed by Engineer-in - charge.	PWD Hand Book I.S.2386 Part-II
3	Cement Concrete	i) Compressive Strength	Upto5Cu.M. -1set 6-15 Cu.M. -2sets 16-30 -3sets 31-50 -4sets 51&above -4sets +One additional set for each additional 50 Cu.M. or part there of. or as directed by Engineer-in - charge.	M.O.S.T. Specification 1716.
4	Cement	i) Comp. Strength ii) Initial setting time iii)Final setting time iv) Specific Gravity v)Soundness vi)Fineness	One test for each consignment of 50M.T.(1000bags)or part there of. But minimum one test for each consignment. or as directed by Engineer-in - charge.	I.S.269 12269

Sr. No	Material	Test	Frequency of Testing (Gen. Manager (Engg.) may increase or decrease the number of test as per site situations)	Remark
5	Masonry Stone	i) Compressive Strength ii) Crushing value	One test for each source or 100 Cubic Meter. or as directed by Engineer-in – charge.	
6	Brick	i) Crushing Strength ii) Water Absorption	One set of 15 Bricks for 3000 Numbers. or as directed by Engineer-in – charge.	
7	Mangalore tiles	i) Breaking Load Water Absorption	One set of 18 Mangalore tiles for every 50000 Numbers. or as directed by Engineer-in – charge.	
8	Flooring tiles	i) Flexural Strength Water Absorption	One set of 18 flooring tiles for every 2000 Numbers or as directed by Engineer-in – charge.	
9	Glazed tiles	i) Water Absorption	One set of 18 glazed tiles for 2000 Numbers. or as directed by Engineer-in – charge.	
10	Steel (T.M.T.)	i) Ultimate tensile stress ii) Yield stress iii) Elongation	One test for each Consignment or as directed by Engineer-in – charge.	
11	Lime /Cement Stabilized soil sub-base	i) Quality of ii) Lime/Cement iii) Degree of iv) Pulverisation Lime/Cement content v) CBR or unconfined compressive Strength on a set of 3 Specimen Density of compacted layer.	As per instructions of Engineer-in-charge or as directed by Engineer-in – charge.	
12	Interlocking concrete paving block	i) Compressive strength ii) Flexural Test iii) Resistance to wear	One set of 18 Block for every 2000 numbers. or as directed by Engineer-in – charge.	
13	Wood work (Shutters)	i) End immersion tests ii) Knife test iii) Glue adhesion test	As per instructions of Engineer-in-charge	
14	Cement Concrete	i) Mix design	One test for each source of materials.	

Sr. No	Material	Test	Frequency of Testing (Gen. Manager (Engg.) may increase or decrease the number of test as per site situations)	Remark
15	Reinforcement Steel Bars.	i) Tensile Strength ii) % Elongation	One set of each consignment	
16	Hard Murrum	Plasticity Index	One test of each source of materials.	

12.2 **Additional Condition for Material Testing :-**

It is mandatory on the part of Contractor to carry out all the required tests of various construction materials as mentioned in RFB and BOQ of the Tender.

If the contractor fails to submit required Test Results of the various construction materials as mentioned in the items of RFB and BOQ, he will be liable to deposit the amount at penal rate of **five times** of the amount of particular test which he has not carried out. Contractor will be informed by the Engineer-in-charge by letter. On receipt of letter, contractor will have to either deposit the said amount or to carry out the required test within 10 days. If he again failed to carry out the required tests in stipulated time limit, the said tests will be carried out by the department and total expenditure incurred on the testing charges plus **five times** amount of testing charges will be recovered from the Contractor's bill. As this recovery is only due to the negligence on the part of contractor to carry out work as per Tender Conditions and Executive Engineer's decision will be final and binding on the Contractor and it cannot be challenged by the Contractor by way of Appeal, Arbitration or in the Court of Law. The testing charges shall be entirely borne by the contractor

Sampling of Material: -

(1) Samples provided to the Engineer or his representative for their retention is to be in the labeled boxes suitable for storage. Materials or workmanship not corresponding in character and quality with approved samples will be rejected by the Engineer or his representative and shall be removed from the site as directed by the Engineer at the Contractor's cost. Samples required for approval and testing must be supplied well in advance by at least 48 hours to allow for testing and approval. Delay to work arising from the late submission of samples will not be acceptable as a reason for delay in the completion of work. For all material brought from outside, the cost of sampling, testing whether in India or outside shall be borne by the contractor.

(2) All materials to be used on work shall be got approved in advance from the Engineer-in-charge and shall pass the test

i) The Contractor shall at his risk and cost make all arrangements and / or shall provide for all such facilities as the Engineer-in-charge may require for collecting, preparing required number of samples for tests or for analysis at such time and to such place or places as may be directed by the Engineer-in-charge.

ii) The Contractor shall if and when required, submit at his cost the samples of materials to be tested or analyzed and if, so directed, shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and the materials, finally accepted by the Engineer-in-charge. Samples provided to the Engineer in charge for retention purpose are to be in labeled boxes suitable for storage.

iii) The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of the materials.

iv) Cost of routine day-to-day quality testing charges for tests required as per specifications will be borne by the contractor by sending the same to the concerned Government Laboratories.

v) Tests shall be carried out at approved Government Laboratories or as directed by Engineer-in-charge or approved lab by MSWC and all testing charges shall be borne by the Contractor.

vi) 15% of the rate for building work & 10% of the rate for road work shall be withheld and shall be released only after the receipt of the satisfactory test result wherever specified. Routine test shall mean testing of aggregate for gradation, flakiness index, impact, value and binder content. All other tests shall be carried out by the Contractor at his own cost. However, the cost of testing of material as directed by Engineer in charge for approving a particular material will have to be borne by the contractor.

vii) The contractor shall at his own cost arrange to carry out the routine tests of material which are to be used on the work. The tests will have to be carried out either in the field laboratory or in an approval laboratory.

viii) In case of material procured by the contractor / testing as required by the codes and specifications, the same shall be arranged by him at his own cost. Testing shall be done in the presence of an authorized representative of the Engineer in Charge at the nearest laboratory.

Environmental and Social Requirements

[The Employer's team preparing the ES requirements should include a suitably qualified Environmental and Social specialist/s.

In preparing detailed specifications for ES requirements the Borrower should refer to and consider the applicable environmental and social standards in the ESF including the specific requirements set out in the Environmental and Social Commitment Plan (ESCP), ESIA/ESA/ESMP, EHSs and other GIIP as well as SEA and SH prevention and management obligations.

The ES requirements should be prepared in manner that does not conflict with the relevant General Conditions of Contract (and the corresponding Particular Conditions of Contract if any), and other parts of the Specifications.

The following is a non-exhaustive list of Sub-Clauses of the Conditions of Contract that make reference to ES matters stated in the Specifications.]

Sub-Clause/Clause No.	Sub-Clause/Clause	Remarks
8.2	Other Contractors	Indicate specific aspects (if any) that require contractor's cooperation such as to conduct environmental and social assessment.
9.4.1, 9.4.2, 9.4.7, 9.4.8	labor	State applicable requirements in accordance with the labor management procedure.
9.4.6	Facilities for Staff and Labor	-Indicate if access to or provision of services that accommodate physical, social and cultural needs of Contractor's Personnel is required.
9.4.20	Training of Contractor's Personnel	As set out in the ESCP, specify, details of any training to relevant Contractor's Personnel to be provided by the Employer's Personnel on environmental and social aspects. (whom, what, when, where, how long etc.)
15.2	Contractor to Construct the Works	If the Contract specifies that the Contractor shall design any part of the Permanent Works, state any

Sub- Clause/Clause No.	Sub-Clause/Clause	Remarks
		<i>applicable technical standards and requirements including to address:</i>
		• <i>climate change considerations,</i> • <i>universal access,</i> • <i>risks of the public's potential exposure to operational accidents or natural hazards, including extreme weather events, applicable certification or approval requirements</i>
		<i>[Refer to ESS4 on requirements for design]</i>
18.2	<i>Health and Safety Obligations</i>	<i>Indicate any additional requirements for the health and safety manual</i>
18.3	<i>Protection of the Environment</i>	<i>Specify any values for emissions, surface discharges, effluent and any other pollutants from the Contractor's activities that shall not be exceeded.</i>
19.1	<i>Archeological and Geological Findings</i>	<i>Specify other requirements if any in accordance with the ESF – ESS8</i>
29.1	<i>Security of the Site</i>	<i>State any additional requirements for the security arrangements (ESS4 of the ESF states the principles of proportionality, GIIP and applicable laws. Include any other requirement set out in the ESCP.</i>

In addition to provisions in the above table, the Employer shall specify the following as applicable.

Management and Safety of Hazardous Materials

As applicable, specify requirements for the management and safety of hazardous materials (see ESF - ESS4 para. 17 and 18 and relevant guidance notes).

Resource Efficiency and Pollution Prevention and Management

As applicable specify Resource Efficiency and Pollution Prevention and Management measures (see ESF -ESS3 and relevant guidance notes).

- **Resource efficiency**

The Employer shall specify, as applicable, measures for improving efficient consumption of energy, water and raw materials, as well as other resources.

- **Energy:** *When the Works have been assessed to involve a potentially significant use of energy, specify any applicable measures to optimize energy usage.*
- **Water:** *When the Works have been assessed to involve a potentially significant use of water or will have potentially significant impacts on water quality, specify any applicable measures that avoid or minimize water usage so that the Works' water use does not have significant adverse impacts on communities, other users and the environment.*
- **Raw material:** *When the Works have been assessed to involve a potentially significant use of raw materials, specify any applicable measures to support efficient use of raw materials.*

- **Pollution prevention and management**

- **Management of air pollution:** *specify any measure to avoid or minimize Works related air pollution. See also GCC Sub-Clause 18.3 and the table above on Conditions of Contract that make reference to ES matters in the Specification.*
- **Management of hazardous and nonhazardous wastes:** *specify any applicable measures to minimize the generation of waste, and reuse, recycle and recover waste in a manner that is safe for human health and the environment including storage, transportation and disposal of hazardous wastes. See also GCC Sub-Clauses 18.2 and 18.3 and the table above on Conditions of Contract that make reference to ES matters in the Specification.*
- **Management of chemicals and hazardous materials:** *specify any applicable measures to minimize and control the release and use of hazardous materials for Works activities including the production, transportation, handling, and storage of the materials. See also GCC Sub-Clauses 18.2 and 18.3 and the table above on Conditions of Contract that make reference to ES matters in the Specification.*

- **Biodiversity Conservation and Sustainable Management of Living Natural Resources**

The Employer shall specify, as applicable, Biodiversity Conservation and Sustainable Management of Living Natural Resources (see ESF - ESS6 and relevant guidance notes). This includes, as applicable:

- *invasive alien species: managing the risk of invasive alien species during the execution of the Works;*
- *sustainable management of living natural resources; and*

- *certification and verification requirements for the supply of natural resource materials where there is a risk of significant conversion or significant degradation of natural or critical habitats.*

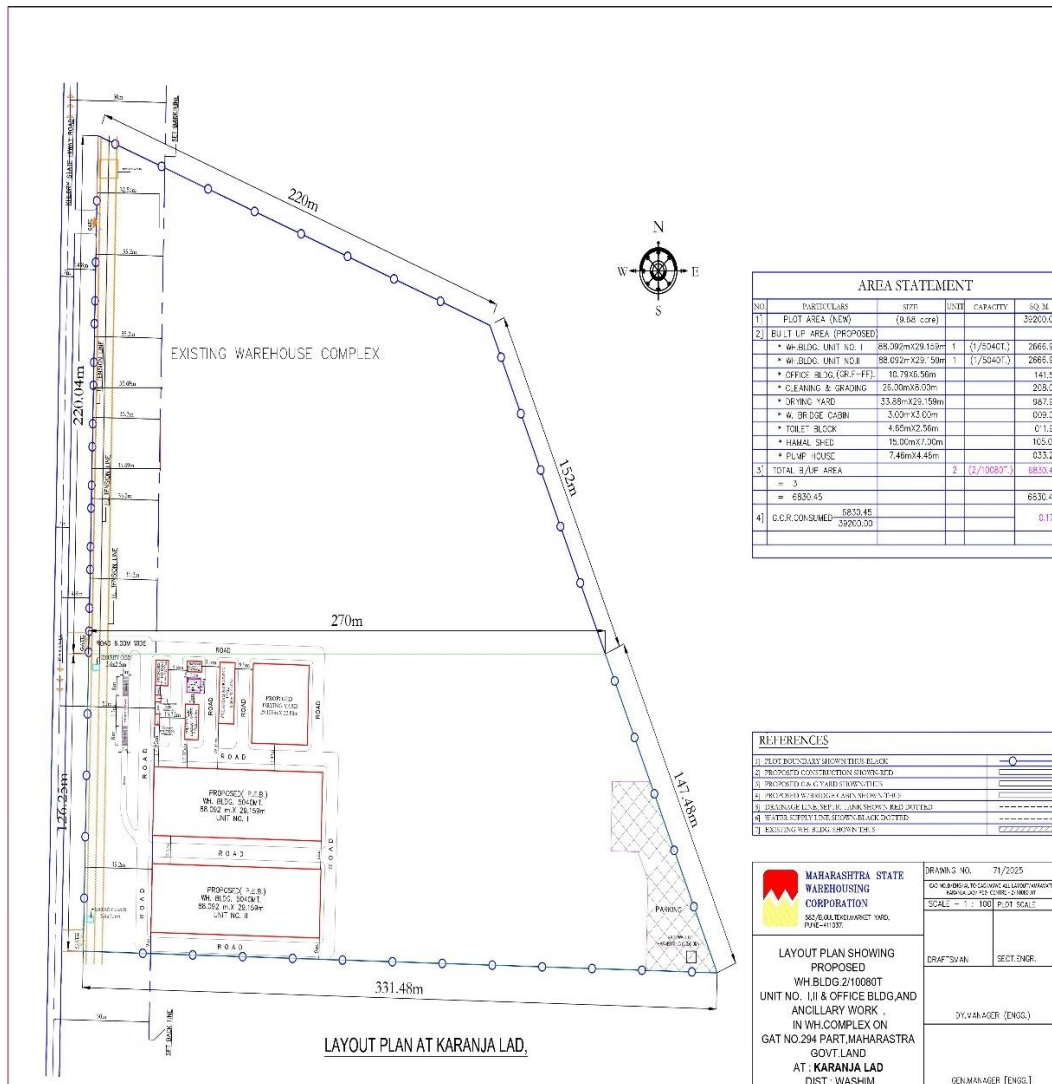
See also GCC Sub-Clause 18.3 and the table above on Conditions of Contract that make reference to ES matters in the Specification.

