PROCUREMENT DOCUMENT

Request for Bids
Works
Design-Build

National Open Competitive Procurement
(Two-Envelope Bidding Process with e-Procurement and without Rated Criteria)
(Without Prequalification)

January 2026

GOVERNMENT OF ASSAM.

PROJECT: Assam State Secondary Healthcare Initiative for Service Delivery Transformation (ASSIST) Project

REQUEST FOR BIDS NO: IN-AHIDMS-526519-CW-RFB

NATIONAL OPEN COMPETITIVE PROCUREMENT

(Two-Envelope Bidding Process with e-Procurement and without Rated Criteria)
(Without Prequalification)

Request for Bids Works Design-Build

NAME OF WORK: Design and Construction of Centre of Excellence (CoE) in Nursing, Guwahati, Assam

Bid Reference	**IN-AHIDMS-526519-CW-RFB**
Date of commencement of downloading of bid document	09/01/2026 at 5.00 PM
Start date for seeking clarification if any.	10/01/2026 at 10.00 AM
Last date for seeking clarification if any.	17/01/2026 at 5.00 PM
Pre-bid meeting	19/01/2026 at 3.00 PM
Bid submission start date	11/02/2026 at 2.00 PM
Last date for downloading of bid document from the E-procurement platform: https://assamtenders.gov.in	18/02/2026 at 2.00 PM
Last date and time for online bid submission/uploading of bid in E- procurement platform	18/02/2026 at 2.00 PM

Last Date and Time for hard* copy submission (*bid security, power of attorney etc.)	18/02/2026 at 2.00 PM
Time and date of online opening of technical bids	18/02/2026 at 3.00 PM
Place of opening of bids and address for communication	Online (https://assamtenders.gov.in) Assam Health Infrastructure Development & Management Society, Dept. of Medical Education & Research, Govt. of Assam 4th floor, Nayantara Supermarket Complex, Six Mile, Khanapara, Guwahati, Assam, India-781006 Email:pmu.ahidms@gmail.com

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Summary

Specific Procurement Notice - Request for Bids

The template attached is the Specific Procurement Notice for Request for Bids, using two-envelope Bidding process with e-Procurement without prequalification.

PART 1 – REQUEST FOR BID PROCEDURES

Section I - Instructions to Bidders (ITB)

This Section provides relevant information to help Bidders prepare their Bids.It is based on a two-envelope Bidding process with e-procurement process when prequalification has not taken place. Information is also provided on the submission, opening, and evaluation of Bids and on the award of Contracts. **Section I contains provisions that are to be used without modification.**

Section II - Bid Data Sheet (BDS)

This Section consists of provisions that are specific to each procurement and that supplement the information or requirements included in Section I, Instructions to Bidders.

Section III - Evaluation and Qualification Criteria

This Section specifies the methodology that will be used to 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.

Section IV - Bid Forms

This Section contains the forms which are to be completed by the Bidder and submitted as part of the Bid.

Section V - Eligible Countries

This Section contains information regarding eligible countries.

Section VI - Fraud and Corruption

This section includes the Fraud and Corruption provisions which apply to this Request for Bids process. **This section shall not be modified.**

PART 2 – EMPLOYER'S REQUIREMENTS

Section VII - Employer's Requirements

This section shall set out a description of the functional and/or performance specification of the works to be designed and constructed. It shall present, as appropriate, a statement of the required standards for materials, plant, supplies, and workmanship to be provided.

The Employer's Requirements shall also include the environmental and social (ES) requirements.

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VIII - General Conditions of Contract (GCC)

This Section contains the general clauses of the Conditions of Contract for all Design-Build Contracts. **The text of the clauses in this Section shall not be modified.**

Section IX - Particular Conditions of Contract (PCC)

This Section contains clauses specific to each contract. The contents of this Section modify or supplement the General Conditions of Contract and shall be completed by the Employer.

Section X - Contract Forms

This Section contains the Letter of Acceptance, Contract Agreement and other relevant forms.

GOVERNMENT OF ASSAM
ASSIST PROJECT

REQUEST FOR BIDS (RFB)

Works
Design and Build
E-Procurement Notice

(Two-Envelope Bidding Process with e-Procurement and without Rated Criteria)
(Without Prequalification)

NATIONAL OPEN COMPETITIVE PROCUREMENT

Name of Project: Assam State Secondary Healthcare Initiative for Service Delivery Transformation (ASSIST) Project

Contract Title: Design and Construction of Centre of Excellence (CoE) in Nursing, Guwahati, Assam

Loan No:9570-IN

RFB Reference No. - IN-AHIDMS-526519-CW-RFB

Date: **09.01.2026**

1. The Government of Assam on behalf of Govt. Of India has obtained financing from the World Bank toward the cost of the Assam State Secondary Healthcare Initiative for Service Delivery Transformation (ASSIST) Project and intends to apply a part of the proceeds to cover eligible payments under the contract for construction of works as detailed below.

2. Bidding will be conducted through national open competitive procurement using Request for Bids (RFB) as specified in the World Bank's "Procurement Regulations for IPF Borrowers updated in September 2025" ("Procurement Regulations"), and is open to all Bidders as defined in the Procurement Regulations.

3. Bidders from India should, however, be registered as Class I Civil Contractor with the Government of Assam or other State Governments/Government of India, or State/Central Government Undertakings. Bidders from India, who are not registered as above, on the date of bidding, can also participate provided they get themselves registered by the time of contract signing if they become successful bidders.

4. The Project Director, ASSIST, now invites online Bids from eligible Bidders for " **Design and Construction of Centre of Excellence (CoE) in Nursing, Guwahati, Assam" under Assist project.** Interested bidders may obtain further information and inspect the bidding document at the address given below during office hours [*10:00 to 1700 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.

5. The bidding document is available online on www.assamtenders.gov.in*(website)* from 09/01/2026 to 18/02/2026. Bid Security documents are to be submitted as per the procedure described in paragraph 9 below. 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.

6. For submission of the bid, the bidder is required to have Digital Signature Certificate (Class-3 digital signature) from one of the Certifying Authorities authorized 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: www.assamtenders.gov.in.

7. Bids comprise two Parts, namely the Technical Part and the Financial Part, and both parts must be submitted simultaneously online on www.assamtenders.gov.in on or before1400 hours on 18.02.2026 and the 'Technical Part' of the bids will be publicly opened online at the address given at para 10 on the same day at 1500 hours, in the presence of the bidders' designated representatives and anyone who chooses to attend. 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.

8. Procedure for submission of bid security is described below:

Bid Security: The bidders are required to submit **₹ 2,60,00,000/- (Two Crore Sixty Lakhs Only)**. Bid security will have to be in any one of the forms as specified in the bidding document and shall have to be valid for 45 days beyond the validity of the bid. Procedure for submission of bid security is described in Para 9.

Cost of Bid Document: **₹ 25,000/- (₹Twenty Five thousand only)** (To be deposited through net banking or RTGS/NEFT as per office memorandum no.FEB.269/2017/27 Dtd.21/08/2019)

9. Bid Security may either be remitted through net banking or RTGS/NEFT as per office memorandum no.FEB.269/2017/27 Dtd.21/08/2019 **OR** submitted through any of following mode:

Bank Guarantee/ Fixed Deposit/Time Deposit certificate issued by a Nationalized or Scheduled Bank located in India for equivalent or higher values are acceptable provided it is pledged in favour of **Assam Health Infrastructure Development and Management**

Society (AHIDMS) (Implementing agency) and such pledging has been noted and suitably endorsed by the bank issuing the certificate.

In case bidder(s) opt to submit bid security in the form of Bank Guarantee/ Fixed Deposit/Time Deposit certificate, please comply the following instructions:

a. Bidder has to submit the ***ORIGINAL*** Bank Guarantee/ Fixed Deposit/Term Deposit certificate before the bid submission end date & time, failing to which bid of the bidder shall be rejected outrightly and bid shall not be opened. ***ORIGINAL*** Bank Guarantee/ Fixed Deposit/Time Deposit certificate shall be submitted in the address mentioned in ITB/BDS 21.3.

b. Only to accommodate the submission of Bank Guarantee/ Fixed Deposit/Term Deposit certificate, Option of "BID SECURTY/EMD EXEMPTION" provision is enabled in the e-procurement portal. Bidder has to select/click the 100% exemption option to proceed further for submission of bid. The scanned copy of Bank Guarantee/ Fixed Deposit/Time Deposit certificate needs to be submitted under Technical Folder along with other qualification documents.

c. Bidder to note that there is otherwise no BID SECURTY/EMD EXEMPTION for any bidder whosoever. This option is only enabled to submit Bank Guarantee/ Fixed Deposit/Term Deposit certificate as bid security. Bidder who does not submit the ORIGINAL Bank Guarantee/ Fixed Deposit/Time Deposit certificate before the bid submission end date & time, bid of the bidder shall be rejected outrightly even if scanned copy of Bank Guarantee/ Fixed Deposit/Time Deposit certificate submitted under Technical Folder along with other qualification documents.

d. In case bidder(s) opt to submit bid security in the form of Bank Guarantee, the following bank details of AHIDM Society may be used while obtaining Bank Guarantee:

Account Name -Assam Health Infra Development &Mgt Society World Bank ASSIST Project Account

Number- 245601002420 IFSC - ICIC0002456

Bank Name- ICICI Bank Ltd.

Branch Name- Downtown, Guwahati

(Bidder should note that this Bank Account should not be used for remitting cost for bid document or for Bid Security may remitted through net banking or RTGS/NEFT as per office memorandum no.FEB.269/2017/27 Dtd.21/08/2019OR. The above-mentioned account details only be used while obtaining Bank Guarantee.).

10. A pre-bid meeting will be held on 19/01/2025 at 1500 hours at the office of Project Director, Assam Health Infrastructure Development & Management Society, Dept. of Medical Education & Research, GOA, 4th floor, Nayantara Supermarket Complex, Six Mile

, Kanapara, Guwahati, Assam 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 for bidders to have a good understanding of the scope of work under this contract for discussion and clarification at the pre-bid meeting.

11. 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.

Dr. Siddharth Singh, IAS

The Project Director
Assam Health Infrastructure Development & Management Society,
Dept. of Medical Education & Research, Govt. of Assam
4th floor, Nayantara Supermarket Complex, Six Mile, Khanapara,
Guwahati, Assam, India-781006
Phone:03613501033
Email:pmu.ahidms@gmail.com

Table

Pack-age No	**Brief description of Design-Build Works**	**Completion Period**	***Bid Security Amount (INR)**	**Cost of Bid Document Rs.**
1	**2**	**3**	**4**	**5**
1	**IN-AHIDMS-526519-CW-RFB** **Design & Construction of Center of Excellence (CoE) in Nursing, Guwahati, Assam on Design-Build Basis**	3 years	**₹ 2,60,00,000/- (Two Crore sixty Lakhs Only)**	**₹ 25,000/- (₹Twenty Five thousand only)**

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PART 1 – REQUEST FOR BID PROCEDURES

SECTION I - INSTRUCTIONS TO BIDDERS (ITB)

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SECTION I - INSTRUCTIONS TO BIDDERS

A. GENERAL

1. Scope of Bid

1.1 The Employer, as specified **in the BDS**, issues this Request for Bids (RFB) Document for the Design and Build of the Works as specified in Section VII, Employer's Requirements. The name, identification and number of lots (contracts) of this RFB are specified **in the BDS.**

1.2 Unless otherwise stated, throughout this RFB Document definitions and interpretations shall be as prescribed in the Section VIII, General Conditionsof Contract.

1.3 Throughout this RFB Document:

(a) the term **"in writing"** means communicated in written form (e.g. by mail, e-mail, 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 an official working day of the Borrower. It excludes the Borrower's official public holidays;

(d) **"Works"** refers to Works, subject of this request for Bids document, to be executed on design and build contracting arrangement;

(e) **"ES"** means environmental and social (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH));

(f) **"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;

(g) **"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;

(h) **"Contractor's Personnel"** is as defined in Sub-Clause 1.1.17 of the General Conditions of Contract; and

(i) **"Employer's Personnel"** is as defined in Sub-Clause 1.1.31 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") indicated **in the BDS** has applied for or received 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 RFB Document is issued.

2.2 Payments by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the Loan (or other financing) Agreement between the Borrower and the Bank (hereinafter called the Loan Agreement), and will be subject in all respects to the terms and conditions of that 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 equipment, materials or any other goods, 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 (where 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, Bid 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, a state-owned enterprise or institution subject to **ITB 4.6**—or any combination of such entities 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 RFB 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. Any Bidder 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 RFB 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 RFB process; or

(e) any of its affiliates participates as a consultant in the preparation of the Employer's Requirements for the Works that are the subject of the Bid; or

(f) or any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower as the Engineer for the Contract implementation; or

(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; or

(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 RFB 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 RFB 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 an individual Bidder or a JV member in a Bid 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 sub-contractors 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, and 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 initially selected for, prequalified for, bid for, submit Bid 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 submitting Bids by the Employer as the result of the operation of a Bid Securing Declaration 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 procurement is 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 one 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 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 (RFB) DOCUMENT

6. Sections of RFB Document

6.1 The RFB Document consists of Parts 1, 2, and 3, which include all the sections indicated below, and should be read in conjunction with any Addenda issued in accordance with **ITB 8**:

PART 1 Request for Bid Procedures

Section I - Instructions to Bidders (ITB)

Section II - Bid Data Sheet (**BDS**)

Section III - Evaluation and Qualification Criteria

Section IV - Bid Forms

Section V - Eligible Countries

Section VI - Fraud and Corruption

PART 2 Employer's Requirements

Section VII - Employer's 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, Notice of Request for Bids (RFB) issued by the Employer, is not part of this RFB Document.

6.3 Unless obtained directly from the Employer, or downloaded from the E-portal or the official website specified in the 'E-Procurement Notice', the Employer is not responsible for the completeness of the document, responses to requests for clarification, the Minutes of the pre-bid meeting (if any), or Addenda to the RFB Document in accordance with **ITB 8**. In case of any contradiction, documents obtained directly from the Employer or downloaded from the E-portal or the official website shall prevail.

6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the RFB Document and to furnish with its Bid all information or documentation as is required by the RFB Document.

7. Clarification of RFB 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 of the RFB Document may notify the Employer online on the e-procurement system or raise its enquiries 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 on the e-procurement system 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 23.2. 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 the 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. 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 The Bidder's designated representative is invited to attend a pre-bid meeting and/or a site visit, if provided for **in the BDS**. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage. Nonattendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

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, including the text of the questions raised 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 RFB 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 RFB document.

8. Amendment of RFB Document

8.1 At any time prior to the deadline for submission of Bids, the Employer may amend the RFB 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 RFB**.**

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 23.2.

C. Preparation of Bids

9. Cost of Bids

9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

10. Contacting the Employer

10.1 From the time of Bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the Bid, it should do so in writing.

10.2 If a Bidder tries to directly influence the Employer or otherwise interfere in the Bid evaluation process and the Contract award decision, its Bid may be rejected.

11. Language of Bids

11.1 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, the translation shall govern.

12. Documents Comprising the Bid

12.1 The Bid shall comprise two Parts, namely the Technical Part and the Financial Part. These two Parts shall be submitted simultaneously on the e-Procurement system.

12.2 The Technical Part submitted by the Bidder shall comprise the following:

(a) **Letter of Bid - Technical Part**, prepared in accordance with **ITB 13 and ITB 15**;

(b) **Bid Security or Bid-Securing Declaration** in accordance with **ITB 19**;

(c) **Alternative Bid** - Technical Part, if permissible in accordance with **ITB 14**;

(d) **Authorization:** written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with **ITB 21.3,** and in accordance with **ITB 21.4** in case of a JV;

(e) **Bidder's Eligibility:** documentary evidence in accordance with **ITB 17** establishing the Bidder's eligibility to submit the 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) Method statement, equipment, personnel, and any other information as stiplulated in Section IV, Bid Forms;

(h) **Conformity:** documentary evidence in accordance with **ITB 18** that the Works offered by the Bidder conform to the RFB Document;

(i) **Deviations:** details of any departures in their Technical Part from the RFB documents;

(j) **Registration:** Bidder's registration certificate (as specified in Specific Procurement Notice/Notice of Request for Bid);

(k) **JV agreement:**in the case of a Bid submitted by a JV (where permitted), JV agreement, or letter of intent to enter into a JV Agreement (in the event of a successful Bid) signed by all partners, together with a copy of the draft Agreement, indicating at least the parts of the Works to be executed by the respective partners;

(l) **Subcontractors:** list of subcontractors, in accordance with **ITB 18.3**; and

(m) any other document required **in the BDS**.

12.3 The Financial Part submitted by the Bidder shall comprise the following:

(a) **Letter of Bid - Financial Part:** prepared in accordance with **ITB 13**;

(b) **Price Schedules:** completed in accordance with **ITB 15** and **ITB 16**;

(c) **Alternative Bid – Financial Part:** if permissible in accordance with **ITB 14**;

(d) **Financial Disclosure:** The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid; and

(e) **Other:** any other document required **in the BDS**.

12.4 The Technical Part shall not include any financial 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.

13. Letter of Bid, and Schedules

13.1 The Bidder shall complete the Letter of Bid – Technical Part, Letter of Bid - Financial Part, and all documents listed under Clause 12, using the relevant forms furnished in Section IV, Bid Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under **ITB 21.3**. All blank spaces shall be filled in with the information requested.

13.2 Entire Bid including the Letter of Bid – Technical Part, Letter of Bid – Financial Part, completed Price Schedules, and all other documents, shall be submitted online on e-procurement system specified in ITB 7.1. Details and process of online submission of the Bid and relevant documents are given in the e-Procurement Portal. Scanned copies of documents listed in ITB clauses 12 and 13.3 should also be uploaded on this Portal.

14. Alternative Bids

14.1 Unless otherwise specified **in the BDS**, alternative Bids shall not be considered.

14.2 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.

14.3 (a) Alternative Bid - Technical Part: except as provided under (b) below, the Bidder wishing to offer alternative technical Bid shall (i) document that the proposed technical alternatives are to the

benefit of the Employer, that they fulfill the principal objectives of the contract, and that they meet the basic performance and technical criteria specified in the RFB Documents; and (ii) further provide all information necessary for a complete technical evaluation of the alternative by the Employer, including as relevant drawings, design calculations, technical specifications, and proposed construction methodology and other relevant details.

(b) 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.

14.4 Alternative Bid - Financial Part: The Bidder submitting alternative technical Bid shall provide all information necessary for a complete financial evaluation of the alternative by the Employer, including breakdown of prices relevant to the offered technical alternative and in the manner and detail called for in the Schedule of Rates and Prices (if any) incuded in Section IV – Bid Forms**.**

14.5 Only the technical alternatives, if any, of the Bidder with the Most Advantageous Bid conforming to the basic performance and technical criteria specified in the RFB Documents shall be considered by the Employer.

15. Bid Prices

15.1 The prices and discounts quoted by the Bidder in the Letter of Bid – Financial Part and in the Priced Activity Schedules shall conform to the requirements specified below.

Unless otherwise **specified in the BDS,** Bidders shall quote for the entire Works on a "single responsibility" basis such that the total lump sum Bid price, subject to any adjustments, in accordance with the Contract, covers all the Contractor's obligations mentioned in or to be reasonably inferred from the RFB Document in respect of the design, manufacture, including procurement and subcontracting (if any), delivery, construction and completion of the Works. This includes all requirements under the Contractor's responsibilities for testing, pre-commissioning and commissioning (as applicable) of the Works and, where so required by the RFB Document, the acquisition of all permits, approvals and licenses, etc.; the operation, maintenance and training services and such other items and services as may be specified in the RFB Document, all in accordance with the requirements of the General Conditions of Contract.

15.2 Bidders shall give a breakdown of the prices in the manner and detail called for in the Schedule of Priced Activities and Sub-activitiesincluded in Section IV, Bid Forms with further

breakdown prices for sub activities, as appropriate. The total of the prices of the items in the Schedule of Priced Activities is the Bidder's offer to complete the works on a "single responsibility" basis. The cost of any items that the Bidder may have omitted is deemed to be included in the price of other items in the Schedule of Priced Activities and Sub-activities and will not be paid for separately by the Employer. Corrections if any, in the bid can be carried out by editing the information before electronic submission on e-procurement system.

15.3 The prices shall be either fixed or adjustable as specified **in the BDS**.

15.4 In the case of **Fixed Price**, prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account. A Bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.

15.5 In the case of **Adjustable Price**, prices quoted by the Bidder shall be subject to adjustment during performance of the contract to reflect changes in the cost elements such as labor, material, transport and Contractor's equipment in accordance with the procedures specified in the corresponding Schedule of Cost Indexation. A Bid submitted with a fixed price quotation will not be rejected, but the price adjustment will be treated as zero. Bidders are required to indicate the weightings for labor and material indices in the corresponding Form in Section IV, Bid Forms.

15.6 If so indicated in **ITB 1.1**, Bids are being invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer any price reduction (discount) for the award of more than one Contract shall specify in their Letter of Bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package, and the manner in which the price reductions will apply.

15.7 Bidders wishing to offer any unconditional discount shall specify in their Letter of Bid the offered discounts and the manner in which price discounts will apply.

15.8 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 Bid price submitted by the Bidder.

15.9 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 RFB 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 the Activity Schedules, 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 Engineer.

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.

16. Bid Currencies

16.1 The currency (ies) of the Bid and the currency (ies) of payments shall both be Indian Rupees.

17. Documents Establishing the Eligibility and

17.1 To establish its eligibility in accordance with ITB 4, the Bidder shall complete the eligibility declarations in the Letter of Bid - Technical Part and Forms ELI (eligibility) 1.1 and 1.2, included in Section IV, Bid Forms.

Qualification of the Bidder

17.2 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 in Section IV, Bid Forms.

18. Documents Establishing Conformity of the Works

18.1 Pursuant to **ITB 12.2 (h),** the Bidder shall furnish, as part of its Bid documents establishing the conformity to the RFB Documents of the Works that the Bidder proposes to design, and build under the Contract.

18.2 The documentary evidence of the conformity of the Works with the RFB Documents may be in the form of literature, drawings and data, and shall include:

(a) the documents specified in Section IV (Bid Forms) - Technical Bid;

(b) detailed description of the essential technical and functional/performance characteristics of the proposed Works, in response to the Employer's Requirements; and

(c) adequate evidence demonstrating the substantial responsiveness of the Works to the Employer's Requirements. Bidders shall note that standards for workmanship, materials and equipment designated by the Employer in the RFB Document are intended to be descriptive (establishing standards of quality and performance) only and not restrictive. The Bidder may substitute alternative standards, in its technical Bid, provided that it demonstrates to the Employer's satisfaction that the substitutions are substantially equivalent or superior to the standards designated in the Performance / Functional requirements specified by the Employer.

18.3 The Bidder shall be responsible for ensuring that any proposed subcontractor complies with the requirements of **ITB 4**, and that any Works to be provided by the subcontractor comply with the requirements of **ITB 5** and **ITB 18.1.** The Bidder shall submit its Code of Conduct that meets the requirements setout in Section IV-Bid Forms.

19. Securing the Bid

19.1 The Bidder shall furnish with the Technical Part of Bid, either a Bid-Securing Declaration or a Bid Security in original form in 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 creditissued by a Nationalized or Scheduled bank located in India;

(c) a cashier's or certified check issued by a Nationalized or Scheduled bank located in India; or

(d) another security indicated **in the BDS**.

19.4 In the case of a bank guarantee, the Bid Security shall be submitted using the Bid Security Form included in Section IV, Bid 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 date of expiry of the Bid validity, or beyond any extended date if requested under **ITB 20.2.**

19.5 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.

19.6 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 46.

19.7 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract, furnished the required Performance Security, and if required in the BDS, the Environmental and Social (ES) Performance Security.

19.8 The Bid Security may be forfeited or the Bid-Securing Declaration may be executed:

(a) if a Bidder withdraws or modifies its Bid prior to the expiry date of the Bid validity specified by the Bidder on the Letter of Bid – Technical Part and repeated in the Letter of Bid – Financial Part or any extended date 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 45**; or

(ii) furnish a Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security, in accordance with **ITB 46.**

19.9 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 legally constituted into a legally enforceable JV at the time of submission of Bid, 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.**

19.10 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 if the Bidder does not accept the correction of its Bid Price pursuant to ITB Sub-Clause 36; or

(b) if the successful Bidder fails to: sign the Contract in accordance with ITB 45; or furnish a Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with ITB 46;

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. Period of Validity of Bids

20.1 Bids shall remain valid until the date specified **in the BDS** or any extended date if amended by the Employer in accordance with **ITB 8**. A Bid that is not valid until the date specified **in the BDS,** or any extended date if amended by the Employer in accordance with ITB 8, shall be rejected by the Employer as nonresponsive.

20.2 In exceptional circumstances, prior to the date of expiry of the Bid validity, the Employer may request that the Bidders extend the date of validity until a specified date. The request and the responses to the request shall be made in writing. A Bidder may refuse the request without risking execution of the Bid-Securing Declaration or forfeiting the Bid Security. Except as provided in **ITB 20.3**, a Bidder agreeing to the request will not be required or permitted to modify its Bid, but will be required to ensure that the Bid Security is extended for a correspondingly longer period, pursuant to **ITB 19.4**.

20.3 In the case of fixed price contracts, if the award is delayed by a period exceeding fifty-six (56) days beyond the date of expiry of the Bid validity specified in accordance with ITB20.1, the contract price will be adjusted as specified **in the BDS**. In the case of

adjustable price contracts, no adjustment shall be made. In any case, Bid evaluation will be based on the Bid prices without taking into consideration the above correction.

21. Format and Signing of Bid

21.1 The Bidder shall prepare the Bid as per details given in **ITB 12 and ITB 22.**

21.2 Bidders shall mark as "CONFIDENTIAL" information in their Bids which is confidential to their business.

21.3 The Bid shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. The authorization must be in writing as specified **in the BDS**, and shall be uploaded along with the Bid pursuant to **ITB 12.2(d).** The name and position held by each person signing the authorization must be typed or printed below the signature.

21.4 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.

21.5 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the Bid.

21.6 The Bidder shall furnish in the Bid Submission Form (Section IV) information regarding commissions or gratuities, if any, paid or to be paid to agents relating to this procurement and to the execution of the Contract should the Bidder be successful.

D. ONLINE SUBMISSION OF BIDS

22. Preparation and Submission of Bids

22.1 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**).

As part of the enrolment process, bidders are required to choose unique username and assign a password for their accounts. Upon enrolment, the Bidders will be required to register their valid Digital

Signature Certificate (DSC) with their profile. The bidders should register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the e-procurement system. A 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.

22.2 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 specified in different sections of the RFB document and scanned copy of the Bid security.

22.3 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, and a copy should be retained by the Bidder.

22.4 Physical, E-mail, Telex, Cable or Facsimile Bids will be rejected as non-responsive.

23. Deadline for Submission of Bids

23.1 Bids both Technical and Financial Parts, must be uploaded online no later than the time and date specified, **in the BDS**. The server time will be considered as the standard time for referencing the deadlines for submission of the bids, opening of bids etc.

23.2 The Employer may, at its discretion, extend the deadline for submission of Bids by amending the RFB Documents in accordance with **ITB 8.3**, in which case all rights and obligations of the Employer and Bidders will thereafter be subject to the deadline as extended.

24. Late Bids

24.1 The electronic bidding system would not allow any late submission of Bids after due date & time as per server time.

25. Withdrawal, Substitution, and Modification of Bids

25.1 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 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 the BDS**).

25.2 Bids requested to be withdrawn in accordance with **ITB 25.1** shall not be opened.

25.3 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 Letters of Bid or any extension thereof. This will result in the forfeiture of the Bid Security or execution of the Bid-Securing Declaration pursuant to **ITB 19.8.**

E. PUBLIC OPENING OF TECHNICAL PARTS OF BIDS

26. Opening of Technical Part by Employer

26.1 The Employer shall publicly open Technical Parts of the Bids in the presence of Bidders designated representatives and anyone who chooses to attend, and at the address, date and time specified **in the BDS,** 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 13.3** shall be first scrutinized, and Bids that do not comply with the provisions of **ITB 13.3** 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 as Technical Part Bid opening summary.

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.

26.2 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

27. Confidentiality

27.1 Information relating to the evaluation of the Technical Part shall not be disclosed to Bidders or any other persons not officially concerned with the RFB process until the notification of evaluation of the Technical Part in accordance with **ITB 33**.

27.2 Information relating to the evaluation of the Financial Part and recommendation of contract award shall not be disclosed to Bidders or any other persons not officially concerned with the RFB process until the Notification of Award is transmitted in accordance with **ITB 44**.

27.3 Any effort by a Bidder to influence the Employer in the evaluation of the Bids may result in the rejection of its Bid.

27.4 Notwithstanding **ITB 27.1 and ITB 27.2**, from the time of Bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the RFB process, it should do so in writing.

28. Clarification of Bids

28.1 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 and shall be delivered to concerned bidders through e-procurement system/ official email id mentioned in IFB. 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.

28.2 The bidder shall respond to the queries on e- procurement system. 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.

29. Deviations, Reservations, and Omissions

29.1 During the evaluation of Bids, the following definitions apply:

(a) "Deviation" is a departure from the requirements specified in the RFB document;

(b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the RFB document; and

(c) "Omission" is the failure to submit part or all of the information or documentation required in the RFB document.

G. EVALUATION OF TECHNICAL PARTS OF BIDS

30. Determination of Responsiveness of Technical Parts

30.1 The Employer will examine the Technical Parts, including any alternatives submitted by Bidders, to determine whether they are complete, have been properly signed, and are generally in order.

30.2 The Employer's determination of a Technical Part's substantial responsiveness is to be based on the contents of the Bid itself. For purposes of this determination, a substantially responsive Bid is one that materially conforms to the requirements of the RFB 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 RFB 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.

30.3 The Employer shall examine the technical aspects of the Bid, submitted in accordance with **ITB 18**, in particular to confirm that all requirements of Section VII (Employer's Requirements) have been met without any material deviation, reservations or omissions. In order to reach such a determination, the Employer will examine the information supplied by the Bidder, taking into account the following factors:

(a) overall completeness and compliance with the Employer's Requirements; the technical merits of any alternatives offered, conformity of the Works with specified functional/ performance requirements in the RFB Documents;

(b) quality of the Technical Part including, as appropriate, the design methodology, method statement, construction management strategy, operation management Bid, organization, resources allocation and risk assessment;

(c) suitability of the proposed Works in relation to the environmental and climatic conditions prevailing at the site;

(d) compliance with the Completion Time for Works or each Section, as specified in GCC 8.2 or elsewhere in the RFB Documents and any alternative time schedules offered by

Bidder, as evidenced by a milestone schedule provided in the Bid;

(e) any proposed deviations in the Bid to the contractual provisions stipulated in the RFB Documents; and

(f) any other relevant technical factors that the Employer deems necessary or prudent to take into consideration, if specified **in the BDS**.

30.4 Provided that a Technical Part is substantially responsive, the Employer may waive any nonmaterial nonconformity in the Bid.

30.5 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.

31. Evaluation of Technical Bids

31.1 The Employer shall use the factors, methods, criteria, and requirements as specified in Section III, Evaluation and Qualification Criteria for evaluation of technical Bids and no other factors, methods, criteria, or requirements shall be used.

31.2 Not Used.

32. Evaluation of Bidder's Qualification

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 pursuant to **ITB 12.2 (f), and ITB 17.2.** 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 Prior to Contract award, the Employer will verify that the successful Bidder (including each member of a JV) is not disqualified by the Bank due to noncompliance with contractual SEA/SH prevention and response obligations. The Employer will conduct the same verification for each subcontractor proposed by the successful Bidder. If any proposed subcontractor does not meet the requirement, the Employer will require the Bidder to propose a replacement subcontractor.

32.4 Only Bids that are both substantially responsive to the RFB document and are qualified shall have their envelopes marked "FINANCIAL PART" opened at the second public opening.

33. Notification of evaluation of Technical Parts

33.1 Following the completion of the evaluation of the Technical Parts of Bids, and the Bank has issued its no objection (if applicable), the Employer shall make the following notifications:

(a) Notify in writing those Bidders whose Bids were considered substantially non-responsive to the requirements in the RFB, advising them of the following information:

(i) the grounds on which their Technical Part has been considered to be non-responsive;

(ii) their Financial Part of the Bid shall not be opened, and notify them of the date, place and time of the public opening of the Financial Parts of the Bids.

(b) Simultaneously, notify in writing those Bidders whose Bids were considered substantially responsive to the requirements in the RFB Documents, advising them that their Bid has been evaluated as substantially responsive to the RFB Documents and met the Qualification Criteria; their Financial Part of Bid will be opened at the public opening of the Financial Parts; and notify them of the date, place and time of the public opening of the Financial Parts of the Bids.

33.2 The Employer shall allow **not less than ten (10) Business Days** for opening the Financial Parts, from the date of notification of the results of evaluation of the Technical Parts to the Bidders. However, if the Employer receives a complaint on the results of the technical evaluation within the ten (10) Business Days, the opening date shall be subject to ITB 48.1.

H. PUBLIC OPENING OF FINANCIAL PARTS OF BIDS

34. Public Opening of Financial Parts

34.1 The Financial Parts will be opened in public by the Employer in the presence of Bidders, or their designated representatives, and anyone else who chooses to attend, The name of each Bidder, the total Bid prices, per lot (contract) if applicable, including any discounts, the presence or absence of a Bid Security and Alternative Bid - Financial Part if any, will be notified online by the Employer at the time of bid opening.

In the event of the specified date of Financial Parts opening being declared a holiday for the Employer, the Bids will be opened at the appointed time and location on the next working day.

34.2 The electronic summary of the Financial Parts 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. Nonmaterial Nonconformities

35.1 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 non-conforming item or component by adding the average price of the item or component quoted by substantially responsive Bidders. If the price of the item or component cannot be derived from the price of other substantially responsive Bidders, the Employer shall use its best estimate.

36. Arithmetic Correction

36.1 The Employer shall correct arithmetical errors on the following basis:

(a) **Schedule of Priced Sub-activities:** where there are errors between the total of the amounts given under the column for Sub-activity Price and the amount given under the total for the Sub-activity, the former shall prevail and the latter will be corrected accordingly;

(b) **Schedule of Priced Activities:** where there are errors between the total of the amounts given under the column for the Activity Price and the amount given under the total price of Activities, the former shall prevail and the latter will be corrected accordingly;

(c) where there are errors between the total of the amounts in the Schedule of **Priced Sub-activities** and the corresponding amount in the Schedule of **Priced Activities**, the former shall prevail and the latter will be corrected accordingly;

(d) **Grand Summary:** where there are errors between the total price of Activities in the Schedule of **Priced Activities** and the amount given in **Grand Summary**, the former shall prevail and the latter will be corrected accordingly; and

(e) 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) to (d) above.

36.2 A Bidder shall be requested to accept the 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 or the Bid-Securing Declaration may be executed in accordance with ITB Sub-Clause 19.8.

37. Evaluation Process Financial Parts

37.1 To evaluate each Bid's Financial Part, the Employer shall consider the following:

(a) the Bid price, excluding provisional sums and the provision, if any, for contingencies in the Schedule of Priced Activities, but including Daywork 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 15.7**;

(d) price adjustment due to quantifiable nonmaterial nonconformities in accordance with **ITB 35.1**;

(e) any additional evaluation factors, if indicated **in the BDS** and detailed in Section III, Evaluation and Qualification Criteria.

37.2 If price adjustment is allowed in accordance with **ITB 15.5**, 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.

37.3 If this RFB 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.

38. Comparison of Financial Parts

38.1 The Employer shall compare the evaluated costs of all substantially responsive Bids established in accordance with **ITB 37** to determine the Bid that has the lowest evaluated cost.

39. Abnormally Low Bids

39.1 An Abnormally Low Bid is one where the Bid price, in combination with other elements of the Bid, appears so low that it raises material concerns as to the capability of the Bidder to perform the Contract for the offered Bid Price.

39.2 In the event of identification of a potentially Abnormally Low Bid, the Employer 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 RFB Document.

39.3 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.

40. Unbalanced or Front Loaded Bids

40.1 If the Bid that is evaluated as 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 to demonstrate the consistency of the Bid prices with the scope of the Works, proposed methodology, schedule and any other requirements of the RFB Document.

40.2 After the evaluation of the information and detailed price analyses presented by the Bidder, the Employer may:

(a) accept the Bid, or

(b) if appropriate, require that the total 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; or

(c) reject the Bid, if the risk cannot be mitigated through additional Performance Security.

41. Most Advantageous Bid

41.1 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 RFB; and

(b) the lowest evaluated Bid.

42. Employer's Right to Accept Any Bid, and to Reject Any or All Bids

42.1 The Employer reserves the right to accept or reject any Bid, and to annul the RFB process and reject all Bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid securities shall be promptly returned to the Bidders.

J. AWARD OF CONTRACT

43. Award Criteria

43.1 Subject to **ITB 42.1**, the Employer shall award the Contract to the Bidder with the Most Advantageous Bid, provided that the Bidder is determined to be eligible and qualified to perform the Contract satisfactorily.

44. Notification of Award

44.1 Prior to the date of expiry of the Bid validity or any extension thereof, the Employer shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification of award (hereinafter and in the General Conditions of Contract and Contract Forms called 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 General Conditions of Contract and Contract Forms called "the Contract Price").

44.2 Within ten (10) Business days from the 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) name of all Bidders whose Bids were rejected either as nonresponsive or as not meeting qualification criteria, or were not evaluated with reasons thereof;

(e) the name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope.

44.3 The Contract Award Notice shall be published on a National website (GoI website http://tenders.gov.in or GoI Central Public Procurement Portal https://eprocure.gov.in/cppp/) or on the Employer's website with free access if available, and on the e-procurement system.

44.4 Until a formal contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.

45. Signing of Contract

45.1 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.

45.2 Within twenty-one (21) days of receipt of the Letter of Acceptance, the successful Bidder shall sign the Agreement and furnish the Performance Security in accordance with **ITB 46**. 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.

46. Performance Security

46.1 Within twenty one (21) 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 **ITB 40.2 (b),** using the Performance Security and ES Performance Security Forms included in Section X, Contract Forms. The Performance Security of a Joint Venture shall be in the name of the Joint Venture specifying the names of all members.

46.2 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 sign the Contract 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 next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

46.3 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, 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 19.6 and 19.7.

47. Adjudicator

47.1 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 Bid, 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 20.3 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

48. Procurement Related Complaint

48.1 The procedures for making a Procurement-related Complaint are as specified **in the BDS**.

SECTION II - BID DATA SHEET (BDS)

The following specific data for the proposed Works 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 reference number of the Request for Bids is: **IN-AHIDMS-526519-CW-RFB** The Employer is: **Project Director,** Assam Health Infrastructure Development & Management Society The name of the RFB is: **Design and Construction of Centre of Excellence (CoE) in Nursing, Guwahati, Assam on Design Build Basis**
ITB 1.3 (a)	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 Assam Loan or Financing Agreement amount: $251.03 million The name of the Project is: Assam State Secondary Healthcare Initiative for Service Delivery Transformation (ASSIST) Project
ITB 4.1	Bids from Joint ventures are acceptable. (a) Maximum number of members in the Joint Venture (JV) shall be: ***2 (Two)*** (b) Place where the agreement to form JV to be registered is: India (c) A statement to the effect that all members of the joint venture shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms, shall be included in the authorization nominating a Representative or member in charge, as well as in the Bid and in the Agreement [*in case of a successful bid*]. (d) The joint venture agreement should precisely define the division of assignments to each member of JV. All members of JV should have active participation in the execution during the currency of the contract. This should not be varied/ modified subsequently without prior approval of the Employer.
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 (RFB) Document	

ITB 7.1	**Electronic – Procurement System** The Employer shall use the following electronic-procurement system to manage this Bidding process: ***www.assamtenders.gov.in*** The electronic-procurement system shall be used to manage the following aspects of the Bidding process: *1) Issuing bidding document, 2) Issue of clarifications 3) Issue of Amendments, 4) submission of Bids, 5) Opening of Bids 6) Disclosing technical and financial bids 8) Disclosure on Awards* 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 ***"shall"*** take place at Assam Health Infrastructure Development & Management Society, Dept. of Medical Education & Research, GOA, 4th floor, Nayantara Supermarket Complex, Six Mile, Kanapara, Guwahati, Assam Date: 19/01/2026 Time: 1500 Hours A site visit conducted by the Employer ***"shall not be"*** organized.
ITB 8.2	No change in the stated procedure
C. Preparation of Bids	
ITB 12.2(m)	The Bidder shall submit the following additional documents in its Bid: (i) **Code of Conduct for Contractor's Personnel (ES)** for **preventing Gender Based Violence and Violence Against Children** The Bidder shall submit its Code of Conduct that will apply to its employees and subcontractors, to ensure compliance with its Environmental and Social (ES) obligations under the contract. The Bidder shall use for this purpose the Code of Conduct form provided in Section IV. No substantial modifications shall be made to this form, except that the Bidder may introduce additional requirements, including as necessary to take into account specific Contract issues/risks. **Management Strategies and Implementation Plans (MSIP) to manage the Environment and Social (ES) risks** The Bidder shall submit Management Strategies and Implementation Plans (MSIP) to manage the following key Environmental and Social (ES) risks. • Gender Based Violence (GBV), Sexual Exploitation, and Abuse (SEA)and Sexual Harasmemt (SH) prevention and response action plan. Mechanisms need to be in place to identify, prevent and manage

	SEA/SH incidents at workplace. The workers must abide by the Code of Conduct (CoC) which is applicable to its employees and subcontractors. • Labour Management plan in compliance to legal and regulatory requirements and grievance redressal mechanism for labour. • Environment Social Health and Safety Management Plan for construction and operation which includes: a. Water Resource Protection Plan to prevent contamination of drinking water sources, other surface and ground water sources etc. b. Boundary Marking and Protection Strategy for mobilization and construction to prevent offsite adverse impacts; c. Legal requirements such as Consent to Establish for the proposed DH from Pollution Control Board, Assam/Permits prior to the start of relevant works such as opening a quarry or borrow pit, Labour licenses, permits from ULB/ RLB for solid and liquid waste disposal d. Occupational Health & Safety Plan for labour e. Community health and safety plan for public/community (that includes management of any legacy waste on the site, vector management, pollution control (air, water, noise) and infection control and probable inconveniences caused to the public due to construction activities.) f. Develop Waste Management Plans such as Solid Waste Management Plan, Liquid Waste Management Plan infection control plan and construction waste management plan. The Liquid waste management plan shall include the preliminary treatment/ disinfection of all liquid waste using Karnataka pollution control board norms and further treatment in ETP and STP as per approval from SPCB. g. Construction traffic management plan to ensure safety of local communities from construction traffic. h. Grievance redressal mechanism for community as well as workers. i. Prohibition Child and Forced Labour.
ITB 12.3 (b)	The following schedules shall be submitted with the bid: ***Activity Schedule***
ITB 12.3 (e)	The Bidder shall submit with its Bid the following additional documents: ***NIL***
ITB 13	**Note for Bidders:** Bidders are required 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/Price Schedules that are available for online filling on the e-procurement portal. The rest of the Bid Forms shall be downloaded by the Bidders and filled up. The filled-up pages signed by the authorized

	representative of the Bidder shall then be scanned and uploaded on the e-procurement portal along with the scanned copies of the supporting documents. Documents which are to be submitted as scanned documents shall be printed or written in indelible ink (or legible photocopies in the case of copies) and all the pages shall be signed by person or persons duly authorized to sign on behalf of the Bidder before scanning and uploading. To avoid time and effort required in uploading the same set of standard documents which are required to be uploaded as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders in the NIC e-procurement system. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid and need not be uploaded again and again. My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of e-Technical Bid.**/**
ITB 13.3	Add the following as sub-clause 13.3: "13.3 **Submission of Original Documents**: The bidders are required to separately submit (i) Power of Attorney/Board Resolution to authorised signatory to sign the bid document submitted by the bidder; (ii) original bid security; 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. These original documents shall be sealed in an envelope(s) that (a) shall bear the name and address of the Bidder; (b) shall be addressed to the Employer; and (c) shall bear the specific identification of this bidding process as indicated in BDS 1.1."
ITB 13.3	Original Documents required to be submitted before the Bid submission deadline at the address mentioned below: The Project Director Assam Health Infrastructure Development & Management Society, Dept. of Medical Education & Research, Govt. of Assam 4th floor, Nayantara Supermarket Complex, Six Mile, Khanapara, Guwahati, Assam, India-781006

ITB 14.1	Alternative bids ***shall not be*** permitted.
ITB 14.2	Alternative times for completion ***shall not be*** permitted.
ITB 14.3 (a)	Not Applicable
ITB 14.3 (b)	Alternative technical solutions shall be permitted for the following parts of the Works: Not Applicable
ITB 14.5	Not Applicable
ITB 15.1	Bidders shall quote for the following component of the Works on a single responsibility basis: Design and Construction of Centre of Excellence (CoE) in Nursing, Guwahati, Assam on Design Build Basis
ITB 15.3	The prices quoted by the Bidder shall not be subject to adjustment during the performance of the Contract.
ITB 19.1	The Bidder shall furnish a Bid Security in the amount of **₹ 2,60,00,000/- (Two Crore sixty Lakhs Only).**
ITB 19.3 (d)	Bid Security may either be remitted through net banking or RTGS/NEFT as per office memorandum no.FEB.269/2017/27 Dtd.21/08/2019 **OR** submitted through any of following mode: **Bank Guarantee/ Fixed Deposit/Term Deposit certificate** issued by a Nationalized or Scheduled Bank located in India for equivalent or higher values are acceptable provided it is pledged in favour of **Assam Health Infrastructure Development and Management Society** (AHIDMS) (implementing agency) and such pledging has been noted and suitably endorsed by the bank issuing the certificate. **In case bidder(s) opt to submit bid security in the form of Bank Guarantee/ Fixed Deposit/Term Deposit certificate, please comply the following instructions:** **a.** Bidder has to submit the ***ORIGINAL*** Bank Guarantee/ Fixed Deposit/Time Deposit certificate before the bid submission end date & time, failing to which bid of the bidder shall be rejected outrightly and bid shall not be opened. b. Only to accommodate the submission of Bank Guarantee/ Fixed Deposit/Time Deposit certificate**, Option of "BID SECURTY/EMD EXEMPTION"** provision is enabled in the e-procurement portal. Bidder has to select/click the 100% exemption option to proceed further for submission of bid. The scanned copy of Bank Guarantee/ Fixed Deposit/Time Deposit

	certificate needs to be submitted under Technical Folder along with other qualification documents. c. Bidder to note that there is otherwise no BID SECURTY/EMD EXEMPTION for any bidder whatsoever. This option is only enabled to submit Bank Guarantee/ Fixed Deposit/Term Deposit certificate as bid security. Bidder who does not submit the ***ORIGINAL*** Bank Guarantee/ Fixed Deposit/Term Deposit certificate before the bid submission end date & time, bid of the bidder shall be rejected outrightly even if scanned copy of Bank Guarantee/ Fixed Deposit/Time Deposit certificate submitted under Technical Folder along with other qualification documents. d. In case bidder(s) opt to submit bid security in the form of Bank Guarantee, the following bank details of AHIDM Society may be used while obtaining Bank Guarantee: Account Name -Assam Health Infra Development &Mgt Society World Bank ASSIST Project Account Number- 245601002420 IFSC - ICIC0002456 Bank Name- ICICI Bank Ltd. Branch Name- Downtown, Guwahati (Bidder should note date this Bank Account should not be used for remitting cost for bid document or for Bid Security may remitted through net banking or RTGS/NEFT as per office memorandum no.FEB.269/2017/27 Dtd.21/08/2019 OR. The abovementioned account details only be used while obtaining Bank Guarantee.).
ITB 19.10	Deleted
ITB 20.1	The Bid shall be valid until 150 days from the deadline for submission of Bids. i.e.
ITB 20.3	The Bid price shall be adjusted by the following factor: - The bid price will not be adjusted
ITB 21.3	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: (a) In case of Bid submitted by a Single Entity: Legally valid Power of Attorney to demonstrate the authority of the signatory to sign the Bid; and (b) In case of Bid submitted by an existing or intended JV: Legally valid Power of Attorney signed by legally authorized signatories of all the members of the JV.

D. Online Submission of Bids	
ITB 22.1	Class of DSC required is: Class III[1]
ITB 23.1	The deadline for uploading the Bids is: Date: ***18/02/2026*** Time: 1400 hours
ITB 25.1	Re-submission of the bid ***"not allowed"***, if withdrawn.
E. Public Opening of Technical Parts of Bids	
ITB 26.1	The online Bid opening of Technical Parts of Bids shall take place at: Project Diretor, Assam Health Infrastructure Development & Management Society, Dept. of Medical Education & Research, GOA, 4th floor, Nayantara Supermarket Complex, Six Mile, Kanapara, Guwahati, Assam, India-781006, Phone:03613501033. Date: 18/02/2026 Time: ***1500 hours***
G. Evaluation of Technical Parts of Bids	
30.3 (f)	***Technical Evaluation will be done as per criteria in Section III***
H. Public Opening of Financial Parts of Bids	
ITB 34.1	Following the completion of the evaluation of the Technical Parts of the Bids, the Employer will notify all Bidders of the date, time, and location of the public opening of Financial Parts. The online bid opening of Financial Parts of Bids shall take place at: Project Director, Project Diretor, Assam Health Infrastructure Development & Management Society, Dept. of Medical Education & Research, GOA, 4th floor, Nayantara Supermarket Complex, Six Mile, Kanapara, Guwahati, Assam, India-781006, Phone:03613501033.

[1] *Please modify the Class of DSC, if necessary*

I. Evaluation of Financial Parts of Bids	
ITB 37.1 (e)	No additional evaluation factor included in evaluation except the criteria detailed in Section III

ITB 39	Provisions related to Abnormally Low Bids apply.
J. Award of Contract	
ITB46.1	The successful Bidder shall be required to submit an Environmental, Social, Health and Safety (ES) Performance Security @1% of the accepted tender amount in addition to the Performance Security @5% of the accepted tender amount.. . Throughout this RFB 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 in GCC/ PCC 4.2.
ITB 47.1	The Adjudicator proposed by the Employer is: to be nominated at the time of contract award. The daily fee for this proposed Adjudicator shall be: ***Rs 10,000/-***
ITB 48.1	The procedures for making a Procurement-related Complaint are detailed in the "Procurement Regulations for IPF Borrowers." If a Bidder wishes to make a Procurement-related Complaint, the Bidder shall submit its complaint following these procedures, In Writing (by the quickest means available, such as by email or fax), to: **For the attention**: Dr. Siddharth Singh, IAS The Project Director Assam Health Infrastructure Development & Management Society, Dept. of Medical Education & Research, Govt. of Assam 4th floor, Nayantara Supermarket Complex, Six Mile, Khanapara, Guwahati, Assam, India-781006 Phone:03613501033 Email:pmu.ahidms@gmail.com A copy of the complaint can be sent for the Bank's information and monitoring to: **pprocurementcomplaints@worldbank.org** In summary, a Procurement-related Complaint may challenge any of the following: **1.** the terms of this RFB document; **2.** the Employer's decision to exclude a Bidder from the procurement process prior to the award of contract; and **3.** the Employer's decision to award the contract.

Section III - Evaluation and Qualification Criteria

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

SECTION III. EVALUATION AND QUALIFICATION CRITERIA

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A. Technical Part

1.1 Evaluation (ITB 30.3 (f)

In addition to the criteria listed in ITB 30.3 (a) – (e), the following factors shall apply: N/A

1.2 Evaluation of Technical Parts of Bids (ITB 30) - Adequacy of Technical Bid

In evaluating the Technical Parts of each Bid, the Employer shall use the criteria and methodologies listed in the ITB and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted.

Evaluation of the Bidder's Technical Bid will include:

(i) an assessment of the essential technical and functional/performance characteristics of the proposed Works demonstrating substantial responsiveness of the Works to the Employer's Requirements without any material deviation, reservation, or omission.

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

For this purpose, the Bidder shall also submit:

(i) A detailed note outlining its proposed methodology and program of construction including implementation of the Environmental and Social Management Strategies and Implementation Plans (ES-MSIP), backed with equipment planning and deployment, 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) An assessment of the details of subcontracting elements of works amounting to more than 10% of the bid price; for each element proposed to be sub contracted, details be furnished to indicate whether the identified Sub-contractor possesses the required qualifications and experiences to execute that element satisfactorily. ***[Work should not be split by the Bidder into small parts and proposed for sub-contracting.]***

(iii) Bidders shall submit an undertaking from proposed subcontractors to confirm that they have read, understood and will comply with the ES obligations and Code of Conduct.

The Technical Bid shall be evaluated in terms of the following:

(a) Overall completeness and compliance with the Employer's Requirements; the technical merits of any alternatives offered to determine whether such alternatives are responsive to the requirements set forth in the RFB Documents, conformity of the Works with specified functional/ performance requirements in the RFB Documents;

(b) Quality of the Technical Part, as appropriate, the design methodology, method statement, construction management strategy, organization, resources allocation and risk assessment;

(c) Suitability of the proposed Works in relation to the environmental and climatic conditions prevailing at the site;

(d) Compliance with the time schedule specified in the RFB Documents and any alternative time schedules offered by Bidders, as evidenced by a milestone schedule provided in the Bid;

(e) Any proposed deviations in the Bid from the contractual provisions stipulated in the RFB Documents;

(f) An assessment of the details of the proposed subcontracting if any, whether the identified Sub-contractors possess the required qualifications and experiences to execute the respective elements satisfactorily;

(g) Suitability of the Bidder's Code of Conduct and its implementation proposal to deliver the ES policy (statement) set out in the Employer's Requirements; and

(h) Any other relevant technical factors that the Employer deems necessary/prudent.

1.3 Alternative Technical Solutions, if permitted under ITP 14.1, will be evaluated as follows: **NotApplicable**

1.4

Subcontractors for Electrical Works

The sub-contractors for Electrical Works proposed shall be fully qualified for their work proposed, and meet the following criteria:

- The Sub Contractor should have valid Electrical Contractor License issued or recognized/endorsed by state licensing Board, Govt. Of Assam. In case license expires during contract period the same shall be renewed by the contractor. The contract may be terminated if the license is not renewed. The documents will have to be submitted in detail as required, which will be checked as per NIT for approval of the sub-contractors.

1.5. **Specialized Sub-Contractors**

Any Specialized Sub-contractor, if identified and proposed shall meet the applicable requirements. Only the specific experience of **Specialized Subcontractors** for specific works will be considered. The general experience

and financial resources of the Specialized Subcontractors shall not be added to those of the Bidder for purposes of qualification of the Bidder.

The bidder may propose **Specialised Sub-Contractor** for the following activities, who has minimum qualifications as indicated. The bidder will have to submit **Memorandum of Understanding** from the **Specialised Sub-Contractor** drawn specifically for this Contract duly indicating its commitment to provide services for the activity as per the scope of work

Specialized Sub Contracting is allowed only upto 20% of the contract

Activity No.	**Description of Activity**	**Minimum Criteria to be met**
1	Sub Consultant for Design services - Experience	The Specialised Consultant should have minimum 10 years of experience in building design and also must have experience of designing at least One Institutional building of not less than 30000 Sq Mtr
2	Design, Construction, Sewage Treatment Plant (STP) only	Must have experience of designing and establishing STP of not less than 20 KLD for a Building premises. Or Must have installed at least 3 STPs of minimum 20 KLD capacity in last 5 years in building.

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.

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
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	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.2	**Conflict of Interest**	No conflicts of interest in accordance with ITB 4.2	Must meet requirement	Must meet requirement	Must meet requirement	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	Must meet requirement	Must meet requirement	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	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, 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 5.1 and Section V.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
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 any two contract[2] did not occur as a result of contractor default since 1st January 2020. The Non-Performance of Contract shall include any default in any construction milestone in any two (02) of the awarded contract by AHIDMS,	Must meet requirement	Must meet requirements	Must meet requirement[3]	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	Must meet requirement	Must meet requirement	N/A	Letter of Bid

[2] Non-performance, as decided by the Employer, shall include all contracts where (a) non-performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non-performance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e.dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

[3] This requirement also applies to contracts executed by the Bidder as JV member.

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
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	Must meet requirement	N/A	Form CON – 2
2.4	**Litigation History**	No consistent history of court/arbitral award decisions against the Bidder[4]since 1st January *2020*	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Form CON – 2
2.5	**Declaration: Environmental and Social (ES) past performance**	Declare any civil work 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[5].	Must make the declaration. Where there are Specialized Sub-contractor/s, the Specialized Sub-contractor/s must also make the	N/A	Each must make the declaration. Where there are Specialized Sub-contractor/s, the Specialized Sub-contractor/s must also make the declaration.	N/A	Form CON-3 ES Performance Declaration

[4]The Bidder shall provide accurate information on the Letter of Bid about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last five years. A consistent history of court/arbitral awards against the Bidder or any member of a joint venture may result in disqualifying the Bidder.

[5]The Employer may use this information to seek further information or clarifications in carrying out its due diligence.

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
			declaration.				
3. Financial Situation and Performance							
3.1	Financial Situation and Performance	(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit[6], and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as Rs. 22 crores (Twenty Two Crores) for the subject contract(s) net of the Bidder's other commitments	Must meet requirement	Must meet Requirement	Must meet at least 25% of the requirement as a minimum	Must meet at least 50% of the requirement as a minimum	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	Must meet requirement	Must meet requirement	N/A	N/A	

[6]In case the bidder submits a letter of intent from a commercial bank with the bid, firm commitment from the bank to provide line of credit shall be required before contract signing.

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
		progress and for future contract commitments.					
		(iii) The audited balance sheets or, if not required by the laws of the Bidder's country, other financial statements acceptable to the Employer, for the last five years (FY 2019-20 to FY 23-24) 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	Must meet requirement	N/A	
Note: *The construction cash flow requirement should be for a number of months determined as the total time needed to pay contractor invoice by the employer. The cash flow should not normally exceed 3 months peak contract requirements and availability should be certified by Bank (Nationalized or Scheduled Bank In India) in form Fin 3.3*							
3.2	**Average Annual Turnover**	Minimum average annual turnover of Rs. 129 Crore (One Hundred Twenty Nine Crores], calculated as total certified payments received for contracts in progress and/or completed within the last five financial years (FY 2019-20 to FY 23-24), divided by five years.	Must meet requirement	Must meet requirement	Must meet 25%, (twenty five percent) of the requirement	Must meet 50%, (fifty percent) of the requirement	Form FIN – 3.2

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
4. Experience							
4.1 (a)	**General Construction Experience**	Experience under construction contracts "Construction of Non-Residential /Institutional Buildings of a multi-storied RCC framed structure including finishing works, water supply, drainage & sanitary installations, electrical works, Firefighting, Lifts and Centralized HVAC all composite executed under one project) in the role of prime contractor, JV member for: 1. At least one contract of Rs. 103 Crores value in the last five years since 1st January 2020 as a single entity OR Two contracts of at least Rs. 77 Crore each in the last five years,	Must meet requirement	N/A	N/A	Must meet requirement	Form EXP – 4.1

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
		since 1st January 2020 as a single entity OR Three contracts of at least 52 Crores each in the last five years, 1st January 2020 as a single entity					
4.2 (a)	**Specific Construction & Contract Management Experience**	(i) The Contractor should have experience of Construction of at least one Institutional / Academic Building completed of area 50000 Sq. Mtr. and made operational as a prime contractor, joint venture member, between 1st January 2020 and bid submission deadline.	Must meet requirement	N/A	N/A	Must meet the requirement	Form EXP 4.2(a)
4.2 (b)	Construction Experience in Key Activities	For the above **OR** any other contracts as prime contractor, joint venture	Must meet requirements	N/A	N/A	Must meet requirements	Form EXP – 4.2 (b) and

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
		member, or as a Specialised Sub Contractor between 1st January 2020 and Application submission deadline, a minimum construction experience in the following key activities successfully completed: Minimum area of RCC slab built in a project- 5000 Sqm Minimum value of MEP works (including electrical, plumbing, firefighting) executed in a project –INR 15 Crore. Minimum capacity of STP built in a project- 20 KLD (The Bidder or its nominated specialized subcontractor must have the experience)					Form ELI- 1.2 A& MOU (Enclosure-I) in case of specialized Sub-Contractor
4.2(c)	**Specific Design Experience**	The Bidder or its nominated specialized subcontractor must	Must meet requirements	DELETED	DELETED	Must meet requirements	Form EXP – 4.2 (c) and Form ELI- 1.2 A & MOU (Enclosure-I) in

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended) where permitted			Submission Requirements
				All members Combined	Each Member	At least one Member	
		have experience of designing at least i) One Academic Institute/ Institutional building of not less than 30000 Sq Mtr					case of specialized Sub-Contractor
4.2 (e)	**Bid Capacity**	Available Bid Capacity should be more than value of INR 129 Crore.	Must meet requirement	Must meet requirement	Must meet 40% (Forty percent) of the requirement	Must meet 60% (Sixty percent) of the requirement	Form FIN 2.4 & EXP 1

Bid Capacity: The available bid capacity will be calculated as under:

Assessed Available bid capacity = (A*N*1.5-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 2023-24 at the rate of 5% per 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 (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

3. 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.

1.6. **Key Personnel**

Requirement of Technical / Architectural Personnel required to be deployed by the Contractor for planning stage

Sl no.	**Position**	**No. Of Positions**	**Essential Qualification**	**Minimum Experience* (Years)**
1	Lead Architect	1	Bachelors in Architecture	12
2	Architect	1	Bachelors in Architecture	07
3	Structural Engineer	1	M.Tech in Civil Engineering	12
4	Electrical Engineer	1	B.E./B.Tech in Electrical Engineering	12
5	Mechanical Engineer	1	B.E./B.Tech in Mechanical Engineer	12
6	Landscape & Site Development Expert	1	Masters in Architecture (Landscape)	5
7	Environmental, Health & Safety Expert	1	B.E./ B. Tech in Environmental Engineering/M. Sc (Environment Science) and relevant experience in development of EIA/EMPs for construction projects	12 (Having core experience in Infrastructure Projects)
8	Social Expert	1	Master Degree in Sociology/ Social work	5
9	Fire Safety Expert	1	Master degree in Industrial Safety or equivalent	10

* Experience of Similar works is defined as design and Building of Institutional / Academic or Residential Complex

The Requirement of Technical / Architectural Personnel for the construction work:

Sl no.	Position	No. Of Positions	Essential Qualification	**Minimum Experience (Years)**
1	Project Manager	1	B.E./B.Tech in Civil Engineering	15 years (and having experience of one similar nature of work)
2	Project/ Site Engineer	1	B.E./B.Tech in Civil Engineering	5 years
3	Quality Manager	1	B.E./B.Tech in Civil Engineering	10 years experience in Quality assurance
4	Project Engineer	1	B.E./B.Tech in Mechanical Engineer	12 years (and having experience of one similar nature of work)
5	Site Engineer	1	B.E./B.Tech in Electrical Engineering	5 years

6	Project Planning/ billing Engineer/ Quantity Surveyor	1	B.E./B.Tech in Civil Engineering	6 years
7	Site Architect	1	Bachelors in Architecture	5 years
8	Environmental, Health & Safety Engineer	1	B.E./ B. Tech in Enviromental Engineering	12 years (Having core experience in Infrastructure Projects)
9	Horticulturist	1	BSc Agriculture/M. Sc (Botany)	5 years

The Bidder shall provide details of the proposed personnel and their experience records using Form PER-1 and PER-2 included in Section IV, Bidding Forms.

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 any State Government Departments of Govt of Assam .

[ii] without permission of Central/ State Government, any person who retired as gazetted officer in India within the last two years.

4. Equipment

The Bidder must demonstrate that it will have access to (through ownership, lease or purchase) the key Contractor's equipment listed hereafter:

Sl. No.	Equipment	Numbers
1.	100MT compression testing machine, electrical -cum-manually operated)	2
2.	Slump cone, steel plate, tamping rod, steel scale, scoop	3
3.	Vicat Apparatus with Desk pot	1
4	Sets of sieves of 450mm internal dia for coarse aggregate [100mm, 80mm, 40mm, 20mm, 12.5mm]	2 sets
5	Sets of sieves of 200mm internal dia for fine aggregate [4.75mm; 2.36mm; 1.18mm; 600microns; 300 microns & 150 micron, with lid and pan]	2 sets
6	Cube moulds size 70mmx70mmx70mm	18
7	Cube moulds size 150mmx150mmx150mm	36
8	Electronic balance 600gx0.1g., 10kg and50 kg	2
9	Digital PH meter least count 0.01mm	2 each
10	Mortar Cube vibrator	1

REQUIREMENTS OF PLANT AND EQUIPMENT AT SITE

Sl. No.	Equipment
1	Centralized concrete batch mix plant of minimum capacity 30 cum per hour
2	Transit mixers
3	Concrete pump
4	Concrete Mixer Machine (with weigh batcher)
5	Excavator cum loader (JCB 3D model or equivalent)
6	Specialised / Hydraulic Excavator 3D

7	DG set of minimum capacity 62.5 KVA.
8	Needle Vibrators
9	Dumper/Tipper
10	Total station
11	Water pump minimum capacity 2 HP
12	Constant Pressure pumps
13	Good quality Camera for taking photographs and video recording of major activities for record purpose and for quality assurance.

Notes:

- Bidders are requested to verify latest position in respect of "Duties on Contractor's Equipment" from Department of Revenue, Ministry of Finance, Government of India.
- The equipment listed above should not be older than 05 years of age.
- Based on their own studies of the equipment required, the Bidders shall furnish details of the above equipment and such other equipment that the Bidder considers appropriate, using Form EQU included in Section IV.

5. Qualification Criteria for Multiple Contracts (ITB 37.3):

Not Applicable

B. Financial Part

1. Evaluation of Financial Part

In evaluating the Financial Parts of each Bid, the Employer shall use the criteria and methodologies listed in the ITB, and specifically **ITB 35 to 37, & ITB 39 to 40** and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted.

The following factors and methods will apply: ***N/A***

1.1 Time Schedule

Time for completion of the Works from the Commencment Date shall be as specified in the Particular Conditions of Contract Sub-clause 1.1.86. Alternative times for completion **shall not be** permitted;

1.2 In addition to the criteria listed in ITB 37.1 (a) – (d) the following factors and methods shall apply:

(a) Alternative Bids

If invited in accordance with ITB 13 will be evaluated as follows: N/A

(b) Specific additional criteria

The relevant evaluation method, if any, shall be as follows - N/A

2. Multiple Contracts (ITB 37.3)

'Not Applicable'

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Bid Forms

Letter of Bid - Technical Part

INSTRUCTIONS TO BIDDERS

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

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

Note: All italicized text in black font is to help Bidders in preparing this form and Bidders shall delete it from the final document.

Date of this Bid submission: [*insert date (as day, month and year) of Bid submission*]
RFB No.: [*insert number of RFB process*]
Alternative No[7].: [*insert identification No. if this is a Bid for an alternative*]

To,

[*insert complete name of Employer*]

Dear Sir or Madam,

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

(i) the Technical Part, and

(ii) The Financial Part;

And we declare as under:

(a)No reservations: We have examined and have no reservations to the the RFB Documents, including any Addenda issued in accordance **with ITB 8.**

(b) Eligibility: We (and our subcontractors) meet the eligibility requirements as stated in ITB 4, we have not been suspended by the Employer based on execution of a Proposal-Securing Declaration or Proposal-Securing Declaration in accordance with ITB 4.7.