- **Road Safety**
 - *State any specific traffic and road safety requirement, as applicable. See also Sub-Clause 9.3 of the General Conditions of Contract. For details, refer to the Guidance Note on Road safety.*

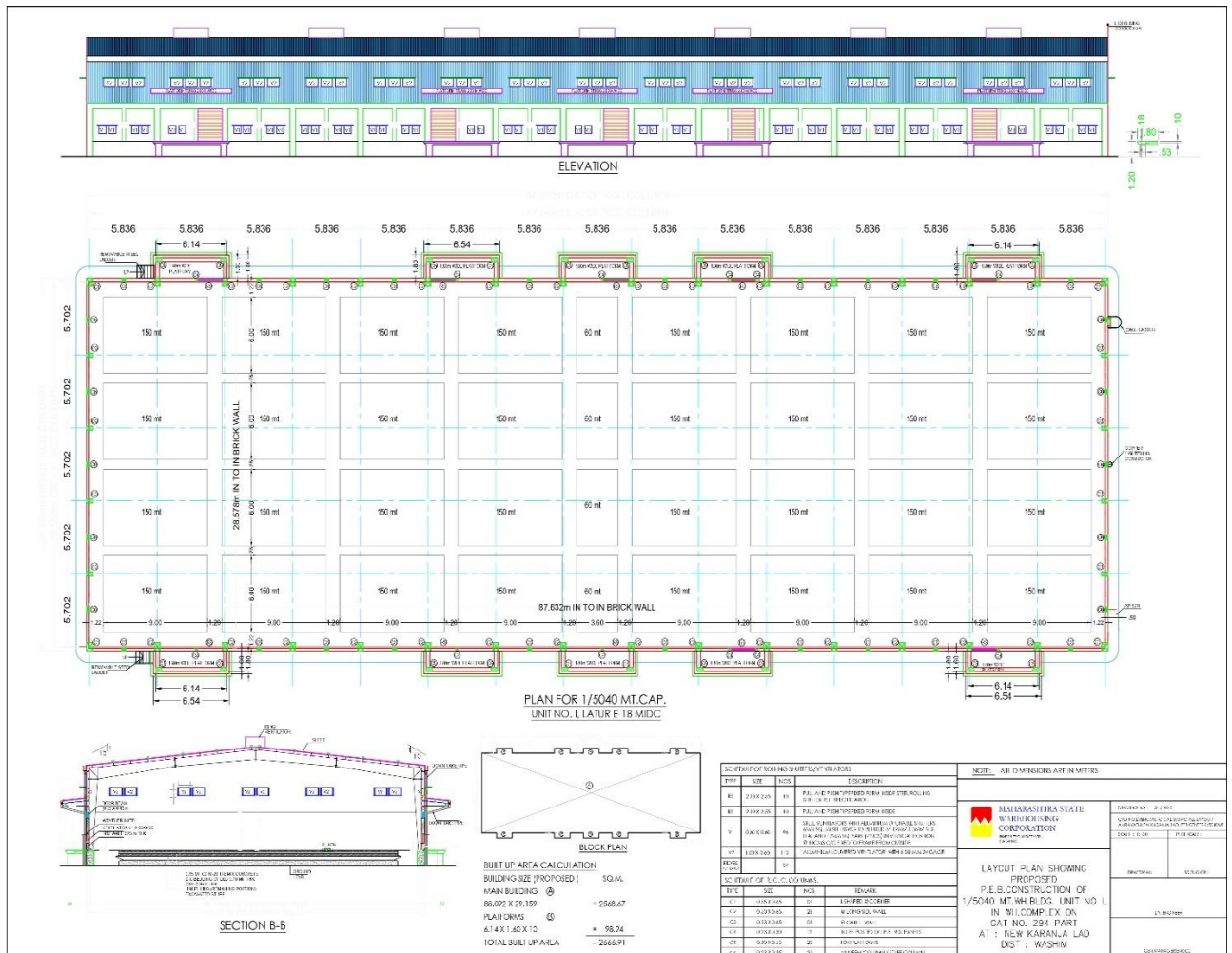
PAYMENT FOR ES REQUIREMENTS

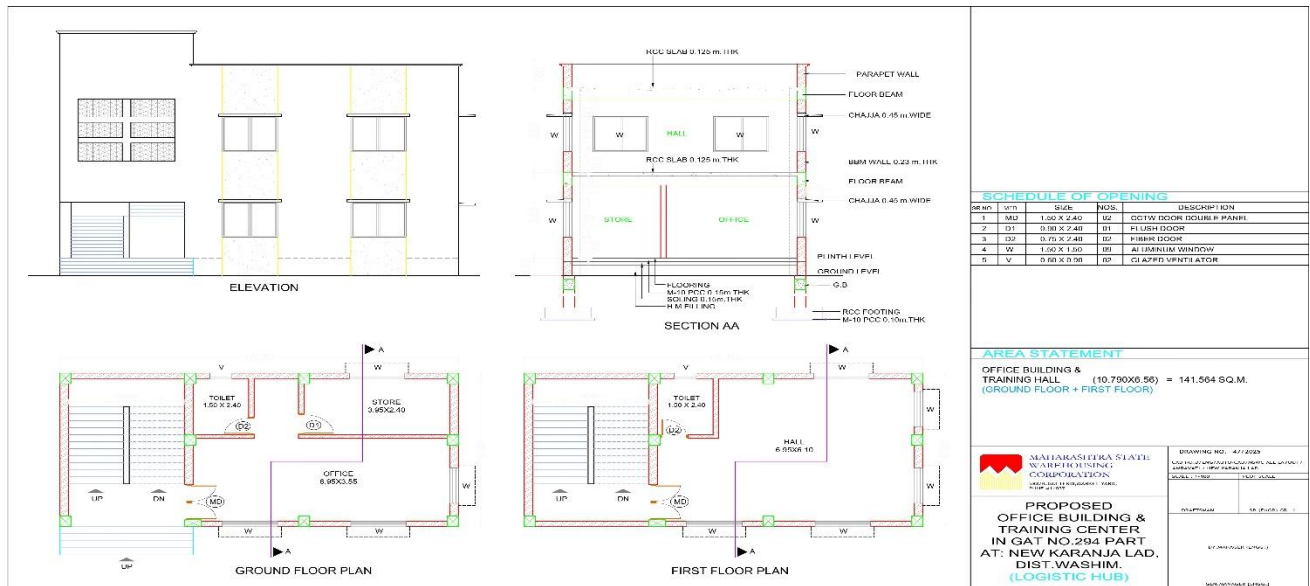
The Employer's ES and procurement specialists should consider how the Contractor will cost the delivery of the ES requirements. In the majority of cases, the payment for the delivery of ES requirements shall be a subsidiary obligation of the Contractor covered under the prices quoted for other Bill of Quantity items or activities. For example, normally the cost of implementing workplace safe systems of work, including the measures necessary for ensuring traffic and road safety, shall be covered by the Bidder's rates for the relevant works. Alternatively, provisional sums could be set aside for discrete activities for example for HIV counselling service, and, GBV/SEA awareness and sensitization or to encourage the contractor to deliver additional ES outcomes beyond the requirement of the Contract.

Drawings

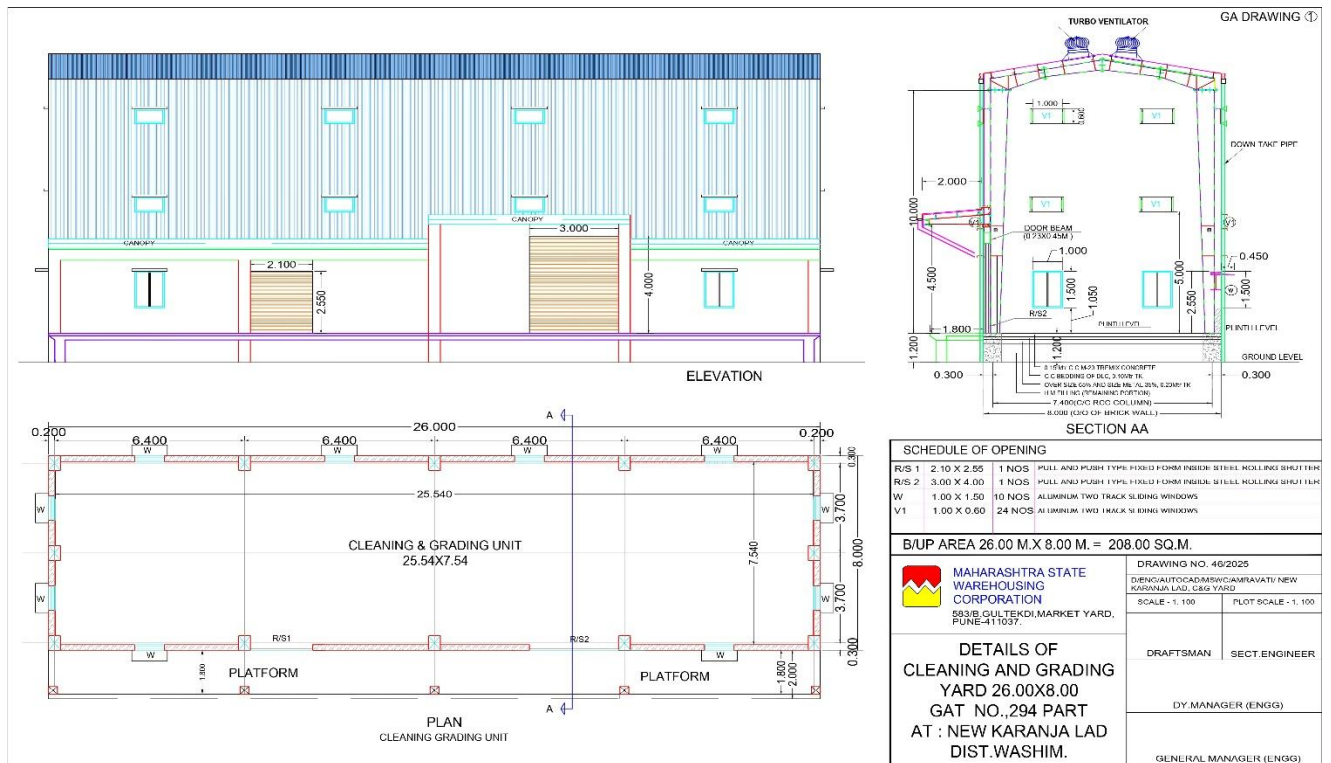


Dwg.1 Site Layout Plan





Dwg. 3 Office Building Plan, Section and Elevation



Dwg. 4 Cleaning And Grading Yard Plan, Section and Elevation

PART 3 – Conditions of Contract and Contract Forms

Section VIII - General Conditions of Contract

These General Conditions of Contract (GCC), read in conjunction with the Particular Conditions of Contract (PCC) and other documents listed therein, should be a complete document expressing fairly the rights and obligations of both parties.

These General Conditions of Contract have been developed on the basis of considerable international experience in the drafting and management of contracts, bearing in mind a trend in the construction industry towards simpler, more straightforward language.

The GCC can be used for both smaller admeasurement contracts and lump sum contracts.

General Conditions of Contract

A. General

1. Definitions

Boldface type is used to identify defined terms.

- (a) The **Accepted Contract Amount** means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
- (b) The **Activity Schedule** is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump-sum contract. It includes a lump-sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
- (c) The **Adjudicator** is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.
- (d) **Bank** means the financing institution **named in the PCC**.
- (e) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.
- (f) **Compensation Events** are those defined in GCC Clause 46 hereunder.
- (g) The **Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 57.1.
- (h) 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 GCC Sub-Clause 2.3 below.
- (i) The **Contractor** is the party whose Bid to carry out the Works has been accepted by the Employer.
- (j) The **Contractor's Bid** is the completed bidding document submitted by the Contractor to the Employer.
- (k) The **Contract Price** is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
- (l) **Days** are calendar days; months are calendar months.

- (m) **Dayworks** are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
- (n) A **Defect** is any part of the Works not completed in accordance with the Contract.
- (o) The **Defects Liability Certificate** is the certificate issued by Project Manager upon correction of defects by the Contractor.
- (p) The **Defects Liability Period** is the period **named in the PCC** pursuant to GCC Sub-Clause 38.1 and calculated from the Completion Date.
- (q) **Drawings** means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- (r) The **Employer** is the party who employs the Contractor to carry out the Works, **as specified in the PCC**.
- (s) **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
- (t) "**In writing**" or "**written**" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- (u) The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.
- (v) The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The **Intended Completion Date** is specified in the PCC. The **Intended Completion Date** may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- (w) **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.

- (x) **Plant** is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
- (y) The **Project Manager** is the person named in the PCC (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.
- (z) **PCC** means Particular Conditions of Contract.
- (aa) The **Site** is the area defined as such in the PCC.
- (bb) **Site Investigation Reports** are those that were included in the bidding document and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- (cc) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- (dd) The **Start Date** is **given in the PCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- (ee) A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- (ff) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- (gg) A **Variation** is an instruction given by the Project Manager which varies the Works.
- (hh) The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the PCC.
- (ii) **“Contractor’s Personnel”** refers to all personnel whom the Contractor utilizes on the Site or other places where the Works are carried out, including the staff, labor and other employees of each Subcontractor.

- (jj) **“Key Personnel”** means the positions (if any) of the Contractor’s personnel that are stated in the Specification.
- (kk) **“ES”** means Environmental and Social (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH)).
- (ll) **“Sexual Exploitation and Abuse” “(SEA)”** means the following:

Sexual Exploitation is defined as any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;

Sexual Abuse is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions.
- (mm) **“Sexual Harassment” “(SH)”** is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by the Contractor’s Personnel with other Contractor’s or Employer’s Personnel; and
- (nn) **“Employer’s Personnel”** refers to the Project Manager and all other staff, labor and other employees (if any) of the Project Manager and of the Employer engaged in fulfilling the Employer’s obligations under the Contract; and any other personnel identified as Employer’s Personnel, by a notice from the Employer or the Project Manager to the Contractor.

- 2. Interpretation**
- 2.1 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
 - 2.2 If sectional completion is **specified in the PCC**, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works

(other than references to the Completion Date and Intended Completion Date for the whole of the Works).