(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;

[7] Delete if not applicable

(c) Conformity: We undertake, if our Bid is accepted, to execute the Worksspecified in the Employer's Requirements, in full conformity with the RFB Documents, and any Addenda thereto; and we also undertake, if our Bid is accepted, to commence the Worksand achieve Completion within the respective times stated in the RFB Documents.

(d) No conflict of interest: We hereby certify that we, including any subcontractors for any part of the contract, meet the eligibility requirements and have no conflict of interest in accordance with **ITB 4.**

(e) Bid Validity Period: Our Bid shall be valid for a period specified in BDS ITB 20.1 (or as amended if applicable) from the date fixed for the Bid submission deadline specified in BDS 23.1 (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 [and the Environmental and Social (ES) Performance Security] in accordance with the RFB Documents.

(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 14.

(h) Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment (SH): [*select the appropriate option from (i) to (v) below and delete the others*].

We *[where JV, insert:* "including any of our JV members"*]*, and any of our subcontractors:

(i) [have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.]

(ii) [are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.]

(iii) [had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. An arbitral award on the disqualification case has been made in our favor.]

(iv) [had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have subsequently provided and demonstrated that we have adequate capacity and commitment to comply with SEA and SH prevention and response obligations.]

(v) [had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have attached documents demonstrating that we have adequate capacity and commitment to comply with SEA and SH prevention and response obligations.]

(i) 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;

(j) 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;

(k) State-owned enterprise or institution: State-owned enterprise or institution: *[select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of **ITB 4.6**]*;

(l) 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

(m) Binding Contract: We agree to abide by this Bid, which, in accordance with **ITB 12** and **ITB 13**, consists of this letter (Technical Part) and enclosures, until [insert day, month and year in accordance with BDS 20.1], and it shall remain binding upon us and may be accepted by you at any time on or before this date.Until the formal final Contract is prepared and executed between us, this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us.

(n) Adjudicator: We accept the appointment of [insert name proposed in Bid Data Sheet] as the Adjudicator.

[or]

We do not accept the appointment of [insert name proposed in Bid Data Sheet] as the Adjudicator, and propose instead that [insert name] be appointed as Adjudicator, whose daily fees and biographical data are attached with our Bid.

_____

Name of the Bidder: **[insert complete name of the Bidder]*

_____

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 a 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. The power of attorney shall be attached with the Bid Schedules.

ENCLOSURE(S):

Letter of Bid - Financial Part

INSTRUCTIONS TO BIDDERS

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

Note: All italicized text in black font is to help Bidders in preparing this form and Bidders shall delete it from the final document.

Date of this Bid submission: [*insert date (as day, month and year) of Bid submission*]
RFB No.: [*insert identification*]
Alternative No.[8]: [*insert identification No if this is a Bid for an alternative*]

To,

[*insert complete name of Employer*]

Dear Sir or Madam:

We, the undersigned Bidder, hereby submit the second part of our Bid, the Bid Price and Priced Activity Schedules. This accompanies the Letter of Technical Part.

In submitting our Bid, we make the following additional declarations:

(a) **Bid Validity Period:** Our Bid shall be valid for a period specified in BDS ITB 20.1 (or as amended if applicable) from the date fixed for the Bid submission deadline specified in BDS 23.1 (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;

(b) **Bid Price**: The total price of our Bid, excluding any discounts offered in item (c) below is: *[Insert one of the options below as appropriate]*

[Option 1, in case of one lot:] Total price is: [*insert the total price of the Bid in Rs in words and figures*];

Or

[8] Delete if not applicable

[Option 2, in case of multiple lots:] (a) Total price of each lot [*insert the total price of each lot in Rs in words and figures*]; and (b) Total price of all lots (sum of all lots) [*insert the total price in Rs of all lots in words and figures*];

(c) **Discounts:** The discounts offered and the methodology for their application are:

(i) The discounts offered are: [*Specify in detail each discount offered.*]

(ii) The exact method of calculations to determine the net price after application of discounts is shown below: [*Specify in detail the method that shall be used to apply the discounts*];

(d) **Commissions, gratuities and fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Bidding process or execution of the Contract: [*insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount of each such commission or gratuity*]

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

Until the formal final Contract is prepared and executed between us, this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us.

_____

Name of the Bidder:**[insert complete name of the Bidder]*

_____

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 a 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. The power of attorney shall be attached with the Bid Schedules.

ENCLOSURE(S):

Appendix to Bid Financial Part

Bill of Quantity for Lumpsum Price

Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
1	**SURVEY AND GEOTECHNICAL INVESTIGATION**					
1.01	Carry out Topographic survey of the entire land and thorough Geotechnical investigation surveys including report preparation as per the specifications as required at the site for construction of permanent structure. Necessary clearance to be obtained from the respective agencies. The contractor shall submit comprehensive Geotechnical Investigation Report and ensure that the final report is reviewed and vetted by Authority Engineer/ approved by the EIC.	1.00	Job		0.00	INR Zero Only
1.02	**Salvage**					
1.02.1	Credit for Demolition of building structures etc. complete and taking away all fetched material out of campus within 30 days after completing demolition part except the C&D waste kept for recycling and used the recycle product for non structural work such as in foot path, manhole, lean concrete, filling under plinth, re-filling of foundation etc. or as approved by Engineer-in-charge complete in all respect. The serviceable material received from dismantling/demolishing to be kept with executing agency and take away from the site as per direction ofengineer-in-charge. **Note : This amount to be paid by agency to the department. Quote the lump sum amount (in minus)**	1.00	Job		0.00	INR Zero Only
2	**CIVIL & ALLIED SERVICES**					
2.01	Planning, Designing, and Construction on EPC Basis RCC framed structure HOSTEL BLOCK- 2 SEATER BUILDING (PARTIAL BASEMENT +G+4), with support services, allied & lift facilities with stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms, IS Codes and latest INC (Indian Nursing Council) guidelines complete in all respect. **Note :- Plinth Area shall be measured for the actual constructed.**	10626.460	Sqm		0.00	INR Zero Only

2.02	Planning, Designing, and Construction on EPC Basis RCC framed structure HOSTEL BLOCK- 3 SEATER BUILDING (PARTIAL BASEMENT+G+4), with support services, allied & lift facilities with stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms, IS Codes and latest INC (Indian Nursing Council) guidelines complete in all respect. **Note :- Plinth Area shall be measured for the actual constructed**.	5174.760	Sqm		0.00	INR Zero Only
2.03	Planning, Designing, and Construction on EPC Basis RCC framed structure ACADEMIC AND ADMIN BUILDING (G+2), with support services, allied & lift facilities with stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms, IS Codes and latest INC (Indian Nursing Council) guidelines complete in all respect. The scope of works also includes complete premium interior & Exterior finishes, acoustic wall treatment, decorative wall panels, murals, Exterior 3D wall art / 3D painting, signage & branding, canteen interiors, , conference room furnishing, multipurpose hall finishing and all decorative interior elements. **Note :- Plinth Area shall be measured for the actual constructed.**	9259.080	Sqm		0.00	INR Zero Only
2.04	Planning, Designing, and Construction on EPC Basis RCC framed structure P.G HOSTEL BUILDING (G+3), with support services & allied & lift facilities incorporating stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms, IS Codes and latest INC (Indian Nursing Council) guidelines complete in all respect. **Note :- Plinth Area shall be measured for the actual constructed.**	3113.620	Sqm		0.00	INR Zero Only
2.05	Planning, Designing, and Construction on EPC Basis RCC framed structure DIRECTOR BUNGALOW (G+1), with support services & allied by incorporating stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms & IS Codes and guidelines complete in all respect. **Note :- Plinth Area shall be measured for the actual constructed.**	282.00	Sqm		0.00	INR Zero Only
2.06	Planning, Designing, and Construction on EPC Basis RCC framed structure SUB-STATION BUILDING (GR. FLOOR), with support services, by incorporating stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms & IS Codes and guidelines complete in all respect. **Note :- Plinth Area shall be measured for the actual constructed.**	300.00	Sqm		0.00	INR Zero Only
3	**EXTERNAL SITE DEVELOPMENT**					

3.01	Planning, Designing and construction of Civil External development works: Complete site grading works including chemical (non- explosive) rock blasting and earthcutting as required at the site for construction of permanent structure. Levelling, Retaining wall and Random Masonary works wherever required, Cement concrete pavement with vaccum dewatered concrete & Paver Blocks as required for footpath with Kerb stone , Boundary wall, Landscape & Horticulture works, Earthfilling, Storm water drain, trenches for services, Underground sump (UGR), External Sewerage, Sewerage treatment plan (STP - 2 Nos), Rain water Harvesting, water Distribution lines, Campus Signage, Main Gate & Guard Room with Electromechanical boom barrier, Dismantaling of existing structure & Disposing of material to selected GMC dumping ground, Car Parking Area development with pavement, markings and drainage provisions & Civil external Service connection. The scope also includes development of Playground area complete with 2 Nos. Volleyball Courts and 3 Nos of . Badminton Court with all associated civil works, surface finishing, poles, nets, lighting provisions, drainage arrangements and allied facilities complete in all respects as per specifications and including handing over complete as per scope of work and directions of Engineer In charge.	1.00	Job		0.00	INR Zero Only
3.02	Planning, Designing and Construction on EPC Basis of INFRASTRUCTURE & EXTERNAL DEVELOPMENT – Electrical Works such as Electrical sub station, HT/LT Panel, DG set with synchronizing panels, UPS System, solar photo voltaic power generation system, IP based CCTV system, LAN System, IP based EPABX System, Audio Visual/Conference System, Street lighting with LED , High mast lights, Emergency Light and Illuminated digital signages, PHE & Fire fighting works & all services including handing over complete as per scope of work and directions of Engineer In charge.	1.00	Job		0.00	INR Zero Only
4	**CENTRALIZED HVAC SYSTEM**					
4.01	Planning, Designing, and Construction on EPC Basis of HVAC system for academic and administrative block alongwith hostel blocks (warden and visitor rooms) with support services & allied facilities by incorporating stipulated specifications, The scope further specifies centralized HVAC system, comprising VRV–VRF units ,Air Handling Units (AHU), Fresh Air Units (FAHU), Axial fan wherever required including handing over complete as per scope of work and directions of Engineer In charge.	1.00	Job		0.00	INR Zero Only
Total in Figures					0.00	INR Zero Only
Quoted Rate in Words		**INR Zero Only**				

Note

Any item not specifically mentioned in this section or in the BOQ but technically required for the complete, safe, and functional installation shall be deemed included in the respective equipment or system rate.

Schedule of Payments

S No.	Stages of Payment against item No. 1		Breakup of % of Item Contract Value	% of Item Contract Value	Total % of Value
	Topographic survey & Geotechnical investigation surveys				
1.01	Carry out Topographic survey of the entire land and thorough Geotechnical investigation surveys including report preparation as per the specifications. As required at the site for construction of permanent structure. Necessary clearance to be obtained from the respective agencies. The contractor shall submit comprehensive Geotechnical Investigation Report and ensure that the final report is reviewed and vetted by Authority Engineer/ approved by the EIC.				
a.	Topographic Survey Completion		**0.003%**	**0.01%**	
b.	Geotechnical Field Investigation		**0.003%**		

c.	Final Report prepared by Contractor and vetted by Authority Engineer		**0.003%**		
d.	Clearance report & Documentation		**0.001%**		
	Total (1.02)		-	**0.01%**	**0.01%**
S No.	**Stages of Payment against item No. 2**		**Breakup of % of Item Contract Value**	**% of Item Contract Value**	
	HOSTEL BLOCK- 2 SEATER BUILDING (PARTIAL BASEMENT+G+4)				
2.01	Planning, Designing, and Construction on EPC Basis RCC framed structure HOSTEL BLOCK- 2 SEATER BUILDING (PARTIAL BASEMENT+G+4), with support services, allied & lift facilities with stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by **incorporating** stipulated specification and adopting NBC-2016 norms & IS Codes and guidelines complete in all respect.				
	Note :- Plinth Area shall be measured for the actual constructed.				
A)	**Planning, Design & Engineering Works- Investigation, Planning, Designing and obtaining approvals for works.**				
a.	On approval of Engineer-in-charge, the inception report & detailed survey and architectural drawings ready for submission for approval of local bodies and statutory authorities		0.25%		
b.	On approval of structure design by the proof consultant and Engineer-in-charge		0.35%		
c.	On obtaining all required approvals from statutory authorities and local bodies for commencement of construction as per requirements and directions of Engineer-in-charge.		0.35%		
d.	On submission of all Good for Construction (GFC) drawings as per requirements and directions of Engineer-in-charge:				
	i. Architectural drawings	0.25%	0.55%	**2.50%**	
	ii. Structural design & Drawings	0.15%			
	iii. Design & Drawings for Services	0.15%			
e.	On completion of construction				
	i. On Completion of Foundation work	0.10%			
	ii. On Completion of 100% Super structure	0.15%			
	iii. On Completion of work	0.25%	1.00%		
	iv. On obtaining required statutory approvals after completion of works	0.25%			
	v. On handing over to Client	0.25%			
B)	**CONSTRUCTION**				
a)	**Civil Works**				
(i)	Foundation Work upto plinth level		2.50%	**15.03%**	

(ii)	Structure Work RCC frame of the entire building from plinth level to terrace, stair roof, overhead tank, Lift machine room etc. including water proofing etc.		4.62%		
(iii)	Brick work & Partitioning work upto terrace.		1.50%		
(iv)	Flooring, skirting, dado, wall lining work		1.50%		
(v)	Doors & Windows with hardware		1.20%		
(vi)	External Glazing, GRC Jali, External Cladding etc		0.50%		
(vii)	False Ceiling Work		1.20%		
(viii)	Finishing Work i/c painting (inside & outside)		1.20%		
(ix)	All balance misc. civil Works, viz. Steel work, railing, panelling, signage & branding, etc to make functional building		0.60%		
(x)	Structural/Window Glass glazing		0.20%		
	Services				
b	**Water Supply & Sewerage System**				
(i)	Water Supply System		0.50%		
(ii)	Sanitary & Sewerage System		0.25%		
(iii)	Strom water drainage		0.25%	**1.75%**	
(iv)	Fittings & Fixtures		0.65%		
(v)	Overhead tank		0.10%		
c	**Fire Protection System**				
(i)	With wet riser and sprinkler system		0.85%	**1.37%**	
(ii)	Automatic Fire Alarm System , Gas supressionsystem,fire extinguisher		0.52%		
d	**Electrical Works**				
(i)	Light Fixtures, Fans		0.84%	**2.94%**	
(ii)	Lightening conductors		0.20%		
(iii)	Telephone conduits with wire and switch connection up to exchange EPBX		0.20%		
(iv)	Internal Electrical Works, rising mains and DB & other related works		1.70%		
e	**ELV Works**				
(i)	IP based CCTV system		0.13%	**0.39%**	
(ii)	External Surveillance		0.10%		
(iii)	IP based EPABX system		0.08%		
(iv)	LAN System		0.08%		
e	**Lift**				
(i)	Passenger Lift Capacity-13 Person (2 no's)		0.50%	**0.50%**	
C)	**COMPLETION AND HANDING OVER**				
(i)	Testing & Commissioning,GRIHA 3 Star Certificate		0.10%	**0.20%**	
(ii)	Handing over		0.10%		

	Total (2.01)			**24.68%**	**24.68%**
S No.	**Stages of Payment against item No. 2**		**Breakup of % of Item Contract Value**	**% of Item Contract Value**	
	HOSTEL BLOCK- 3 SEATER BUILDING (PARTIAL BASEMENT+G+4)				
2.02	Planning, Designing, and Construction on EPC Basis RCC framed structure HOSTEL BLOCK- 3 SEATER BUILDING (PARTIAL BASEMENT+G+4), with support services, allied & lift facilities with stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms & IS Codes and guidelines complete in all respect.				
	Note :- Plinth Area shall be measured for the actual constructed.				
A)	**Planning, Design & Engineering Works- Investigation, Planning, Designing and obtaining approvals for works.**				
a.	On approval of Engineer-in-charge, the inception report & detailed survey and architectural drawings ready for submission for approval of local bodies and statutory authorities		0.15%		
b.	On approval of structure design by the proof consultant and Engineer-in-charge		0.15%		
c.	On obtaining all required approvals from statutory authorities and local bodies for commencement of construction as per requirements and directions of Engineer-in-charge.		0.15%		
d.	On submission of all Good for Construction (GFC) drawings as per requirements and directions of Engineer-in-charge:				
	i. Architectural drawings	0.15%	0.45%	**1.50%**	
	ii. Structural design & Drawings	0.15%			
	iii. Design & Drawings for Services	0.15%			
e.	On completion of construction				
	i. On Completion of Foundation work	0.10%			
	ii. On Completion of 100% Super structure	0.15%			
	iii. On Completion of work	0.15%	0.60%		
	iv. On obtaining required statutory approvals after completion of works	0.15%			
	v. On handing over to Client	0.05%			
B)	**CONSTRUCTION**				
a)	**Civil Works**				
(i)	Foundation Work upto plinth level		1.50%	**8.00%**	
(ii)	Structure Work RCC frame of the entire building from plinth level to terrace, stair roof, overhead tank, Lift machine room etc. including water proofing etc.		2.95%		

(iii)	Brick work & Partitioning work upto terrace.		0.85%		
(iv)	Flooring, skirting, dado, wall lining work		0.85%		
(v)	Doors & Windows with hardware		0.30%		
(vi)	External Glazing, GRC Jali, External Cladding etc		0.40%		
(vii)	False Ceiling Work		0.20%		
(viii)	Finishing Work i/c painting (inside & outside)		0.40%		
(ix)	All balance misc. civil Works, viz. Steel work, railing, panelling, signage & branding, etc to make functional building		0.45%		
(x)	Structural/Window Glass glazing		0.10%		
	Services				
b	**Water Supply & Sewerage System**				
(i)	Water Supply System		0.15%		
(ii)	Sanitary & Sewerage System		0.15%		
(iii)	Strom water drainage		0.10%	**0.70%**	
(iv)	Fittings & Fixtures		0.25%		
(v)	Overhead tank		0.05%		
c	**Fire Protection System**				
(i)	With wet riser and sprinkler system		0.20%		
(ii)	Automatic Fire Alarm System , Gas supressionsystem,fire extinguisher		0.30%	**0.50%**	
d	**Electrical Works**				
(i)	Light Fixtures, Fans		0.30%		
(ii)	Lightening conductors		0.20%		
(iii)	Telephone conduits with wire and switch connection up to exchange EPBX		0.20%	**1.00%**	
(iv)	Internal Electrical Works, rising mains and DB & other related works		0.30%		
e	**ELV Works**				
(i)	IP based CCTV system		0.05%		
(ii)	External Surveillance		0.03%		
(iii)	IP based EPABX system		0.02%	**0.15%**	
(iv)	LAN System		0.05%		
e	**Lift**				
(i)	Passenger Lift Capacity-13 Person (2 no's)		0.20%	**0.20%**	
C)	**COMPLETION AND HANDING OVER**				
(i)	Testing & Commissioning,GRIHA 3 Star Certificate		0.10%	**0.20%**	
(ii)	Handing over		0.10%		
	Total (2.01)			**12.25%**	**12.25%**

S No.	Stages of Payment against item No. 2		Breakup of % of Item Contract Value	% of Item Contract Value	
	ACADEMIC AND ADMIN BUILDING (G+2)				
2.03	Planning, Designing, and Construction on EPC Basis RCC framed structure **ACADEMIC AND ADMIN BUILDING (G+2)**, with support services, allied & lift facilities with stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms & IS Codes and guidelines complete in all respect. The scope of works also includes complete premium interior & Exterior finishes, acoustic wall treatment, decorative wall panels, murals, Exterior 3D wall art / 3D painting, signage & branding, canteen interiors, , conference room furnishing, multipurpose hall finishing and all decorative interior elements.				
	Note :- Plinth Area shall be measured for the actual constructed.				
A)	**Planning, Design & Engineering Works- Investigation, Planning, Designing and obtaining approvals for works.**				
a.	On approval of Engineer-in-charge, the inception report & detailed survey and architectural drawings ready for submission for approval of local bodies and statutory authorities		0.25%		
b.	On approval of structure design by the proof consultant and Engineer-in-charge		0.35%		
c.	On obtaining all required approvals from statutory authorities and local bodies for commencement of construction as per requirements and directions of Engineer-in-charge.		0.35%		
d.	On submission of all Good for Construction (GFC) drawings as per requirements and directions of Engineer-in-charge:				
	i. Architectural drawings	0.25%	0.55%	**2.50%**	
	ii. Structural design & Drawings	0.15%			
	iii. Design & Drawings for Services	0.15%			
e.	On completion of construction				
	i. On Completion of Foundation work	0.10%			
	ii. On Completion of 100% Super structure	0.15%			
	iii. On Completion of work	0.25%	1.00%		
	iv. On obtaining required statutory approvals after completion of works	0.25%			
	v. On handing over to Client	0.25%			
B)	**CONSTRUCTION**				
a)	**Civil Works**				
(i)	Foundation Work upto plinth level		1.95%	**14.03%**	

(ii)	Structure Work RCC frame of the entire building from plinth level to terrace, stair roof, overhead tank, Lift machine room etc. including water proofing etc.		4.85%		
(iii)	Brick work & Partitioning work upto terrace.		1.45%		
(iv)	Flooring, skirting, dado, wall lining work		1.45%		
(v)	Doors & Windows with hardware		0.85%		
(vi)	External Glazing, GRC Jali, External Cladding etc		0.63%		
(vii)	False Ceiling Work		0.85%		
(viii)	Finishing Work i/c painting (inside & outside)		0.80%		
(ix)	All balance misc. civil Works, viz. Steel work, railing, acoustic wall treatment, decorative wall panelling, murals, Exterior 3D wall art / 3D painting, signage & branding, canteen interiors, , conference room furnishing, multipurpose hall finishing etc to make functional building		1.00%		
(x)	Structural/Window Glass glazing		0.20%		
	Services				
b	**Water Supply & Sewerage System**				
(i)	Water Supply System		0.35%		
(ii)	Sanitary & Sewerage System		0.25%		
(iii)	Strom water drainage		0.25%	**1.50%**	
(iv)	Fittings & Fixtures		0.50%		
(v)	Overhead tank		0.15%		
c	**Fire Protection System**				
(i)	With wet riser and sprinkler system		0.80%	**1.30%**	
(ii)	Automatic Fire Alarm System , Gas supressionsystem,fire extinguisher		0.50%		
d	**Electrical Works**				
(i)	Light Fixtures, Fans		0.84%		
(ii)	Lightening conductors		0.20%		
(iii)	Telephone conduits with wire and switch connection up to exchange EPBX		0.20%	**3.24%**	
(iv)	Internal Electrical Works, rising mains and DB & other related works		1.70%		
(v)	Online 3 phase UPS System		0.30%		
e	**ELV Works**				
(i)	IP based CCTV system		0.13%	**0.59%**	
(ii)	External Surveillance		0.10%		
(iii)	IP based EPABX system		0.08%		
(iv)	LAN System		0.08%		
(v)	Audio Visual		0.20%		
e	**Lift**				
(i)	Passenger Lift Capacity-13 Person (2 no's)		0.50%	**0.50%**	
C)	**<u>COMPLETION AND HANDING OVER</u>**				

(i)	Testing & Commissioning,GRIHA 3 Star Certificate		0.10%	**0.20%**	
(ii)	Handing over		0.10%		
	Total (2.01)			**23.86%**	**23.86%**
S No.	**Stages of Payment against item No. 2**		**Breakup of % of Item Contract Value**	**% of Item Contract Value**	
	P.G HOSTEL BUILDING (G+3)				
2.04	Planning, Designing, and Construction on EPC Basis RCC framed structure **P.G HOSTEL BUILDING (G+3)**, with support services & allied facilities incorporating stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms & IS Codes and guidelines complete in all respect.				
	Note :- Plinth Area shall be measured for the actual constructed.				
A)	**Planning, Design & Engineering Works- Investigation, Planning, Designing and obtaining approvals for works.**				
a.	On approval of Engineer-in-charge, the inception report & detailed survey and architectural drawings ready for submission for approval of local bodies and statutory authorities		0.15%		
b.	On approval of structure design by the proof consultant and Engineer-in-charge		0.15%		
c.	On obtaining all required approvals from statutory authorities and local bodies for commencement of construction as per requirements and directions of Engineer-in-charge.		0.15%		
d.	On submission of all Good for Construction (GFC) drawings as per requirements and directions of Engineer-in-charge:				
	i. Architectural drawings	0.15%	0.45%	**1.50%**	
	ii. Structural design & Drawings	0.15%			
	iii. Design & Drawings for Services	0.15%			
e.	On completion of construction				
	i. On Completion of Foundation work	0.10%			
	ii. On Completion of 100% Super structure	0.15%			
	iii. On Completion of work	0.15%	0.60%		
	iv. On obtaining required statutory approvals after completion of works	0.15%			
	v. On handing over to Client	0.05%			
B)	**CONSTRUCTION**				
a)	**Civil Works**				
(i)	Foundation Work upto plinth level		1.05%	**4.53%**	

(ii)	Structure Work RCC frame of the entire building from plinth level to terrace, stair roof, overhead tank, Lift machine room etc. including water proofing etc.		1.98%		
(iii)	Brick work & Partitioning work upto terrace.		0.35%		
(iv)	Flooring, skirting, dado, wall lining work		0.25%		
(v)	Doors & Windows with hardware		0.20%		
(vi)	External Glazing, GRC Jali, External Cladding etc		0.15%		
(vii)	False Ceiling Work		0.10%		
(viii)	Finishing Work i/c painting (inside & outside)		0.15%		
(ix)	All balance misc. civil Works, viz. Steel work, railing, panelling, signage & branding, etc to make functional building		0.20%		
(x)	Structural/Window Glass glazing		0.10%		
	Services				
b	**Water Supply & Sewerage System**				
(i)	Water Supply System		0.05%		
(ii)	Sanitary & Sewerage System		0.05%		
(iii)	Strom water drainage		0.04%	**0.25%**	
(iv)	Fittings & Fixtures		0.08%		
(v)	Overhead tank		0.03%		
c	**Fire Protection System**				
(i)	With wet riser and sprinkler system		0.15%		
(ii)	Automatic Fire Alarm System , Gas supressionsystem,fire extinguisher		0.10%	**0.25%**	
d	**Electrical Works**				
(i)	Light Fixtures, Fans		0.05%		
(ii)	Lightening conductors		0.05%		
(iii)	Telephone conduits with wire and switch connection up to exchange EPBX		0.05%	**0.35%**	
(iv)	Internal Electrical Works, rising mains and DB & other related works		0.20%		
e	**ELV Works**				
(i)	IP based CCTV system		0.05%		
(ii)	External Surveillance		0.03%		
(iii)	IP based EPABX system		0.02%	**0.15%**	
(iv)	LAN System		0.05%		
f	**Lift**				
(i)	Passenger Lift Capacity-13 Person (1 no's)		0.20%	**0.20%**	
C)	**<u>COMPLETION AND HANDING OVER</u>**				
(i)	Testing & Commissioning,GRIHA 3 Star Certificate		0.10%	**0.20%**	
(ii)	Handing over		0.10%		

	Total (2.01)			**7.43%**	**7.43%**
S No.	**Stages of Payment against item No. 2**		**Breakup of % of Item Contract Value**	**% of Item Contract Value**	
	DIRECTOR BUNGALOW (G+1)				
2.05	Planning, Designing, and Construction on EPC Basis RCC framed structure **DIRECTOR BUNGALOW (G+1)**, with support services & allied facilities by incorporating stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms & IS Codes and guidelines complete in all respect.				
	Note :- Plinth Area shall be measured for the actual constructed.				
A)	**Planning, Design & Engineering Works- Investigation, Planning, Designing and obtaining approvals for works.**				
a.	On approval of Engineer-in-charge, the inception report & detailed survey and architectural drawings ready for submission for approval of local bodies and statutory authorities		0.05%		
b.	On approval of structure design by the proof consultant and Engineer-in-charge		0.02%		
c.	On obtaining all required approvals from statutory authorities and local bodies for commencement of construction as per requirements and directions of Engineer-in-charge.		0.01%		
d.	On submission of all Good for Construction (GFC) drawings as per requirements and directions of Engineer-in-charge:				
	i. Architectural drawings	0.03%	0.07%	**0.20%**	
	ii. Structural design & Drawings	0.02%			
	iii. Design & Drawings for Services	0.02%			
e.	On completion of construction		0.05%		
	i. On Completion of Foundation work	0.01%			
	ii. On Completion of 100% Super structure	0.01%			
	iii. On Completion of work	0.01%			
	iv. On obtaining required statutory approvals after completion of works	0.01%			
	v. On handing over to Client	0.01%			
B)	**CONSTRUCTION**				
a)	**Civil Works**				
(i)	Foundation Work upto plinth level		0.08%	**0.40%**	
(ii)	Structure Work RCC frame of the entire building from plinth level to terrace, stair roof, overhead tank etc. including water proofing etc.		0.13%		
(iii)	Brick work & Partitioning work upto terrace.		0.04%		

(iv)	Flooring, skirting, dado, wall lining work		0.03%		
(v)	Doors & Windows with hardware		0.03%		
(vi)	External Glazing, GRC Jali, External Cladding etc		0.02%		
(vii)	False Ceiling Work		0.02%		
(viii)	Finishing Work i/c painting (inside & outside)		0.02%		
(ix)	All balance misc. civil Works, viz. Steel work, railing, panelling, signage & branding, etc to make functional building		0.02%		
(x)	Structural/Window Glass glazing		0.01%		
	Services				
b	**Water Supply & Sewerage System**				
(i)	Water Supply System		0.02%		
(ii)	Sanitary & Sewerage System		0.02%		
(iii)	Strom water drainage		0.02%	**0.12%**	
(iv)	Fittings & Fixtures		0.05%		
(v)	Overhead tank		0.01%		
c	**Fire Protection System**				
(i)	With wet riser and sprinkler system		0.05%		
(ii)	Automatic Fire Alarm System , Gas supressionsystem, fire extinguisher		0.05%	**0.10%**	
d	**Electrical Works**				
(i)	Light Fixtures, Fans		0.03%		
(ii)	Lightening conductors		0.02%	**0.12%**	
(iii)	Internal Electrical Works, rising mains and DB & other related works		0.07%		
e	**ELV Works**				
(i)	IP based CCTV system		0.03%		
(ii)	External Surveillance		0.03%	**0.06%**	
C)	**<u>COMPLETION AND HANDING OVER</u>**				
(i)	Testing & Commissioning,GRIHA 3 Star Certificate		0.03%	**0.05%**	
(ii)	Handing over		0.02%		
	Total (2.01)			**1.05%**	**1.05%**

S No.	**Stages of Payment against item No. 2**		**Breakup of % of Item Contract Value**	**% of Item Contract Value**	
	SUB-STATION BUILDING (GR. FLOOR)				

2.06	Planning, Designing, and Construction on EPC Basis RCC framed structure **SUB-STATION BUILDING (GR. FLOOR)**, with support services, by incorporating stipulated specifications including handing over complete as per scope of work and directions of Engineer-in-charge by incoprating stipulated specification and adopting NBC-2016 norms & IS Codes and guidelines complete in all respect.				
	Note :- Plinth Area shall be measured for the actual constructed.				
A)	**Planning, Design & Engineering Works- Investigation, Planning, Designing and obtaining approvals for works.**				
a.	On approval of Engineer-in-charge, the inception report & detailed survey and architectural drawings ready for submission for approval of local bodies and statutory authorities		0.05%		
b.	On approval of structure design by the proof consultant and Engineer-in-charge		0.02%		
c.	On obtaining all required approvals from statutory authorities and local bodies for commencement of construction as per requirements and directions of Engineer-in-charge.		0.01%		
d.	On submission of all Good for Construction (GFC) drawings as per requirements and directions of Engineer-in-charge:				
	i. Architectural drawings	0.03%	0.07%	**0.20%**	
	ii. Structural design & Drawings	0.02%			
	iii. Design & Drawings for Services	0.02%			
e.	On completion of construction		0.05%		
	i. On Completion of Foundation work	0.01%			
	ii. On Completion of 100% Super structure	0.01%			
	iii. On Completion of work	0.01%			
	iv. On obtaining required statutory approvals after completion of works	0.01%			
	v. On handing over to Client	0.01%			
B)	**CONSTRUCTION**				
a)	**Civil Works**				
(i)	Foundation Work upto plinth level		0.05%		
(ii)	Structure Work RCC frame of the entire building from plinth level to terrace, overhead tank etc. including water proofing etc.		0.10%		
(iii)	Brick work & Partitioning work upto terrace.		0.04%		
(iv)	Flooring, skirting, dado, wall lining work		0.02%	**0.28%**	
(v)	Doors & Windows with hardware		0.03%		
(viii)	Finishing Work i/c painting (inside & outside)		0.02%		
(ix)	All balance misc. civil Works, viz. Steel work, railing, rooling shutter, Trench, signage & branding, etc to make functional building		0.02%		
	Services				

b	**Water Supply & Sewerage System**				
(i)	Water Supply System		0.02%	**0.10%**	
(ii)	Sanitary & Sewerage System		0.02%		
(iii)	Strom water drainage		0.02%		
(iv)	Fittings & Fixtures		0.03%		
(v)	Overhead tank		0.01%		
c	**Fire Protection System**				
(i)	Automatic Fire Alarm System , Gas supressionsystem, fire extinguisher		0.05%	**0.05%**	
d	**Electrical Works**				
(i)	Light Fixtures, Fans		0.03%	**0.12%**	
(ii)	Lightening conductors		0.02%		
(iii)	Internal Electrical Works, rising mains and DB & other related works		0.07%		
e	**ELV Works**				
(i)	IP based CCTV system		0.03%	**0.06%**	
(ii)	External Surveillance		0.03%		
C)	**COMPLETION AND HANDING OVER**				
(i)	Testing & Commissioning,GRIHA 3 Star Certificate		0.02%	**0.04%**	
(ii)	Handing over		0.02%		
	Total (2.01)			**0.85%**	**0.85%**

S No.	**Stages of Payment against item No.3**		**Breakup of % of Item Contract Value**	**% of Item Contract Value**	
	CIVIL EXTERNAL DEVELOPMENT				
3.01	Planning, Designing and construction of **Civil External development works**: Complete site grading works including chemical (non- explosive) rock blasting and earthcutting as required at the site for construction of permanent structure. Levelling, Retaining wall and Random Masonary works wherever required, Cement concrete pavement with vaccum dewatered concrete & Paver Blocks as required for footpath with Kerb stone , Boundary wall, Landscape & Horticulture works, Earthfilling, Storm water drain, trenches for services, Underground sump (UGR), External Sewerage, Sewerage treatment plan (STP-2 nos), Rain water Harvesting, water Distribution lines, Campus Signage, Main Gate & Guard Room with Electromechanical boom barrier, Dismantaling of existing structure & Disposing of material to selected GMC dumping ground, Car Parking Area development with pavement, markings and drainage provisions & Civil external Service connection. The scope also includes development of Playground area complete with 2 Nos. Volleyball Courts and 3 Nos of . Badminton Court with all associated civil works, surface finishing, poles, nets, lighting provisions, drainage				

	arrangements and allied facilities complete in all respects as per specifications and including handing over complete as per scope of work and directions of Engineer In charge.				
A)	**Planning, Design & Engineering Works- Investigation, Planning, Designing and obtaining approvals for works.**				
a.	On approval of Engineer-in-charge, the inception report & detailed survey and architectural drawings ready for submission for approval of local bodies and statutory authorities		**0.25%**		
b.	On approval of structure design by the proof consultant and Engineer-in-charge		**0.25%**		
c.	On obtaining all required approvals from statutory authorities and local bodies for commencement of construction as per requirements and directions of Engineer-in-charge.		**0.15%**		
d.	On submission of all Good for Construction (GFC) drawings as per requirements and directions of Engineer-in-charge:				
	i. Architectural drawings	0.20%	**0.55%**	**1.50%**	
	ii. Structural design & Drawings	0.20%			
	iii. Design & Drawings for Services	0.15%			
e.	On completion of construction		**0.30%**		
	i. On Completion of Foundation work	0.10%			
	ii. On Completion of 100% Super structure	0.05%			
	iii. On Completion of work	0.05%			
	iv. On obtaining required statutory approvals after completion of works	0.05%			
	v. On handing over to Client	0.05%			
B)	**Completion of Civil External Development Work**				
(i)	Levelling & Earth filling work	1.08%	**14.02%**	**14.02%**	
(ii)	RCC Retaining Wall with Avg. height 4.5 mtr (550 Mtr.)	3.20%			
(iii)	Random Rubble Masonary wall with Avg. height 2.5 mtr (400 Mtr.)	0.94%			
(iv)	Cement concrete pavement with vaccum dewatered concrete (7588 sqm)	1.01%			
(v)	Foothpath with PCC base, 60 mm thick paver blocks and kerb stone edging. (3029 Sqm)	0.56%			

(vi)	Boundary Wall (1530 mtr.)	2.05%			
(vii)	Horticulture & Landscape (quantum area as per master plan)	0.75%			
(ix)	Storm water drain (1063 Mtr.)	0.35%			
(x)	Trenches for Services (500 mtr.)	0.23%			
(xii)	Under ground Sump with civil, electrical, fire pump, water treatment & mechanical complete (UGR) (500 KLD)	0.86%			
(xiii)	Sewerage treatment plant with civil, electrical & mechanical complete (STP) (100 KLD)	0.54%			
(xvi)	Campus Signage	0.01%			
(xvii)	Main Gate & Guard Room with Electromechanical boom barrier with additional gate for Director bunglow.	0.07%			
(xviii)	Dismantaling & Disposing of material to selected GMC dumping ground	0.07%			
(xix)	Car Parking Area development with pavement, markings and drainage provisions	0.05%			
(xxi)	Development of Playground area including 2 Nos. Volleyball Courts and 3 Nos of . Badminton Court all include	0.05%			
(xxii)	External Sewerage (450 Mtr.)	0.11%			
(xxiii)	Site Grading, Earthwork & Chemical (Non explosive) Rock Blasting	2.10%			
C)	**COMPLETION AND HANDING OVER**				
(i)	Testing & Commissioning	0.25%	0.25%	**0.50%**	
(ii)	Handing over	0.25%	0.25%		
	Total(3.01)			**16.02%**	**16.02%**
S No.	**Stages of Payment against item No.3**		**Breakup of % of Item Contract Value**	**% of Item Contract Value**	
	INFRASTRUCTURE & EXTERNAL DEVELOPMENT				
3.02	Planning, Designing and Construction on EPC Basis of INFRASTRUCTURE & EXTERNAL DEVELOPMENT – Electrical Works such as Electrical sub station, HT/LT Panel, DG set with synchronizing panels, UPS System, solar photo voltaic power generation system, IP based CCTV system, LAN System, IP based EPABX System, Audio Visual/Conference System, Street lighting with LED , High mast lights, Emergency Light and Illuminated digital signages, PHE & Fire fighting works & all services including handing over complete as per scope of work and directions of Engineer In charge. Including APDCL security money.				
A)	Planning, Design & Engineering Works- Investigation, Planning, Designing and obtaining approvals for works.				
a.	On approval of Engineer-in-charge, the inception report & detailed survey and architectural drawings ready for submission for approval of local bodies and statutory authorities		**0.20%**	**1.40%**	
b.	On approval of structure design by the proof consultant and Engineer-in-charge		**0.20%**		

c.	On obtaining all required approvals from statutory authorities and local bodies for commencement of construction as per requirements and directions of Engineer-in-charge.		**0.15%**		
d.	On submission of all Good for Construction (GFC) drawings as per requirements and directions of Engineer-in-charge:				
	i. Architectural drawings	0.20%	**0.55%**		
	ii. Structural design & Drawings	0.20%			
	iii. Design & Drawings for Services	0.15%			
e.	On completion of construction		**0.30%**		
	i. On Completion of Foundation work	0.10%			
	ii. On Completion of 100% Super structure	0.05%			
	iii. On Completion of work	0.05%			
	iv. On obtaining required statutory approvals after completion of works	0.05%			
	v. On handing over to Client	0.05%			
B	Completion of Development Work such as Electrical sub station ,DG set , UPS System, solar photo voltaic power generation system, IP based CCTV system, LAN System, IP based EPABX System, Audio Visual/Conference System, Street lighting with LED and Emergency Light and Illuminated digital signages				
I	Supplying, installation, testing and commissioning of substation equipments comprising HT Panel, Dry type Transformers, HT cable, Bus trunking from Transformer to LT Panel, LT Panel, Automatic Power factor correction panel, Active Harmonic Filters, TVSS (Transient Voltage suppression system),SPD (Surge protection system), Essential panel, Earthing, required inter-connections,substation safety equipments including LT cabling from sub station to the buildings fed by the sub station.				
i	Supply of equipment / material	1.40%	1.95%	1.95%	
ii	On installation of all materials	0.55%			
II	**Supplying installation testing and commissioning of silent type D.G. Set, Sychronizing Panel, Bus Trunking /cables from DG Set to essential panel, control cable, Earthing of DG Set and AMF Panel, DG set exhaust piping as per CPCB norms and minor allied works.**				
i	Supply of equipment / material	1.60%	2.20%	2.20%	
ii	On installation of all materials	0.60%			
IV	**Supplying, installation, testing and commissioning of Grid interactive roof top solar photo voltaic power generation system including space frame.**		1.32%	1.32%	

i	Supply of equipment / material	0.75%			
ii	On installation of all materials	0.57%			
V	**Supplying, installation, testing and commissioning of IP based CCTV system for building security comprising of PTZ / fixed camera, cabling, digital recording, HD display system with minimum display of 5" x 8" per camera and hard ware software support- For External Surveillance**				
i	Supply of equipment / material	1.02%	1.68%	1.68%	
ii	On installation of all materials	0.66%			
IX	**Supplying, installation, testing and commissioning of LED Street/ Compound/ High mast/ Pathway/ Landscape Lighting for the Campus**				
i	Supply of equipment / material	0.92%	1.49%	1.49%	
ii	On installation of all materials	0.57%			
X	**Emergency Light and Illuminated digital signages**				
i	Supply of equipment / material	0.32%	0.42%	0.42%	
ii	On installation of all materials	0.10%			
XI	**External PHE & Fire fighting works**				
i	Supply of equipment / material	0.64%	0.94%	0.94%	
ii	On installation of all materials	0.30%			
C)	**COMPLETION AND HANDING OVER**				
(i)	Testing & Commissioning	0.25%	0.50%	0.50%	
(ii)	Handing over	0.25%			
	Total(3.02)			**11.90%**	**11.90%**

S No.	**Stages of Payment against item No.4**		**Breakup of % of Item Contract Value**	**% of Item Contract Value**	
	HVAC with support services & allied facilities				
4.01	Planning, Designing, and Construction on EPC Basis of HVAC with support services & allied facilities by incorporating stipulated specifications, The scope further specifies centralized HVAC system, comprising VRV–VRF units ,Air Handling Units (AHU), Fresh Air Units (FAHU), Axial fan wherever required including handing over complete as per scope of work and directions of Engineer In charge.				
A)	Planning, Design & Engineering Works- Investigation, Planning, Designing and obtaining approvals for works.			0.25%	
	-				
B)	Completion of HVAC System				

I)	VRV/VRF AC SYSTEMS				
i	Supply of equipment / material	0.35%	0.70%		
ii	On installation of all materials	0.35%			
II)	**Air Handling Units (AHU)/ System**				
i	Supply of equipment / material	0.20%	0.40%	**1.40%**	
ii	On installation of all materials	0.20%			
III)	**Fresh Air Units (FAHU), Axial fan wherever**				
i	Supply of equipment / material	0.15%	0.30%		
ii	On installation of all materials	0.15%			
C)	**COMPLETION AND HANDING OVER**				
(i)	Testing & Commissioning	0.15%	0.15%	**0.30%**	
(ii)	Handing over	0.15%	0.15%		
	Total(4.01)			**1.95%**	1.95%
			TOTAL		**100.00%**

Schedule of Performance Guarantees and Performance Damages

(i) Details of Performance Guarantee are mentioned in PCC (GCC 4.2)

The Performance Security and ES Performance Security will be in the form of demand guarantee(s) from Nationalized or Scheduled bank(s) in India, in the Performance Security and ES Performance Security Forms included in Section X, Contract Forms.

The Performance Security amount is 5% - Five percent of the Accepted Contract Amount ;

and the Environmental and Social (ES) Performance Security amount is 1%- One percent of the Accepted Contract Amount .

The performance security of a Joint Venture shall be in the name of the Joint Venture specifying the names of all members

(iii)*Performance Damages*

S. No.	*Description of work (performance damage)*	*Penalty*
1	Delay in submission of monthly progress report or for incomplete reports as mentioned in section "Monthly Progress report"	@ Rs. 5,000/- per day, subject to a maximum of Rs. 20,000/- per report
2	Non-compliance / delay in compliance of testing of materials as mentioned in section "Testing of Material"	@ Rs. 1000/- per day will be imposed which will be recovered from the immediate next R/A Bill of the Contractor
3	Non submission of pollution control plan as mentioned in section "Construction Waste"	Compensation of Rs. 5,000/- per day will be levied and recovered from the dues of the contractor for each day of delay beyond 15 days for non submission of pollution control plan
4	Surplus dismantle material/building rubbish received from dismantling/demolishing shall be dumped to the dumping ground in properly covered truck with precaution. Agency shall submit the hard copy of photograph showing the properly covered truck disposing the dismantles material/building rubbish (as mentioned in section "SPECIAL CONDITIONS FOR PREVENTION OF AIR, WATER, LAND POLUTION, GREEN BUILDING CONSTRUCTION SITE"	Failure of which shall be sternly dealt and a penalty @Rs.500/- per trip of truck shall be levied and the decision of Engineer-in-Charge shall be final & binding

<table>
<tr>
<td>5</td>
<td>Contractor shall submit to the Authority's Engineer on the 7th day of each month, 2 hard copies and one soft copy (CD) of monthly progress report of the work. Such progress report will include the project progress, summary, work progress (planned vs actual), CPM chart, status of financial progress and achievement of milestone, manpower deployment status, inventory of materials and photographs of important activities.</td>
<td>For delay in submission of the report,@ ₹2000/- (₹ Two Thousand only) per day of delay subject to maximum of ₹.20,000/- for each report</td>
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<tr>
<td>6</td>
<td>Insurance
<table>
<tr><th>SN.</th><th>Description</th><th>Minimum cover for Insurance</th><th>Maximum deductible for Insurance</th></tr>
<tr><td>(i)</td><td>Works and Plant and Materials</td><td>Equal to 25% of Contract Amount</td><td>0.4% of the contract amount</td></tr>
<tr><td>(ii)</td><td>Loss or damage to Equipment</td><td>10% of the Contract Amount</td><td>0.4% of the contract amount</td></tr>
<tr><td>(iii)</td><td>Other Property (except the Works, Plant, Materials, and Equipment)</td><td>25% of the Contract Amount</td><td>0.4% of the contract amount</td></tr>
<tr><td>(iv)</td><td>Personal injury or death insurance:
a) for other people;</td><td>As per workmen's compensation Act 1923 and other Acts in force</td><td>As per workmen's compensation Act 1923 and other Acts in force</td></tr>
<tr><td></td><td>b) for Contractor's Employees</td><td colspan="2">In accordance with the statutory requirements applicable in India</td></tr>
</table>
</td>
<td>In case the Contractor does not provide these Insurances as per above provisions, the Employer shall deduct the amount of premium from the Contractor's payments as per above and shall ensure the compliances. In such case an additional penalty of INR 1,00,000/- may also be imposed to the Contractor for non-compliance of the Insurance provisions and/or delay in renewal, If not done before validity of the insurance for the required period expires,</td>
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</table>

<table>
<tr><td></td><td></td><td>in each occasion except in the case of insurance for T&P and machinery, which will be penalized as per above table and any damage/incident to the work/workmen, that occur during the uninsured period, will be the sole responsibility of the contractor</td></tr>
<tr><td>7</td><td>. The details of liquidated damages for not achieving the milestone within the stipulated time is mentioned below .
<table>
<tr><th>Sl. No.</th><th>Description of Mile stone</th><th>Time allowed in months (From date of start)</th><th>Penalty Amount to be deducted in case of Non-achievement of mile stone*</th></tr>
<tr><td>1.</td><td>Carry out Topographic survey of the entire land and thorough Geotechnical investigation surveys including report preparation as per the specifications.</td><td>3 Months</td><td>0.20%</td></tr>
<tr><td>2.</td><td>Planning, Design & Engineering Works- architectural planning, designing of all structural design drawings of Hostel buildings, Academic blocks, Director bungalow, Substation</td><td>6 Months</td><td>0.30%</td></tr>
</table></td><td>The liquidated damages for not achieving the milestone within the stipulated time shall not exceed 5% (Five percent) of the Contract Price. If the damages exceed 5% (Five percent) of the Contract Price, the Contractor shall be deemed to be in default of this agreement having no cure and the Authority shall be entitled to terminate this Agreement by</td></tr>
</table>

			etc. all complete to start the construction activities. Establishment of Site Office.			issuing a Termination Notice
		For Construction work:				
		3.	25% of Total work in Financial Terms	12 Months	0.50%	
		4.	50% of Total work in Financial Terms	24 Months	0.75%	
		5.	75% of Total work in Financial Terms	30 Months	0.75%	
		6.	90% of Total work in Financial Terms	34 Months	1.25%	
		7.	All civil, electrical & mechanical and horticulture work completed in all aspects in Residential & non-residential buildings with services, clearances from local body/ completion certificates/ GRIHA 3 Star Certificate (V.2019 or latest) etc.	36 Months	1.25%	

Technical Bid Forms

1. Design Methodology
2. Construction Management Strategy
3. Method Statement for key construction activities
4. Sustainable Procurement Proposal
5. Code of Conduct for Contractor's Personnel (ES)
6. Work Program
7. Contract Personnel Organization Chart
8. Risk Assessment
9. Contractor's Equipment
10. Subcontractors
11. Others

Design Methodology

The Bidder shall submit a design methodology which addresses as a minimum the following:

(a) organizational arrangements for the design including: team structure, roles and responsibilities, interface arrangements, design review and approval procedures and quality assurance arrangements;

(b) Proposed design deliverables

(i) Design and Drawings
(ii) Construction of Classroom Buildings (RCC)
(iii) Electrical works
(iv) Plumbing works.
(v) Anti-termite treatment works
(vi) Storm water drains & sewerage works
(vii) Rain water harvesting works
(viii) Firefighting & Protection works.
(ix) Landscaping and site development work

(c) design statement setting out how the Employers Requirements will be achieved;

(d) Any added value the Bidder will bring including examples of innovative aspects of the design;

(e) comments on the Employer's Requirements, including:

i. status of the information available and relevant design issues for the Works;

ii. comments on any errors, defects or ambiguities noted in the Employer’s Requirements; and

(f) Sustainable Procurement: sustainability aspects (e.g. energy efficiency, reduction of wastages, material reduction, sources of materials etc.)demonstrating the Bidder’s approach and commitment to sustainable design and construction practices;

(g) strategy for gathering baseline ES information in time to inform design development;

(h) details of how theES requirements, and any Bid to enhance ES outcomes,will be incorporated into all design stages, and how the implications for the construction phase has been considered;

(i) details ofthe approach to managing risks, stakeholder engagement, consultation and environmental permits/consents;

(j) value engineering (value management) arrangements, including consideration of ES issues;

(k) software systems intended to be employed for planning, design, records and reporting; and

Construction Management Strategy

The Bidder shall submit a construction management strategy which addresses as a minimum:

(a) organizational arrangements for the construction management including: team structure, roles and responsibilities, interface arrangements, approval procedures and quality assurance arrangements;
(b) subcontractor selection and management;
(c) Bids for training all personnel attending site;
(d) stakeholder engagement;
(e) obtaining and managing consents, permits and approvals;
(f) site setup Bids including access, accommodation, welfare facilities, arrangement for plant and material storage;
(g) construction phasing Bids including sequence of work and management of conflicting activities;
(h) ensuring that geotechnical investigations or other advance works meet the ES requirements;
(i) risk management approach for geotechnical and subsurface aspects of the Works;
(j) quality management system including a draft of the quality management plan;
(k) sustainability aspects demonstrating the Bidder's approach and commitment to sustainable construction practices (e.g. energy efficiency, reduction of wastages, material reduction and sources of materials etc.);
(l) preparation, approval and implementation of the Contractor's environmental and social management plan;
(m) preparation, approval and implementation of the Contractor's health and safety manual;
(n) grievance redress mechanisms;
(o) reporting arrangements, including topics (that include ES) and timescales in accordance with the Particular Conditions of Contract Sub-Clause 4.20 and Appendix C to the General Conditions of Contract;
(p) arrangements for testing upon completion of the works;
(q) arrangements for site handover, including completion of as-built drawings, preparation of operation and maintenance manuals, and any other relevant aspects;

Method Statement for key construction activities

The Bidder shall provide its method statements for addressing the following risks and carrying out the following construction activities. Each method statement shall describe the proposed approach, the level of staffing and experience, the safe system of work, and the equipment or materials to be used to manage risk or activity in accordance with the Employer's Requirements

Examples:

- *foundation excavation;*
- *erection of steel structures;*
- *prevention of Sexual Exploitation, and Abuse (SEA);*
- *management of traffic including construction traffic*

- *…;*

.
[length of the method statement for each activity maximum 4 sides of A4]

Sustainable Procurement Proposal

In addition to submitting the **required** ES Management Strategies and Implementation Plans, the Bidder shall also provide its plan to demonstrate whether he would be addressing any sustainable procurement requirements.

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

***Note to the Employer**:*

***The following minimum requirements shall not be modified**. The Employer may add additional requirements to address identified issues, informed by relevant environmental and social assessment.*

The types of issues identified could include risks associated with: labor influx, spread of communicable diseases, and Sexual Exploitation and Abuse (SEA) etc.

Delete this Box prior to issuance of the RFB documents.

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 taking into account Contract-specific issues/risks.

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

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 related to the Works. It applies to all our staff, labourers 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 Contractors' 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 any form of 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, 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 sexual exploitation, sexual abuse and sexual harassment cases, 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: _____

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.

Work Program

The Bidder shall set out a work program for design and construction of the Works to be undertaken. The proposed work program shall be developed based on the Employer's Requirements and shall consider the following key milestones:

(a) design of the Works, including the submission of the design deliverables, review and approval of the design by the Authority Engineer;

(b) processes and deliverables needed to commence the Works;

(c) execution of the Works within the Time for Completion, highlighting activities imposing constraints on the construction sequence;

(d) testing, commissioning and handing over of the completed Works;

(e) No-objection to the Contractor's MSIPs, which collectively form the C-ESMP, in accordance with the Particular Conditions Sub-Clause 4.1 and Appendix C to the General Conditions of Contract;

(f) Appointment of the Adjudicator

(g) SEA and SH orientation conference; and.

(h) Defect Liability Period of 12 month

Contract Personnel Organization Chart

The Bidder shall provide an organization chart illustrating the proposed management structure and reporting lines for delivery of the Contract. The organization chart shall include the names of all Key Personnel.

Risk assessment and Proposed Management

The Bidder should submit a risk register identifying the hazards anticipated during the implementation of the contract.

For the key hazards ranked by impact, the risk register shall include a description of the hazard, an assessment of the potential impact on health and safety, environment, cost, program or other, and the proposed mitigation strategy for each hazard.

*[**Note to the Bidder**: (i) If the contract has been assessed to present potential or actual cyber security risks, also include method statement, management strategies and implementation plans and innovations, to manage cyber security risks; (ii) if there are assessed supply chain risks, the risk assessment and proposed management plans, must include proposed supply chain risks management plan.]*

FORM EQU
Contractor's Equipment

The Bidder shall provide its strategy for acquiring and maintaining the key equipment that may be needed to execute the Works in accordance with the Work Program. In the strategy, the Bidder shall specify the manufacturer, capacity, model, power rating, age and maintenance condition, and how it will ensure that the equipment is maintained in accordance with manufacturer's specifications for the duration of the Contract. The Bidder shall specify whether it will own, lease, rent or specially manufacture the key equipment.

Personnel
FORM PER -1
Key Personnel qualifications and resource schedule

Bidders should provide the names and details of the suitably qualified Contractor's Representative and Key Personnel to perform the Contract. The data on their experience should be supplied using the Form PER-2 below for each candidate. Bidders should submit a fully detailed Key Personnel resource schedule for the whole contract implementation period. The resource schedule must include:

- the name and role for each Key Personnel position
- The duration of each Key Personnel appointment
- The level of effort (time) allocated to each Key Personnel position and its distribution throughout the contract implementation period.

	Title of position	**Name of candidate**	
1.	*[Contractor's Representative]*		
2.	*[Cyber security Expert/s] [Include as required]*		
Key Personnel for Design			
3.	*[Design Manager]*		
4.	*[Environmental Impact Assessment Specialist]*		
5.	*[Social Impact Assessment Specialist]*		
6.	*[Health and Safety Specialist]*		
7.	*[Biodiversity, Air quality, Noise etc. Specialists]*		
8.	*[Modify/add others as appropriate]*		
Key Personnel for Construction			
9.	*[Construction Manager]*		
10.	*[Environmental Specialist]*		
11.	*[Health and Safety Specialist]*		
12.	*[Social Specialist]*		
13.	*[Survey Manager]*		

14.	*[***Sexual Exploitation, Abuse and Harassment Expert(s)** *[Where a Project SEA risks are assessed to be substantial or high, Key Personnel shall include an expert (s) with relevant experience in addressing sexual exploitation, sexual abuse and sexual harassment] cases]*		
15.	*[Modify/add others as appropriate]*		

FORM PER-2:
Resume and Declaration
Contractor's Representative and Key Personnel

Name of Bidder

Position ***[#1]: [title of position from Form PER-1]***		
Personnel information	**Name:**	**Date of birth:**
	Address:	**E-mail:**
	Professional qualifications:	
	Academic qualifications:	
	Language proficiency: *[language and levels of speaking, reading and writing skills]*	
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**	**Relevant experience**
[main project details]	*[role and responsibilities on the project]*	*[time in role]*	*[describe the experience relevant to this position]*

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

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

(a) be taken into consideration during Bid evaluation;

(b) my disqualification from participating in the Bid;

(c) 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): _____

Subcontractors

Proposed Subcontractors for Major Activities/Sub-Activities

The following Subcontractors and/or manufacturers are proposed for carrying out the activity/subactivity indicated. For any additional subcontractor (that is not the Specialized Subcontractor), Bidders are free to propose more than one Subcontractor for each activity/subactivity.

Activity/Sub-Activity	Proposed Subcontractors name and address	Nationality

Qualification Forms

Form ELI 1.1
Bidder Information Sheet

Date:_____
RFB No.: _____

Page _____ of _____ pages

1.Bidder's Legal Name
2.In case of JV, legal name of each party:
3.Bidder's actual or intended Country of Registration:
4.Bidder's Year of Registration:
5.Bidder's Legal Address in Country of Registration:
6.Bidder's Authorized Representative Information Name: Address: Telephone/Fax numbers: Email Address:
7. 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 ☐ 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 8. Included are the organizational chart and a list of Board of Directors.

Form ELI 1.2
Party to JV Information Sheet

Date: _____

RFB No.: _____

Page _____ of _____ pages

1. Bidder's Legal Name:
2. JV's Party legal name:
3. JV's Party Country of Registration:
4. JV's Party Year of Registration:
5. JV's Party Legal Address in Country of Registration:
6. JV's Party Authorized Representative Information Name: Address: Telephone/Fax numbers: Email Address:
7. Attached are copies of original documents of ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITP 4.4. ☐ In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Employer, in accordance with ITP 4.6. 8. Included are the organizational chart and a list of Board of Directors.

Appendix to Technical Part

Form ELI -1.2 A

Specialized Subcontractor's Information Form

(to be completed for each Specialized Subcontractor)

Date: _____
RFB No. and title: _____
Page _____ of _____ pages

Bidder's legal name:

Specialized Subcontractor's legal name:
Specialized Subcontractor's country of registration:
Specialized Subcontractor's year of constitution:
Specialized Subcontractor's legal address in country of constitution:
Specialized Subcontractor's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
Attached are copies of original documents of ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4. ☐ Authorization to represent the Specialized Subcontractor.

Form CON – 2

Historical Contract Non-Performance, Pending Litigation and Litigation History

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

Bidder's Name: *[insert full name]*
Date: *[insert day, month, year]*
JV Member's Name: ***-N/A-***
RFB No. and title: *[insert RFB number and title]*
Page *[insert page number]* of *[insert total number]* pages

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

Year of dispute	Amount in dispute (Rs.)	Contract Identification	Total Contract Amount (Rs.)
		Contract Identification: _____ Name of Employer: _____ Address of Employer: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	

Litigation History in accordance with Section III, Evaluation and Qualification Criteria

☐ No Litigation History
☐ Litigation History

Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (Rs.)
[insert year]	*[insert percentage]*	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Matter in dispute: *[indicate main issues in dispute]* Party who initiated the dispute: *[indicate "Employer" or "Contractor"]* Reason(s) for Litigation and award decision *[indicate main reason(s)]*	*[insert amount]*

Form CON – 3
Environmental and Social Performance Declaration

[The following table shall be filled in for the Bidder and for JVs, each member of the 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 total number]* pages

Environmental and SocialPerformance Declaration in accordance with Section III, Qualification Criteria, and Requirments			
☐ **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 and Social (ES) performancesince 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 and 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**	
[insert year]	*[insert amount and percentage]*	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for suspension or termination: *[indicate main reason(s)e.g. gender-based violence; sexual exploitation or sexual abuse breaches]*	
[insert year]	*[insert amount and percentage]*	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]*	

		Reason(s) for suspension or termination: *[indicate main reason(s)]*
...	...	*[list all applicable contracts]*
Performance Security called by an employer(s) for reasons related to ES performance		
Year	**Contract Identification**	
[insert year]	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for calling of performance security: *[indicate main reason(s)e.g. gender-based violence; sexual exploitation or abuse breaches]*	

Form CON – 4
Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment Performance Declaration

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

Bidder's Name: *[insert full name]*
Date: *[insert day, month, year]*
Joint Venture Member's or Subcontractor's Name: *[insert full name]*
RFB No. and title: *[insert RFB number and title]*
Page *[insert page number]* of *[insert total number]* pages

SEA and/or SH Declaration **in accordance with Section III, Qualification Criteria, and Requirements of the RFB Documents**
We: ☐ (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations ☐ (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations ☐ (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. An arbitral award on the disqualification case has been made in our favor. ☐ (d) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have subsequently demonstrated that we have adequate capacity and commitment to comply with SEA/ SH obligations. ☐(e) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have attached evidence demonstrating that we have adequate capacity and commitment to comply with SEA/ SH obligations.
[*If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]*
[If (d) or (e) above are applicable, provide the following information:]
Period of disqualification: From: _____ To: _____
If previously provided on another Bank financed works contract, details of evidence that demonstrated adequate capacity and commitment to comply with SEA/ SH obligations (**as per (d) above)** Name of Employer: _____ Name of Project: _____ Contract description: _____ Brief summary of evidence provided: _____

_____ Contact Information: (Tel, email, name of contact person): _____ _____
As an alternative to the evidence under (d), other evidence demonstrating adequate capacity and commitment to comply with SEA/ SH obligations (**as per (e) above)** *[attach details as appropriate].*

Form FIN – 3.1
Financial Situation and Performance

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

Bidder's Name: *[insert full name]*
Date: *[insert day, month, year]*
Joint Venture Member Name: ***-N/A-***
RFB No. and title: *[insert RFB number and title]*
Page *[insert page number]* of *[insert total number]* pages

1. Financial data

Type of Financial information in INR	**Historic information for previous** _ *[insert number] years, [insert in words]* **(Amount in INR)**				
	Year 1	Year 2	Year 3	Year4	Year 5
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					

2. Sources of Finance

[The following table shall be filled in for the Bidder and all parties combined in case of a Joint Venture]

Specify sources of finance to meet the cash flow requirements on contracts 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 *[number]* years pursuant Section III, Table 1 – Qualification Criteria, and Requirements Sub-factor 3.1. 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 statements[9] for the *[number]* years required above; and complying with the requirements

[9] "If the most recent set of financial statements is for a period earlier than 12 months from the date of Application, the reason for this should be justified

Form CCC
Current Contract Commitments / Works in Progress

Bidders and each partner to 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 & Address of Employer	Value of Contract (Rs. in million) (without taxes)	Stipulated Period of Completion	Value of Works[10] Remaining to be Completed (Rs. in million) (without taxes)	Anticipated date of Completion	Average monthly invoicing over last six months (Rs./month in million) (without taxes)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

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

Description of Work	Place & State	Name & Address of Employer	Estimated Value of Works (Rs. in million) (without taxes)	Stipulated Period of Completion	Date when decision is expected	Remarks (if any)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

[10] *Attach certificate(s) from the Engineer(s)-in-Charge*

Form FIN - 3.2
Average Annual Construction Turnover

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

Bidder's Name: *[insert full name]*
Date: *[insert day, month, year]*
Joint Venture Member Name: ***-N/A-***
RFB No. and title: *[insert RFB number and title]*
Page *[insert page number]* of *[insert total number]* pages

Annual turnover data (construction only)	
Year	**Amount in Rs.**
[indicate year]	*[insert amount]*
Average Annual Construction Turnover *	

** Total INR equivalent for all years divided by the total number of years. See Section III, Table 1 Qualification Criteria, and Requirements, 3.2. This should be certified by a Chartered Accountant.

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 indicated in Section III, Evaluation and Qualification Criteria

Source of financing	Amount (INR)
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. _____ 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.]

Form EXP - 4.1
General Construction Experience

[The following table shall be filled in for the Bidder and in the case of a JV, each Member]

Bidder's Name: *[insert full name]*
Date: *[insert day, month, year]*
Joint Venture Member Name: *[insert full name]*
RFB No. and title: *[insert RFB number and title]*
Page *[insert page number]* of *[insert total number]* 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 Year	Ending Year	Contract Identification	Role of Bidder
[indicate year]	*[indicate year]*	Contract name: *[insert full name]* Brief Description of the Contracts performed by the Bidder: *[describe contracts performed briefly]* Amount of contract: *[insert amount in Rs.]* Name of Employer: *[indicate full name]* Address: *[indicate street/number/town or city/country]*	*[insert "Prime Contractor" or "JV Member" or "Sub-contractor" or "Management Contractor"]*
		Contract name: *[insert full name]* Brief Description of the Contracts performed by the Bidder: *[describe contracts performed briefly]* Amount of contract: *[insert amount in Rs.]* Name of Employer: *[indicate full name]* Address: *[indicate street/number/town or city/country]*	*[insert "Prime Contractor" or "JV Member" or "Sub-contractor" or "Management Contractor"]*
		Contract name: *[insert full name]* Brief Description of the Contracts performed by the Bidder: *[describe contracts performed briefly]* Amount of contract: *[insert amount in Rs.]* Name of Employer: *[indicate full name]* Address: *[indicate street/number/town or city/country]*	*[insert "Prime Contractor" or "JV Member" or "Sub-contractor" or "Management Contractor"]*

Form EXP - 4.2 (a)
Specific Experience

(Table 1, sub-factor 4.2)

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

Bidder's Name: *[insert full name]*
Date: *[insert day, month, year]*
Joint Venture Member Name: *[insert full name]*
RFB No. and title: *[insert RFB number and title]*
Page *[insert page number]* of *[insert total number]* 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 years[11]. [Attach certificate from the Engineer-in-charge.]