2.3 The documents forming the Contract shall be interpreted in the following order of priority:

- (a) Agreement,
- (b) Letter of Acceptance,
- (c) Contractor's Bid,
- (d) Particular Conditions of Contract,
- (e) General Conditions of Contract, including Appendices,
- (f) Specifications,
- (g) Drawings,
- (h) Bill of Quantities, and
- (i) any other document **listed in the PCC** as forming part of the Contract.

3. Language and Law

3.1 The language of the Contract and the law governing the Contract are **stated in the PCC**.

3.2 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Employer's country when

(a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country; or

(b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's Country prohibits any import of goods from that country or any payments to any country, person, or entity in that country.

4. Project Manager's Decisions

4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer.

5. Delegation

5.1 Unless otherwise **specified in the PCC**, the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor.

6. **Communications** 6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.
7. **Subcontracting** 7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations. The Contractor shall require that its Subcontractors execute the Works in accordance with the Contract, including complying with the relevant ES requirements and the obligations set out in Sub-Clause 28.1.
8. **Other Contractors** 8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as **referred to in the PCC**. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.
- 8.2 The Contractor shall also, as stated in the Specifications or as instructed by the Project Manager, cooperate with and allow appropriate opportunities for the Employer's or any other personnel, notified to the Contractor by the Employer or Project Manager, to conduct any environmental and social assessment.

9. Personnel and Equipment

- 9.1 The Contractor shall employ the Key Personnel and use the Equipment identified in its Bid, to carry out the Works or other personnel and Equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and Equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 9.2 The Project Manager may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Key Personnel (if any), who:
- (a) persists in any misconduct or lack of care;
 - (b) carries out duties incompetently or negligently;
 - (c) fails to comply with any provision of the Contract;
 - (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment;
 - (e) based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution of the Works;
 - (f) has been recruited from the Employer's Personnel;
 - (g) undertakes behavior which breaches the Code of Conduct for Contractor's Personnel (ES).

If appropriate, the Contractor shall then promptly appoint (or cause to be appointed) a suitable replacement with equivalent skills and experience.

Notwithstanding any requirement from the Project Manager to remove or cause to remove any person, the Contractor shall take immediate action as appropriate in response to any violation of (a) through (g) above. Such immediate action shall include removing (or causing to be removed) from the Site or other places where the Works are being carried out, any Contractor's Personnel who engages in (a), (b), (c), (d), (e) or (g) above or has been recruited as stated in (f) above."

- 9.3 The Contractor shall take all necessary safety measures to avoid the occurrence of incidents and injuries to any third party associated with the use of, if any, Equipment on public roads or other public infrastructure. The Contractor shall monitor road safety incidents and accidents to identify negative safety issues, and establish and implement necessary measures to resolve them.

9.4 Labor

9.4.1 *Engagement of Staff and Labor.* The Contractor shall provide and employ on the Site for the execution of the Works such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within the Country.

Unless otherwise provided in the Contract, the Contractor shall be responsible for the recruitment, transportation, accommodation and welfare facilities in accordance with GCC Sub-Clause 9.4.6, of the Contractor's Personnel, and for all payments in connection therewith.

The Contractor shall provide the Contractor's Personnel information and documentation that are clear and understandable regarding their terms and conditions of employment. The information and documentation shall set out their rights under relevant labor laws applicable to the Contractor's Personnel (which will include any applicable collective agreements), including their rights related to hours of work, wages, overtime, compensation and benefits, as well as those arising from any requirements in the Specifications. The Contractor's Personnel shall be informed when any material changes to their terms or conditions of employment occur.

9.4.2 *Conditions of Labor.* The Contractor shall inform the Contractor's Personnel about:

- (a) any deduction to their payment and the conditions of such deductions in accordance with the applicable laws or as stated in the Specifications; and
- (b) their liability to pay personal income taxes in the Country in respect of such of their salaries, wages, allowances and any benefits as are subject to tax under the laws of the Country for the time being in force.

The Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws.

Where required by applicable laws or as stated in the Specifications, the Contractor shall provide the Contractor's Personnel written notice of termination of

employment and details of severance payments in a timely manner. The Contractor shall have paid the Contractor's Personnel (either directly or where appropriate for their benefit) all due wages and entitlements including, as applicable, social security benefits and pension contributions, on or before the end of their engagement/employment.

- 9.4.3 The Contractor may bring into the Country any foreign personnel who are necessary for the execution of the Works to the extent allowed by the applicable Laws. The Contractor shall ensure that these personnel are provided with the required residence visas and work permits. The Employer will, if requested by the Contractor, use its best endeavors in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national, or government permission required for bringing in the Contractor's personnel.
- 9.4.4 The Contractor shall at its own expense provide the means of repatriation to and the Contractor's Personnel employed on the Contract at the Site to their various home countries. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.
- 9.4.5 *Disorderly conduct.* The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst the Contractor's Personnel.
- 9.4.6 *Facilities for Staff and Labor.* Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. If stated in the Specification, the Contractor shall give access to or provide services that accommodate the physical, social and cultural needs of the Contractor's Personnel. The Contractor shall also provide similar facilities for the Employer's Personnel if stated in the Specifications.
- 9.4.7 The Contractor shall, in all dealings with the Contractor's Personnel, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and

regulations pertaining to the employment of labor. The Contractor shall provide the Contractor's Personnel annual holiday and sick, maternity and family leave, as required by applicable laws or as stated in the Specifications.

- 9.4.8 *Supply of Foodstuffs.* The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract.
- 9.4.9 *Supply of Water.* The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.
- 9.4.10 *Measures against Insect and Pest Nuisance.* The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce the danger to their health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.
- 9.4.11 *Alcoholic Liquor or Drugs.* The Contractor shall not, otherwise than in accordance with the laws of the Country, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift, barter or disposal thereto by Contractor's Personnel.
- 9.4.12 *Arms and Ammunition.* The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.
- 9.4.13 *Funeral Arrangements.* The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of its local employees who may die while engaged upon the Works.
- 9.4.14 *Forced Labor.* The Contractor, including its Subcontractors, shall not employ or engage forced labor. Forced labor consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labor, such as indentured labor, bonded labor or similar labor-contracting arrangements.

No persons shall be employed or engaged who have been subject to trafficking. Trafficking in persons is defined as the recruitment, transportation, transfer, harboring or receipt of persons by means of the threat or use of force or other forms of coercion, abduction, fraud, deception, abuse of power, or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purposes of exploitation.

- 9.4.15 *Child Labor*. The Contractor, including its Subcontractors, shall not employ or engage a child under the age of 14 unless the national law specifies a higher age (the minimum age).

The Contractor, including its Subcontractors, shall not employ or engage a child between the minimum age and the age of 18 in a manner that is likely to be hazardous, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

The Contractor including its Subcontractors, shall only employ or engage children between the minimum age and the age of 18 after an appropriate risk assessment has been conducted by the Contractor with the Project Manager's approval. The Contractor shall be subject to regular monitoring by the Project Manager that includes monitoring of health, working conditions and hours of work.

Work considered hazardous for children is work that, by its nature or the circumstances in which it is carried out, is likely to jeopardize the health, safety, or morals of children. Such work activities prohibited for children include work:

- (a) with exposure to physical, psychological or sexual abuse;
- (b) underground, underwater, working at heights or in confined spaces;
- (c) with dangerous machinery, equipment or tools, or involving handling or
- (d) transport of heavy loads;
- (e) in unhealthy environments exposing children to hazardous substances, agents, or processes, or to temperatures, noise or vibration damaging to health; or

- (f) under difficult conditions such as work for long hours, during the night or in confinement on the premises of the employer.

9.4.16 *Employment Records of Workers.* The Contractor shall keep complete and accurate records of the employment of labor at the Site. The records shall include the names, ages, genders, hours worked, and wages paid to all workers. These records shall be summarized on a monthly basis and submitted to the project Manager.

9.4.17 *Workers' Organizations.* In countries where the relevant labor laws recognize workers' rights to form and to join workers' organizations of their choosing and to bargain collectively without interference, the Contractor shall comply with such laws. In such circumstances, the role of legally established workers' organizations and legitimate workers' representatives will be respected, and they will be provided with information needed for meaningful negotiation in a timely manner. Where the relevant labor laws substantially restrict workers' organizations, the Contractor shall enable alternative means for the Contractor's Personnel to express their grievances and protect their rights regarding working conditions and terms of employment. The Contractor shall not seek to influence or control these alternative means. The Contractor shall not discriminate or retaliate against the Contractor's Personnel who participate, or seek to participate, in such organizations and collective bargaining or alternative mechanisms. Workers' organizations are expected to fairly represent the workers in the workforce.

9.4.18 *Non-Discrimination and Equal Opportunity.* The Contractor shall not make decisions relating to the employment or treatment of Contractor's Personnel on the basis of personal characteristics unrelated to inherent job requirements. The Contractor shall base the employment of Contractor's Personnel on the principle of equal opportunity and fair treatment, and shall not discriminate with respect to any aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices.

Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the

inherent requirements of the job shall not be deemed discrimination. The Contractor shall provide protection and assistance as necessary to ensure non-discrimination and equal opportunity, including for specific groups such as women, people with disabilities, migrant workers and children (of working age in accordance with GCC Sub-Clause 9.4.15).

- 9.4.19 *Contractor's Personnel Grievance Mechanism.* The Contractor shall have a grievance mechanism for Contractor's Personnel, and where relevant the workers' organizations stated in GCC Sub-Clause 9.4.17, to raise workplace concerns. The grievance mechanism shall be proportionate to the nature, scale, risks and impacts of the Contract. The mechanism shall address concerns promptly, using an understandable and transparent process that provides timely feedback to those concerned in a language they understand, without any retribution, and shall operate in an independent and objective manner.

The Contractor's Personnel shall be informed of the grievance mechanism at the time of engagement for the Contract, and the measures put in place to protect them against any reprisal for its use. Measures will be put in place to make the grievance mechanism easily accessible to all Contractor's Personnel.

The grievance mechanism shall not impede access to other judicial or administrative remedies that might be available, or substitute for grievance mechanisms provided through collective agreements.

The grievance mechanism may utilize existing grievance mechanisms, providing that they are properly designed and implemented, address concerns promptly, and are readily accessible to Contractor's Personnel. Existing grievance mechanisms may be supplemented as needed with Contract-specific arrangements.

- 9.4.20 *Training of Contractor's Personnel.* The Contractor shall provide appropriate training to relevant Contractor's Personnel on ES aspects of the Contract, including appropriate sensitization on prohibition of SEA and SH, and health and safety training referred to in GCC Sub-Clause 18.2.

As stated in the Specifications or as instructed by the Project Manager, the Contractor shall also allow appropriate opportunities for the relevant Contractor's

Personnel to be trained on ES aspects of the Contract by the Employer's Personnel.

The Contractor shall provide training on SEA and SH, including its prevention, to any of its personnel who has a role to supervise other Contractor's Personnel.

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 From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks:

- (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
 - (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
 - (ii) negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.
- (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.

11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to

- (a) a Defect which existed on the Completion Date,
- (b) an event occurring before the Completion Date, which was not itself an Employer's risk, or
- (c) The activities of the Contractor on the Site after the Completion Date.

12. Contractor's Risks

12.1 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the

Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.

13. Insurance

13.1 The Contractor 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 **stated in the PCC** 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 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.

13.5 Both parties shall comply with any conditions of the insurance policies.

14. Site Data

14.1 The Contractor shall be deemed to have examined any Site Data **referred to in the PCC**, supplemented by any information available to the Contractor.

15. Contractor to Construct the Works

15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.

15.2 If the Contract specifies that the Contractor shall design any part of the permanent Works, the Contractor shall take into account the Employer's requirements which may include, if stated in the Specifications:

- (a) designing structural elements of the Works taking into account climate change considerations;
- (b) applying the concept of universal access (the concept of universal access means unimpeded access for people of all ages and abilities in different situations and under various circumstances; and
- (c) Considering the incremental risks of the public's potential exposure to operational accidents or natural hazards, including extreme weather events.

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

- 16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.
- 16.2 The Contractor shall not carry out mobilization to the Site unless the Project Manager gives approval, an approval that shall not be unreasonably delayed, to the measures the Contractor proposes to address environmental and social risks and impacts, which at a minimum shall include applying the Management Strategies and Implementation Plans (MSIPs) and Code of Conduct for Contractor's Personnel submitted as part of the Bid and agreed as part of the Contract.

The Contractor shall submit, to the Project Manager for its approval any additional MSIPs as are necessary to manage the ES risks and impacts of ongoing Works. These MSIPs collectively comprise the Contractor's Environmental and Social Management Plan (C-ESMP). The Contractor shall review the C-ESMP, periodically (but not less than every six (6) months), and update it as required to ensure that it contains measures appropriate to the Works. The updated C-ESMP shall be submitted to the Project Manager for its approval.

17. Approval by the Project Manager

- 17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.
- 17.2 The Contractor shall be responsible for design of Temporary Works.
- 17.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

- 17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.
- 18. Health, Safety and Protection of the Environment**
- 18.1 The Contractor shall be responsible for the safety of all activities on the Site.
- 18.2 The Contractor shall:
- (a) comply with all applicable health and safety regulations and Laws;
 - (b) comply with all applicable health and safety obligations specified in the Contract;
 - (c) take care for the health and safety of all persons entitled to be on the Site and other places, if any, where the Works are being executed;
 - (d) keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons;
 - (e) provide fencing, lighting, safe access, guarding and watching of the Works until the issue of the Contract Completion Certificate;
 - (f) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land;
 - (g) provide health and safety training of Contractor's Personnel as appropriate and maintain training records;
 - (h) actively engage the Contractor's Personnel in promoting understanding, and methods for, implementation of health and safety requirements, as well as in providing information to Contractor's Personnel, training on occupational safety and health, and provision of personal protective equipment without expense to the Contractor's Personnel;
 - (i) put in place workplace processes for Contractor's Personnel to report work situations that they believe are not safe or healthy, and to remove themselves from a work situation which they have reasonable

justification to believe presents an imminent and serious danger to their life or health.

- (j) Contractor's Personnel who remove themselves from such work situations shall not be required to return to work until necessary remedial action to correct the situation has been taken. Contractor's Personnel shall not be retaliated against or otherwise subject to reprisal or negative action for such reporting or removal;
- (k) where the Employer's Personnel, any other contractors employed by the Employer, and/or personnel of any legally constituted public authorities and private utility companies are employed in carrying out, on or near the site, of any work not included in the Contract, collaborate in applying the health and safety requirements, without prejudice to the responsibility of the relevant entities for the health and safety of their own personnel; and
- (l) Establish and implement a system for regular (not less than six-monthly) review of health and safety performance and the working environment.

Subject to GCC Sub-Clause 16.2, the Contractor shall submit to the Project Manager for its approval a health and safety manual which has been specifically prepared for the Works, the Site and other places (if any) where the Contractor intends to execute the Works.

The health and safety manual shall be in addition to any other similar document required under applicable health and safety regulations and laws.

The health and safety manual shall set out all the health and safety requirements under the Contract,

- (a) which shall include at a minimum:
 - (i) the procedures to establish and maintain a safe working environment without risk to health at all workplaces, machinery, equipment and processes under the control of the Contractor, including control measures for chemical, physical and biological substances and agents;
 - (ii) details of the training to be provided, records to be kept;

- (iii) the procedures for prevention, preparedness and response activities to be implemented in the case of an emergency event (i.e. an unanticipated incident, arising from both natural and man-made hazards, typically in the form of fire, explosions, leaks or spills, which may occur for a variety of different reasons including failure to implement operating procedures that are designed to prevent their occurrence, extreme weather or lack of early warning);
 - (iv) remedies for adverse impacts such as occupational injuries, deaths, disability and disease;
 - (v) the measures to be taken to avoid or minimize the potential for community exposure to water-borne, water-based, water-related, and vector-borne diseases,
 - (vi) the measures to be implemented to avoid or minimize the spread of communicable diseases (including transfer of Sexually Transmitted Diseases or Infections (STDs), such as HIV virus) and non-communicable diseases associated with the execution of the Works, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups. This includes taking measures to avoid or minimize the transmission of communicable diseases that may be associated with the influx of temporary or permanent Contract-related labor;
 - (vii) the policies and procedures on the management and quality of accommodation and welfare facilities if such accommodation and welfare facilities are provided by the Contractor in accordance with GCC Sub-Clause 9.4.6; and
- (b) any other requirements stated in the Specification

18.3 Protection of the environment

The Contractor shall take all necessary measures to:

18.3.1 protect the environment (both on and off the Site); and

18.3.2 limit damage and nuisance to people and property resulting from pollution, noise and other results of the Contractor's operations and/ or activities.

The Contractor shall ensure that emissions, surface discharges, effluent and any other pollutants from the Contractor's activities shall exceed neither the values indicated in the Specifications, nor those prescribed by applicable laws.

In the event of damage to the environment, property and/or nuisance to people, on or off Site as a result of the Contractor's operations, the Contractor shall agree with the Project Manager the appropriate actions and time scale to remedy, as practicable, the damaged environment to its former condition. The Contractor shall implement such remedies at its cost to the satisfaction of the Project Manager.

19. Archaeological and Geological Findings

19.1 All fossils, coins, articles of value or antiquity, structures, groups of structures, and other remains or items of geological, archaeological, paleontological, historical, architectural or religious interest found on the Site shall be placed under the care and custody of the Employer. The Contractor shall:

- (a) take all reasonable precautions, including fencing-off the area or site of the finding, to avoid further disturbance and prevent Contractor's Personnel or other persons from removing or damaging any of these findings;
- (b) train relevant Contractor's Personnel on appropriate actions to be taken in the event of such findings; and
- (c) Implement any other action consistent with the requirements of the Specifications and relevant laws.

The Contractor shall, as soon as practicable after discovery of any such finding, notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.

20. Possession of the Site

20.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date **stated in the PCC**, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.

21. Access to the Site

21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager (including the

Bank staff or consultants acting on the Bank's behalf, stakeholders and third parties, such as independent experts, local communities, or non-governmental organizations), including to carry out environmental and social audit, as appropriate, 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.

22. Instructions, Inspections and Audits

22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.

22.2 The Contractor shall keep, and shall make all reasonable efforts to cause its Subcontractors and sub consultants to keep, accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.

22.3 Inspections & Audit by the Bank

Pursuant to paragraph 2.2 e. of Appendix A to the GCC-Fraud and Corruption, the Contractor shall permit and shall cause its agents (where declared or not), subcontractors, sub consultants, service providers, suppliers, and personnel, to permit, the Bank and/or persons appointed by the Bank to inspect the site and/or the accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have such accounts, records and other documents audited by auditors appointed by the Bank. The Contractor's and its Subcontractors' and sub consultants' attention is drawn to GCC Sub-Clause 25.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).

23. Appointment of the Adjudicator

23.1 The Adjudicator shall be appointed jointly by the Employer and the Contractor, at the time of the Employer's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority **designated in the PCC**, to appoint the Adjudicator within 14 days of receipt of such request.

23.2 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract; a new Adjudicator shall be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority **designated in the PCC** at the request of either party, within 14 days of receipt of such request.

24. Procedure for Disputes

24.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Project Manager's decision.

24.2 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.

24.3 The Adjudicator shall be paid by the hour at the **rate specified in the PCC**, together with reimbursable expenses of the types **specified in the PCC**, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision shall be final and binding.

24.4 The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and in the place **specified in the PCC**.

25. Fraud and Corruption

25.1 The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Appendix A to the GCC.

25.2 The Employer requires the Contractor to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

26. Stakeholder Engagement

26.1 The Contractor shall provide relevant contract- related information, as the Employer and/or Project Manager may reasonably request to conduct Stakeholder engagements. “Stakeholder” refers to individuals or groups who:

- (i) are affected or likely to be affected by the Contract; and
- (ii) May have an interest in the Contract.

The Contractor may also directly participate in Stakeholder engagements, as the Employer and/or Project Manager may reasonably request

27. Suppliers (other than Subcontractors)

27.1 **Forced Labor:** The Contractor shall take measures to require its suppliers (other than Subcontractors) not to employ or engage forced labor including trafficked persons as described in GCC Sub-Clause 9.4.14. If forced labor/trafficking cases are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.

27.2 **Child Labor:** The Contractor shall take measures to require its suppliers (other than Subcontractors) not to employ or engage child labor as described in GCC Sub-Clause 9.4.15. If child labor cases are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.

27.3 **Serious Safety Issues:** The Contractor, including its Subcontractors, shall comply with all applicable safety obligations, including as stated in GCC Sub-Clause 18.2. The Contractor shall also take measures to require its suppliers (other than Subcontractors) to adopt procedures and mitigation measures adequate to address safety issues related to their personnel. If serious safety issues are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.

27.4 *Obtaining natural resource materials in relation to supplier:*

The Contractor shall obtain natural resource *materials* from suppliers that can demonstrate, through compliance with the applicable verification and/ or certification requirements, that obtaining such materials is not contributing to the risk of significant conversion or significant degradation of natural or critical habitats such as unsustainably harvested wood products, gravel or sand extraction from river beds or beaches.

If a supplier cannot continue to demonstrate that obtaining such materials is not contributing to the risk of significant conversion or significant degradation of natural or critical habitats, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to demonstrate that they are not significantly adversely impacting the habitats.

28. Code of Conduct

28.1 The Contractor shall have a Code of Conduct for the Contractor's Personnel.

The Contractor shall take all necessary measures to ensure that each Contractor's Personnel is made aware of the Code of Conduct including specific behaviors that are prohibited, and understands the consequences of engaging in such prohibited behaviors.

These measures include providing instructions and documentation that can be understood by the Contractor's Personnel and seeking to obtain that person's signature acknowledging receipt of such instructions and/or documentation, as appropriate.

The Contractor shall also ensure that the Code of Conduct is visibly displayed in multiple locations on the Site and any other place where the Works will be carried out, as well as in areas outside the Site accessible to the local community and project affected people. The posted Code of Conduct shall be provided in languages comprehensible to Contractor's Personnel, Employer's Personnel and the local community.

The Contractor's Management Strategy and Implementation Plans shall include appropriate processes for the Contractor to verify compliance with these obligations.

29. Security of the Site

29.1 The Contractor shall be responsible for the security of the Site, and:

- (a) for keeping unauthorized persons off the Site;

- (b) Authorized persons shall be limited to the Contractor's Personnel, the Employer's Personnel, and to any other personnel identified as authorized personnel (including the Employer's other contractors on the Site), by a notice from the Employer or the Project Manager to the Contractor.

Subject to GCC Sub-Clause 16.2, the Contractor shall submit for the Project Manager's No-objection a security management plan that sets out the security arrangements for the Site

The Contractor shall (i) conduct appropriate background checks on any personnel retained to provide security; (ii) train the security personnel adequately (or determine that they are properly trained) in the use of force (and where applicable, firearms), and appropriate conduct towards Contractor's Personnel, Employer's Personnel and affected communities; and (iii) require the security personnel to act within the applicable Laws and any requirements set out in the Specifications.

The Contractor shall not permit any use of force by security personnel in providing security except when used for preventive and defensive purposes in proportion to the nature and extent of the threat.

In making security arrangements, the Contractor shall also comply with any additional requirements stated in the Specification."

B. Time Control

30. Program and Progress Reports

- 30.1 Within the time **stated in the PCC**, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump-sum contract, the activities in the Program shall be consistent with those in the Activity Schedule. The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.
- 30.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of

the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.

- 30.3 The Contractor shall monitor progress of the Works and submit to the Project manager progress report and any updated Program showing the actual progress achieved and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities, at intervals no longer than the period **stated in the PCC**. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount **stated in the PCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of lump-sum Contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.
- 30.4 Unless otherwise stated in the Specifications, each progress report shall include the Environmental and Social (ES) metrics set out in Appendix B.
- 30.5 In addition to the progress reports, the Contractor shall inform the Project Manager immediately of any allegation, incident or accident in the Site, which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Employer's Personnel, Project Manager's personnel or Contractor's Personnel. This includes, but is not limited to, any incident or accident causing fatality or serious injury; significant adverse effects or damage to private property; or any allegation of SEA and/or SH. In case of SEA and/or SH, while maintaining confidentiality as appropriate, the type of allegation (sexual exploitation, sexual abuse or sexual harassment), gender and age of the person who experienced the alleged incident should be included in the information.

The Contractor, upon becoming aware of the allegation, incident or accident, shall also immediately inform the Project Manager of any such incident or accident on the Subcontractors' or suppliers' premises relating to the Works which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Employer's Personnel, or Contractor's, its Subcontractors' and suppliers' personnel. The notification shall provide sufficient detail regarding such incidents or accidents. The Contractor shall provide full details of such incidents or

accidents to the Project Manager within the timeframe agreed with the Project Manager.

The Contractor shall require its Subcontractors and suppliers (other than Subcontractors) to immediately notify the Contractor of any incidents or accidents referred to in this Sub clause.

31. Extension of the Intended Completion Date

31.1 The Project Manager 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 work, which would cause the Contractor to incur additional cost.

31.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or 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.

32. Acceleration

32.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.

32.2 If the Contractor's priced proposals for acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.

33. Delays Ordered by the Project Manager

33.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

34. Management Meetings

34.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

34.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

- 35. Early Warning** 35.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
- 35.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

C. Quality Control

- 36. Identifying Defects** 36.1 The Project Manager 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 Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.
- 37. Tests** 37.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specifications to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.
- 38. Correction of Defects** 38.1 The Project Manager 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 PCC**. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

38.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.

39. Uncorrected Defects

39.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

D. Cost Control

40. Contract Price⁴

40.1 The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.

41. Changes in the Contract Price⁵

41.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change. The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.

41.2 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.

42. Variations

42.1 All Variations shall be included in updated Programs⁶ produced by the Contractor.

42.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to

⁴ In lump-sum contracts, replace GCC Sub-Clauses 40.1 as follows:

40.1 The Contractor shall provide updated Activity Schedules within 14 days of being instructed to by the Project Manager. The Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for materials on site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.

⁵ In lump-sum contracts, replace entire GCC Clause 41 with new GCC Sub-Clause 41.1, as follows:

41.1 The Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

⁶ In lump-sum contracts, add "and Activity Schedules" after "Programs."

do so by the Project Manager. The Contractor shall also provide information of any ES risks and impacts of the Variation. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.

- 42.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
- 42.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 42.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
- 42.6 If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in GCC Sub-Clause 41.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work. ⁷
- 42.7 Value Engineering: The Contractor may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following;
- (a) the proposed change(s), and a description of the difference to the existing contract requirements;
 - (b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle cost) the Employer may incur in implementing the value engineering proposal;

⁷ In lump-sum contracts, delete this paragraph.

- (c) a description of any effect(s) of the change on performance/functionality; and
- (d) A description of the proposed work to be performed, a program for its execution and sufficient ES information to enable an evaluation of ES risks and impacts.

The Employer may accept the value engineering proposal if the proposal demonstrates benefits that:

- (a) accelerates the contract completion period; or
- (b) reduces the Contract Price or the life cycle costs to the Employer; or
- (c) improves the quality, efficiency, safety or sustainability of the Facilities; or
- (d) yields any other benefits to the Employer,

without compromising the functionality of the Works.

If the value engineering proposal is approved by the Employer and results in:

- (a) a reduction of the Contract Price; the amount to be paid to the Contractor shall be the **percentage specified in the PCC** of the reduction in the Contract Price; or
- (b) an increase in the Contract Price; but results in a reduction in life cycle costs due to any benefit described in (a) to (d) above, the amount to be paid to the Contractor shall be the full increase in the Contract Price.

43. Cash Flow Forecasts

43.1 When the Program,⁸ is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

44. Payment Certificates

44.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.

44.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.

⁸ In lump-sum contracts, add "or Activity Schedule" after "Program."

- 44.3 The value of work executed shall be determined by the Project Manager.
- 44.4 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed.⁹
- 44.5 The value of work executed shall include the valuation of Variations and Compensation Events.
- 44.6 The Project Manager 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.
- 44.7 If the Contractor was, or is, failing to perform any ES obligations or work under the Contract, the value of this work or obligation, as determined by the Project Manager, may be withheld until the work or obligation has been performed, and/or the cost of rectification or replacement, as determined by the Project Manager, may be withheld until rectification or replacement has been completed. Failure to perform includes, but is not limited to the following:
- (a) failure to comply with any ES obligations or work described in the Works' Requirements which may include: working outside site boundaries, excessive dust, failure to keep public roads in a safe usable condition, damage to offsite vegetation, pollution of water courses from oils or sedimentation, contamination of land e.g. from oils, human waste, damage to archeology or cultural heritage features, air pollution as a result of unauthorized and/or inefficient combustion;
 - (b) failure to regularly review C-ESMP and/or update it in a timely manner to address emerging ES issues, or anticipated risks or impacts;
 - (c) failure to implement the C-ESMP e.g. failure to provide required training or sensitization;
 - (d) failing to have appropriate consents/permits prior to undertaking Works or related activities;

⁹ In lump-sum contracts, replace this paragraph with the following: "The value of work executed shall comprise the value of completed activities in the Activity Schedule."