Similar Contract No. *[insert number]* of *[insert number of similar contracts required]*	**Information**			
Contract Identification	*[insert contract name and number, if applicable]*			
Award date	*[insert day, month, year, i.e., 15 June, 2020]*			
Completion date	*[insert day, month, year, i.e., 03 October, 2023]*			
Role in Contract *[check the appropriate box]*	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount	*[insert total contract amount in Rs.]*			
If member in a JV or sub-contractor, specify share in value in total Contract amount and roles and responsibilities	*[insert a percentage amount]*	*[insert total contract amount in Rs.]*		
	[insert roles and responsibilities]			
Description of the similarity in accordance with Section III Table 1, 4.2				

[11] Immediately preceding the financial year in which bids are received.

Similar Contract No. *[insert number]* of *[insert number of similar contracts required]*	**Information**
Physical size of required contracts items	*[insert physical size of items]*
Complexity	*[insert description of complexity]*
Methods/Technology	*[insert specific aspects of the methods/technology involved in the contract]*
Other Characteristics	*[insert other characteristics as described in Section VII, Scope of Employer's Requirements]*
Employer's Name:	*[insert full name]*
Address: Telephone/fax number E-mail:	*[indicate street / number / town or city / country]* *[insert telephone/fax numbers, including country and city area codes]* *[insert e-mail address, if available]*

Form EXP - 4.2(b)
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 (b):

Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Subcontractor ☐
Total Contract Amount	*[insert total contract amount in Rs.]*			
Details of relevant experience				

2. Key Requirement no 2 in accordance with 4.2 (b): _____
3. Key Requirement no 3 in accordance with 4.2 (b): _____

Form EXP – 4.2(c)

Specific Design Experience

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

Bidder's Name: _____
Date: _____
Joint Venture Member's Name_____
RFB No. and title: _____
Page _____of _____pages

All Sub-contractors for key activities must complete the information in this form as per Section III, Evaluation and Qualification Criteria, Sub-Factor 4.2(c).

(C) Quantities of work executed as prime contractor or Sub-Contractor (in the same name and style) in the last five years:[12] [*Attach certificate from the Engineer-in-charge.*]

1. Key Activity No One: _____[repeat if applicable, for each activity specified in Section III: Qualification Criteria]

[12] Immediately preceding the financial year in which bids are received.

	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount	*[insert total contract amount in Rs.]*			
Quantity (Value) performed under the contract per year or part of the year in the last five 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				
Employer's Name:				
Address: Telephone/fax number E-mail:				

Others

Commercial or contractual aspects of the RFB documents that the Bidder would like to discuss with the Employer during clarifications.

Appendix to Technical Part

Memorandum of Understanding

This memorandum of understanding (MOU) is entered by and between M/S_____*(name of the bidder)* having office at_____ and M/S_____*(Specialized Sub-contractor)* having office at on *dd/mm/yyyy* to provide specialized job of providing _____ _____ (specify the job) stipulated in the RFB vide no._____ for **Design and Construction of Centre of Excellence (CoE) in Nursing, Guwahati, Assam.**

In case the bid is successful, the tender inviting authority awards the contract to _____ _____*(name of the bidder)*, then _____*(Specialized Sub-contractor) hereby confirms and accepts to provide* _____ *services as per the RFB No.-*_____ *to the* **Design and Construction of Centre of Excellence (CoE) in Nursing, Guwahati, Assam**

Further both parties are jointly and severally liable to execute the specialised job as agreed above.

Both the parties understood that this memorandum of understanding (MOU) shall be irrevocable and binding for both the parties.

For & On behalf of M/S_____(Name of the bidder)

Signature:
Name :
Designation.

For & On behalf of M/S_____(Name of the Specialized Sub Contractor)

Signature:
Name :
Designation.

Declaration regarding tax/duty exemption for materials/ construction equipment bought for the wor

(*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 Activity Schedules 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: _____ (*Signature*)_____
Place:_____ (*Printed Name*)_____
(*Designation*)_____
(*Common Seal*) _____

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

**** Modify the above to suit the requirements given in Government of India's Notifications as current of date of bidding.***

Form of Bid Security – Demand 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][13] (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 _____ [14]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.

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[13] *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.*

[14] *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.*

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.

This Guarantee will remain in force up to and including the date _____ [15]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.

[15] *45 days after the end of the validity period of the Bid.*

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 **ITB 5.1**, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this RFB process:

Under **ITB 4.8(a)** and**ITB 5.1**: *"none"*

Under **ITB 4.8(b)** and **ITB 5.1**: *"none"*

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/Bidders),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 Bid 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;[1] (ii) to be a nominated[2] 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 Bids documents and in contracts financed by a Bank loan, requiring (i) Bidders (applicants/Bidders), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect[3] all accounts, records and other documents relating to relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

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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 –EMPLOYER'S REQUIREMENTS

SECTION VII.
EMPLOYER'S REQUIREMENTS

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1. Employer's Requirements

1.1 The Assam Health Infrastructure Development & Management Society (AHIDMS) has proposed the Design and Construction of a Center of Excellence (CoE) in Nursing, Guwahati on EPC (Design & Build).

1.2 The details of building and approximate plinth area and particulars are indicated **in Architecture DBR**. The minimum plinth area and particulars are also indicated. The work is to be executed on **Engineering Procurement and Construction Basis.** The suggestive layout plan and conceptual architectural plans of buildings shall be provided by the department and are annexed with the document. The bidder shall provide complete planning and design, architectural drawings, detailed working drawings, structural drawings & service drawings for all buildings and development works & services sub head in schedule and any other drawings required for completing the project. The Contractor will also get the structural designs and drawings proof checked from a "Authority Engineer" if instructed by the Authority by an organization of national repute for proof checking of structural drawings/proposals prepared by the structural Engineer of EPC Contractor. The execution shall be done on the basis on the approved working architectural & structural drawings. CPWD Specifications, relevant IS codes, National Building Code 2016, Harmonised Guidelines & Standards for Universal Accessibility in India 2021,Guidelines of AERB, IPHS/NMC Norms and other standard specifications shall be followed in general except otherwise mentioned in bid document. Samples of the materials of approved make or otherwise shall be got approved from the Engineer-in-charge before use in the work.

1.3 The scope of work includes (Pre-Post) Statutory Approvals, topographical Survey, soil Investigation, preparation of architectural drawings, detailed working drawings, structural design & drawings of buildings, required services i.e electrical installations including all electrical fittings/fixtures, water supply pumps, sub-mersible pump, de-watering pumps etc. HT and LT including emergency and backup supply, sub-station, DG set with AMF panel, HT Panel, LT panel, feeder pillars. Lightning protection and Earthing system, External Lighting, Firefighting, fire detection, UPS, Lifts, Air conditioning VRV/VRF system, Ventilation, Smoke evacuation system, Street light design with control panel, Lighting in meeting room and any other services required but not specifically indicated,. Signages, liaisoning with statutory agencies like Fire Services, BSNL/MTNL, Central Electricity authority, Municipal Authority, Water supply & sewerage authorities, EIA, CPCB, CGWB / State Water Board etc, forest officer, fire officer, Electrical Service provider for obtaining the pre-construction and post construction clearances. The statutory payments to these agencies will be paid by the agency except the charges of HT Electrical Service connection from local supply agency to the HT energy meter in the premises of the building which will be initially paid by the contractor and reimbursed by the department to the contractor on producing the proof of charges paid to the local concern agency. Liasoning with the local supply agency shall be in the scope of the contractor for which, nothing extra shall be paid to the contractor. Thereafter complete construction and commissioning of building(s) alongwith all mentioned services is in the scope of the work.The scope of work is inclusive of site clearance, removing any legacy waste, vegetation, re-routing of existing underground services if any, making site encumbrance free for construction, setting layout on ground, profile, establishment of reference bench mark, installing various signage, taking spot levels, survey with total station construction of all safety and protection devices, barriers, earth embankments, preparatory works, all testing of materials working during monsoon, working at all depths, height and locations etc. unless specified in the schedule of quantities

1.4 The design of the Building should be based on GRIHA specifications and the bidder is to get the building so constructed to get 3 (three) star rating by GRIHA Version 2019 or latest. The work shall be carried out as per specifications laid down by CPWD including latest amendments, if any.

2. Environmental and Social (ES) Requirements

Contractors Environment and Social Management Plan (C-ESMP)

The Environment Management Plan (C-ESMP) is a set of measures for assessment, identification, minimization and mitigation of adverse environmental and social issues and impacts. The Contractor will abide by the environmental, social, occupational health and safety measures listed in the Environment and Social Management Plan (C-ESMP) given in the table below during preparation and execution of Works. Adverse impact/s on the environment caused due to non-adherence of legal and C-ESMP requirements during preparation and execution of civil works shall be made good at the Contractor's own expenses.

The complete document on Environmental and Social Management Framework (ESMF) is in the AHIDMS website. The activity to be carried out by the Contractor as a part of C-ESMP are as follows:

S. No.	Activity	Measures to be Implemented by the Contractor
1.	Work Plan for C-ESMP implementation	The Contractor is responsible for implementation of C-ESMP provided in the bid document. The contractor shall make additions in the C-ESMP provided depending upon the need/inclusion of any additional activities. The Environment, Health & Safety Officer/specialist/Expert will be responsible to update and ensure implementation of the C-ESMP. The Project Manager will coordinate and facilitate the implementation of the said plan. C-ESMP will be implemented to avoid, reduce, and minimize any impact which can harm the environment as well as the Building staff, patients, community in and around the site. The C-ESMP gives an account of the risks and impacts that have been identified and its mitigation measures to avoid or minimize the impacts. The C-ESMP also outlines the responsibilities and timelines for complying the suggested mitigation measures. Along with the Work Programme, the Contractor shall submit a plan including method statement and timeline about specific actions that will be taken by him to implement the provisions laid out in the C-ESMP.
2.	Regulatory Permissions and Consents	The Contractor shall obtain all requisite statutory clearances prior to commencement of civil works, which includes obtaining permission/consent for plants, water extraction and borrow areas operations. This includes:

S. No.	Activity	Measures to be Implemented by the Contractor
		▪ Consent for establishment and operation of plant (for concrete work) from SPCB ▪ Consent for establishment and operation for ETP & STP from SPCB, Assam ▪ Permission from Central Ground Water Agency for new bore wells. ▪ PUC certification for all vehicles/equipment used for/during construction ▪ Permission/consent of the District Administration/Mining Department/other agencies for quarrying and/or borrowing operations for materials like sand and earth ▪ Permission for water extraction, if applicable in the local area context. ▪ Land ownership documents with information on land parcels of the site concerned The Contractor shall abide by all conditions laid out in the said clearances.
3.	Consultation and Community Consent	The Contractor shall orient, consult and obtain written consents of landowners (individual/panchayat/govt. agency) for temporary use of land for all construction related activities including: (a) setting-up and operation of construction camp including labour camps, stock yards etc. (b) borrow areas and (c) disposal of debris and other waste material.
4.	Construction/ Labour Camp	a. Location: The camp and plant site/s location and establishment shall be done in a manner that does not interfere or disturb the activities of hospital staff, patients, local inhabitants, particularly those of schools and health facilities. Written permission (no objection certificate) shall be taken from the Gram Sabha/other authority and the land owner prior to location selection and a copy shall be submitted to the Engineer for approval. b. Camp site shall not be located within 250 mts. from a water body including village ponds. c. A distance of at least 500 mts. shall be maintained from designated/protected natural habitats (such as National Parks, Sanctuaries, Biosphere Reserves, Reserve Forests and Ramsar Sites) and Coastal Regulation Zone.
		d. Provision of basic amenities to the labourers:

S. No.	Activity	Measures to be Implemented by the Contractor
		o Proper sanitation: Separate toilets for male and female workers staying in labour camp connected to septic tank/ adequate waste collection and disposal arrangement o Adequate solid & liquid waste disposal and management provisions: Waste management system to be implemented in labour camp by providing adequate number of bins and collection/drainage system to avoid littering of wastes. o Sleeping space along with bedding provision. o Separate Kitchen/Cooking space along with fuel requirement for cooking. The Contractor shall ensure that fuel wood is not used as a cooking medium in the construction/labour camp. o Supply of safe drinking water. Drinking water supply of at least 40 lpcd with the required supply points shall be provided. o The drinking water will be tested quarterly through a NABL accredited laboratory. o Bathing space with water provision for male and female workers separately. o Sufficient lighting facility along with required numbers of fans. e. Fire Safety: Adequate fire safety precautions shall be taken and required fire safety equipment (such as fire extinguishers) shall be provided by the Contractor. f. Orientation on good health and hygiene practices, use of PPE and safety gears/ harness etc., prevention of GBV & SEA/SH and POSH, occupational health and safety g. It will be ensured that the Labours and staff is wearing the PPE h. Registration and Redressal of grievances of all type including SEA/SH/GBV of Labourers as per GRM protocol set up under the project. i. Clearance of migratory labour under Inter-state Migrant Workmen. j. Following labour management procedures and provision of basic amenities to labourers as guided by

S. No.	Activity	Measures to be Implemented by the Contractor
		Labour Management Procedures under ASSIST Project as in the **Link**[19] below.
5.	Site Clearance	a. No tree cutting is to be carried out without the written instruction from the Employer & concerned authority, who in turn will ensure that relevant regulatory permission/s (including those from Forest Dept., if required) are obtained prior to cutting of such trees. The Authority shall assist the Contractor in obtaining the Applicable Permits for felling and disposal of trees to be identified by the Contractor for this purpose if and only if such trees cause a Material Adverse Effect on the construction or maintenance of the Project. The cost of such felling and disposal shall be included in the Contract price. The Parties hereto agree that the felled trees shall be deemed to be owned by the Contractor after depositing the required amount to the concerned Department at the rates estimated by the Forest Department, Government of Assam and shall be disposed in such manner and subject to such conditions of the concerned Department. However, the Authority will assist in obtaining applicable permits for felling of trees.
		b. The non-timber grade trees are to be stacked and possession is to be given to Employer/concerned Govt. Department or as prescribed by the regulatory authority.
		c. The Contractor shall strip, store and preserve top soil from the site of construction work and in the stock yards prior to stacking of materials. The top soil shall be reinstated in the cyclone shelter compound after the construction is over.
6.	Protection of Properties and Resources	The Contractor shall take due care to protect and prevent damages to the following resources during preparatory and construction work: a. Water supply lines b. Irrigation canals c. Cart, cattle and/or foot trail/tracks d. Cultural properties and sites/structures of religious importance e. Houses, Farmlands, Orchards and/or Trees f. School and other existing buildings adjacent to the site of construction

[19] https://ahidms.assam.gov.in/sites/default/files/public_utility/Revised%20%20Labor%20Management%20Procedures%20%20%281%29.pdf

S. No.	Activity	Measures to be Implemented by the Contractor
		In case of damage due to construction activity, the restoration/repairs shall be carried out by the Contractor at his own cost.
7.	Quarry Operations	The Contractor shall procure material from quarries that have been approved/licensed by the State Govt. A copy of such an approval shall be submitted to the Engineer prior to procuring material.
8.	Borrow Areas	(a) Borrow areas for the project will be selected by the Contractor following the stipulations given below. The finalization of all such locations shall be dependent on the approval of the Engineer on technical and environmental grounds. This includes on-site verification to cross-check the accuracy of details provided by the Contractor. Only after receipt of the written approval from the Engineer, the Contractor shall enter into a formal agreement with landowner.
		(b) The Contractor shall not procure any kind of construction material (such as aggregates, sand and earth) from ecologically protected areas.
		(c) <u>Identification and Selection</u> 1. The borrow area should not be located in agriculture field/s unless unavoidable i.e. barren land is not available. In case borrowing needs to be done on an agricultural land, top-soil stripping, stacking and preservation is a must. 2. Borrow pits shall not be located within a distance of 100 mts. from any NH, SH or other roads. 3. Borrow pits shall be preferably located 500 mts. away from settlements/ habitations.
		(d) <u>Operation</u> 1. Area up to which material will be extracted shall be clearly demarcated on ground. 2. A 15 cm topsoil layer will be stripped and preserved in stockpiles.
		(e) <u>Rehabilitation of Borrow Areas</u> 1. Rehabilitation shall be satisfactorily undertaken immediately after the use has ceased and at least three weeks prior to monsoon.

S. No.	Activity	Measures to be Implemented by the Contractor
9.	Water Extraction/ Use	Water for construction and for use at construction camps (including labour camps) is to be extracted with prior written permission of (a) the individual owner, in case the source is private well/tube well; (b) Gram Panchayat in case the source belongs to community; and (c) Irrigation Department in case the source is an irrigation canal or a river (d) ground water authority in case extraction of ground water
10.	Safety of Road Users and Local Residents	a) Traffic safety arrangements (including provision of warning signage, speed breakers etc.) shall be made by the Contractor to ensure safety of road users and local people, particularly in the internal village roads which will be used for transporting materials.
		b) Material shall be adequately covered during transportation to prevent spillage, accidents and
		c) All required measures to ensure safety of local residents including children and other near-by residents shall be taken up by the Contractor. This shall include provisions to prevent unauthorised entry into the construction site and camp; fire and electrical safety measures; pre-cautions around excavation such as barricading and warning signs and safe storage of material
11.	Worker's Safety	a. All measures required for ensuring safety and health of the workers shall be taken up by the Contractor. This includes provision and enforcement of appropriate personal protective equipment; first aid facility; emergency response arrangement; proper storage of hazardous/ toxic and polluting materials and; measures for ensuring fire, electrical and mechanical safety arrangements in camp and in work
		b. All methods, steps and measures required for ensuring safety of workers, particularly those needed while undertaking work in or around excavations; working at height; and; while handling inflammable, toxic and/or hazardous materials shall be ensured by the
		c. Material safety data sheet record of fuel and other inflammable chemicals shall be maintained at the site.
12.	Air Pollution	a. Wind barriers or screens shall be provided in the downwind direction at air pollution causing sources like plant sites and fine material storage stock yards.

S. No.	Activity	Measures to be Implemented by the Contractor
		b. Fugitive dust emissions have to be eliminated by providing dust suppression/control measures, such as water sprinkling and cover on materials, based on activity and site conditions.
		c. All plants and equipment shall comply with pollution control norms.
		d. Water shall be sprinkled at least twice during dry day on haulage roads passing through or near settlements (including at least 100 m before the settlement).
13.	Water pollution	a. All measures (including provision of temporary silt fencing to control sediment run-off) required for avoiding adverse impacts to water bodies (such as ponds, streams, canals and rivers), water sources (such as hand pumps and wells) and adjacent farmland shall be undertaken by the Contractor.
		b. Storage of materials like fuel, chemicals and cement shall be done in a manner (with impervious layer on bottom and a covered shed on top) that does not contaminate land and ground/surface water.
14.	Noise Pollution	a. All noise causing activities shall be stopped during night time (9:00 PM to 6:00 AM). The Contractor shall schedule construction works in consultation with local Panchayat Authority and School Principal to ensure least disturbance to school children and other adjacent residents.
		b. Ear plugs shall be provided to the labour facing risk from high noise pollution such as plant site and those working near generators, heavy equipment/machinery.
		c. Appropriate noise controlling devices including acoustic generators shall be used to minimise noise during construction work and operation of camp.
15.	Disposal of Debris/Wastes	a. Debris and other construction waste, if any, shall be disposed in locations pre-approved by the Engineer in a manner that it does not contaminate the environment.
		b. Location of Debris Disposal Sites: Debris disposal sites shall be located preferably away from farmlands, water sources and water bodies. In no case, debris shall be disposed within 500 mts. of ecologically sensitive areas, including forests, wetlands and protected natural habitats.

S. No.	Activity	Measures to be Implemented by the Contractor
16.	Restoration and Rehabilitation of Sites	All work sites and areas under temporary use (including construction and labour camps, plant sites, haul roads and borrow areas) shall be restored/ rehabilitated to a better condition (if not at least to its original condition) and to the satisfaction of the Engineer and land owner upon completion of construction work by the Contractor. Completion of work (as covered under clause 55.1 of GCC) will also include completion of rehabilitation and clean-up of the work sites including camps, plants, in and around the construction site; disposal of debris/construction wastes at pre-approved locations and; restoration of borrow areas and other sites/locations used for material sourcing.
17.	Liabilities	Any liability arising out of Contractor's agreement with landowners/ local people/gram panchayat (including those related to temporary use of land, water extraction and disposal of debris) shall be settled by the Contractor.

3. SCOPE OF THE WORKS

3.1 Brief Particulars of The Work

3.1.1 AHIDMS, Assam proposed to "Design & Construction of Center of Excellence (CoE) in Nursing, Guwahati, Assam" on Engineering, Procurement and Construction (EPC) Design & Build Basis.

The details of the building and approximate plinth area and particulars are indicated in Table-A.
The minimum plinth area and particulars are also indicated. The work is to be executed on Engineering Procurement and Construction Basis/ /Design & Build Basis .
The suggestive layout plan and conceptual architectural plans of buildings shall be provided by the department and are attached as Annexure-I.

3.1.2 The execution will be done on the basis of drawings and schedule to be prepared by the in-house team of the bidder or consultant as appointed by the bidder with due approval of the department. The bidder shall engage a consultant, who shall provide complete planning and design, architectural drawings, detailed working drawings, structural drawings & service drawings for all buildings and development works & services sub head in schedule and any other drawings required for completing the project.

3.1.3 The drawings and schemes if variance to tender drawings than it shall be pre-approved from Authority Engineer . The execution shall be done on the basis on the approved working architectural & structural drawings. CPWD Specifications, relevant IS codes, National Building Code 2016, Harmonised Guidelines & Standards for Universal Accessibility in India 2021 and other standard specifications shall be followed in general except otherwise mentioned in bid document. Samples of the materials of approved make or otherwise shall be got approved from the Engineer-in-charge before use in the work.

3.1.4 The Contractor shall obtain all Pre & all Post construction clearances/approvals from Statutory Authorities. The scope of work includes Demolition of building structures etc. complete and taking away all fetched material out of campus, Identification and documentation of utilities requiring protection, relocation, or removal to facilitate construction, Topographical Survey, soil Investigation, site grading works including rock blasting using non explosive demolition agent, and earth cutting as required, Retaining wall & Random masonry works wherever required, Roads, internal pathways, Boundary wall, Landscape & Horticulture works, Car Parking Area development with pavement, markings and drainage provisions, development of Playground area complete with 2 Nos. Volleyball Courts and 3 Nos of . Badminton Court with all associated civil works, Campus Signage, Main Gate & Guard Room with Electromechanical boom barrier.

3.1.5 Preparation of architectural & interior drawings, detailed working drawings, structural design & drawings of buildings required services i.e electrical installations including all electrical fittings/fixtures, water supply pumps, submersible pump, dewatering pumps etc. HT and LT include emergency and backup supply, sub-station, DG set with AMF panel, HT Panel, LT panel, feeder pillars. Lightning protection and Earthing system, External Lighting, Firefighting, fire detection, UPS and any other services required but not specifically indicated, Signages, liaising with statutory agencies like Fire Services, BSNL/MTNL, Central Electricity authority, Municipal Authority, Water supply & sewerage authorities, EIA, CPCB, CGWB / State Water Board etc. forest officer, fire officer, Electrical Service provider for obtaining the

pre-construction and post construction clearances. The statutory payments to these agencies will be paid by the agency except the charges of HT Electrical Service connection from local supply agency to the HT energy meter in the premises of the building which will be initially paid by the contractor and reimbursed by the department to the contractor on producing the proof of charges paid to the local concern agency. Liasoning with the local supply agency shall be in the scope of the contractor for which nothing extra shall be paid to the contractor. Thereafter complete construction and commissioning of building(s) alongwith all mentioned services is in the scope of the work.

3.1.6 Agency will submit the structural steel erection manual, formality and modality as per standard best practice.

3.1.7 The scope of work includes:

- Dismantling & Demolition
- Topographical survey
- Soil Investigation
- Site grading and Rock blasting (Hydraulic Excavator /Blasting using non-explosive demolition agents.)
- Preparation of Architectural drawings
- Structural Design & Preparation of Drawings
- Detailed working drawings for Architecture, Structure, Fire Fighting & FA-PA System, MEP
- Services, External Development, Landscaping, Tree / Plantation etc.
- Construction
- Internal Water supply and sanitary installation
- External Electrical Service Connection
- Internal Electric Connection
- Power wiring and plugs
- Lightning conductors
- Telephone conduits
- Passenger Lift -13 Passenger.
- Water tank- over head without independent staging.
- Underground sump
- Excavating, supplying and filling of earthwork
- Campus Road with CC
- Paver Block in internal roads.
- Boundary wall
- Campus Signage, Main Gate & Guard Room with Electromechanical boom barrier
- Car Parking Area development with pavement, markings and drainage provisions
- Playground area complete with 2 Nos. Volleyball Courts and 3 Nos of . Badminton Court with all associated civil works
- External sewerage
- Horticulture
- Substation
- DG set
- 3 Phase UPS System with 30 minutes back up including Batteries
- VRV/VRF AC system
- CCTV, LAN

- IP base EPABX
- LED Street light
- Uninterrupted Power Supply
- STP
- Illuminated signages
- Fire Fighting system (Wet riser & Sprinkler system), Automatic Fire Alarm System and Fire Extinguisher.
- External Development (External Sewerage, Distribution line, Storm Water Drains, Horticulture & Levelling, Internal Road Paths with CC pavement)

3.1.8 Liaising with statutory agencies like Municipal, Fire Services, AAI, EIA, BSNL etc. for obtaining the pre-construction and post construction clearances. The statutory payments to these agencies will be paid by the contractor which is in the scope of the work except the charges of HT Electrical Service connection from local supply agency to the HT energy meter in the premises of the building which will be initially paid by the contractor and reimbursed by the department to the contractor on producing the proof of charges paid to the local concern agency.

Liaising with the local supply agency shall be in the scope of the contractor for which nothing extra shall be paid to the contractor.

Thereafter construction and commissioning of building(s) will be completed alongwith the above-mentioned services.

3.1.9 Obtaining mandatory approvals (Pre & Post Construction) from all local bodies/ State & Central authorities/ Municipal Corporation, EIA (Environmental Impact Assessment) clearance, fire clearance, forest clearance etc. for the complete works in scope of this contract. Approvals as per latest Assam local building Byelaws / Town & Country Planning (Assam) Bye laws with up-to-date corrections slips, necessary Environmental Clearance from the appropriate authority, NOC from Fire Department, NOC from Airport Authority of India etc. and any other statutory approval/Central Licensing Approving Authority etc., approval from authorities required for commencing the work, execution of work & services and handing over the assets. The defect liability period after completion of work shall be 12 months. The contractor has to withstand the warranty and has to provide repair services to building and all equipments & accessories during the defect liability period. The contractor has to attend the complaints of minor nature within 24 hours and the complaint of major nature within3 days of receiving the complaints. For this purpose, the contractor has to depute sufficient number of technical manpower within the building complex. In case, if the complaint is not attended and rectified by the contractor within the specified period as above the work shall be got rectified by the department and the recovery at the double rate of cost of execution of work shall be recovered from the dues of the contractor. LED fitting/fixtures shall withstand the warranty of five years from the date of handing over the installations to the client department.

3.1.10 The cost of labour, material, tools and plants and machinery required for execution of the whole project as per Layout plan& detailed design and drawings to be approved, specifications etc. is within the scope of this work The buildings are to be planned and registered to meet THREE STAR GRIHA rating.

3.1.11 The contractor is required to execute the work in a befitting manner to suit these standards. The contractor shall take all precautions and abide by all rules, regulations and directions of the regulatory authorities, municipalities, traffic, labour, green tribunal in respect of all kinds of pollution, C&D waste management, labour safety measure etc.

Buildings:(Academic and Admin Building, Hostel Block -2 seater & 3 seater, PG Hostel Building, Directors Bungalow, Substation)

Floor-wise distributions of various facilities are only indicative. The area details included in scope of works are as below:

Built Up Area

Table-A

Description	**Academic Block**	**Unit**
No. Of Floors	**G.F+2**	
GROUND FLOOR	3319	
FIRST FLOOR	2919.38	
SECOND FLOOR	3020.7	
TOTAL	**9259.08**	**Sqm**
Description (Partial Basement +G+4)	**Hostel Block-2-seater**	
No. Of Floors		
Partial basement	381.97	
Ground Floor	824.62	
First Floor	921.36	
Second Floor	1061.76	
Third Floor	1061.76	
Fourth Floor	1061.76	
TOTAL	**5313.23**	**Sqm**
TOTAL (2 nos)	**10626.46**	**Sqm**
Description (Partial Basement+G+4)	**Hostel Block-3-seater**	
No. Of Floors		
Partial basement	402.58	
Ground Floor	544.23	
First Floor	962.57	
Second Floor	1088.46	
Third Floor	1088.46	
Fourth Floor	1088.46	
TOTAL	**5174.76**	**Sqm**
Description (G+3)	**P.G. Hostel Block**	
Ground floor	784.03	
First floor	776.53	
Second floor	776.53	
Third Floor	776.53	

TOTAL	**3113.62**	**Sqm**
Description (G+1)	**Director Bungalow (G+1)**	
Ground floor (RCC)	141.00	
First floor (RCC)	141.00	
TOTAL	**282.00**	Sqm
Substation house	**300.00**	**Sqm**
SITE DEVELOPMENT		
Total available Land area	71.00	**Bighas**
Boundary wall length	1530.00	**m**
Storm water drain	1063.00	**m**
Random rubble masonry wall with avg depth of 2.5 m	400.00	**m**
RCC Retaining wall length with avg depth of 4.5 m	550	**m**
Horticulture works	7170.00	**Sqm**
Internal roads	7587.60	**sqm**
Footpath	3028.75	**Sqm**
External sewerage	450.00	**m**
Main Gate with security Room	1	**Nos**
Backfilling and levelling	17737	**sqm**
Excavation	31283	**Cum**
Non-Explosive Rock Blasting	9384.90	**Cum**
STP works (2 nos)-Total capacity (100 KLD)	100	**KLD**
UGR	500	**KLD**

Area and quantum of work as per layout attached in Annexure-I.

Buildings can be RCC Framed structure/RCC Composite Structure/PT Slab. Contractors can explore and achieve given design intent. However, DBR of Structure is for RCC Framed Structure only.

3.1.12 Note:
The payments to Contractor shall be made on the area basis w.r.t each building.
The area for purposes of payment shall be the plinth area constructed. Areas for security cabins at entrances, pump room, underground structures including UG Tanks, ESS, STP/WTP/Borewells etc. shall not be reckoned towards the plinth areas and their cost shall be deemed to be included in the respective subheads/items of works.
The total plinth area of a building shall be the sum total of the plinth area at every floor including the basement, if any.

3.1.13 Gallaries, Mezzanine Floors, Lofts.

Area of galleries i.e. upper floor of seats in an assembly hall, Auditorium, theatres, etc. shall be fully included in the plinth area.
Area of mezzanine floor i.e. an intermediate floor introduced between two main floors, shall be included in the plinth area, if no separate provision is made for the same.
The area of a loft i.e. an intermediate slab just beneath the floor of roof without any direct staircase leading to it and used for storage purpose shall not be included in the plinth area.

Necessary provision for car parking to be provided while preparing the architectural drawings. Depending upon the adequacy of the land for car parking as per local bye laws, car parking building may be included in the scope of work for which payment will be regulated as per DSR'2021 with relevant Cost index or market rate as applicable on date of execution.

3.1.14 Schematic layout plan, Concept drawings of buildings are attached with bidding documents. These are only indicative just to give idea regarding works. The successful bidder shall appoint an architectural consultant who in association with other specialized consultants shall prepare the architectural. Architectural Consultant shall incorporate all the suggestions and modification as directed. Indicative soil investigation and survey drawing is attached.
However, necessary detail survey and soil investigation has to be carried out by the successful bidder for co-relations data and results as indicated in the survey site plan, drawings & soil investigation report as attached with bidding document. No claim about extra payment the change in site condition or soil strata/bearing capacity / water table shall be entertained in future. No claim whatsoever will be entertained in future in this regard.

3.2 Electrical & Mechanical Works:
3.2.1 Brief description of E&M works:

General Services in the scope of E&M Works

- Design, Drawings, Vetting and shop drawings to be provided by Contractor, Schedule of Quantities of various items involved in this work which has been elaborated in detail in Bill of Quantity.
- Design of electrical installations including all electrical fittings/fixtures, water supply pumps, de-watering pumps etc., as necessary.
- Design of Power Supply & Distribution system of HT and LT including emergency and backup supply, sub-station, DG set with AMF panel, HT Panel, LT panel, feeder pillars etc.
- Design of EPABX system, intercom communications facilities, data cable/networking system.
- Design of Lightning protection and earthing system.
- Design of External Lighting
- Design of UPS back up wherever indicated.
- Design of Fire fighting, fire detection and PA system design
- Design of Street light design with control panel
- Design of C.C.TV & equipments.
- Design of Water supply submersible & booster pumps, dewatering pumps etc
- Proper coordination with civil engineering/ mechanical engineering features /services.
- Liaisoning with other statutory agencies like Fire Services, BSNL, local bodies etc. for obtaining the pre construction and post construction clearances. The statutory payments to these agencies will be paid by the agency.

3.2.2 Site Development Works as per Master Plan and Site Requirement (including survey, investigation, design and construction):

3.2.3 Roads: The road shall be constructed as per requirement and the drawing submitted by contractor and approved by Authority Engineer.

A	Main road and peripheral Road	Approach and peripheral roads & pathways as per functional requirements, of the building & as per drawings approved by the Engineer in charge.

3.2.4 Water supply, Storm water drains and sewer line:

- Survey, investigation, design and execution of dual water supply system of the whole campus including fire fighting system.