- (e) failure to submit ES report/s (as described in Appendix B), or failure to submit such reports in a timely manner;
- (f) Failure to implement remediation as instructed by the Project Manager within the specified timeframe (e.g. remediation addressing non-compliance/s).

45. Payments

- 45.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.
- 45.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 45.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
- 45.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

46. Compensation Events

- 46.1 The following shall be Compensation Events:
- (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
 - (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
 - (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.

- (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
 - (e) The Project Manager unreasonably does not approve a subcontract to be let.
 - (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
 - (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
 - (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
 - (i) The advance payment is delayed.
 - (j) The effects on the Contractor of any of the Employer's Risks.
 - (k) The Project Manager unreasonably delays issuing a Certificate of Completion.
- 46.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 46.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

46.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.

47. Tax

47.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 28 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 49.

48. Currencies

48.1 Where payments are made in currencies other than the currency of the Employer's country **specified in the PCC**, the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.

49. Price Adjustment

49.1 (Not Applicable) Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the PCC**. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type specified below applies to each Contract currency:

$$P_c = A_c + B_c \text{ Imc/Ioc}$$

where:

P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c."

A_c and B_c are coefficients¹⁰ **specified in the PCC**, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c;" and

Imc is the index prevailing at the end of the month being invoiced and Ioc is the index prevailing 28 days before

¹⁰ The sum of the two coefficients A_c and B_c should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the nonadjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other nonadjustable components. The sum of the adjustments for each currency are added to the Contract Price.

Bid opening for inputs payable; both in the specific currency “c.”

49.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

50. Retention

50.1 The Employer shall retain from each payment due to the Contractor the proportion **stated in the PCC** until Completion of the whole of the Works.

50.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC Sub-Clause 57.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an “on demand” Bank guarantee.

51. Liquidated Damages

51.1 The Contractor shall pay liquidated damages to the Employer at the rate per day **stated in the PCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount **defined in the PCC**. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor’s liabilities.

51.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 45.1.

52. Bonus

52.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day **stated in the PCC** for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.

53. Advance Payment

- 53.1 The Employer shall make advance payment to the Contractor of the amounts **stated in the PCC** by the date **stated in the PCC**, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.
- 53.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.
- 53.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

54. Securities

- 54.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount **specified in the PCC**, by a bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Certificate of Completion in the case of a Performance Bond.

55. Dayworks

- 55.1 If applicable, the Day works rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 55.2 All work to be paid for as Day works shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.

55.3 The Contractor shall be paid for Day works subject to obtaining signed Day works forms.

56. Cost of Repairs 56.1 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 the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

57. Completion 57.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.

58. Taking Over 58.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.

59. Final Account 59.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

60. Operating and Maintenance Manuals 60.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates **stated in the PCC**.

60.2 If the Contractor does not supply the Drawings and/or manuals by the dates **stated in the PCC** pursuant to GCC Sub-Clause 60.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the PCC** from payments due to the Contractor.

61. Termination

61.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

61.2 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 Program and the stoppage has not been authorized by the Project Manager;
- (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 28 days;
- (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 84 days of the date of the Project Manager's certificate;
- (e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
- (f) the Contractor does not maintain a Security, which is required;
- (g) 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 the PCC**; or
- (h) if the Contractor, in the judgment of the Employer has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix A to the GCC, in competing for or in executing the Contract, then the Employer may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.

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

61.4 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.

61.5 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 61.2 above, the Project Manager shall decide whether the breach is fundamental or not.

62. Payment upon Termination

62.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as **specified in the PCC**. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.

62.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

63. Property

63.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.

64. Release from Performance

64.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager 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.

**65. Suspension of
Bank Loan or
Credit**

65.1 In the event that the Bank suspends the Loan or Credit to the Employer, from which part of the payments to the Contractor are being made:

- (a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the Bank's suspension notice.
- (b) If the Contractor has not received sums due to it within the 28 days for payment provided for in GCC Sub-Clause 45.1, the Contractor may immediately issue a 14-day termination notice.

APPENDIX A TO GENERAL CONDITIONS

Fraud and Corruption

(Text in this Appendix shall not be modified)

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
 - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) Acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.

- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹¹ (ii) to be a nominated¹² sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders(applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect¹³ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

¹¹ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

¹² A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

¹³ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

APPENDIX B

Environmental and Social (ES) Metrics for Progress Reports

After finalization of a contractor, it is mandatory for the contractor to prepare and implement the Environment and Social Management Plan (ESMP). For Health and Safety of workers and community, the plan entailing the below aspects need to be prepared and implemented;

A) Social Management Plan:

1. **In case of labour influx**, (if labours are not available locally and to be outsourced from outside district/region/state) the basic residence facility (setting up of camps, provision of residence with all basic amenities) need to be provided. Due to labour influx, there may be risk of communicable disease, gender-based violence among workers and community. Hence the plan to avoid/mitigate these factors also need to be prepared and implemented.
2. **At workplace** : The following provisions/measures need to be complied at workplace
 - The provision of clean drinking water, health and hygiene facilities, separate washrooms for male & female, first aid kit, child crèches for women etc.
 - Mechanism to restrict sexual harassment of women and child at construction site, mechanism to prevent child labour and bonded labour, etc.
 - For safety of workers, Safety equipment like provision of personal protection equipment (PPE) for workers, such as safety boots, helmets, masks, gloves, protective clothing, goggles, full-face eye shields, and ear protection, firefighting equipment need to be provided.
3. **Community Safety Measure:** For avoiding the accidents due to increase in traffic at local level, the plan regarding road transport and road traffic management i.e. to provide signs at strategic locations of the roads, install and maintain a display board at each important road intersection on the roads to be used during construction, display boards about information regarding construction works as well as vehicle movements and warning signs etc. .needs to be prepared and implemented.

B) Environmental Management Plan

I. Air Quality

Possible impacts during construction are dust emission due to activities such as excavation, leveling, movement of vehicles at construction site. Emission due to operation of construction machineries.

Following mitigation measures should be adopted by the contractors;

- 1) Construction materials shall be transported to the site in covered trucks, where necessary.
- 2) Land clearing for construction site will be kept at the absolute minimum practicable.
- 3) Layout should be designed to minimize the removal of soil and vegetation
- 4) Topsoil removed will be preserved for later reinstatement purposes by piling it within and along the boundary of the site.
- 5) Dust suppression systems (water spray) shall be put into service as per requirement at the construction site.
- 6) Fuel used for machineries shall be clean and with low Sulphur content.
- 7) Construction machineries used shall have a valid PUC certificate.
- 8) Construction workers shall be provided with clean fuel for cooking.
- 9) Reducing speed of vehicle on Water Bound Macadam (WBM) road within the construction site to 20 km/hr. will reduce dust emission.
- 10) Vehicles used shall be Bharat Stage V or VI compliant as per the prevailing regulations.

II. Noise quality

Noise quality shall be impacted due to operation of construction machineries. Mitigation measures should be adopted are as follows;

- 1) Provision of silencers to modulate the noise generated by machines
- 2) Provision of protective devices like ear muff/ plugs to the workers who will be working in the noise prone areas.
- 3) Acoustic enclosure to D.G set shall be provided if used.
- 4) Construction activity generating noise shall be limited to the day time

III. Water Use and Quality

Following water conservation measures should be adopted;

- 1) Curing water shall be sprayed on to the concrete structures instead of free flow of water.
- 2) Concrete structures shall be covered with thick cloth/gunny bags to avoid water rebound and will ensure sustained and complete curing.

- 3) Following mitigation measures should be integrated in case of waste water generated from temporary labour tents or rainwater run-off from construction sites;
- 4) Sewage generated shall be treated in septic tank followed by soak pits.
- 5) Silt traps shall be provided prior to discharge of run-off from construction area into drains.
- 6) An oil trap shall be provided in the drainage line to prevent contamination by accidental spillage of oil and grease.
- 7) Washdown area shall be provided for cleaning of vehicle wheels and the waste water shall be drained properly. Here also a settling pit and baffled oil water separator shall be provided.

IV. Soil Quality

Possible impacts on Soil Quality are due to generation of construction waste and municipal solid waste from workers camps.

Following mitigation measures should be followed;

- 1) Construction waste generated shall be collected, segregated and disposed as per the Construction and Demolition Waste Rules 2016.
- 2) Municipal solid waste generated shall be disposed as per Solid Waste Management Rules 2016.
- 3) Used oil generated shall be collected and sold to authorized recyclers.

V. Design Elements for energy efficiency:

General measures that shall be adopted in the design for energy efficient and sustainable design of building for Warehouse, Cold Storages, etc. are as follows;

- 1) Building design shall utilize maximum natural daylight and rely minimum on artificial lighting.
- 2) Use low energy Light Emitting Diode (LED) lighting system to reduce their energy usage.
- 3) Waste management based on the concept of reduce, reuse and recycle shall be adopted to promote waste avoidance ahead of recycling and disposal.
- 4) Electrical / electronic equipment used in the facility shall be of 3 star and above rating.
- 5) Warehouse and Retails shall utilize solar energy for internal and external lighting to the extent possible.
- 6) Construction material to the extent possible shall be sourced locally to reduce carbon foot print.
- 7) Building material to the extent possible considering the design requirement shall utilize recyclable material such as fly ash bricks.
- 8) Refrigerator trucks shall be energy efficient and Bharat Stage VI and above compliant as per the prevailing norms.

- 9) Cold Storages and Retails shall use refrigerants that are environment friendly and non-ozone depleting and adhere to Ozone Depleting Substances (Regulation and Control) Rules, 2000 and its amendments.
- 10) HVAC (Heat Ventilation and Air Conditioning) system used shall be energy efficient.

Section IX - Particular Conditions of Contract

Except where otherwise specified, all Particular Conditions of Contract should be filled in by the Employer prior to issuance of the bidding document. Schedules and reports to be provided by the Employer should be annexed.

A. General			
GCC 1(d)	The financing institution is: The World Bank		
GCC 1 (r)	The Employer is Chairman & Managing Director, Maharashtra State Warehousing Corporation & Head PIU-MSWC, SMART		
GCC 1 (v)	The Intended Completion Date for the whole of the Works shall be 12 Months.		
GCC 1 (y)	The Project Manager is General Manager (Engg.), Maharashtra State Warehousing Corporation, Pune.		
GCC 1(aa)	The Site is located at S. No 294, A/p Shaha, Tal- Karanja, Dist- Washim, Maharashtra .		
GCC 1 (dd)	The Start Date shall be <i>15 days after the date of issue of notice to proceed With works to the contractor.</i>		
GCC 1 (hh)	The Works consist of Construction of 2x5040 MT Capacity Pre-Engineered Warehouse Building, Internal Road, Office Building & Training center, Cleaning & Grading Yard, Drying Yard, Hamal Shed and ancillary works for Agro Logistic Hub at Shah, Tal -Karanja Lad, Dist. Washim, Maharashtra. Identification number of Contract is Ref.No. IN-PCMU-SMART-533196-CW-RFB		
GCC 1(jj)	GCC 1.1 (jj) is replaced with the following: “Key Personnel are the Contractor’s personnel named in GCC 9.1 of the Particular Conditions of Contract.”		
GCC 2.2	Sectional Completions are: 12 months from start date		
GCC 2.3(i)	The following documents also form part of the Contract:		
	S. No.	Document	Description of the document
	1	RFB	Request for bid including Bid Data Sheet/ITB (Instruction to Bidder) as mentioned in RFB.

	2.	Construction Methodology	Construction methodology given in bid amended as per comments of employer given in letter of acceptance.
	3.	Quality control	Quality control procedures and assurance plans given in the bid and amended as per comments of Employer given in letter of acceptance.
	4.	Fraud and Corruption	Appendix A – Fraud and Corruption
	5.	Environmental and Social	Appendix B - Environmental and Social (ES) Metrics for Progress Reports.
GCC 3.1	The following is inserted as a sub-clause at the end of GCC 3.1: “Salient features of major labour and other laws that are applicable to construction industry in India are given as Appendix 1 to these General Conditions of Contract.” The language of the contract is <i>English</i>. The law that applies to the Contract are the laws of Union of India.		
GCC 4.1	The following is inserted as a sub-paragraph at the end of GCC 4.1: “However, if the Project Manager is required, under the rules and regulations and orders of the Employer, to obtain approval of some other authorities for specific actions, he will so obtain the approval. Provided further that any requisite approval shall be deemed to have been given by the Employer for any such authority exercised by the Project Manager.”		
GCC 5.1	The Project manager may delegate any of his duties and responsibilities.		
GCC 6.1	The following is inserted at the end of GCC 6.1: “All oral instructions shall be confirmed in writing in seven working days.”		
GCC 7.1	Not Applicable		
GCC 8.1	Schedule of other contractors:		
GCC 9	The following is inserted as a sub-clause at the end of GCC 9.2: “In all the above cases, the contractor shall ensure that the person leaves the site within seven days and has no further connection with the work in the contract. The Contractor shall appoint a suitable replacement within		

	28 days or earlier as may be agreed to between the Project Manager and the Contractor.” The following sentence is deleted from first paragraph of GCC 9.4.1: “The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within the Country.” GCC 9.4.3 and GCC 9.4.4 are deleted. The following sub-clauses are inserted at the end of GCC 9.4: “9.5 The Contractor shall not employ any retired Gazetted officer who has either not completed two years after the date of retirement or has not obtained permission from the Government authorities for employment with the Contractor¹⁴. 9.6 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 laws (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law prevailing on the Base Date either by the State or the Central Government or the local authority. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contraventions 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 Project Manager/ Employer shall have the right to deduct any money due to the Contractor including his amount of performance security and if applicable, the Environmental and Social (ES) Performance Security. The Employer/ Project Manager 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. 9.7 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. 9.8 The Contractor shall duly comply with the provisions of the Apprentices Act 1961 (III of 1961) and the rules made there under, and

¹⁴Based on Government Directives.

	comply, failure or neglect to shall be subject to all liabilities and penalties provided in the said Act and Rules.”
GCC 9.1	Key Personnel and equipment: Key Personnel are the Contractor’s personnel named in this GCC 9.1 of the Particular Conditions of Contract. The Contractor shall employ the Key Personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
GCC 13.1	The Contractor Shall take out necessary Insurance Policy / Policies (viz. Contractors' All Risks Insurance Policy as decided by the Directorate of Insurance) so as to provide adequate insurance cover for execution of the awarded contract work for total contract value and complete contract period COMPULSORILY from the “ Directorate of Insurance, Maharashtra State, Mumbai ” only. Its postal address for Correspondence is “264, MHADA, First Floor, Opp. Kalanagar, Bandra(East), Mumbai-400 051” (Telephone Nos. 022-26590403 / 26590690 and Fax No. is 022-26592461 / 26590403). Similarly, all workmen's' appointed to complete the contract work are required to insure under workmen's' compensation Insurance Policy. Insurance policy / policies taken out from any other Company will not be accepted, if any Contractor has not taken out the insurance policy from the "Directorate of Insurance, Maharashtra State, Mumbai" or has effected Insurance with any Insurance Company, the same will not be accepted and 1% of the tender amount or such amount of premium calculated by the Government Insurance Fund will be recovered directly from the amount payable to the Contractor for the executed contract work and paid to the Directorate of Insurance Fund, Maharashtra State, Mumbai. The Director of Insurance reserves the right to distribute the risks of insurance among the other insurers.
GCC 14.1	Site Data are: Site shall be inspected by the Employer Representative, the Contractor and the Project Manager within 10 (ten) days of the date of this Agreement to prepare a detailed memorandum in accordance to “ Annexure-A ” containing an inventory of the Site including the vacant and unencumbered land, buildings, structures, road works, trees and any other immovable property on or attached to the Site
GCC 15.1	GCC 15.1 is replaced with the following: “The Contractor shall construct and install the Works in accordance with the Specifications and Drawings and as per instructions of Project Manager.”
GCC 18 (add new 18.3.3)	The following is inserted as a new sub-clause 18.3.3:

	“18.3.3 During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made thereunder, regulations, notifications and by-laws of the State or Central Government, or local authorities and other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority. Salient features of the major laws are given in Appendix 1 to the General Conditions of Contract.”
GCC 20.1	The Site Possession Date(s) shall be: on start date.
GCC 23	The following is inserted as a new sub-clause 23.1.1: “23.1.1 The Adjudicator should be in position before “notice to proceed with work” is issued to the Contractor and an agreement should be signed with the Adjudicator jointly by the Employer and the Contractor in the form attached – Appendix 3.”
GCC 23.1 & GCC 23.2	Name of the agreed Adjudicator - <i>(To be appointed jointly on dispute)</i>
GCC 24	In the first sentence in GCC 24.3, the words “The Adjudicator shall be paid by the hour at the rate” are replaced by the words “The Adjudicator shall be paid daily at the rate”
GCC 24.3	Daily rate and type of reimbursable expenses to be paid to the Adjudicator: Fee per day plus all reimbursable expenses such as travel, accommodation, Documentation etc. shall be decided mutually by employer and contractor
GCC 24.4	The procedure for adhoc arbitration will be as follows: (a) In case of Dispute or difference arising between the Employer and a Contractor relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 3 Arbitrators one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding Arbitrator. In case of failure of the two Arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the Arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the* Indian Council of Arbitration/ President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India).

	(b) If one of the parties fails to appoint its Arbitrator in pursuance of sub-clause (a) above within 30 days after receipt of the notice of the appointment of its Arbitrator by the other party, then the *Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India), both in cases of Foreign Contractor as well as Indian Contractor, shall appoint the Arbitrator. A certified copy of the order of the* Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India), making such an appointment shall be furnished to each of the parties. (c) Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the Employer, the Project Manager, the Contractor and the Adjudicator shall not be altered by reason of the arbitration being conducted during the progress of the Works. (d) Arbitration proceedings shall be held at Pune , and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English. (e) The decision of the majority of Arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation, etc. of its proceedings as also the fees and expenses paid to the Arbitrator appointed by such party or on its behalf shall be borne by each party itself. (f) Where the value of the contract is Rs. 50 million and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority, namely the * Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India). (g) The Arbitrator should give final award within 120 days of starting of the proceedings (h) Performance under the contract shall continue during the arbitration proceedings and payments due to the contractor by the Employer shall not be withheld, unless they are the subject matter of the arbitration proceedings.

	"Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by arbitration in accordance with the Rules of Domestic Commercial Arbitration of the Indian Council of Arbitration and the award made in pursuance thereof shall be binding on the parties. The arbitral tribunal shall consist of 3 Arbitrators, arbitration proceedings shall be held at Pune, India and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English".
B. Time Control	
GCC 30.1	The Contractor shall submit for approval a Program for the Works within 14 days of delivery of the Letter of Acceptance. Any revision in Program should only be agreed in writing.
GCC 30.3	The period between Program updates is 120 days. The amount to be withheld for late submission of an updated Program is <i>10% of next payment to Contractor</i>.
GCC 31	GCC 31.1 is replaced with the following: "31.1 The Project Manager shall extend the Intended Completion Date including milestones if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date as per the agreed milestones without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost." In GCC 31.2, replace the words "Intended Completion Date" at the first occurrence by the words "Intended Completion Date/ Milestones"; and at the second occurrence by the words "Intended Completion Date/ Milestone".
GCC 34	GCC 34.1 is replaced with the following: "Either the Project Manager or the Contractor may require the other to attend a management meeting (which will be held at the place indicated in PCC. The periodicity shall be fixed by Project Manager/ Contractor jointly). The business of a management meeting shall be to review the progress of construction with reference to the construction program given in accordance with GCC 30.1, the plans for remaining work and to

	deal with matters raised in accordance with the early warning procedure.”
GCC 34.1	Venue of management meeting will be office of the General Manager (Engg.) MSWC Pune. The management meetings shall be held at intervals of 3 months.
C. Quality Control	
GCC 36	The following sub-clause is inserted at the end of GCC 36.1: “36.2 The contractor shall permit the Employer’s Technical auditor to check the contractor’s work and notify the Project Manager and Contractor of any defects that are found. Such a check shall not affect the Contractor’s or the Project Manager’s responsibility as defined in the Contract Agreement.”
GCC 37	The following sub-clauses are inserted before GCC 37.1, and GCC 37.1 is re-numbered as GCC 37.3: “GCC 37.1 The Contractor shall institute Quality Assurance (QA) and Quality Control (QC) systems in accordance with Quality Assurance Plan to demonstrate compliance with the requirements of the Contract as approved by the Project Manager. Compliance with the QA/QC systems shall not relieve the Contractor of any of his duties obligations or responsibilities under the Contract. GCC 37.2 The Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently.”
GCC 38.1	The Defects Liability Period is: 60 Months from the date of final completion of project.
D. Cost Control	
GCC 41	No rate change against increase or decrease of quantity as stated in BOQ is allowed.
GCC 42.7	Provisions related to Value Engineering do not apply.
GCC 43.1	The second sentence in GCC 43.1 is replaced with the following:

	“The cash flow forecast shall be in Indian Rupees.”																						
GCC 44	At the end of GCC 44.1 after the word ‘previously’, the following words are added: “along with details of measurement of the quantity of works executed in a tabular form approved by the Project Manager and photographs so as to observe the progress of work at different stages of execution of works. The contractor shall take out coloured photograph at 3 stages i.e., 1) Before execution 2) During execution 3) After completion of work. Contractor shall take out at least 15 photographs of different location of each sub works at each stage. The photographs will be of post card size same shall be submitted along with the running bill in duplicate. No extra cost shall be paid to the contractor on this account” At the end of GCC 44.2 after the words ‘the Contractor’, the following words are added: “After taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amount and under conditions set forth in GCC Sub-Clause 53.1 (Secured Advance)”																						
GCC 45	Payment Schedule: Payment to the contractor will be paid by the employer as per the schedule mentioned below. <table> <tr> <th>Payment of work</th><th>Work completed</th></tr> <tr> <td>1) 1st R A bill</td><td>10% of work completed</td></tr> <tr> <td>2) 2nd R A bill</td><td>20% of work completed</td></tr> <tr> <td>3) 3rd RA bill</td><td>30% of work completed</td></tr> <tr> <td>4) 4th RA bill</td><td>40% of work completed</td></tr> <tr> <td>5) 5th RA bill</td><td>50% of work completed</td></tr> <tr> <td>6) 6th RA bill</td><td>60% of work completed</td></tr> <tr> <td>7) 7th RA bill</td><td>70% of work completed</td></tr> <tr> <td>8) 8th RA bill</td><td>80% of work completed</td></tr> <tr> <td>9) 9th RA bill</td><td>90% of work completed</td></tr> <tr> <td>10) 10th Final bill</td><td>100% of work completed</td></tr> </table> 45.1 is replaced with the following: “Payments shall be adjusted for deductions for advance payments, retention, other recoveries in terms of contract & taxes to be deducted at source [TDS] as per applicable law. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date	Payment of work	Work completed	1) 1 st R A bill	10% of work completed	2) 2 nd R A bill	20% of work completed	3) 3 rd RA bill	30% of work completed	4) 4 th RA bill	40% of work completed	5) 5 th RA bill	50% of work completed	6) 6 th RA bill	60% of work completed	7) 7 th RA bill	70% of work completed	8) 8 th RA bill	80% of work completed	9) 9 th RA bill	90% of work completed	10) 10 th Final bill	100% of work completed
Payment of work	Work completed																						
1) 1 st R A bill	10% of work completed																						
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5) 5 th RA bill	50% of work completed																						
6) 6 th RA bill	60% of work completed																						
7) 7 th RA bill	70% of work completed																						
8) 8 th RA bill	80% of work completed																						
9) 9 th RA bill	90% of work completed																						
10) 10 th Final bill	100% of work completed																						

	of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the rate stated in the PCC." A new sub-clause 45.5 is added after sub-clause 45.4: "45.5 The Contractor shall open an Escrow Account with his bank for the purpose of receiving all the payments as well as incurring expenditure under this Contract. The Account shall be open to verification and audit at any time by the Employer or designee of the Employer. This account will be controlled solely by the Contractor's Project Officers (Project Manager and/or Finance Manager or equivalent designate). No other Contractor employees or associates will have access to the Project Account or the funds therein. The Contractor shall report monthly on the status of this account including actual bank account statements. The Contractor shall provide all Account statements as requested by the Employer."
GCC 45.1	Interest rate for Delayed payment: As per the <i>State Bank of India prime lending rate</i> .
GCC 45.3	All payments (and deductions) shall be paid or charged in Indian Rupees.
GCC 48	All payments shall be made in Indian Rupees.
GCC 49	Not Applicable
GCC 50.1	The proportion of payments retained (Retention Money) shall be 5% from each bill subject to the maximum of 5% of final contract price.
GCC 50.2	The last line of GCC 50.2 is replaced with the following: "On completion of the whole works the Contractor may substitute the balance retention money with an "on demand" Bank guarantee."
GCC 51	In the first sentence of GCC 51.1, the following words are inserted after the words 'Intended Completion Date': "(for the whole of the works or the milestones as stated in the PCC)" The following is inserted as a sub-paragraph at the end of GCC 51.1: "Time is the essence of the contract and payment or deduction of liquidated damages shall not relieve the contractor from his obligation to complete the work as per agreed construction program and milestones, or

	from any of the Contractor's other obligations and liabilities under the contract.” In the first sentence in GCC 51.2 the following words are inserted after the words ‘Intended Completion Date’: “including milestones”							
GCC 51.1	The liquidated damages for the whole of the Works are @ 0.05% of balance cost of Contract Price per day and the maximum amount of liquidated damages for the whole of the Works is 10% of Contract Price.							
GCC 52.1	Not Applicable							
GCC 53	Not Applicable							
GCC 54	GCC 54.1 is replaced with the following: “The Performance Security (2%)and an Environmental and Social (ES) Performance Security(1%) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in the amounts specified in the PCC , and shall be issued by a Nationalized or Scheduled bank in India. The Performance Security including additional security for unbalanced bids, and the ES Performance Security, shall be valid until a date 28 days from the date of issue of the Certificate of Completion.”							
GCC 54.1	The Environmental and Social (ES) Performance Security amount is (1%) of the Accepted Contract Amount and Performance Security amount is 2% (percent) of the Accepted Contract Amount plus Rs. as additional security for unbalanced bids as detailed below, <table><tr><td>If the offer submitted is up to 10 % below estimated cost</td><td>1% of the estimated cost put to tender</td></tr><tr><td>for offer more than 10 % below upto 15 % below the estimated cost</td><td>1% of the estimated cost put to tender plus an amount equal to the percentage by which the offer is below 10% of the estimated cost put to tender. [e.g.1- if the offer is 14.50% below, the Performance Security will be 1% + (14.50-10.00=4.5) 4.5= 5.5 % of the estimated cost put to tender.] [e.g. if the offer is 15.00% below, the Performance Security will be 1% + (15.00-10.00=5) 5= 6.00 % of the estimated cost put to tender.]</td></tr><tr><td>for offer more than 15 % below the estimated cost</td><td>2 % of the estimated cost put to tender plus an amount equal for to the percentage by which the offer is below 15 % of the estimated cost put to tender. e.g. 1- if the</td></tr></table>		If the offer submitted is up to 10 % below estimated cost	1% of the estimated cost put to tender	for offer more than 10 % below upto 15 % below the estimated cost	1% of the estimated cost put to tender plus an amount equal to the percentage by which the offer is below 10% of the estimated cost put to tender. [e.g.1- if the offer is 14.50% below, the Performance Security will be 1% + (14.50-10.00=4.5) 4.5= 5.5 % of the estimated cost put to tender.] [e.g. if the offer is 15.00% below, the Performance Security will be 1% + (15.00-10.00=5) 5= 6.00 % of the estimated cost put to tender.]	for offer more than 15 % below the estimated cost	2 % of the estimated cost put to tender plus an amount equal for to the percentage by which the offer is below 15 % of the estimated cost put to tender. e.g. 1- if the
If the offer submitted is up to 10 % below estimated cost	1% of the estimated cost put to tender							
for offer more than 10 % below upto 15 % below the estimated cost	1% of the estimated cost put to tender plus an amount equal to the percentage by which the offer is below 10% of the estimated cost put to tender. [e.g.1- if the offer is 14.50% below, the Performance Security will be 1% + (14.50-10.00=4.5) 4.5= 5.5 % of the estimated cost put to tender.] [e.g. if the offer is 15.00% below, the Performance Security will be 1% + (15.00-10.00=5) 5= 6.00 % of the estimated cost put to tender.]							
for offer more than 15 % below the estimated cost	2 % of the estimated cost put to tender plus an amount equal for to the percentage by which the offer is below 15 % of the estimated cost put to tender. e.g. 1- if the							

	offer is 16 % below, the performance security will be $(16-15=1 \times 2=2)$ $6+2=8$ % of the estimated cost put to tender. e.g. 2- if the offer is 19 % below, the performance security will be $(19-15=4 \times 2=8)$ $6+8=14$ % of the estimated cost put to tender. e.g. 3- if the offer is 25 % below, the performance security will be $(25-15=10 \times 2=20)$ $6+20=26$ % of the estimated cost put to tender. e.g. 4- if the offer is 26.25 % below, the performance security will be $(26.25-15=11.25 \times 2=22.50)$ $= 6+22.50=28.50$ % of the estimated cost put to tender. The standard forms of Performance Security and if applicable ES Security acceptable to the Employer shall be <u>unconditional</u> Bank Guarantees from Scheduled or Nationalized banks in India of the types as presented in Section X of the Bidding Document. Throughout this bidding document the term 'performance security', unless the context clearly indicates otherwise, means and includes both 'the performance security and the ES performance security' to be submitted by the successful bidder in the amounts specified above.
E. Finishing the Contract	
GCC 59.1	The following is added after the words 'issue a payment certificate' at the end of GCC 59.1: "within 56 days of receiving the contractor's revised account"
GCC 61.2 (I)	Deleted
GCC 62	The following is added after the words 'issue of the certificate' in the first sentence of GCC 62.1; "less other recoveries due in terms of contract, less taxes to be deducted at source [TDS] as per applicable law," The following is added after the words 'date of the certificate' at the end of GCC 62.2: "less other recoveries due in terms of contract, less taxes to be deducted at source [TDS] as per applicable law"
GCC 62.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is 20%.