- Providing and laying dual water supply lines (one for fresh water and one for treated wastewater) around the building as well as in green areas, inside the building. The wastewater from bathrooms, toilets, canteen and other such area is to be collected and treated in STP and the treated water is to be storage in separate under ground sump, which shall be lifted through pumps and collected in a separate over head tank for supply to the Water Closets only for flushing purpose and for watering in the green area with the uniform sprinkling facility. The surplus wastewater is to be drained out in the main sewer line. Separate over head tank for domestic, flushing and fire requirement are to be provided.

- Any dead / live sewer line / water supply line / electrical lineetc if passing through the site shall have to be removed / diverted/relocated to clear the site of any obstruction caused by such lines. Any approval from the local authority for such an action will also be taken by the bidder without any extra payment.

- Survey, investigation, design & construction of storm water drains, sewer line i/c connection to the trunk sewer line /STP/nearest drain. Sewerage treatment plant and the Rainwater harvesting, underground sump overhead tank are included in the scope of work. It should be insured that the wastewater should be collected in the collection tank before the STP plant through gravity.

3.2.5 Landscape and Horticulture:

- Survey, investigation, design & execution of Landscape works as mentioned/indicated in Master Plan and vertical plantation for entire plot (both hard & soft) in and around the existing/proposed buildings, roads & services in the scope of this tender and the maintenance of same upto defect liability period of 12 months. Landscaping plan including parks, planters and other details etc. as per concept/ landscape layout prepared by consultant, including water bodies, planters, plantation, street formation and other details for the horticulture works and execution of same including providing unfiltered/recycled water supply lines. Development of landscape, construction of its toe wall, providing SS railings, wicked gates, water hydrants, the grassing with Mexican grass, creepers and planting trees etc. shall be completed as per the specification and drawing approved by the Engineer-in-charge. Other Items which are not mentioned above but are essential considering functional requirements.

3.2.6 Note:

- All works has to be executed as per specifications provided in the bid document, CPWD Specifications Vol-I &Vol. II-2019 and National Building Codes 2016, (in case of

difference if any, stringent / higher specification of the two shall be followed. In absence of CPWD Specification, IS Codes, Harmonised Guidelines & Standards for Universal Accessibility in India 2021, MoRTH Specifications, National Building Code 2016, CPWD Specifications & sound engineering practices and other standard specifications suitable for modern office building and latest technology shall be adopted as per order of precedence defined in the contract.

- The scope of works & specification are given in general but they are not exhaustive i.e. does not mention all the incidental works required to be carried out for complete execution of the work. The work shall be carried out, all in accordance with true intent and meaning of the specifications and the drawings taken together, regardless of whether the same may or may not be particularly shown on the drawings and/ or described in the specifications, provided that the same can be reasonably inferred there from. There may be several incidental works, which are not mentioned in the contract document/specifications but will be necessary to complete the items in all respect. All these incidental works/ costs which are not mentioned but are necessary to complete the work shall be deemed to have been included in the overall amount quoted by the contractor for various components of work. No adjustment of rates shall be made for any variation in quantum of incidental works due to variation/change in actual working drawings. Also, no adjustment of rates shall be made due to any change in incidental works or any other deviation in such element of work (which is incidental to the items of work and are necessary to complete such items in all respects) on account of the directions of Engineer-in-charge. Nothing extra shall be payable on this account.

- In case, some of descriptions are missing in the scope of work or specifications in the bidding documents, items / work shall be executed as given in the CPWD Specifications, NBC-2016, Harmonised Guidelines & Standards for Universal Accessibility in India 2021, IS Codes etc and according to sound engineering practices so as to make the building including related services fully functional. No claim whatsoever shall be entertained at later stage. All cost of providing and making buildings with services, landscape and horticulture works fully complete and making buildings facilities functional in all aspect unless specifically mentioned in the contract document.

3.3 Brief Description of Activities:

3.3.1 Planning:

- Survey, investigation (including soil investigation) and other related works & services. Identification and documentation of utilities requiring protection, relocation, or removal to facilitate construction.

- Architectural planning & Structural designing of buildings & services in the campus and obtaining all statutory / local body approvals (Pre & Post Construction) through the statutory bodies. The agency shall also take permission from Fire Department/Environment/Pollution control Board, other necessary approvals from local bodies etc required to start construction work as per plinth area given above. Signature / authority of department or the client department whenever required shall be provided to the contractor. All liasoning and charges to the concerned authority shall be paid by the contractor for obtaining the clearance. The charges so paid by the contractor are in the scope of the work. This also includes Environmental Impact Assessment & clearance and compliance, Traffic Impact assessment and design of merging/demerging of traffic etc.

- The structural design of earthquake resistant RCC framed structure buildings & design of services in the campus and getting approval from Authority / Authority Engineer and vetting of drawings by Authority Engineer .In rare occasion, client may ask the contractor to vet Structural designs / drawing of critical components by institute of repute like IIT and cost for the same will be borne by Contractor. The IS codes/Standards to be followed for the design & execution of reinforced concrete structure shall be as given below i:

3.3.2 IS CODES to be followed for design of building

- All the design shall be based on Indian standard & codes as specified here. List of commonly used Codes and Standards:
- IS-875 (Part 1,2,4, & 5)-1987 - Code of Practice for Design Loads (Other Than Earthquake) For Buildings and Structures.
- IS-875 (Part 3)-2015 - Code of Practice for Design Loads (Other Than Earthquake) For Buildings and Structures.
- IS1893-2016 - Criteria for Earthquake Resistant Design of Structures
- IS-456-2000 - Plain and Reinforced Concrete - Code of Practice
- IS-13920-2016 - Ductile Detailing of Reinforced Concrete Structures Subjected to Seismic Forces - Code of Practice
- IS-800-2007 - Code of Practice for General Construction, In Steel
- Code IS 1786 -2008 - Specification for high strength deformed steel bars and wires for concrete reinforcement
- SP-34 – Handbook on Concrete reinforcement and Detailing
- SP-16 – Design aids for IS-456
- IS 1904 - Indian Standard Code of Practice for Design and Construction of Foundation in Soils: General requirements.
- IS 11384:-Code of practice for composite construction in structural steel and concrete.
- National Building Code of India. NBC-2016

- IS 11384-Composite construction in structural steel and concrete.
- IS 14458 (Part 1 to 5) – Guidelines for Retaining Walls for Hill Areas (type selection, design and construction of retaining / breast walls in hill terrain).
- IS 14680 : 2024 (superseding IS 14680:1999) – Landslide Control Measures – Guidelines, for selection of landslide control and slope stabilization measures in hill areas.
- IS 4081 : 2013 – Blasting and Related Drilling Operations – Code of Safety
- IS 16651 – Design and installation of post-installed mechanical and chemical anchors in concrete (for anchors in concrete)
- IS 14458 / IRC / MoRTH guidelines – Retaining walls and hill/slope protection (as relevant)
- NIDM "Landslide Preparedness Guidelines for Safety of Buildings on Slopes" for good practice on siting, drainage, benching, buttress fills, etc.

In addition to above any additional code wherever applicable to be followed. In absence of Indian codes, international codes to be followed. In case of revisions in code, latest codes to be followed.

(Note: Latest updated revisions of the codes and standards would be applied where applicable).

3.3.3 Design and construction of buildings, services, fittings etc. as per 3 STAR GRIHA rating including dual plumbing system (One from the normal water supply line and the other from the treated water supply of STP for flushing, horticulture purpose), energy saving LED lights etc.

Building shall be designed for differently-abled persons as per the latest norms of Central Govt.

3.4 Execution of Work:

- After approval from AHIDMS and getting approval from local bodies including necessary modifications as per the requirements, execution of work as per the scope of buildings & services defined in the contract document, CPWD Specifications, NBC-2016, Harmonised Guidelines & Standards for Universal Accessibility in India 2021, IS Codes, MoRTH Specifications and Sound Engineering Practices and handing over the assets.
- Submission of completion plan of the building & services including getting approval/clearance from local bodies. Submission of building & services plan & drawings and other related documents both in hard copy 6 nos and the soft copy (in Auto CAD and other software used for the purpose) after completion (i.e. 'as- built').
- Clearance of site before Handing over of the facilities after fulfilling all the obligations under the contract.
- Obtaining necessary clearances/licenses from different local bodies/ statuary authorities required to make office building fully operational during/after completion of work.

3.5 Establishing Site Laboratory And Testing of Materials

Equipment's for conducting necessary tests (as per CPWD Specifications 2019 Volume-I) shall be provided and installed at site in the well-furnished site laboratory by the agency at his own cost. The following laboratory equipment should be in general or as and when required be set up at site laboratory: -

Sl. No.	Equipment	Numbers
1.	100MT compression testing machine, electrical -cum-manually operated)	2
2.	Slump cone, steel plate, tamping rod, steel scale, scoop	3
3.	Vicat Apparatus with Desk pot	1
4.	Megger & earth resistance tester	1
5.	Pumps and pressure gauges for hydraulic testing of pressure	1
6.	Weighing scale platform type 100 Kg	1
7.	Graduated glass measuring cylinder of various capacity	As per requirement
8.	Sets of sieves of 450mm internal dia for coarse aggregate [100mm, 80mm, 40mm, 20mm, 12.5mm]	2 sets
9.	Sets of sieves of 200mm internal dia for fine aggregate [4.75mm; 2.36mm; 1.18mm; 600microns; 300 microns & 150 micron, with lid and pan]	2 sets
10.	Sieve Brushes and sieve shaker capable of200mm and 300mm dia sieves, manually operated with timing switch assembly	1
11.	Cube moulds size 70mmx70mmx70mm	18
12.	Cube moulds size 150mmx150mmx150mm	36
13.	Ultrasonic pulse velocity Test Equipment (For concrete)	1
14.	Hot air oven temp. Range 50°C to 300°C-sensitivity 1 Degree	2
15.	Electronic balance 600gx0.1g., 10kg and50 kg	2
16.	Physical balance weight up to 5 kg	2
17.	Digital thermometer up to 150oc	3
18.	Air Content of concrete testing machine	1
19.	Measuring jars 100ml, 20ml, 500ml	5 Nos each size
20	Gauging trowels 100mm & 20mm with wooden	5
21	Spatula 100mm & 20mm with long blade wooden handle	5
22.	Vernier calipers 12" & 6" size	3 each
23.	Digital PH meter least count 0.01mm	3 each
24.	Digital Micrometer least count. 0.01mm	3 each
25.	Digital paint thickness meter for steel 500microns	2
26.	GI tray 600x450x50mm,450x300x40mm,300x250x40mm	3 Nos each
27.	Electric Motor mixer 0.25 cum capacity	1
28.	Rebound hammer test digital rebound hammer	2
29.	Screw gauge 0.1mm-10mm, least count 0.05	4
30.	Water testing kit	2
31.	Motorized sieve shaker	2
32.	Pruning Rods 2 Kg weight length 40 cm and ramming face 25 mm2	2
33.	Extra Bottom plates for 15 cm cube mould	15
34.	Standard Vibration Table for gauging theCubes	2
35.	Pocket concrete penetrometer 0 to 50kg/sq.cm	3
36.	Concrete temperature measuring thermometer with Brass protection sheath0- 100 degree centigrade	2

37.	Mortar Cube vibrator	1
38.	Dial type spring balance preferable withzero correction knob capacity 100 kgs.Reading to ½ kg.	2
39.	Counter scale capacity 1 kg and 10 kg	2
40.	Iron Weight of 5 kg, 2 kg, 1 kg, 500 gm, 20 gm, 100 gm	2 each
41.	Brass Weight of 50 gm, 2 gm, 10 gm, 5 gm,2 gm, 1 gm	2 each
42.	Measuring cylinder TPX or Poly propylene capacity 100 ml, 500 ml, 250 ml, 1000 ml	3 each
43.	Pyrex, corning or Borosil beakers with cover capacity 500 ml, 20 ml, 50 ml	3 each
44.	Wash Bottles capacity 500 ml	5
45.	Thermometers 1-100 degree centigrade /max. and Min/ Dry and wet with table	3
46.	Set of box spanner ratchet	2
47.	Hammer 1lb& 2lb	3 each
48.	Distance metre (of 100 metre)	2
49.	Hacksaw with 6 blades	3
50.	Measuring tape (5 metre)	4
51.	Depth gauge 2 cm	6
52.	Shovels& Spade	6
53.	Steel plates 5 mm thick 75x75 cm	6
54.	Plastic or G.I. Buckets 15 ltr, 10 ltr, 5 ltr	2 each
55.	Wheel Barrow	10
56.	Floor Brushes, hair dusters, scrappers, wirebrush, paint brushes, shutter steel plat oil,kerosene with stove etc.	3 each
57.	Any other equipment for site tests as outlined in BIS codes and as directed bythe Engineer-in-charge.	As per requirement
58.	Concrete Core cutter Machine	2

3.6 Requirements of Plant and Equipment at Site

Sl. No.	Equipment	Numbers
1.	Builders hoist	3
2.	Centralized concrete batch mix plant of minimum capacity 30 cum per hour (fully automatic with computer control)	2
3.	Excavator cum loader (JCB 3D model or equivalent).	2
4	Hydraulic Excavator	3
5	Compressor machine minimum 20 CFM with rock Breaker.	2
6	DG set	2
7	Automatic batch mix plant (With printer facility) Min 30cum/hr	1
8	Mini batching plant (6 cum./hr.).	2
9	Transit mixers.	As per requirement
10.	Concrete pump	3
11.	Needle Vibrators.	12
12.	Screed leveler.	3
13.	Plate Vibrator	3
14.	Automatic Ring making machine(Reinforcement)	2
15.	Dumper/Tipper	As per requirement
16.	Reinforcement bending machine.	2
17	Reinforcement cutting machine.	2
18.	Power driven earth rammer (Soil compactor).	1
19.	Total survey station.	1
20.	Water tanker (Minimum capacity of 5000 liters)	2
21.	Welding machine 400 Ampere	3
22.	Screener for coarse sand and fine sand	3
23.	Centrifugal mono block water pump minimum capacity 2 HP	3
24.	Road roller / Vibratory roller 8 to 10 tonnes	1
25.	Drilling machine	3 Nos.
26.	Steel Shuttering with necessary tubular pipe props	12000 sq.mt.
27.	Double steel scaffolding and staging materials.	As per requirement
28.	Air compressor	2 Nos.
29.	Floor grinding/polishing machines	5 Nos.
30.	Granite cutting machine	2 Nos.
31.	Ceramic tile cutting machine	2 Nos.
32.	Granite polishing machine	2 Nos.
33.	Granite hand polishing machine	2 Nos.
34.	Mobile tower crane	1 Nos.
35.	Vacuum dewatering machine for concrete	2
36.	Good quality Camera and handycam for taking photographs and video recording of major activities for record purpose and for quality assurance	1 each
37.	Any other machinery required for completion of the work as per decision of Engineer-in-charge.	As per Actual Requirement

3.6.1 Note:

- Workshop facilities for fabrication/addition and alterations, and other allied works shall be arranged by the contractor at his own cost.
- The list of equipment/T&P/machinery as per above is for general guidance. In addition to these, machinery / equipment as required shall be arranged by the contractor in case the requirement at any stage exceeds as per the Programme finalized at his own cost and nothing extra whatsoever on this account shall be paid. This includes equipment for arrangement of concrete from RMC producing plants also.
- All the equipment, T&P and machinery shall be kept in good working conditions.
- Equipment like batching plant, concrete pump excavators/Transit mixer etc. shall be allowed to be moved away from the site when, the same are no longer required at site of work in the opinion of Engineer-in-charge.
- In addition to above list, contractor is bound to brought at site any test equipment for any item of work, at his own cost, which Engineer-in-Charge may direct him. Nothing extra shall be paid to contractor in this regard. Direction of Engineer-in-Charge in this regard shall be final & binding.
- If contractor fails to comply such directions within time specified by Engineer-in-Charge, the same shall be brought to site by department by any means at cost of contractor itself and nothing shall be paid in this regard.

3.7 Architectural Planning & Design

General Conditions for Planning & Design:

In case of non-availability of in-house capabilities in consultancy for any specialized component of Engineering services, the Firms / Consultants will submit intention to engage/associate sub consultant/firms having domain specific specialization to prepare working drawings based on concept drawing, DBR, Technical specification, Client requirement and any other norms required to fulfill functional requirement to operationalize the campus who has got expertise for architecture and structural engineering .

The bidder may engage a Firm / Consultant (whether titled as an Architectural firm or Engineering firm), as proposed in the bid with a MoU, which shall provide consultancy services in project, detailed architectural drawings, detailed structural analysis, designing and detailing of all services, their drawings & approval, external development works, landscaping, etc. Such Consultant shall prepare and supply all the coordinated Good for construction drawings and get them duly proof checked and approved. The Consultant shall be associated till completion of the project and support AHIDMS in obtaining the completion certificate from the concerned local body.

- The bidder shall within 15 days of award of work, submit details of all Consultancy work of consultancy services of similar nature completed by such firm/ consultant (proposed to be engage) during the last ten years. Also performance report of consultancy services & Structure and Organization details will also be submitted by the bidder.
- In case the proposed consultant does not meet the requirement, the agency shall propose another eligible /capable consultant meeting the requirements immediately upon receipt of such directions from Engineer-in-Charge and no hindrance shall be available to them on this account.

3.8 Role of the Bidder if they utilize their inhouse capacity

- The Role of the Bidder is to Design & Construction of Center of Excellence (CoE) in Nursing, Guwahati, Assam, including Internal & External Civil, Electrical & Mechanical Services on Engineering, Procurement and Construction (EPC) Basis.

  The work shall also include Planning, Designing, Installation, testing and commissioning of E &M services like Internal & external Electrification of Building, Electrical Substation, LT panels DG Set, HVAC, Fire Detection system, CCTV, Firefighting, wet riser and sprinkler system, Fire Alarm & Public Address System, drinking water supply system, Dewatering, UPS other E&M services .

  The contractor shall provide comprehensive services in project conceptualization covering space utilization, functional requirements, preparation of LOP, Project cost estimation, Detailed Architectural drawings, structural drawings and various services design, Detailed Project Report including schedule of quantities etc. The project report shall cover all project components in detail. The details of the scope of the work involved mentioned in this Bid Document are broad and suggestive. Notwithstanding the details of the scope of the work and role of contractor mentioned elsewhere in this Bid Document, the contractor is required to provide drawing and design in all aspects of the work for completing comprehensive planning and designing for proposed construction of buildings.

  The contractor shall take all necessary statutory approval from all authorities including local authority, Pollution Control Board, Dept. of Forest & environment, Fire Services of Govt. of Assam, CEA, Air Port Authority etc. Preparation of all submission drawings / materials/ 3D-walk through as per norms and models for these approvals will be the responsibility of the consultant. The statutory approvals shall include obtaining Fire Clearance from CFO and completion certificate for the completed building from the local and statuary bodies.

  All Environmental Impact and Social Impact Assessment have to be done by the contractor.
  Refer to the report on "Environment & Social Impact Assessment and Management Plan" attached with this document.

3.9 Scope of Services

The bidder shall also provide the following services.

- All Architectural Services including building plans/ all hard and soft Landscaping/Signages.
- All Quantity Surveying Services
- All Civil & Structural Engineering Services including all proof checking work.
- All Electrical Engineering Services i/c all proof checking works.
- All Mechanical Engineering Services i/c all proof checking works.
- All Public Health Engineering Services i/c all proof checking works.
- All Waste Water treatment and Management System i/c all proof checking works.
- Green Building Concept (TERI-GRIHA Norms to be followed).

3.9.1 The building should be designed for barrier free and accessibility as per hand book on "Barrier free and Accessibility" available and NBC 2016 with available latest guidelines.

Building should be designed based on CPWD guidelines for sustainable habitat with available latest guidelines.
3.9.2 The landscape should be designed based on "a hand book of landscape –with available latest guidelines.
3.9.3 The rain water harvesting shall be designed based on "rain water harvesting and conservation manual" with available latest guidelines.
3.9.4 All fittings for building, Meeting Hall and all E&M.
3.9.5 All interiors and all acoustical treatments.
3.9.6 All water supply & drainage system
3.9.7 All I.T. Service.
3.9.8 Any other services which are required but not specifically indicated.

3.10 The bidder shall be responsible for carrying out the following works

3.10.1 Preliminary Stage:

- Carry out topographical survey and the survey of all existing services if any and other constraints existing in and around the site.
- Identification and documentation of utilities requiring protection, relocation, or removal to facilitate construction.
- Carry out geotechnical investigation of the site to establish the soil characteristics and other parameters required for the foundation design of multi-storey buildings. Types of investigation/tests and their qualities shall be get approved from Engineer-in-Charge. Soil investigation agency should be experienced in carrying out the work of similar magnitude, specialized and should be got approved from Engineer-in-charge.\
- The contractor shall also get ascertained the liquefaction potential of soil to required depths using modern methodology e.g. Spectral Analysis of Surface Waves (SASW) test or any other method and combination of tests approved by Engineer-in-charge and suggest remedial measures and account for same while suggesting the foundation system and suggesting bearing capacity/load carrying capacity.
- The soil report shall be reviewed and vetted by Authority Engineer as approved by Engineer-in-charge.

3.11 Master Plan/Lay out plan.

- Submission of the revised Master Plan to local bodies and incorporating changes, if any, suggested by them and re- submitting the same.
- Obtaining approval of the revised master Plan from local authorities for the work under this project.
- Concept Design.
- Interact with the user departments of client and finalize the functional plan.
- Development of the concept design.
- Submission of the draft concept design and make presentation of the scheme.
- Modifications of the draft concept plans taking into account the comments, suggestions etc. of the client and the Department.
- Submission of the final concept design along with models, photographs,3D-walk through and as per the requirements & norms etc. The cost of such models, walk through, photographs, etc. shall be borne by the consultant.
- Obtaining approval of the Concept design from the EIC.
- Development of the Submission Plans.

- Submission of the design, drawings and related documents to concerned local authorities
- Modifications of the design, drawings etc taking into account the comments, suggestions etc. of the local bodies
- Re-submission & obtaining approval of the design, drawings etc from local bodies.
- Carrying out Environment Impact Assessment, submission of the same and getting approval from concerned authorities.
- Obtaining necessary approval of the project from Local authority.

3.12 Detailed Design Stage

3.12.1 Architectural Services

- Prepare drawings, schedules and specification of materials and workmanship, in sufficient detail. The drawings & documents shall include detailed site plan, detailed drawings for building including floor plans, interior details, elevations, sections, door & window schedules, finishing schedules, wall profiles, Staircases, ramp details, Exterior wall cladding & Paneling details, 3D Murals & artworks, details of important building parts / areas, Roads, pavement, landscape & horticulture details etc. As far as possible standards of quality performance requirement and descriptive names shall be used rather than specific products or brand names.

- Prepare and issue "Good for construction" drawings. Drawings shall be adequately detailed and shall contain enough information to enable construction. The working drawing shall include:
- Layout Plan showing:

  Proposed building, green area, location of UGR and OHT, STP, Sump, RWH, Elect. Sub- Station Roads and drain etc.
  Blow up of road junction / parking area, Playground and landscaping, Boundary wall. and other such area as required.
  Coordinated External services

3.12.2 Detailed Drawings

The Architect shall prepare, coordinate, and deliver the following drawings for all buildings (hostel blocks, academic blocks, PG hostel, Director's bungalow):

- Fully coordinated floor plans with all services/disciplines (structural, MEP, landscape, interiors, fire-fighting, etc.).
- Elevations and building sections at required scales.
- Wall profiles, room layouts, and partition details.
- Door and window schedules, joinery details, hardware specifications.
- Staircase and ramp details, including handrails, riser-tread configuration, balustrade details, and landing designs.
- Detailed drawings of building components, materials, finishes, service shafts, insulation, façade systems, etc.

3.12.2.1Toilet and wet area Details

- Floor plans, fully coordinated with all services/disciplines, Elevations, Sections, Wall profiles, Doors & Window details, Stairs/Ramps details. Details of building parts, areas. Toilet details.
- Waterproofing works
- Flooring pattern and details
- Wall cladding details.

3.12.2.2 Finishing works

- Flooring pattern drawings
- Wall cladding works
- Ceiling layouts
- Painting works

3.12.2.3 Waterproofing works

- Toilets & wet areas
- Roof terrace
- Basement walls and floors
- Water bodies & landscaping ponds

3.12.2.4 Art works and Architectural Features

Details drawings for murals, installations, façade art, sculpture foundations, signage design etc.

3.12.2.5 Landscape Architecture

- Conceptual and detailed landscape master plan for the campus surroundings of all blocks.
- Integration of softscape (plants) and hardscape (paving, seating, pathways).
- Site grading and earth contouring.
  Coordination with external services (storm water, utilities, irrigation, lighting).Finalizing finishing schedule, elevation treatment, fixtures, colour scheme of all building
- Integration of design with the existing landscape including water bodies and suggest modification if any.
- Any other details required for completion of the buildings/services.

Inspect the works and attend meetings during execution to give clarifications, if any, and to modify the drawings as per the site/construction requirements.

3.12.3 Civil and Structural Engineering Services

3.12.3.1 Structural Design Development

Design Basis (For Construction in Hilly / Sloping Terrain with Controlled Rock Excavation)

- Site Surveys, Geotechnical Investigations and Data Collection
- Conduct detailed topographical and contour surveys to record level differences, slope angles, natural drainage channels, and existing rock outcrops.

- Carry out geotechnical investigations including boreholes, trial pits, geophysical tests, and rock mass characterization (RMR, GSI) to determine soil/rock properties and foundation requirements.
- Assess slope stability, rock fall potential, and the need for retaining or stabilization structures.
- Investigate safe methods for rock cutting on slopes, including:
- Use of hydraulic 3D excavators equipped for precision cutting, ripping, and benching.
- Use of non-explosive demolition agents (e.g., expansive mortar) for controlled rock fracturing.
- Controlled blasting only where absolutely necessary, following local regulations and safety protocols.

3.12.3.2 Structural Planning and Analysis

- Structural framing shall be coordinated with architectural design considering stepped levels, split floors, and terraced foundations necessitated by the slope.

- The entire structure shall be analyzed as a 3D space frame using ETABS / STRAP / STAAD or any standard design software. SI units shall be used throughout.

- Structural analysis shall include:
  Dead Loads (DL)
  Live Loads (LL)
  Wind Loads (WL)
  Earthquake Loads (EQ) (as per IS 1893 Part 1, zone classification applicable for hilly regions)
  Earth pressures on retaining structures
  Additional forces induced by slope excavation and rock cutting
  Story drift, lateral displacements, and torsional responses shall be checked thoroughly due to the tall structure and terrain irregularity.
  Shear walls, bracing systems and rigid core structures shall be incorporated to handle significant lateral loads.
  Column effective lengths and foundation stiffness values shall be assigned based on actual excavated levels, stepped foundations, and geotechnical findings.

3.12.3.3 Coordination and Finalization of Structural Systems

- Entire structural arrangement considering split-level planning imposed by ground slope.
- Foundation systems including stepped footings, combined footings, pile/rock anchor foundations (if required), and raft foundations on cut benches.
- Beam and column locations and sizing appropriate for differential levels and rock-cut platforms.
- Slab profiles including stepped slabs, transfer slabs, and ramp slabs.
- Retaining walls, slope stabilization structures (rock bolts, gabions, shotcrete, soil nailing), and drainage systems.
- Detailing for safe load transfer from superstructure to foundations on rock benches.

3.12.3.4 Rock Excavation, Blasting & Non-Explosive Demolition Methods

The design and execution methodology shall include:

a. Rock Cutting Using Hydraulic 3D Excavators

- Hydraulic 3D excavators equipped with breakers, rippers, and rotary cutters shall be used for precision cutting in steep or restricted access areas.

- Suitable for creating stepped benches required for stable foundation levels.
- Reduces vibration, improves safety, and allows controlled excavation near built-up areas.

b. Non-Explosive Demolition Agents (Expansive Mortar)

- Use of chemical expansive agents for silent rock cracking in sensitive zones.
- Ideal for excavation close to residential areas, utilities, or heritage structures.
- Allows high-precision excavation while minimizing vibration and noise.
- Drilling patterns, depth, spacing, and curing times shall follow manufacturer guidelines.

3.12.3.5 Finalization of Design Basis & Structural Systems

- Prepare a complete design basis report integrating:
- Geotechnical data
- Rock excavation methodology (blasting/chemical/hydraulic)
- Slope stabilization strategy
- Seismic design criteria for hilly regions
- Finalize structural systems keeping in view foundation levels, cut-fill balance, and long-term slope stability.

3.12.3.5 Proof Checking and "Good for Construction" (GFC) Drawings

All structural drawings, calculations, and geotechnical recommendations shall be approved from EIC.

3.12.3.6 Submit the complete set of:

- Structural design inputs/outputs
- Proof checking reports
- Revised drawings
- Safety and excavation methodology documents

3.12.3.7 Foundation type will be finalized based on geotechnical recommendations and may include:

- Raft foundations where soil is soft or buildings are closely spaced.
- Pile foundations (bored cast in-situ / micro-piles) where required due to low bearing capacity, high fills, or large differential settlements

3.12.3.8 Stepped & Terraced Foundations

- Footings along slopes will be stepped following natural strata; depth measured from lowest adjacent ground as per IS 1904.
- Proper keying into rock / firm soil will be ensured to prevent sliding.

Where buildings straddle multiple terraces, movement joints will be introduced at suitable locations to accommodate differential settlements/movements
Design of all the structural and non-structural elements

3.12.3.9 Drawing Stage

- **Structural and Non-Structural Design Services**

The Bidder shall provide comprehensive structural and non-structural design services, addressing the unique challenges of construction in hilly terrain, including slope stability, soil conditions, seismic considerations, drainage, and accessibility.

- **Drawing Stage Deliverables**

- Foundation Plans & Details

Designs shall consider stepped foundations, retaining structures, soil nailing, rock anchoring, terracing requirements, and differential settlement control, special attention to slope stability and geological strata.

- Column, Walls, and Beam Layout Plans

Layouts optimized for irregular terrain, multi-level platforms, and split-level structures.

- Floor Framing Plans

Accounting for level differences, retaining walls, and load transfer on sloped ground

- Floor Slab Structural Details

Including reinforcement drawings, slab-on-fill/voided slab details for uneven terrain, and structural joints due to elevation variations.

- Column & Beam Structural Details

Including tie beams, grade beams, and bracing systems suitable for seismic and slope-induced forces.

- Design & Detailing of Staircases, Ramps, UG Tanks, Rainwater Harvesting Chambers, etc.

Staircases and ramps designed for varying ground levels.
Tanks and chambers designed to handle soil pressure variations in cut-and-fill zones.

- **Hill-Specific Components**

Retaining walls (gravity, RCC, gabion, crib walls) Surface and sub-surface drainage systems to Manage high runoff.
Slope protection measures: shotcrete, rock bolts, vegetation, geogrids Integration of passive design suited for hilly climatic conditions Efficient stormwater management in steep terrains Renewable energy integration considering site topography

3.12.4 ELECTRICAL ENGINEERING SERVICES

- General

The services to be provided by bidder shall include (Schedule of Quantities of various items involved in this work, Design, Drawings, Vetting and shop drawings).

i) Design of electrical installations includes all electrical fittings/fixtures, water supply pumps, de- watering pumps etc., as necessary.
ii) Design of Power Supply & Distribution system of HT and LT including emergency and backup supply, LT panel, feeder pillars, etc.

iii) Telephone system, intercom communications facilities, data cable/networking system.
iv) Lightning protection and Earthing system.
v) External Lighting around building periphery.
vi) UPS back up, if required or wherever indicated.
vii) Firefighting, fire detection and PA system design
viii) Any other services required but not specifically indicated.
ix) Proper coordination with civil engineering / mechanical engineering features / services.
x) Liaising of other statutory agencies for obtaining the pre-construction and post construction clearances, if applicable. The statutory payments to these agencies however will be paid by the department/Client.
xi) Air conditioning / HVAC systems.

- Services

i) Carry out basic and detailed designs of comprehensive electrical power distribution scheme, indoor and outdoor lighting, lightning protection and earthing systems of all the buildings in accordance with the relevant Indian Electricity Rules (amended) and Standards. The work shall include, but not limited to the following services.

ii) Design and draw up preliminary schemes on the electrical requirements. Design the distribution systems and prepare single line diagrams with details of accessories and equipment.

iii) Specify the details and capacities of LT panels, standby diesel generators, and to specify the type of supply arrangement for incoming power supply, interlocking arrangement between HT panel, transformer, LT panel & DG sets.

iv) Design the L T panel room, generator room, Operator Room and to specify the necessary switchgear and control 'Changeover panels, capacitor banks, bus duct, essential and non-essential panels as necessary with the appropriate load shedding.

v) Make detailed specifications of all electrical items, essential and non - essential panels, power control centers, capacitor panels and the corresponding bill of quantities for the various items.

vi) Design and prepare detailed layout drawings for the individual power. Indoor and outdoor lighting, lightning protection and earthing system as required.

- Telephone**,** Intercom **&** Communication System

i) Telephone layout and telephone equipment including conduit and accessories layout for the telephone system and any protective devices battery back-up required.
ii) Design the EPABX room. Prepare conduit layout of cables and terminals inclusive of a fiber optic or other special data transmission cables for system required.
iii) Intercom layout and intercom equipment including conduit and accessories layout for the intercom system and any protective devices required.
iv) Prepare the specifications.

v) Check and approve detailed drawings of the suppliers and manufacturers and integrate with other services and in working drawings.
vi) Check and approve the suppliers' / manufacturers' drawings/documents and integrate with other services and in working drawings.

- Cable TV/Dish Antenna System
  i) Prepare working drawings indicating the locations of TV points, Central panel/ racks of dish antenna and necessary conduits for cables.
  ii) Fixing details of dish antenna.
  iii) Prepare specifications.
  iv) Check and approve the suppliers'/ manufacturers drawings/ documents.