Appendices

Appendix 1

Salient Features of Labour & Environment Protection Laws¹⁵

SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK

(a)	<u>Employees Compensation Act 1923</u> : The Act provides for compensation in case of injury, disease or death arising out of and during the course of employment.
(b)	<u>Payment of Gratuity Act 1972</u> : gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years' service or more or on death at the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
(c)	<u>Employees P.F. and Miscellaneous Provision Act 1952 (<i>since amended</i>)</u> : The Act provides for monthly contribution by the employer plus workers @ 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)	<u>Maternity Benefit Act 1961</u> : The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
(e)	<u>Sexual Harassment of Women at the Workplace (Prevention, Prohibition and Redressal) Act, 2013</u> : This Act defines sexual harassment in the workplace, provides for an enquiry procedure in case of complaints and mandates the setting up of an Internal Complaints Committee or a Local Complaints Committee
(f)	<u>Contract Labour (Regulation & Abolition) Act 1970</u> : 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

¹⁵ This list is only illustrative and not exhaustive. Bidders and Contractors are responsible for checking the correctness and completeness of the list. The law as current on the date of bid opening will apply.

required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labour.

- (g) Minimum Wages Act 1948: The Employer is supposed 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 are scheduled employments.
- (h) Payment of Wages Act 1936: It lays down the mode, manner and by what date the wages are to be paid, what deductions can be made from the wages of the workers.
- (i) Equal Remuneration Act 1976: 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 20 or more employees. Some of the State Governments have reduced this requirement from 20 to 10. The Act provides for payments of annual bonus subject to a minimum of 8.33% of the wages drawn in the relevant year. It applies to skilled or unskilled manual, supervisory, managerial, administrative, technical or clerical work for hire or reward to employees who draw a salary of Rs. 10,000/- per month or less. To be eligible for bonus, the employee should have worked in the establishment for not less than 30 working days in the relevant year. The Act does not apply to certain establishments.
- (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) 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.
- (m) 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 regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in the Building and Construction Industry.

- (n) Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979: The Act is applicable to an establishment which employs 5 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, traveling expenses from home up to the establishment and back, etc.

- (o) The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996 and the Building and Other Construction Workers Welfare Cess Act, 1996 (BOCWW Cess Act): All the establishments who carry on any building or other construction work and employ 10 or more workers are covered under these Acts. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be notified 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.

- (p) Factories Act 1948: the Act lays down the procedure for approval of plans before setting up a factory engaged in manufacturing processes, 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 10 persons or more with aid of power or 20 or more persons without the aid of power.

- (q) Weekly Holidays Act -1942

- (r) Bonded Labour System (Abolition) Act, 1976: The Act provides for the abolition of bonded labour system with a view to preventing the economic and physical exploitation of weaker sections of society. Bonded labour covers all forms of forced labour, including that arising out of a loan, debt or advance.

- (s) Employer's Liability Act, 1938: This Act protects workmen who bring suits for damages against employers in case of injuries endured in the course of employment. Such injuries could be on account of negligence on the part of the employer or persons employed by them in maintenance of all machinery, equipment etc. in healthy and sound condition.

- (t) Employees State Insurance Act 1948: The Act provides for certain benefits to insured employees and their families in case of sickness, maternity and disablement arising out of an employment injury. The Act applies to all

employees in factories (as defined) or establishments which may be so notified by the appropriate Government. The Act provides for the setting up of an Employees' State Insurance Fund, which is to be administered by the Employees State Insurance Corporation. Contributions to the Fund are paid by the employer and the employee at rates as prescribed by the Central Government. The Act also provides for benefits to dependents of insured persons in case of death as a result of an employment injury.

- (u) The Personal Injuries (Compensation Insurance) Act, 1963: This Act provides for the employer's liability and responsibility to pay compensation to employees where workmen sustain personal injuries in the course of employment.
- (v) Industrial Employment (Standing Order) Act 1946: It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.

SALIENT FEATURES OF SOME OF THE MAJOR LAWS THAT ARE APPLICABLE FOR PROTECTION OF ENVIRONMENT.

1. The Environment (Protection) Act, 1986 and as amended: This provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. 'Environment' includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.
2. The Forest Conservation Act, 1980, as amended, and Forest (Conservation) Rules, 1981 as amended: These provides for protection of forests by restricting conversion of forested areas into non- forested areas and prevention of deforestation, and stipulates the procedures for cutting any trees that might be required by the applicable rules. Permissions under the Act also stipulates the norms and compliance requirements of the employer and any contractor on behalf of the employer.
3. State Tree Preservation Acts as may be in force: These provide for protection of trees of important species. Contractors will be required to obtain prior permission for full or partial cutting, uprooting, or pruning of any such trees.
4. The Wildlife (Protection) Act, 1972, and as amended: This provides for protection of wildlife through notifying National Parks and Sanctuaries and buffer areas around these zones; and to protect individuals of nationally important species listed in the Annex of the Act.
5. The Biological Diversity Act, 2002: This provides for conservation of biological diversity, sustainable use of components of biological diversity, and fair and equitable sharing of the benefits arising out of the use of biological resources, knowledge and for matters connected therewith or incidental thereto.
6. The Public Liability Insurance Act, 1991 as amended and The Public Liability Insurance Rules, 1991 as amended: These provide for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.
7. The Ancient Monuments and Archaeological Sites and Remains Act, 1958 and the Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act, 2010, the Ancient Monuments and Archaeological Sites and Remains Rules, 1959 amended 2011, the National Monuments Authority Rules, 2011 and the similar State Acts: These provide for conservation of cultural and historical remains found in India. Accordingly, area within the radii of 100m and 300m from the

“protected property” are designated as “protected area” and “controlled area” respectively. No development activity (including building, mining, excavating, blasting) is permitted in the “protected area” and development activities likely to damage the protected property is not permitted in the “controlled area” without prior permission of the Archaeological Survey of India (ASI) or the State Departments of Art and Culture or Archaeology as applicable.

8. The Environmental Impact Assessment Notification, 2006 and as amended: This provides for prior environmental clearance for new, modernization and expansion projects listed in Schedule 1 of the Notification. Contractors will be required to ensure that no work starts until applicable clearances under the Notification is not available. Contractors will be responsible for implementation of any environmental management plan stipulated as per the permission under this Notification; and will be required to prepare and submit to the employer and compliance report stipulated in the permission under the Notification.
9. The Water (Prevention and Control of Pollution) Act, 1974 as amended, and the Water (Prevention and Control of Pollution) Rules, 1975 as amended: These provide for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. ‘Pollution’ means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms. Contractors will need to obtain consent for establishment and consent for operation of any item of work or installation of equipment that generates waste water, and observe the required standards of establishment and operation of these items of work or installations; as well as install and operate all required waste water treatment facilities.
10. The Water (Prevention and Control of Pollution) Cess Act, 1977 and The Water (Prevention and Control of Pollution) Cess Rules, 1978: These provide for the levy and collection of a cess on water consumed by persons carrying on certain industries and by local authorities, with a view to augment the resources of the Central Board and the State Boards for the prevention and control of water pollution under the Water (Prevention and Control of Pollution) Act, 1974.
11. The Air (Prevention and Control of Pollution) Act, 1981 as amended, and the Air (Prevention and Control of Pollution) Rules, 1982: These provides for prevention, control and abatement of air pollution. ‘Air Pollution’ means the presence in the atmosphere of any ‘air pollutant’, which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment. Contractors will need to obtain consent for establishment and consent for operation of any item of work or installation of equipment that generates air pollution

such as batching plants, hot mix plants, power generators, backup power generation, material handling processes, and observe the required standards of establishment and operation of these items of work or installations.

12. Noise Pollution (Control and Regulation) Rules, 2000, and as amended: This provides for standards for noise for day and night for various land uses and specifies special standards in and around sensitive receptors of noise such as schools and hospitals. Contractors will need to ensure compliance to the applicable standards, and install and operate all required noise control devices as may be required for all plants and work processes.
13. Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996: This provides for Requirement of preparation of on-site and off-site Disaster Management Plans for accident-prone areas.
14. The Explosives Act 1884 and the Explosives Rules, 2008: These provide for safe manufacture, possession, sale, use, transportation and import of explosive materials such as diesel, Oil and lubricants etc.; and also for regulating the use of any explosives used in blasting and/or demolition. All applicable provisions will need compliance by the contractors.
15. The Petroleum Rules, 2002: This provides for safe use and storage of petroleum products, and will need to be complied by the contractors.
16. The Gas Cylinder Rules 2004 and amendments: This provides for regulations related to storage of gas, and possession of gas cylinder more than the exempted quantity. Contractors should comply with all the requirements of this Rule.
17. Manufacture, Storage and Import of Hazardous Chemical Rules of 1989 and as amended: These provide for use and storage of hazardous material such as highly inflammable liquids like HSD/LPG. Contractors will need to ensure compliance to the Rules; and in the event where the storage quantity exceeds the regulated threshold limit, the contractors will be responsible for regular safety audits and other reporting requirements as prescribed in the Rules.
18. Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016: These provide for protection of general public from improper handling storage and disposal of hazardous waste. The rules prescribe the management requirement of hazardous wastes from its generation to final disposal. Contractors will need to obtain permission from the State Pollution Control Boards and other designated authorities for storage and handling of any hazardous material; and will to ensure full compliance to these rules and any conditions imposed in the permit.
19. The Bio Medical Waste Management Rules, 2016: This provides for control, storage, transportation and disposal of bio-medical wastes. As and where the contractor has any

first aid facility and dispensaries, established in either temporary or permanent manner, compliance to these Rules are mandatory.

20. Construction and Demolition Waste Management Rules, 2016: This provides for management of construction and demolition waste (such as building materials possible to be reused, rubble and debris or the like); and applies to all those waste resulting from construction, re-modelling, repair or demolition of any civil structure. Contractor will need to prepare a waste disposal plan and obtain required approval from local authorities, if waste generation is more than 20 tons in any day or 300 tons in any month during the contract period; and ensure full compliance to these rules and any conditions imposed in the regulatory approval.
21. The E-Waste (Management) Rules, 2016: This provides for management of E-wastes (but not covering lead acid batteries and radio-active wastes) aiming to enable the recovery and/or reuse of useful material from e-waste, thereby reducing the hazardous wastes destined for disposal and to ensure the environmentally sound management of all types of waste of electrical and electronic equipment. This Rule applies to every manufacturer, producer, consumer, bulk consumer, collection centers, dealers, e-retailer, refurbisher, dismantler and recycler involved in manufacture, sale, transfer, purchase, collection, storage and processing of e-waste or electrical and electronic equipment listed in Schedule I, including their components, consumables, parts and spares which make the product operational.
22. Plastic waste Management Rules, 2016: This provides for control and management of the plastic waste generated from any activity. Contractors will ensure compliance to this Rule.
23. The Batteries (Management and Handling) Rules 2001: This provides for ensuring safe disposal and recycling of discarded lead acid batteries likely to be used in any equipment during construction and operation stage. Rules require proper control and record keeping on the sale or import of lead acid batteries and recollection of the used batteries by registered recyclers to ensure environmentally sound recycling of used batteries. Contractors will ensure compliance to this Rule.
24. The Ozone Depleting Substances (Regulation and Control) Rules, 2000 and as amended: This provides for regulation of production and consumption of ozone depleting substances in the country, and specifically prohibits export to or import from countries not specified in the Rules, and prohibits unless specifically permitted, any use of ozone depleting substance.
25. The Coastal Regulation Zone Notifications, 1991 and as amended: This provides for regulation of development activities within the 500m of high tide line in coastal zone and 100m of stretches of rivers and estuaries influenced by tides. Contractors will be required to ensure that no work starts until applicable clearances under the Notification is not available. Contractors will be responsible for implementation of any plan

stipulated as per the permission under this Notification; and will be required to prepare and submit to the employer and compliance report stipulated in the permission under the Notification.

26. The Motor Vehicle Act 1988 as amended (and State Motor Vehicle Acts as may be in force) and the Motor Vehicle Rules, 1989, and as amended (and State Motor Vehicle Rules as may be in force): To minimize the road accidents, penalizing the guilty, provision of compensation to victim and family and check vehicular air and noise pollution. Contractors will be required to ensure full compliance to these rules.
27. Easement Act, 1882: This provides for the rights of landowners on groundwater. Contractors will need to ensure that other landowners' rights under the Act is not affected by any groundwater abstraction by the contractors.
28. State Groundwater Acts and Rules as may be in force and the Guidelines for Groundwater Abstraction for drinking and domestic purposes in Notified Areas and Industry/Infrastructure project proposals in Non-Notified areas, 2012: These provide for regulating extraction of ground water for construction/industrial and drinking and domestic purposes. Contractors will need to obtain permission from Central/State Groundwater Boards prior to groundwater abstraction through digging any bore well or through any other means; and will to ensure full compliance to these rules and any conditions imposed in the permit.
29. The Mines Act, 1952 as amended; the Minor Mineral and concession Rules as amended; and the State Mineral (Rights and Taxation) Acts as may be in force: These provide for for safe and sound mining activity. The contractors will procure aggregates and other building materials from quarries and borrow areas approved under such Acts. In the event the contractors open any new quarry and/or borrow areas, appropriate prior permission from the State Departments of Minerals and Geology will need to be obtained. Contractors will also need to ensure full compliance to these rules and any conditions imposed in the permit.
30. The Insecticides Act, 1968 and Insecticides Rules, 1971 and as amended: These provide for regulates the manufacture, sale, transport, distribution, export, import and use of pesticides to prevent risk to human beings or animals, and for matters connected therewith. No one should import or manufacture; sell, stock or exhibit foe sale; distribute, transport, use: (i) any misbranded insecticides, (ii) any insecticide the sale, distribution or use of which is for the time being prohibited under the Act; and (iii) any insecticide except in accordance with the condition on which it was registered under the Act.
31. National Building Codes of India, 2005 and as amended: This provides guidelines for regulating the building construction activities in India. The code mainly contains administrative regulations, development control rules and general building requirements; stipulations regarding materials, structural design and construction; and

building and plumbing services. Contractors will be required to comply with all Bureau of Indian Standards Codes dealing with: (i) use and disposal of asbestos containing materials in construction; (ii) paints containing lead; (iii) permanent and temporary ventilations in workplace; (iv) safety, and hygiene at the workplace; (v) prevention of fire; (vi) prevention of accidents from faulty electrical gadgets, equipment and accessories; and all other such codes incidental to the Contract.

Appendix 2 (deleted)

Appendix - 3¹⁶
Appointment of Adjudicator

Suggested Draft of **Letter of Appointment of Adjudicators** in civil works contracts

Sub : _____ (Name of the Contract)

To

Name and address of the Adjudicator

We hereby confirm your appointment as Adjudicator for the above contract to carry out the assignment specified in this Letter of Appointment.

For administrative purpose _____ (*name of the officer representing the Employer*) has been assigned to administer the assignment and to provide the Adjudicator with all relevant information needed to carry out the assignment on behalf of both the employer and the contractor. The services will be required during the period of contract for the work of (Name of the Contract) _____.

The Adjudicator shall visit the worksite once in 3 (three) months till the completion of the work indicated above or as specifically requested by Employer/ Contractor for the period up to the end of defects liability period with prior intimation to the Employer and the contractor. The duration of each visit shall ordinarily be for one day only. These durations are approximate and (*Name of the employer and Name of the Contractor*) may find it necessary to postpone or cancel the assignment and/or shorten or extend the duration.

The appointment will become effective upon confirmation of letter by you. The appointment of Adjudicator shall be liable for termination under a 30 (thirty) days written notice from the date of issue of the notice, if both Employer and the Contractor so desire. Also the appointment shall automatically stand terminated 14 days after the defect notice / correction period as stated in Clauses 23 and 24 of the Conditions of Contract is over.

The Adjudicator will be paid a fee of Rs. _____ (Rupees _____ only) per each day of visit at the worksite. The actual expenses for boarding and traveling in connection with the assignment will be reimbursed to the Adjudicator. The Adjudicator will submit a pre-receipted bill in triplicate to the employer indicating the date of the visit, fees for the visit and a proof in support of the actual expenditure [only for items valued above Rs. 500 each] incurred by him against boarding, lodging and traveling expenses after

¹⁶ If ITB 51 makes provision of an Adjudicator from list provided by an institution, kindly modify Appendix 3 to state that the fee and reimbursable payable to the adjudicator shall be as per the rules of the Institution.

performing the visit on each occasion. The Employer will make the admissible payment (both the Employer's and the Contractor's share) to the Adjudicator within 30 days of the receipt of the bill. The Contractor's share on this account (half the paid amount) will be recovered by the Employer from the Contractor's bills against the work.

In accepting this assignment, the Adjudicator should understand and agree that he is responsible for any liabilities and costs arising out of risks associated with travel to and from the place of emergency repatriation, loss or damage to personal/professional effects and property. The Adjudicator is advised to effect personal insurance cover in respect of such risks if he does not already have such cover in place. In this regard, the Adjudicator shall maintain appropriate medical, travel, accident and third-party liability insurance. The obligation under this paragraph will survive till termination of this appointment.

Procedures for resolution of disputes by the Adjudicator is described in the contract of _____ (name of the contract) between the employer and the contractor vide Clause No. 24 of the General Conditions of Contract. Your recommendation should be given in the format attached, within 28 days of receipt of a notification of dispute.

The Adjudicator will carry out the assignment in accordance with the highest standard of professional and ethical competence and integrity, having due regard to the nature and purpose of the assignment, and will conduct himself in a manner consistent herewith. After visiting the worksite, the Adjudicator will discuss the matter with the Employer and if necessary with the Contractor before arriving at any decision.

The Adjudicator will agree that all knowledge and information not within the public domain, which may be acquired while carrying out this service shall be all time and for all purpose, regarded as strictly confidential and held in confidence, and shall not be directly or indirectly disclosed to any party whatsoever, except with the permission of the employer and the contractor. The Adjudicator's decision should be communicated in the form of a speaking order specifying the reasons.

The Adjudicator will agree that any manufacturing or construction firm with which he might be associated with, will not be eligible to participate in bidding for any goods or works resulting from or associated with the project of which this consulting assignment forms a part

Read and Agreed

Name of Adjudicator

Signature

Place:

Date:

Name of Employer

Signature of authorized representative of Employer

Name of the Contractor

Signature of authorized representative of Contractor

Attachment: Copy of contract document between the employer and contractor and format for recommendation.

SUMMARY OF ADJUDICATOR'S RESPONSIBILITIES

The Adjudicator has the following principal responsibilities:

1. Visit the site periodically.
2. Keep abreast of job activities and developments.
3. Encourage the resolution of disputes by the parties.
4. When a dispute is referred to it, conduct a hearing (no legal presentation), complete its deliberations, and prepare a recommendations in a professional and timely manner (as per sample format)

Sample Format of Adjudicator's Recommendation

[Project Name] **Recommendation of Adjudicator**

Dispute No. XX [NAME OF DISPUTE]

Hearing Date: _____

Dispute

Description of dispute. A one or two sentence summation of the dispute.

Contractor's Position

A short summation of the contractor's position as understood by the Adjudicator.

Employer's Position

A short summation of the Employer's position as understood by the Adjudicator.

Recommendation

The Adjudicator's specific recommendation for settlement of the dispute. (*The recommended course is consistent with the explanation*).

Explanation

(*This section could also be called Considerations, Rationale, Findings, Discussion, and so on.*)

The Adjudicator's description of how each recommendation was reached.

Respectfully submitted,

Date : _____

Date : _____

Date : _____

Section X - Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security, ES performance security if applicable, and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

NOTIFICATION OF AWARD

Letter of Acceptance

[on letterhead paper of the Employer]

..... *[date]*

To: *[name and address of the Contractor]*

Subject: *[Notification of Award Contract No]*.

This is to notify you that your Bid dated *[insert date]* for execution of the ..
..... *[insert name of the contract and identification number, as given in the PCC]* for the Accepted Contract Amount of *[insert amount in numbers and words]*, in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish the Performance Security, plus additional security for unbalanced bids in terms of ITB Clause 41 in the form detailed in ITB Clause 50 for amounts¹⁷ of Rs., and Rs. specified therein, within 21 days of the receipt of this letter of acceptance, and visit this office to sign the contract, failing which action as stated in ITB Clause 50.2 will be taken in accordance with the Conditions of Contract. The securities shall be valid up to 28 days from the date of completion i.e. up to and shall be as per the Performance Security Form included in Section X - Contract Forms, of the bidding document.

We accept that Adjudicator will be appointed jointly by the Employer and the Contractor, at the time of dispute.

We have reviewed the construction methodology submitted by you along with the bid in response to ITB Clause 16 and our comments are given in the attachment. You are requested to submit a revised Program including ES requirements as per Clause 30 of General Conditions of Contract within 14 days of receipt of this letter of acceptance as per the details mentioned in Appendix B .

Authorized Signature:

¹⁷ Insert amounts for (i) Performance Security, plus additional security for unbalanced bids in terms of ITB Clause 41; and (ii) ES Performance Security respectively.

Name and Title of Signatory:

Name of Agency:

Issue of Notice to proceed with the work

(Letterhead of the Employer)

_____ (date)

To

_____ (name and address of the Contractor)

Dear Sirs:

Pursuant to your furnishing the requisite securities as stipulated in ITB clause 50.1, insurance policy as per GCC 13, construction methodology as stated in letter of acceptance and signing of the contract agreement for the construction of _____ @ a Bid Price of Rs. _____, you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

(Signature, name and title of
signatory authorized to sign on
behalf of Employer)

Attachment: Contract Agreement

Contract Agreement

THIS AGREEMENT made the day of, between **[name of the Employer]**. (hereinafter “the Employer”), of the one part, and **[name of the Contractor]**.(hereinafter “the Contractor”), of the other part:

WHEREAS the Employer desires that the Works known as **[name of the Contract]**. should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
 - (i) This Agreement
 - (ii) the Letter of Acceptance
 - (iii) the Contractor’s Bid including completed schedules and priced bill of quantities,
 - (iv) the addenda Nos _____(if any)
 - (v) the Particular Conditions
 - (vi) the General Conditions of Contract, including appendix;
 - (vii) the Specification
 - (viii) the Drawings
 - (ix) Construction Program, Methodology, Quality Assurance Program, the ES Management Strategies and Implementation Plans, and Code of Conduct for Contractor’s Personnel (ES)
 - (x) Joint Venture Agreement [for JVs only]; and
 - (xi) any other document **listed in the PCC** as forming part of the Contract.
3. In consideration of the payments to be made by the Employer to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Employer to

execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of India on the day, month and year specified above.

Signed by: _____
for and on behalf of the Employer

Signed by: _____
for and on behalf the Contractor

in the presence of:
Witness, Name, Signature, Address,
Date

in the presence of:
Witness, Name, Signature, Address, Date

Performance Security - Bank Guarantee
[Including Additional Performance Security for unbalanced bids]
[Guarantor letterhead or SWIFT identifier code]

Performance Guarantee No..... *[Insert guarantee reference number]*

Date..... *[insert date of issue of the guarantee]*

To: _____ *[name of Employer]*

_____ *[address of Employer]*

WHEREAS _____ *[name and address of Contractor¹⁸]* (hereinafter called "the Applicant") has undertaken, in pursuance of Contract No. ____ dated _____ to execute _____ *[name of Contract and brief description of Works]* (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Applicant shall furnish you with a Bank Guarantee by a recognized 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 Applicant such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Applicant, up to a total of _____ *[amount of guarantee¹⁹]* _____ *[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 your demand for the sum specified therein.

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

¹⁸ *In the case of a JV, insert the name of the Joint Venture*

¹⁹ *An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract less provisional sums, if any, plus additional performance security for unbalanced bids if any, and denominated in Indian Rupees.*

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 there under or of any of the Contract documents which may be made between you and the Applicant shall in any way 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 ²⁰, and any demand for payment under it must be received by us at this office on or before that date.

Signature and seal of the guarantor _____

Name of Bank _____

Address _____

Date _____

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

²⁰ Insert the date twenty-eight days after the expected completion date as described in GC Clause 53.1. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee"

Environmental and Social (ES) Performance Security

ES – Bank Guarantee

[Guarantor letterhead or SWIFT identifier code]

ES Performance Guarantee No.: *[Insert guarantee reference number]*

Date..... *[Insert date of issue of the guarantee]*

To: _____ *[name of Employer]*

_____ *[address of Employer]*

WHEREAS _____ *[name and address of Contractor²¹]* (hereinafter called "the Applicant") has undertaken, in pursuance of Contract No. ____ dated _____ to execute _____ *[name of Contract and brief description of Works]* (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Applicant shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his Environmental and/or Social (ES) obligations in accordance with the Contract;

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

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Applicant, up to a total of _____ *[amount of guarantee²²]* _____ *[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 your demand for the sum specified therein.

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

²¹ *In the case of a JV, insert the name of the Joint Venture*

²² *An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract less provisional sums, if any, and denominated in Indian Rupees.*

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 thereunder or of any of the Contract documents which may be made between you and the Applicant shall in any way 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 ²³, and any demand for payment under it must be received by us at this office on or before that date.

Signature and seal of the guarantor _____

Name of Bank _____

Address _____

Date _____

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

²³ Insert the date twenty-eight days after the expected completion date as described in GC Clause 53.1. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee"

**Advance Payment Security
(Deleted)**

Retention Money Security
Demand Guarantee
[Guarantor letterhead or SWIFT identifier code]

_____ *[Bank's name and address of issuing branch or office]*

Beneficiary: _____ *[Name and Address of Employer]*

Date: _____

RETENTION MONEY GUARANTEE NO.: _____

We have been informed that _____ *[name of contractor²⁴]* (hereinafter called "the Applicant") has entered into Contract No. _____ *[reference number of the contract]* dated _____ with you, for the execution of _____ *[name of contract and brief description of Works]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment, payment of _____ *[insert the second half of the Retention Money]* is to be made against a Retention Money guarantee.

At the request of the Applicant, we _____ *[name of Bank]* hereby irrevocably undertake to pay you the sum or sums not exceeding in total an amount of _____ *[amount in Rupees]* (_____) *[amount in words²⁵]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Applicant is in breach of its obligation under the Contract without cavil or argument.

It is a condition for any claim and payment under this guarantee to be made that the payment of the second half of the Retention Money referred to above must have been received by the Applicant on its account number _____ at _____ *[name and address of Bank]*.

²⁴ *In the case of a JV, insert the name of the Joint Venture*

²⁵ *The Guarantor shall insert an amount representing the amount of the second half of the Retention Money or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security.*

This guarantee shall expire, at the latest, 21 days after the date when the Employer has received a copy of the Defects Liability Certificate issued by the Project Manager. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

[Signature(s) and seal of the guarantor]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.