- Lightning Protection and Earthing System
  i) Lighting protection system shall be an advanced integrated lighting protection system. The work shall include, but not limited to, the following
  ii) Survey, investigation of ground resistivity of sub soil at different depth.
  iii) Prepare plans showing internal/external earth grid, earth electrodes and lightning protection with size of conductors and details of each electrical and lightning arrestors along-with details of earthing pits.
  iv) Design of earthing system shall be based on survey, investigation data, load and as per relevant Indian Standards and Indian Electricity rules.
- External Lighting
  i) Assess the external lighting requirement for parking, buildings etc.
  ii) Prepare plans indicating the road lighting with circuit details, typical pole detail with type of fixture, cabling, earthing etc.
  iii) Prepare the specifications.
  iv) Check and approve detailed drawings of the suppliers and manufacturers.
  v) Planning & Designing C.C.TV & Entrance Security System & Equipment, D.G. Set & Air Conditioning and other services.

3.12.5 MECHANICAL ENGINEERING SERVICES

- **General**

The services to be provided by Contractor shall include.

i) Fire detection, Firefighting system and smoke detection.
ii) Water pumps etc.
iii) External underground cabling work.
iv) Audio visual equipment and services.
v) Other services as specified in bidding documents.
vi) Proper coordination with civil / electrical engineering features / services.

- **Services**

To carry out basic and detailed design of the required Heating, Ventilation & Air conditioning system. This shall include amongst others the following services:

i. Fire Detection & Alarm System
ii. Design the FDA Control Room layout.

iii. Prepare working drawings (Floor wise) indicating the zones, location of the fire alarm sensors, Response Indicator, Manual call points, Hooters, their conduits and wiring and location/details of FDA control panels.

iv. 3rd party vetting of drawings from local fire authority

v. Water Pumps

- Specify the type of pumps for water supply & de-watering purpose.
- Prepare specifications.
- Check and approve the suppliers'/ manufacturers' drawings/ documents and incorporating in service drawings.
- 3rd party vetting of design and drawings.

vi. Ventilators system (as required)

- Design and estimation of proper ventilation system from user comfort as specified in relevant codes, specifications and also from fire safety point of view.
- 3rd party vetting of design and drawings.

vii. Fire Fighting & Fire Suppression System

- Design and prepare working drawings for internal fire protection fire extinguisher system, UG tanks, etc. in line with the statutory requirements.
- Sizes of all equipment required and prepare detailed specifications.
- Obtain necessary permissions from the local fire authority/ bodies etc. as required.

viii. Check and approve detailed drawings and data sheet of suppliers/ manufacturers and incorporation of modification of any working /architectural /structural drawings.

3.12.6 PUBLIC HEALTH ENGINEERING

i. All the design and drawings should be well coordinated with Architecture, structure and other services drawings.

ii. All designs shall be as per the latest Indian Standards, Local bye-laws and statutory norms/regulation.

iii. Design of Public Health & Engineering services taking into account various topographical, meteorological, Hydrological reports, etc. and identify the source and quality of water, conduct survey of existing water supply system, Sewerage system, Drainage system, Fire-fighting system, other site development works etc. for planning of services. These existing systems are to be augmented if required as per the design.

iv. The services shall include following major components:

- Water Supply System including pumps.
- Overhead water storage tanks
- Water supply piping network
- Sewerage System.

- Drainage System including rain water harvesting, absorption trenches etc.
- Fire Fighting & Fire Suppression System.

3.12.7 Services

i. Water Supply System
   - Calculation of water requirements for entire facility and other blocks and other services for existing and for the buildings and services for the scope of present bidding document.
   - Design and prepare working drawings of internal and external dual water supply system including Underground tank, Overhead tank, Water treatment, pumping stations, rising mains, distribution system and internal plumbing, disposal of waste water etc.
   - Untreated water supply system for horticultural works including design of sprinkler and drip irrigation system, if necessary.
   - Prepare specifications.
   - Client's approval of detailed drawings and data sheets of suppliers/ manufacturers. Incorporation of suggestion /modification in the drawings.

ii. Internal Sanitary Installations
   - Design and prepare working drawings of internal sanitary installations.
   - Identify, design and prepare working drawings of disabled friendly toilets and sanitary installations, where required.
   - Prepare specifications.
   - Client's approval of detailed drawings and data sheets of supplies/ manufacturers.

iii. Sewerage System/Liquid Wastes
   - Calculation for quantity of waste water generated from different sources and design waste water disposal system.
   - Design and prepare the drawings for disposal of waste water from kitchen and dining halls before connecting to sewage system /including management of solid wastes by suitable disposal system
   - STP to be designed for augmentation / improvement of existing system.
   - Prepare specifications.
   - Check and approve detailed drawings and data sheets of suppliers/ manufacturers.
   - Client's approval of detailed drawings and data sheets of suppliers/ manufacturers and incorporation of suggestion /modification in the drawings.

iv. Drainage

- Design and prepare working drawings for storm water drainage including roof drainage, service area drainage and surface drainage.
- Design and prepare working drawings for rain water harvesting system including rain water harvesting pits, trenches and perforated absorption drains.
- Obtain approval from statutory and local bodies for drainage connections and rainwater harvesting scheme etc.
- Prepare specifications.
- Vetting of detailed drawings and data sheets of suppliers/ manufacturers and incorporation of observation in the detail working drawings.

v. Site development Works
- Design and prepare working drawings (longitudinal & cross section) for roads/ footpaths/ parking areas etc.
- Prepare specifications of same.
- Vetting of detailed drawings of suppliers/ manufacturers.

vi. Other Services
- Project Documentation
  - ❖ Prepare and submit required number of copies of monthly progress accomplishment reports of the project.
  - ❖ Ensure the preparation of AS-BUILT drawings and record all approved deviations and changes in drawings.
- Provide any other services not explicitly mentioned but reasonably required for project development.

3.12.8 Number of Documents and copy rights:

3.12.8.1 Submission of Documents and drawings.

- All documents, drawings, designs, reports, calculations, and any other details prepared under this Agreement shall be submitted as follows -Five (05) copies of all documents/drawings during the design and review stage.
- Drawings required for submission to local bodies or statutory authorities shall be submitted in the quantities and formats mandated by the respective authority.
- Final approved drawings shall be submitted in six (06) hard copies, along with one reproducible copy (A1 or larger size) .

In case any drawing or document requires revision due to design changes, comments, site conditions, or statutory requirements, Six copies of drawing/document shall be re-issued along with soft copy in CD without any extra charges. All these drawings will become the property of the Authority's Engineer. The Authority's Engineer may use these drawings in part or full in other work without any notice to the contractor and without any financial claim of the contractor.

The drawings cannot be issued to any other person, firm or authority or used by the Contractor for any other project. No copies of any drawings or documents shall be issued to anyone except the Authority or his authorized representative.

3.12.9 Architectural Design should cover the following general requirements

a) The Architectural Design shall address the following general requirements, with special emphasis on construction in hilly terrain, terrain-responsive planning, and compliance with relevant codes and green building standards:

b) The design shall cater to diverse functional requirements of the users through creative indoor spaces, efficient circulation, flexibility in planning, and integration of the surrounding natural environment. Multi-level planning suited to hill slopes shall be incorporated where required.

c) Architectural, structural, electrical, mechanical, plumbing, and all other services shall be seamlessly integrated. The design shall reflect terrain-appropriate construction methodology, aiming at reduced maintenance and optimized structural stability on sloped ground.

d) Buildings shall maximize natural daylight, ensure effective thermal comfort, provide adequate ventilation, and achieve high workspace performance standards. Designs must respond to the microclimate of the hilly region, including temperature variations, wind movement, and solar access.

e) Preference shall be given to low-embodied-energy materials, regionally available resources, recycled content, and materials compliant with green building principles suited for hilly terrain.

f) Development of surroundings shall consider natural terrain, slope stability, site drainage, traffic circulation, and use of indigenous vegetation. Terracing, retaining structures, and erosion-control measures shall form part of the site planning.

g) Buildings shall be designed to support advanced, repeatable, and fast-track construction techniques. Preference shall be given to systems that offer lower embodied energy, enhanced durability, and efficiency in the context of hilly terrain challenges.

- All interior spaces shall be adequately ventilated and illuminated, with careful placement of openings to leverage hilltop and valley wind patterns while ensuring thermal comfort.

- Fire escapes, safe exit routes, and fire safety systems shall be planned in compliance with NBC, Assam Building Byelaws, and all applicable codes. Special attention shall be given to multi-level or split-level structures common in hilly sites.

- The design shall conform to all local authority regulations regarding setbacks, permissible heights, coverage, floor area ratio (FAR), and hill zone guidelines where applicable.

- Materials for walls, flooring, windows, doors, and finishes shall be of premium quality, durable, and suitable for the climatic and geological conditions of hilly regions.

- Building and site layout shall be planned to avoid traffic conflicts, crisscrossing of pedestrian and vehicular movement, and to ensure safe circulation on steep gradients.

- The façade shall be visually appealing and shall judiciously use energy-efficient glass, cladding materials, and wall systems appropriate to the building's function. The glass-to-wall ratio shall vary by building orientation and shall comply with requirements for achieving minimum 3-Star TERI–GRIHA certification. Adequate and well-organized spaces shall be provided for all building services, ensuring their functionality, safety, and ease of installation. Service ducts, shafts, and routing pathways shall be planned for easy maintenance, accessibility, scalability, and minimum disturbance to the building structure in future expansions.

- The design shall incorporate green building materials and systems enabling the project to achieve minimum 3-Star GRIHA rating from accredited bodies.

- Adequate parking facilities shall be provided in accordance with applicable norms, considering terrain constraints, slope stability, and ease of vehicular maneuverability. Vetting Vertical circulation elements such as stairs, ramps, elevators, and lifts shall be strategically located to ensure easy, safe, and quick access to upper floors. Split-level or stepped solutions appropriate for hilly terrain may be incorporated.

3.12.10 Structural design should cover the following general requirements:

- The structural design shall be executed in accordance with the latest editions, amendments, and corrections of all applicable BIS (Bureau of Indian Standards) Codes, as well as other relevant seismic and safety standards necessary to ensure an earthquake-resistant structure. All designs must follow sound engineering practices and comply with requirements specified by the Client/Employer.
  The Contractor shall arrange for vetting of structural drawings by the Authority Engineer as approved by the EIC.
- The Contractor shall submit all structural design calculations in both hard and soft copies, as directed by the Engineer-in-Charge.
- Any additional design or detailing necessary for the complete and comprehensive planning and development of the building and campus shall also be provided.
- All buildings and associated internal and external services shall be designed and planned to achieve minimum operational cost, low maintenance, and reduced consumption of energy, water, and electricity.
- A combined integrated services drawing shall be prepared for all services (separately for internal and external services). Additionally, for services routed through false ceilings, an integrated layout shall be prepared to avoid clashes or interference between service lines

3.12.11 Presentations and Models

- Preparation of architectural models at 1:200 scale or any other scale as approved by the Engineer-in-Charge.

- Preparation of 3D views, detailed blow-ups of typical and critical areas, and walkthrough presentations to illustrate the design.

3.12.12 Approvals From Local Authorities

a) The Agency shall obtain all required statutory approvals from the concerned local authorities, including but not limited to the Chief Fire Officer (CFO), DGCA, Pollution Control Board, Environmental Authorities, and any other regulatory bodies as applicable.

b) This includes preparation and submission of all necessary drawings, documents, materials, and physical/ digital models in any quantity and in the sizes/scales prescribed by the respective authorities.

The Agency shall also secure all statutory approvals for the Completion Plan from the relevant local authorities, including the CFO, DGCA, Pollution Control Board, AERB, Environmental Clearances, and obtain the Fire Fighting NOC and any other certificates necessary for obtaining the Occupancy/Completion Certificate after construction is completed.

3.12.12 Submission of Data Sheet

Preparation of a comprehensive data sheet detailing room-wise finishes, flooring, doors, windows, and other high-value inventory items.
Preparation of technical specifications for all civil works, electrical works, services, equipment, and related items, and submission of the completed data sheet for approval.

3.13 GENERAL CONDITIONS:

3.13.1 GENERAL SPECIFICATIONS FOR CONSTRUCTION

Except for the items for which particular specifications are given, or where it is specifically mentioned otherwise in the description of the items, the work shall generally be carried out in accordance with the CPWD Specifications 2021 (Vol-I & II) with up-to-date correction slips for civil works; CPWD General Specification for Electrical Works (2022). General Specification for Heating, Ventilation & Air-Conditioning (2022); General Specification for CPWD General Specification for Electrical Works Part II – External (1994); CPWD General Specification for Electrical Works Part VI – Fire Detection and Alarm System (2018); and Specification for Horticulture and Landscaping Works (2018) with up-to-date correction slips (hereinafter referred to as "CPWD Specifications")Standards for Universal Accessibility in India 2021, Guidelines or AERB, MoRTH specification or any other specification shall be followed
The order of preference may be read as the following:

- Description of nomenclature of items in bidding documents.
- Description of user requirement and technical specifications.
- Particular specifications and special conditions for civil, electrical and horticulture works.
- Architectural/ structural drawings.
- CPWD General Specifications.
- Indian Standard Specifications of B.I.S.
- National Building codes 2016.
- Manufacturers specifications.
- Sound engineering practices

A reference made to any Indian Standard Specifications in these documents, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards upto last date of receipt of tenders. The Contractor shall keep at his own cost all such publications of relevant Indian Standard applicable to the work at site.

- Samples including brand / quality of materials and fittings to be used in the work shall be got approved from the Authority, well in advance of actual execution and shall be preserved till the completion of the work.
- The cost of work shall be inclusive of pumping out or bailing out water if required for which no extra payment will be made. This will include water encountered from any source, such as rains, floods, and sub-soil water table being high due to any other cause whatsoever.
- The following modifications to the above specifications shall however apply:
    - All stone aggregates shall be of hard stone variety to be obtained from approved Quarries.
    - River Sand conforming to Zone-I & II of IS:383 to be used for cement concrete work, mortar for masonry and plaster work shall be of standard quality. Sand shall be obtained from approved quarry and screened as required. The same shall be clean and consist of hard material.
    - **(Brick Work Compliant to Three Star Griha (latest or Version 2019) Rating to be used.**) Bricks of 7.5-class designation of standard size as per IS specifications shall be used. Burnt Clay Brick shall be obtained from kilns as approved by the Authority's Engineer. AAC blocks of approved make and size may be used after due approval of the Authority, if so desired.
- Unless otherwise specified in the schedule of quantities, the rates tendered by the contractor shall be inclusive of all cost & taxes and shall apply to all leads and lifts and nothing extra shall be payable on this account.
- The rates for all items of work shall, unless clearly specified otherwise, include cost of all labour, material, tools and plants and other inputs involved in the execution of the item.
- The foundation trenches shall be kept free from water while works below ground level are in progress.
- No foreign exchange shall be made available by the Department for importing (purchase) of equipment, plants, machinery, materials of any kind or any other items required to be carried out during execution of the work. No delay and no claim of any kind shall be entertained from the Contractor, on account of variation in the foreign exchange rate.
- All ancillary and incidental facilities required for execution of work like labour camp, stores, fabrication yard, offices for Contractor, watch and ward, temporary ramp required to be made for working at the basement level, temporary structure for plants and machineries, temporary boundary wall or fencing around the working sites, water storage tanks, installation and consumption charges of temporary electricity, telephone, water etc. required for execution of the work, liaison and pursuing for obtaining various No Objection Certificates, completion certificates from local bodies etc., protection works, testing facilities/ laboratory at site of work, facilities for all field tests and for taking samples etc. during execution or any other activity which is necessary (for execution of work and as directed by Authority's Engineer, shall be deemed to be included in rates quoted by the Contractor, for various items in the schedule of quantities. Nothing extra shall be payable on these accounts. Before start of the work, the Contractor shall submit to the Authority's Engineer, a site / construction yard layout,

specifying areas for construction, site office, positioning of machinery, material yard, cement & other storage, fabrication yard, site laboratory, water tank etc.

- For completing the work in time, the Contractor might be required to work in two or more shifts (including night shifts). No claim whatsoever shall be entertained on this account, not with-standing the fact that the Contractor may have to pay extra amounts for any reason, to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour and other statutory bodies regulations and the agreement entered upon by the Contractor with them.
- All material shall only be brought at site as per program finalized with the Authority's Engineer. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.
- The cost of flooring is inclusive of providing sunken flooring in bath-rooms, kitchen, etc. and nothing extra on this account shall be payable.
- Any legal or financial implications resulting out of carriage of earth from outside or disposal of earth shall be sole responsibility of the contractor. Nothing extra shall be paid on this account.
- The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors are minimized. Wherever absolutely essential, the chase shall be cut using chase cutting machines. Chases will not be allowed to be cut using hammer / chisel. The electrical boxes should be fixed in walls simultaneously while raising the brick work. The contractor shall ensure proper coordination of various disciplines viz. sanitary & water supply, electrical, fire-fighting and any other services.
- All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested as per the design conditions submitted before covering.

3.13.2 Site Conditions in Hilly Terrain

The bidder must acquaint himself with the hill profile, approach roads, gradient, access width, restricted working space, slope stability issues, water drainage paths, landslide-prone zones, muck disposal areas, and all topographical constraints before quoting.
No claim arising from difficult terrain conditions shall be entertained.

3.13.3 Availability of Materials in Hills

The bidder shall assess availability of approved stone quarries, crusher material, sand sources, and road accessibility for transporting materials towards elevated or difficult hill locations. No claim shall be entertained on account of limited or difficult access.

3.13.4 Soil Investigation and Slope Considerations

The bidder shall study the LOP, drawings, and geotechnical/soil investigation report and satisfy himself about slope characteristics, strata variability, bouldery soil, loose soil pockets, hill-cut profiles and other geological conditions.
No claim shall be entertained for variation in geotechnical conditions typical to hilly terrain.

3.13.5 Approach Road Construction / Improvement

If improvement of existing village / hill roads, temporary access tracks, hill-cut benches, widening of bends, or formation of working platforms is required, the same shall be executed by the contractor at his own cost.

3.13.6 Local Regulations and Hill-Specific Clearances

All work shall comply with the directions of the Engineer-in-Charge and local bodies including forest department restrictions, hill-cutting guidelines, NGT norms, and slope stability & drainage stipulations. Nothing extra shall be paid.

3.13.7 Protection of Adjacent Slopes and Properties

The contractor shall prevent any nuisance or damage to houses, slopes, retaining walls, footpaths, village roads, natural drains, water bodies, and terraced land. Damages due to excavation, blasting (if permitted), vibration, or slope instability shall be made good by the contractor at his own cost.

3.13.8 Noise and Vibration Control

Special care shall be taken to minimize noise in hill settlements where sound reverberates and disturbs local residents. Use of low-vibration equipment is encouraged.

3.13.9 Coordination of Drawings (Terrain-Sensitive)

Before starting any item, drawings shall be correlated considering slope profiles, stepped foundations, retaining structures, drainage paths, and cross-levels.
The contractor is fully responsible for losses from execution based on incomplete interpretation.

3.13.10 Indicative Drawings

Tender drawings other than those specifically listed are indicative. The work shall follow consultant-prepared and Engineer-approved detailed drawings incorporating terrain conditions.

3.13.11 Coordination with Other Agencies

Adequate provision for service trenches, sleeves, openings, supports etc. shall be made considering multi-level routing, hill side retaining structures, and restricted space. No extra payment.

3.13.12Access Restrictions

Due to hill terrain & narrow roads, labour and vehicle movement may be restricted by local administration. Identity cards, timing controls, and movement discipline shall be followed without extra claim.

3.13.13 Working in Multiple Shifts

If required due to short working hours, weather, or hill traffic restrictions, additional shifts including night shifts may be permitted without extra claim.

3.13.14 Maintenance, Dewatering, Exchange Rate

Contractor to maintain executed work, keep excavations free of spring/ seepage water common in hills. No foreign exchange claim.

3.13.15 Material Delivery and Stacking in Hilly Terrain

Material shall be brought in planned quantities considering narrow roads and limited storage space.
Stacking shall be done on stable benches only and as per Engineer's approval.

3.13.16 Special Terrain Requirements

Machine-mixed concrete to be transported via steep gradient access.
Flooring includes sunken areas.
Disposal of surplus excavated earth/muck SHALL be done at approved designated muck dumping sites with proper dressing—strictly as per hill-area environmental norms. No extra payment.

3.13.17 Services Compliance & Utilities

Water supply, sanitation and other installations to follow local hill authority norms. Contractor must arrange off-site labour accommodation if hill site does not permit huts. No claim for delay in water/electricity connection in hill regions.

3.13.18 Safety & Signage
Warning boards, night illumination, barricading at steep drops, and signage on hill roads are mandatory. Penalty applies for delay in installation of project signboard.

3.13.19 Display of Permissions
All hill-specific permissions (forest clearance, hill cutting permission, muck disposal permit, quarry movement pass etc.) must be displayed at site office.

3.13.20 Weather & Monsoon Impacts
Contractor shall protect work from heavy rains, snowfall, fog, or cloudbursts typical in hill regions.
Flooding of site, landslides, or slope erosion shall not form basis for any claim.

3.13.21 Double Handling
Double handling of material and muck—common due to restricted space—shall be borne by the contractor.

3.13.22 Entry Restrictions
Entry through particular gates, time-bound movement on narrow hill roads, or local security regulations must be followed without extra payment.

Dismantling of existing structures including RCC/brick/stone masonry walls, roofs, floors, plaster, flooring, foundations, drains, compound walls, boundary pillars, retaining structures, pavements, platforms, steps, and any other built-up components as encountered at site, irrespective of thickness or height.

3.13.23 Setting out:

- The Contractor shall establish permanent bench marks, reference pillars and other control points required for proper execution of the work. These shall be protected, maintained and kept undisturbed throughout the duration of the project. All such reference points shall be established with respect to the levels and locations indicated in the Architectural, Structural and Plumbing drawings and as directed by the Engineer-in-Charge.
- In hilly terrain, additional reference points shall be established at suitable intervals to account for undulating ground and difficult accessibility.

- The Contractor shall, at his own cost, conduct a detailed topographical survey of the work area considering the sloping ground, contour variations and natural features. The building layout shall be set out using Total Station only, in consultation with the Engineer-in-Charge.
  Any discrepancy between the drawings and actual site conditions or contours shall be immediately brought to the notice of the Engineer-in-Charge.
  It shall be the Contractor's responsibility to ensure accurate alignment and setting out in the hilly terrain conditions. Nothing extra shall be payable on this account.

- The Contractor shall establish, maintain and remain fully responsible for all grades, lines, levels, center lines, and bench marks. He shall promptly report any errors or inconsistencies relating to grades, levels, dimensions or contours to the Engineer-in-Charge before commencing work.
  If any error is detected during the progress of the work due to incorrect levels or setting out, the Contractor shall rectify the same at his own cost to the satisfaction of the Engineer-in-Charge. Nothing extra shall be payable on this account.

- Commencement of work shall imply the Contractor's acceptance of the levels, grades, contours, lines and dimensions furnished. No claim shall be entertained at a later stage regarding any error in the setting out or topographical conditions once work has commenced.

- Although site levels may be indicated in the drawings, the Contractor shall independently verify and confirm the existing ground levels and contours with respect to the nearest GTS Bench Mark or Departmental Bench Mark and obtain authentication from the concerned authority.
  In hilly terrain, contour verification at closer intervals must be carried out to ensure accuracy of excavation, filling and terracing.

- The Contractor shall protect and maintain all temporary and permanent benchmarks established at the site throughout execution. These shall be periodically checked and authenticated by the Engineer-in-Charge or his authorized representative.
  At each stage of work, levels shall be checked with reference to the established benchmarks to avoid cumulative errors, especially considering sloping ground conditions. Nothing extra shall be payable on this account.

- Approval of setting out by the Engineer-in-Charge shall not relieve the Contractor of his responsibility regarding the correctness of alignment, gradients, terracing, cutting/filling boundaries, and structural positioning in the hilly terrain.
  Any defects or discrepancies noticed at any stage shall be rectified by the Contractor at his own cost.

- The Contractor shall be fully responsible for the horizontal, vertical and stepped alignment of all works including terraces, retaining structures, foundations and all levels arising from contour adjustments. Any error or imperfection shall be corrected by the Contractor entirely at his own cost as per the instructions of the Engineer-in-Charge.

3.14 PROGRAMME CHART

The Contractor shall prepare and submit an integrated programme chart in MS Project/Primavera within 10 days of award of work. The chart shall reflect the sequence of activities, including those specific to hilly terrain such as access road preparation, cutting/filling operations, slope stabilization, retaining structures, and staggered foundation levels.
It shall also include details of required manpower, equipment, specialized machinery for hill-cutting, drilling or anchoring, and logistics for material movement in restricted terrain.
Non-submission or submission of incomplete programme shall attract recoveries as tender document. The programme shall be fully aligned with the physical milestones stipulated in the contract.

The programme chart shall include the following:
i) A descriptive note explaining sequencing of activities considering terrain constraints, staggered excavation, bench formation, and slope stabilization.
ii) A network (PERT/CPM/Bar Chart) prepared in MS Project/Primavera.
iii) A detailed procurement programme for materials, including transportation planning for hilly terrain.
iv) Programme for procurement and deployment of machinery/equipment suitable for hill cutting, rock excavation, slope protection, and high-reach concreting, commensurate with the quantum of work.
v) Productivity norms for equipment and manpower under hilly terrain conditions on which the programme is based.

The Contractor shall also submit a shuttering schedule and cycle time considering terraced or varying floor levels typical in hilly terrain. Sufficient formwork, staging, and access arrangements shall be mobilized to meet structural milestones.

If at any stage the actual progress does not conform to the approved programme, the Contractor shall submit a revised construction programme incorporating modifications required for timely completion. Non-submission of such revised programme shall attract recoveries as per Schedule-F of the contract.

Submission or approval of the programme does not relieve the Contractor of any obligations under the contract. The Engineer-in-Charge may take necessary actions as per contract conditions for delays or non-performance.

In case the Contractor fails to submit a construction programme, the programme approved by the Engineer-in-Charge shall be deemed final and binding.

3.15 MONTHLY PROGRESS REPORT

- The Contractor shall submit to the Engineer-in-Charge, on or before the 7th day of every month, two hard copies and one soft copy (CD/USB) of the Monthly Progress Report. The report shall include:
- Project progress summary
- Work progress (Planned vs. Actual)
- CPM/PERT chart
- Financial progress and milestone achievement status
- Manpower deployment (category-wise)
- Inventory of materials and machinery, including terrain-specific equipment
- Photographs of major activities such as terracing, excavation, slope protection, cutting/filling, retaining wall works, and structural progress
- For delay in submission or for incomplete reports, recovery shall be made from the Contractor as stipulated in the Schedule of Performance Guarantee and Performance Damages.

3.15.1 The progress report shall contain the following, apart from whatever else may be required as specified above:

- Project information, giving the broad features of the contract of the work under the contract, and the broad structural or other details.

- Introduction, giving a brief scope of the work under the contract, and the broad structural or other details.
- Construction schedule of the various components of the work through a bar chart for the next two fortnights (or as may be specified), showing the milestones, targeted tasks and up to date progress.
- Progress chart of the various components of the work that are planned and achieved, for the month as well as cumulative upto the month, with reasons for deviations, if any, in a tabular format.
- Plant and machinery statement, indicating those deployed in the work, and their working status.
- Man-power statement, indicating individually the names of all the staff deployed in the work, along with their designations. No. of skilled workers (trade wise) and total no. of unskilled workers deployed on the work and their location of deployment, activity wise & block wise.
- Financial statement, indicating the broad details of all the running account payments received upto date, such as gross value of work done, advances taken, recoveries effected, amounts withheld, net payments, details of payments received, etc.
- A statement showing the extra and substituted items submitted by the contractor, and the payments received against them, items pending for sanction/decision by the Department, broad details of the Bank Guarantees, indicating clearly their validity periods, broad details of the insurance policies taken by the contractor, if any, the advances received and adjusted.
- Progress photographs, in colour, of the various items/components of the work done upto date, to indicate visually the actual progress of the work.
- Quality assurance and quality control tests conducted during the month, with the results thereof.
- Videography at various stages of construction right from the day of start of work to date of completion/occupation, covering all major events, inspections, visits by dignitaries etc.
- Chronological brief of all sort of upto date correspondences made by the contractor and department since the award of work in tabular format.
- Details of consumption of electricity, fuel, water, cement, steel, fly ash based products and any other product being used, as directed by the Engineer in charge for the month as well as cumulative since start of work Nothing extra, whatsoever, shall be paid on account of the aforesaid submission of monthly report.

3.16 Safety Precautions

- Within two weeks of award of work, the Contractor shall submit to the Engineer-in-Charge a detailed Safety Management Plan covering measures for ensuring safety of manpower, plant and machinery, slope-related protection measures, and prevention of accidents typical to hilly terrain (such as slips, rolling stones, steep-edge falls, and restricted-access hazards). The Contractor shall deploy a full-time qualified Safety Engineer, having minimum 8 years of relevant experience, exclusively for the enforcement of safety norms.
- The Contractor shall, at his own cost, install barricading using corrugated profile sheets up to 6 m height or as mandated by NGT/MoEF/Assam Government by-laws or any other competent authority, all around the construction zone. In hilly terrain, special care shall be taken to secure barricades against wind loads, uneven ground and slope instability. Proper entry control shall be ensured to safeguard personnel and materials

and to avoid accidents. Upkeep, maintenance and watch & ward of the barricading shall be the Contractor's responsibility. No extra payment shall be made on this account.

- The Contractor shall provide all necessary personal protective equipment (PPE) such as helmets, safety shoes, harnesses (mandatory for work near slopes, edges and height), gloves, reflective jackets and any other equipment required for terrain-specific safety. PPE shall be provided at no extra cost.
- To prevent accidents, the Contractor shall install clear cautionary signage, night reflectors, red lights, barriers, rumble strips on inclined access roads (wherever feasible), and speed-limit boards. He shall be fully responsible for any damage or accidents caused due to negligence. Existing traffic routes, especially narrow hill roads, shall not be obstructed.
- In case of accidents involving labour or staff, full responsibility including payment of compensation, insurance claims, medical expenses, etc., shall lie solely with the Contractor.
- The Contractor shall ensure that no live electrical wiring is left exposed or unattended, especially in areas prone to moisture ingress, rainfall, fog, and land slips.
- Excavation and trenching operations for utilities shall commence only after all manpower, tools, machinery and materials are arranged. In hilly sites, trenches shall be braced, shored and protected against slope failures. Trench closing shall be completed at the earliest.
- For façade, external finishing, or RCC works at height, only steel double-scaffolding systems with dual vertical supports shall be used. On sloping ground, scaffolding shall be anchored and stabilised adequately using terrain-appropriate methods. Safe steel staircases shall be provided for inspection by the Engineer-in-Charge.

Note: The bidder shall submit a declaration on a stamp paper confirming compliance with all safety provisions.

3.17 Quality Assurance

- The Contractor shall ensure high-quality construction in a planned and time-bound manner. Any substandard material or workmanship beyond permissible tolerance limits shall be summarily rejected by the Engineer-in-Charge. The Contractor shall implement quality-control measures covering materials, workmanship, testing and approved construction methodologies. A comprehensive Quality Assurance Programme (QAP) shall be submitted within two weeks of award of work. The QAP shall include method statements for all activities along with checklists for pre-, during- and post-execution quality control.
- The Contractor shall deploy a dedicated Quality Manager exclusively for quality control.
- The Contractor shall submit detailed method statements for all activities associated with execution and completion of the works. Method statements shall specify checklists, testing methodology, testing frequency, applicable standards, acceptance criteria and any terrain-specific precautions required for hilly areas (such as concrete curing in cold conditions, protection of materials on slopes, safe handling, etc.). The Engineer-in-Charge may direct amendments to any method statement, and the Contractor shall resubmit the modified version for approval. No activity shall commence without approval of the method statement and signed checklists for that day's work. Delay arising from the Contractor's failure to submit or revise method statements shall not constitute a claim. No extra payment shall be made on this account.

- All necessary shop drawings shall be prepared by the Contractor at his own cost, well in advance, and submitted for approval prior to ordering materials or executing work.

- Shop drawings for WPC doors, Aluminum doors and windows , plumbing & drainage layouts with invert levels, sewer lines & manholes, ACP/cladding, stone cladding, curtain glazing, façade works or any other works as directed shall be submitted for approval. The Contractor shall incorporate modifications directed by the Engineer-in-Charge and resubmit until approved. No related activity shall commence without approved shop drawings. No extra payment shall be made for delays attributable to non-submission or resubmission of shop drawings.
- Shop drawings shall be submitted at least four weeks prior to the planned delivery or installation of materials. No extension of time shall be granted on account of delays arising from late submission of drawings
- Prior to execution, the Contractor shall submit integrated civil-electrical services drawings showing layouts, sectional elevations, routing of services, elevations and coordination details. Integrated drawings shall be prepared considering site constraints typical of hilly terrain, such as restricted spaces, stepped levels, retaining wall penetrations and drainage gradients. No extra payment shall be made for this requirement.
- The Contractor shall supply all materials sufficiently in advance to permit testing, inspection and approval before use.
- Materials used without prior inspection, testing or approval shall be treated as unauthorized and liable for rejection. The Engineer-in-Charge may order removal of such materials from site. Failure to comply shall permit removal at the risk and cost of the Contractor.
- Suitable weighing, surveying, levelling and measuring instruments shall be provided by the Contractor at his cost. All instruments shall be calibrated by an approved laboratory prior to use. No extra payment shall be made.
- The Contractor shall conduct performance testing of all installations in accordance with specifications and standard codes in the presence of the Engineer-in-Charge before final acceptance. No extra payment shall be made for such tests
- Where specialized agencies are required, their names shall be submitted for approval within 30 days of letter of award. No delay shall be justified on account of failure to appoint approved specialist agencies in time
- All materials received from Government stores or otherwise shall be inspected and checked by the Engineer-in-Charge or his authorized representative prior to use.
- The Contractor shall provide suitable weighing and measuring arrangements at site. Sealed samples shall be handed over to the testing laboratory jointly with the Authority Engineer.
- Samples required for testing shall be supplied free of cost by the Contractor. All sampling, transport, packaging and incidental expenses shall also be borne by the Contractor
- Where testing frequency is not specified in CPWD Specifications, relevant BIS codes shall apply.
- Special or load testing required due to doubtful material quality shall be carried out at the Contractor's cost.
- Samples of all materials and fittings, along with brand and manufacturer details, shall be submitted well in advance for approval. Approved samples shall be retained until completion. Materials specified by brand in the BOQ shall be used only after sample approval. Where brands are not specified, samples conforming to the approved brand list or ISI-marked products shall be submitted. If ISI-marked materials are unavailable,

samples from reputed manufacturers conforming to IS codes shall be submitted for approval.

- Materials found defective after approval shall be replaced at the Contractor's cost. No extension of time shall be granted for replacement.
- Sources of materials such as aggregates, sand, cement, steel, water, etc. shall be approved by the Engineer-in-Charge before use. Trial mixes for controlled concrete shall be prepared using approved sources. Change of source shall require prior approval and fresh testing at the Contractor's cost.
- Brands/makes of all materials not specified in the tender shall be submitted for approval and adhered to thereafter. Any change shall require prior written approval.
- Water shall be tested for suitability as per IS codes, and written approval shall be obtained prior to use. Testing frequency shall conform to CPWD/BIS requirements. If tube-well water does not meet standards, Municipal or other approved water shall be arranged at Contractor's cost.
- No concreting shall commence unless mix design is approved. Any change in source or characteristics of ingredients shall require a revised mix design from a site-established laboratory, at Contractor's cost. No claim for extra time or payment shall be entertained.
- Shop drawings for staging, shuttering, stone cladding, mock-ups and other works shall be submitted for approval before execution. Bar bending schedules shall also be submitted and approved before fabrication.
- Before execution of finishing items (flooring, plaster, toilet units, room finishes, etc.), full-scale samples of repetitive items shall be prepared and approved.
- Mock-ups for flooring, dado, cladding or other finishing works shall be prepared at site as specified. Approved mock-ups forming part of actual work shall be measured for payment. Rejected mock-ups shall be dismantled and removed at the Contractor's cost.
- Mock-ups for critical items, including sample toilet blocks and representative room units (where applicable), shall be prepared, displayed in actual locations and approved prior to mass execution. Rejected samples shall be removed at the Contractor's cost.
- Finishing samples—flooring, external and internal finishes, paints (with colour schemes), tiles, platform finishes, stair finishes, fittings and fixtures—shall be prepared for approval. In case of residential works, one complete sample quarter per category shall be prepared and approved prior to mass construction. No claim beyond agreement rates shall be entertained.
- Construction joints shall be provided only at predetermined locations approved by the Engineer-in-Charge. Shuttering required for such joints shall be included in the concrete/RCC item rates. No extra payment shall be made.
- Water tanks, taps, pipes, sanitary fittings and drainage components shall conform to CPWD Specifications; where unavailable, NBC 2016 and relevant IS codes shall apply. Approved/licensed plumbers shall be engaged, and materials shall be tested as required by local bodies, at the Contractor's cost.
- All concealed items—water supply lines, drainage pipes, conduits, sewers, etc.—shall be tested as per design requirements before covering.
- Final performance tests of all installations shall be carried out using the Contractor's arrangements for water, power, equipment, etc., before final acceptance. No extra payment shall be made.
- Door/window frames, shutters and factory-made items shall be procured only from approved and reputed manufacturers or authorized dealers. The decision of the Engineer-in-Charge shall be final.

3.17.1 Third Party Quality Assurance:

In order to achieve a high standard of quality, it shall be required to go for Third Party Quality Assurance. For this purpose, a separate agency shall be appointed by the owner who will carry out independent testing of materials and checking and ensuring overall quality procedures. The contractor shall be required to fully cooperate with agency and facilitate them in taking samples, transportation and examination of various activities including documentation at no extra time and cost to the owner. In case of any adverse findings by the agency, the contractor shall do the needful rectifications at no extra time and cost to the owner. The Authority's Engineer shall be at liberty for getting quality assurance work done through other agencies approved by competent authority at its own cost. The successful tenderer shall include the provisions of Quality Assurance while framing the proposed methodology for tests.

3.17.2 Samples for Testing

- Samples of all materials required for testing is included in the cost of work. Similarly, all testing in house or through external lab shall be borne by the contractor.
- If any load testing or special testing is to be done for any sample whose strength is doubtful, the cost of the same shall also be borne by the contractor.
- In case there is any discrepancy in frequency of testing as given in list of mandatory tests and that in individual sub-heads of work as per CPWD Specifications, higher of the two frequencies of testing shall be followed.
- The contractor has to establish field laboratory at site as specified including all necessary equipment for field tests at his own cost within one month from the award of work.

3.17.3

The contractor should submit for approval of Authority's Engineer workshop drawings and samples of the work to be performed under the specified items of work before actually commencing the mass execution of the work under the item. For this they will prepare a sample room / quarters and toilet blocks for each type of building for approval of Authority's Engineer of work. Nothing extra shall be payable on this account.

3.17.4 Maintenance of Register of Tests

- All the registers of tests carried out at construction site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Authority's Engineer.
- All samples of materials including cement concrete cubes shall be taken jointly with contractor by Authority's Engineer. All the necessary assistance shall be provided by the contractor. Cost of sampling & testing are to be borne by the contractor and he shall be responsible for safe custody of samples to be tested at site/ outside laboratory.
- All the tests in field lab at construction site shall be carried out by the Engineering staff deployed by the contractor and shall be 100% witnessed by Authority's Engineer. At least 10% of the tests are to be witnessed by the Executive Engineer. Minimum 25% of all samples should be tested in outside approved laboratory/ Govt. Engineering colleges.
- All the entries in the registers will be made by the designated Engineering Staff of the contractor and same should be regularly reviewed by Authority's Engineer.

- Contractor shall be responsible for safe custody of all the test registers.
- Submission of copy of all test registers, Material at site register and hindrance register along with each alternate Running Account Bill and Final Bill shall be mandatory. These registers should be duly checked by Authority's Engineer in division office and receipts of registers should also be acknowledged by Accounts Officer.
- If all the test registers and hindrance register is not submitted along with alternate R/A Bill & Final Bill, no payment will be released to the contractor.

3.17.5. Maintenance of Material at Site (MAS) Register:

All the MAS Registers including cement and Steel Registers which shall be issued to the contractor by Authority's Engineer shall be maintained by Contractor at site and shall be open for inspection by the Department.

Some restrictions may be imposed by the campus security in-charge on the working and on movement of labour, materials, etc in the campus. The contractor shall be bound to follow all such restrictions / instructions. Client will issue the identity cards to all persons authorized by him to do work / visit the work site and no claim whatsoever shall on this account will be entertained.

3.17.6 The contractor shall submit to the Authority's Engineer on the 7th day of each month, 2 hard copies and one soft copy (CD) of monthly progress report of the work. Such progress report will include the project progress, summary, work progress (planned vs actual), CPM chart, status of financial progress and achievement of milestone, manpower deployment status, inventory of materials and photographs of important activities. For delay in submission of the report, compensation as stipulated in the Schedule of Performance Guarantee and Performance Damages.

3.17.7 The contractor(s) shall inform/issue notices to the owner, Municipality, police and other authorities that may be required as per law and obtain all requisite permission/ licenses for temporary obstructions, enclosures etc. Contractor(s) shall pay all fees, taxes and charges which may be leviable on account of these operations in executing the contract. He shall make good any damage to the property whether public or private and shall supply and maintain lights either for illumination or for cautioning the public at night. The contractor(s) shall do the barricading of 3 meter or higher height enclosing the area as per direction of Authority's Engineer, and nothing extra will be payable on this account.

3.17.8 The Contractor(s) shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit board, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused to existing/new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work. In case of any accident of labours / contractual staff's the entire responsibility will rest on the part of the contractor and any compensation under such circumstances if becomes payable the same shall be entirely borne by the contractor and department shall have no role on this account.

3.17.9 The contractor(s) shall take instructions from the Authority's Engineer regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, services and compound walls are to be constructed. The stacking shall take place as per stacking plan. However, if any change is required, the same shall be done with the approval of Authority's Engineer

3.17.10 Contractor(s) shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of the work.

All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.

Contractor at his cost put up the barricading (around 3 metre) all around the buildings sites through suitable method for segregating the construction site and also to control the dust pollution in the campus. Entry to all these sites shall be controlled for proper security of man and materials and to avoid accidents.

On completion of work, the Contractor(s) shall submit at his own cost four prints of "as built" drawings to the Authority's Engineer. These drawings shall have the following information.

- Run off all piping and their diameters including soil waste pipes and vertical stacks.
- Ground and invert levels of all drainage pipes together with locations of all manholes and connections, upto outfall.
- Run off all water supply line with diameters, locations of control valves, access panels etc.
- To show Electrical wiring circuit layout of every points and Distribution boards and circuits of the Power points and control switchgear and their position.

3.17.11 Water tanks, taps, sanitary, water supply and drainages pipes, fittings and accessories should conform to the specifications provided in bidding documents, NBC – 2016, IS codes. The contractor(s) should engage approved, licensed plumbers for the work and get the materials (fixtures/fittings) tested, by the municipal Body/Corporation authorities wherever required at his own cost. The Contractor(s) shall submit for the approval of the Authority's Engineer the name of the plumbing Agency proposed to be engaged by him.

3.17.12 The contractor shall give performance test of the entire installation(s) as per the specifications & codes in the presence of the Authority's Engineer or his authorized representative before the work is finally accepted and nothing extra what-so-ever shall be payable to the contractor for the test.

3.17.13 Any cement slurry added over base surface for continuation of concerting for better bond is deemed to have been built in the items and nothing extra shall be payable and no extra cement considered in consumption on this account.

3.17.14 The Contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by department/arranged by the contractor.

3.18 SPECIALIZED WORKS:

Bidder may engaged specialized agencies for the below mentioned works in case bidder does not have their in house capacity

SPECIALIZED AGENCIES FOR SPECIFIED WORKS (INCLUDING INTERIOR & EXTERIOR FINISHES)

3.18.1 WATERPROOFING TREATMENT OF ALL TYPES OF WORK

- The waterproofing work shall be carried out only through specialized waterproofing agencies having proven technical competence.
- All waterproofing works shall be executed strictly as per manufacturer specifications, approved methodology and quality assurance plan.

3.18.2 ALUMINIUM / GLASS WORK

All aluminum and glass work shall be carried out by a specialized agency having an established workshop equipped with necessary machinery and adequate experience in similar works.

3.18.3 **STRUCTURAL GLAZING WORK**

Structural glazing works shall be executed through a specialized agency with adequate fabrication facilities, testing capabilities, and past experience in high-performance glazing systems.

3.18.4 **WPC DOORS / FLUSH DOORS & FRAMES**

All WPC doors, flush doors, factory-made doorshutters and frames shall be executed through specialized manufacturers/fabricators with adequate production capability and past experience in similar works in institutional, commercial, or government buildings.

Work shall include:

- Factory-made WPC door frames and shutters
- Flush doors (commercial grade/fire-rated where applicable)
- Hardware installation
- Edge banding, lamination/finishing
- Proper alignment, fitting & final finishing

3.18.5 **SPECIALIZED AGENCIES FOR PREMIUM INTERIOR & EXTERIOR FINISHES**

The following works shall also be executed only through specialized interior/exterior finishing agencies with demonstrated expertise, skilled workforce, and prior execution of high-end finishes of similar scale:

- Complete premium interior finishes
- Complete exterior finishes including texture, cladding & designer coatings
- Acoustic wall & ceiling treatments
- Decorative wall panels, murals & feature walls
- Exterior 3D wall art / 3D painting
- Signage & branding systems
- Canteen interiors, service & dining-area finishing
- Conference room furnishing & fit-outs
- Multipurpose hall finishing, acoustic/lighting systems and interior décor
- All other decorative interior elements as shown in drawings or directed

3.18.6 ADDITIONAL CAMPUS DEVELOPMENT WORKS (TO BE EXECUTED BY SPECIALIZED AGENCIES)

3.18.6.1 CAMPUS SIGNAGE SYSTEM

- Work includes design, fabrication and installation of:
- Directional signage
- Building identification signage
- Safety signage
- Illuminated LED signage
- Wayfinding maps and campus branding elements

Only specialized signage agencies with similar completed works shall be engaged.

3.18.6.2 PLAYGROUND DEVELOPMENT WORKS

- The contractor shall develop a complete sports & play area, including:
  Volleyball Court – 2 Nos.

Court layout and marking
PCC base / compacted surface as specified
Synthetic flooring or sand court finishing (as approved)
Poles, sleeves, nets, tensioning hardware
Edge protection, drainage & lighting arrangements
Badminton Court – 3 Nos.
Surface preparation (PCC or synthetic as applicable)
Court marking as per standards
Poles, nets and fixtures
Side clearance, lighting poles and fittings
Drainage, peripheral paving and approach paths
General Play Area Facilities
Levelling, grading and compacting
Turf/grass area or synthetic surfacing
Boundary fencing
Seating elements, dustbins, signages
All associated civil, electrical, drainage and finishing works

Only agencies experienced in sports flooring and playfield development shall be engaged.

3.18.6.3 HORTICULTURE AND LANDSCAPING WORK

The horticulture and landscaping works shall be executed only through specialized horticulture/landscape contractors having adequate technical capability, nursery facilities, skilled manpower, and prior experience in similar institutional/campus landscaping projects.

- Landscape Services

Storm-water drainage integrations
Plantation pits with proper drainage and soil mix
Mulching and moisture-retention systems
Integration with civil works, pathways and campus development

- Soft Landscaping

Preparation of soil, trenching, levelling and grading
Supply and plantation of trees, shrubs, hedges, ornamental plants, climbers, palms, ground covers, and seasonal plants
Turfing/grass lawn development using good-quality grass (clonal, doob, Mexican carpet grass, etc., as specified)
Application of compost, manure, fertilizers and soil conditioners
Anti-termite treatment to planting pits
Establishment period maintenance including watering, weeding, mowing, re-plantation of failures and pest control

- Hard Landscaping

Pathways, jogging/walking tracks, edging and kerbing
Paving, stone work, gravel beds, planters, tree guards
Garden lighting conduits, electrical provisions (fixtures supplied separately if required)
Pergolas, gazebos, trellises and seating elements (if part of BOQ)
Boundary hedges, fencing, green screens

3.18.6.4 General Notes (Applicable to All Specialized Works):

Approval of the specialized agency by the Engineer-in-Charge shall not relieve the Contractor of overall responsibility for quality, performance, and guarantees of the system.
Replacement of the approved specialized agency shall be permitted only with prior written approval of the Engineer-in-Charge.
All works shall be executed strictly as per approved drawings, technical specifications, and manufacturer guidelines.
Nothing extra shall be payable for compliance with the above requirements

3.18.6.5 External Development Work
Roads: Construction of internal roads with Cement Concrete Pavement using Vacuum Dewatered Concrete (VDF) and Paver Block pavements as required.
Footpaths: Complete footpath works with kerb stones, edge restraint, bedding layers and all associated arrangements.
Boundary Wall: Construction/repair/finishing of boundary wall including foundation, superstructure, plaster, paint, coping and allied components.

The work shall be carried out in accordance with the architectural drawings and structural drawings duly proof checked, to be prepared and submitted by architectural/structural consultants engaged by the contractor, after approval by the engineer-in-charge. Before commencement of any item of work the contractor shall correlate all the relevant architectural and structural drawings, nomenclature of items and specifications etc. issued for the work and satisfy himself that the information available there from is complete and unambiguous. The figure and written dimension of the drawings shall be superseding the measurement by scale. The discrepancy, if any, shall be brought to the notice of the engineer-in-charge before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and or incomplete information and no claim whatsoever shall be entertained on this account.

3.19 Execution of Electrical Works:

Adequate number of Competent (Certificate holder of Chief Electrical Inspectorate of Assam) Electrical Supervisors, Electrician and Wireman should be deployed. Site Engineers from electrical discipline should be engaged to supervise all electrical works. Entire Electrical Work should be carried out as per authority's approved electrical layout drawings or electrical circuit layout drawings, Single Line Diagrams prepared by the electrical engineer engaged by the contractor. Contractor shall submit separate Electrical Test Certificate for the Internal Electrical works of the Buildings and External Electrical works as per format of the CEIA and as desired by APDCL authority during charging / energisation of the electrical installation. All Schedule Electrical Test should be conducted through competent electrical supervisor or firms having electrical supervisory certificate.

3.20 Sample of Materials

BIS marked materials except otherwise specified shall be subjected to quality test at the discretion of the Engineer-in-Charge besides testing of other materials as per the specifications described for the item/material. Wherever BIS marked materials are brought to the site of work, the contractor shall, if required, by the Engineer-in-Charge furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the material / procured by the contractor for incorporation in the work satisfies the provisions of specifications/BIS codes relevant to the material and / or the work done.

For certain items, if frequency of tests not mentioned in the CPWD Specifications and then relevant IS code shall be followed and tests shall be carried out as per the frequency specified therein.

The contractor shall be fully responsible for the safe custody of materials brought by him/issued to him even though the materials may be under double lock and key system.

The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and approval of the same before use in the work. The contractor shall provide at his own cost suitable weighing and measuring arrangements at site for checking the weight / dimensions as may be necessary for execution of work. The sealed samples are to be handed over to the testing lab by contractor in the presence of Junior Engineer/Assistant Engineer-in-Charge of work.

Malba, rubbish & other waste materials shall be reused at site as directed by Engineer-in-Charge or disposed off to recycling agents. No deduction on this account shall be made from the agency as well as no extra payment will be made to agency if it is disposed at pre- defined location within the campus.

3.21 Pour card, check-list for Execution of work

As and when any important item is taken up for execution, the Agency shall submit the specifications and develop a checklist and Pour card. This sample checklist should be got approved from the Engineer-in-charge and should be used at site. This check list should be shown to the Engineer-in-charge or his/her designee during inspection. This procedure is to be followed for all hidden items, CC/RCC work, Steel- reinforcement, shuttering, doors & windows, plumbing, including water supply pipe lines, roof treatment, earth filling etc.

3.22 Method Statement

The agency shall submit a 'Method statement' for each important activity for the approval of the Engineer-in-charge soon after the award of work to him. The 'Methods statement' is a statement by which the construction procedures for any activity of construction are formulated and stated in chronological order. The 'Methods statement', should have a description of the item with elaborate procedures in steps to implement the same, the specifications of the materials involved, their testing and acceptance criteria, equipment to be used, Precautions to be taken, steps of measurement, etc.

3.23 **ADDITIONAL CONDITIONS**

i. The bidder shall acquaint himself with the proposed site of work, its approach roads, working space available etc. before quoting his rates and no claim on this account shall be entertained by the department.

ii. The contractor(s) shall get himself acquainted with nature and extent of the work and satisfy himself about the availability of materials from kiln or approved quarries for collection and conveyance of materials required for construction.

iii. The contractor(s) shall study the indicative Site Plan and soil investigation report for the site, given herewith and satisfy himself about complete characteristics of soil and other parameters at site. However, no claim on the alleged inadequacy or incorrectness of the soil data supplied by the department shall be entertained.

iv. The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost. No payment shall be made on this account.

v. Contractor shall take all precautionary measures to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.

vi. The contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupiers of adjacent properties and to the public in general and to prevent any damage to such properties and any pollution of smoke, streams and water-ways. He shall make good at his cost and to the satisfaction of the Authority's Engineer, any damage to roads, paths, cross drainage works or public or private property whatsoever caused thereon by the contractor. All waste or superfluous materials shall be carried away by the contractor without any reservation entirely to the satisfaction of the Authority's Engineer.

vii. Utmost care shall be taken to keep the noise level to the barest minimum so that no disturbance as far as possible is caused to the occupants / users of building/ adjacent properties.

viii. Setting Out:

- The contractor shall establish, maintain and assume responsibility for grades, lines, levels and bench marks. He shall report any errors or inconsistencies regarding grades, lines, levels, dimensions to the Authority's Engineer before commencing work. Commencement of work shall be regarded as the contractor's acceptance of such grades, lines, levels and dimensions and no claim shall be entertained at a later date for any errors found.
- All the building sites are to be developed and raised by earthfilling to Finished Ground Level (FGL), which shall be considered at least 0.5m above from Existing Ground Level (EGL) or the Highest Flood Level (HFL) whichever is higher under the scope of work.

ix. If at any time, any error in this respect shall appear during the progress of the work, the contractor shall, at his own expense rectify such errors, if so required, to the satisfaction of the Authority's Engineer.

- Though the site levels may be indicated in the drawings the contractor shall ascertain himself and confirm the site levels with respect to GTS bench markfrom the concerned authorities.
- The approval by the Authority's Engineer of the setting out by the contractor shall not relieve the contractor of any of his responsibilities.
- The contractor shall be entirely and exclusively responsible for the horizontal, vertical and other alignment, the level and correctness of every part of the work and shall rectify effectively any errors or imperfections therein. Such rectifications shall be carried out by the contractor at his own cost to the instructions and satisfaction of the Authority's Engineer.

x. The rates quoted by the contractor are deemed to be inclusive of site clearance, setting out work, profile, establishment of reference bench mark, spot levels, construction of all safety and protection devices, barriers, earth embankments, preparatory works, all testing of materials working during monsoon, working at all depths, height and locations etc. unless specified in the schedule of quantities.

xi. Royalty at the prevailing rates wherever payable shall have to be paid by the contractor on the boulders, metal, shingle, sand and timber etc, or any other material collected by him for the work direct to revenue authorities and nothing extra shall be paid by the department for the same.

xii. The contractor shall provide at his own cost suitable weighing, surveying and leveling and measuring arrangements as may be necessary at site for checking. All such equipment shall be got calibrated in advance from laboratory, approved by the Authority's Engineer. Nothing extra shall be payable on this account.

xiii. The contractor shall get the water tested with regard to its suitability and conforming to the relevant IS Code. The contractor shall obtain written approval from the Authority's Engineer before he proceeds by using the same for execution of work. The water testing charges shall be borne by the contractor.

xiv. Other agencies will also simultaneously execute and install the works of sub-station / generating sets, air- conditioning, lifts, etc. for the work and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings trenches etc. as may be required for such related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be supplied free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.

xv. All materials obtained from Govt. Stores or otherwise shall be got checked by the Authority's Engineer or his any authorized supervisory staff on receipt of the same at site before use.

xvi. All material shall only be brought at site as per programme finalized with the Authority's Engineer. Any redelivery of the material not required for immediate consumption shall not be accepted and thus not paid for.

xvii. The Indicative Architectural drawings given in the tender other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fixings involved unless and otherwise specifically mentioned. However, the work shall be executed in accordance with the drawings duly approved by the Authority.

xviii. All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Authority's Engineer which shall be preserved till the completion of the work. If a particular brand of material is specified in the item of work in Schedule of Quantity, the same shall be used after getting the same approved from Authority's Engineer. Wherever brand / quality of material is not specified in the item of work, the contractor shall submit the samples as per approved list of brand names given in the tender document / particular specifications for approval of technical sanctioning authority. For all other items, materials and fittings of ISI Marked shall be used with the approval of Authority's Engineer. Wherever ISI Marked material / fittings are not available, the contractor shall submit samples of materials / fittings manufactured by firms of repute conforming to relevant specifications or IS codes and use the same only after getting the approval. To avoid delay, contractor should submit samples as stated above well in advance so as to give timely orders for procurement. If any material, even though approved by Authority's Engineer is found defective or not conforming to specifications shall be replaced/ removed by the contractor at his own risk & cost.

xix. The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material / work beyond set-out tolerance limit shall be summarily rejected by the Authority's Engineer & contractor shall be bound to replace / remove such sub- standard / defective work immediately.

xx. The day to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard Performa by the Authority's Engineer and which shall be duly signed by the contractor or his authorized representative.

xxi. Cement bags shall be stored in separate godowns. The decisions of the Authority's Engineer regarding the capacity needed will be final. Each godown shall be provided with a single door with two locks.

xxii. For construction works which are likely to generate debris / rubbish, the contractor shall dispose of debris, rubbish & other unserviceable materials and wastes at his own cost to the notified designated Municipal dumping ground only and under no circumstances these shall be stacked / dumped even temporarily, outside the construction premises.

xxiii. In the event of any restrictions being imposed by the Security agency, Client, Traffic or any other authority having jurisdiction in the area on the working or movement of labour / material, the contractor shall strictly follow such restrictions and nothing extra shall be payable to the contractor on this account. The loss of time on this account, if any, shall have to be made up by generating additional resources etc.

xxiv. The proposed building work is a prestigious project and quality of work is of paramount importance. Contractor shall have to engage well experienced skilled labour and deploy modern T&P and other equipment to execute the work. Many items like stone masonry & stone cladding work, stone flooring & other specialized flooring work, wood work, precast RCC coffers, polysulphide/ silicone sealant will specifically require engagement of skilled workers having experience particularly in execution of such items.

xxv. No payment shall be made for any damage caused by rain, snowfall, flood or any other natural calamity, whatsoever during the execution of the work. The contractor shall be fully responsible for any damage to the govt. property and work for which the payment has been advanced to him under the contract and he shall make good the same at his

risk and cost. The contractor shall be fully responsible for safety and security of his material, T&P, Machinery brought to the site by him.

xxvi. Construction Phase And Worker Facilities

The contractor shall specify and limit construction activity in preplanned/ designated areas and shall start construction work after securing the approval for the same from the Authority's Engineer. This shall include areas of construction, storage of materials, and material and personnel movement.

xxvii. Preserve And Protect Landscape During Construction

- The contractor shall ensure that no trees, existing or otherwise, shall be harmed and damage to roots should be prevented during trenching, placing backfill, driving or parking heavy equipment, dumping of trash, oil, paint, and other materials detrimental to plant health. These activities should be restricted to the areas outside of the canopy of the tree, or, from a safe distance from the tree/plant by means of barricading. Trees will not be used for support; their trunks shall not be damaged by cutting and carving or by nailing posters, advertisements or other material. Lighting of fires or carrying out heat or gas emitting construction activity within the ground, covered by canopy of the tree is not permitted.
- The contractor shall take steps to protect trees or saplings identified for preservation within the construction site using tree guards of approved specification.
- Contractor should limit all construction activity within the specified area as per the Construction Management Plan (CMP) approved by Authority's Engineer.
- The contractor shall avoid cut and fill in the root zones, through delineating and fencing the drip line (the spread limit of a canopy projected on the ground) of all the trees or group of trees. Separate the zones of movement of heavy equipment, parking, or excessive foot traffic from the fenced plant protection zones.
- The contractor shall ensure that maintenance activities during construction period shall be performed as needed to ensure that the vegetation remains healthy.
- Contractor shall be required to develop and implement a waste management plan, quantifying material diversion goals. He shall establish goals for diversion from disposal in landfills and incinerators and adopt a construction waste management plan to achieve these goals. A project-wide policy of nothing leaves the Site, should be followed, in such a case when strictly followed; care would automatically be taken in ordering and timing of materials such that excess does not become waste. Consider recycling cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wallboard, carpet and insulation. Designate a specific area(s) on the construction site for segregated or commingled collection of recyclable material, and track recycling efforts throughout the construction process. Identify construction haulers and recyclers to handle the designated materials. The diversion may include donation of materials to charitable organizations and salvage of materials on-site.

- Contractor shall collect all construction waste generated on site, segregate these wastes based on their utility and examine means of sending such waste to manufacturing units which use them as raw material or other site which require it for specific purpose. Typical construction debris could be broken bricks, steel bars, broken tiles, spilled concrete and mortar etc.
- The contractor shall provide potable water for all workers. The water quality shall be got tested quarterly from a Govt approved lab.
- The contractor shall provide the minimum basic level of sanitation and safety facilities for the workers at their camp/labour site. The contractor shall ensure cleanliness of workplace with regard to the disposal of waste and effluent; provide clean drinking water and latrines and urinals as per applicable standard. Adequate toilet facilities shall be provided for the workman within easy access of their place of work. The total no. to be provided shall not be less than 1 per 30 employees in any one shift. Toilet facilities shall be provided from the start of building operations, connection to a sewer shall be made as soon as practicable. Every toilet shall be so constructed that the occupant is sheltered from view and protected from the weather and falling objects. Toilet facilities shall be maintained in a sanitary condition. A sufficient quantity of disinfectant shall be provided. Natural or artificial illumination shall be provided.
- The contractor shall ensure that air pollution due to dust/generators is kept to a minimum, preventing any adverse effects on the workers and other people in and around the site. The contractor shall ensure proper screening/hard barricading, covering stockpiles, covering brick and loads of dusty materials, wheel-washing facility, gravel pit, and water spraying. Contractor shall ensure the following activities to prevent air pollution during construction:

  (a) Clear vegetation only from areas where work will start right away

  (b) Vegetation / mulch areas where vehicles do not ply.

  (c) Apply gravel / landscaping rock to the areas where mulching / paving is impractical

  (d) Identify roads on-site that would be used for vehicular traffic. Upgrade vehicular roads (if these are unpaved) by increasing the surface strength by improving particle size, shape and mineral types that make up the surface & base. Add surface gravel to reduce source of dust emission. Limit amount of fine particles (smaller than 0.075mm) to 10 - 20%

  (e) Water spray, through a simple hose for small projects, to keep dust under control. Fine mists should be used to control fine particulate. However, this should be done with care so as not to waste water. Heavy watering can also create mud, which when tracked onto paved public roadways, must be promptly removed. Also, there must be an adequate supply of clean water nearby to ensure that spray nozzles don't get plugged.

  (f) Water spraying shall be done on:

  - Any dusty materials before transferring, loading and unloading
  - Area where demolition work is being carried out

- Any un-paved main haul road
- Areas where excavation or earth moving activities are to be carried out

- The contractor shall ensure that the speed of vehicles within the site is limited to 20 km/hr.
- All material storages should be adequately covered and contained so that they are not exposed to situations where winds on site could lead to dust / particulate emissions.
- Spills of dirt or dusty materials will be cleaned up promptly so the spilled material does not become a source of fugitive dust and also to prevent of seepage of pollutant laden water into the ground aquifers. When cleaning up the spill, ensure that the clean-up process does not generate additional dust. Similarly, spilled concrete slurries or liquid wastes should be contained / leaned up immediately before they can infiltrate into the soil / ground or runoff in nearby areas
- Provide hard barricading of not less than 3 metre or higher as per direction of Authority's Engineer, along the site boundary, next to a road, around batching plant or other public area.
- Provide dust screens, sheeting or netting to scaffold along the perimeter of the building
- Cover stockpiles of dusty material with impervious sheeting
- Cover dusty load on vehicles by impervious sheeting before they leave the site
- Contractor shall be required to provide an easily accessible area that serves the entire building and is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals. He shall coordinate the size and functionality of the recycling areas with the anticipated collections services for glass, plastic, office paper, newspaper, cardboard, and organic wastes to maximize the effectiveness of the dedicated areas. Consider employing cardboard balers, aluminium can crushers, recycling chutes, and collection bins at individual workstations to further enhance the recycling program
- The contractor shall ensure that no construction leachate (e.g. cement slurry etc.), is allowed to percolate into the ground. Adequate precautions are to be taken to safeguard against this including, reduction of wasteful curing processes, collection, basic filtering and reuse. The contractor shall follow requisite measures for collecting drainage water run-off from construction areas and material storage sites and diverting water flow away from such polluted areas. Temporary drainage channels, perimeter dike/swale, etc. shall be constructed to carry the pollutant-laden water directly to the treatment device or facility (municipal sewer line).
- Staging (dividing a construction area into two or more areas to minimize the area of soil that will be exposed at any given time) should be done to separate undisturbed land from land disturbed by construction activity and material storage.

- The contractor shall comply with the safety procedures, norms and guidelines (as applicable) as outlined in the document Part 7 Constructional practices and safety, 2005, National Building code of India, Bureau of Indian Standards. A copy of all pertinent regulations and notices concerning accidents, injury and first- aid shall be prominently exhibited at the work site. Depending upon the scope & nature of work, a person qualified in first-aid shall be available at work site to render and direct first-aid to causalities. A telephone may be provided to first-aid assistant with telephone numbers of the hospitals displayed. Complete reports of all accidents and action taken thereon shall be forwarded to the competent authorities.
- The contractor shall ensure the following activities for construction workers safety, among other measures:
    a) Guarding all parts of dangerous machinery.
    b) Precautionary signs for working on machinery
    c) Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
    d) Durable and reusable formwork systems to replace timber formwork and ensure that formwork where used is properly maintained.
    e) Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
    f) Provide protective equipment; helmets etc.
    g) Provide measures to prevent fires. Fire extinguishers and buckets of sand to be provided in the fire- prone area and elsewhere.
    h) Provide sufficient and suitable light for working during night time.
    i) Electrical Safety switchgears MCBs, MCCBs, proper earthing (as per IE Rules) should be used during utilization of construction electrical power.
    j) Adequate number of competent Electrician should be engaged during construction period.
- The storage of material shall be as per standard good practices as specified in Part 7, Section 2. Storage, Stacking and Handling practices, NBC 2005 and shall be to the satisfaction of the Authority's Engineer to ensure minimum wastage and to prevent any misuse, damage, inconvenience or accident. Watch and ward of the Contractor's materials shall be his own responsibility. There should be a proper planning of the layout for stacking and storage of different materials, components and equipment with proper access and proper maneuverability of the vehicles carrying the materials. While planning the layout, the requirements of various materials, components and equipment at different stages of construction shall be considered.
- The contractor shall provide for adequate number of garbage bins around the construction site and the workers facilities and will be responsible for the proper utilization of these bins for any solid waste generated during the construction. The contractor shall ensure that the site and the workers facilities are kept litter free. Separate bins should be provided for plastic,

glass, metal, biological and paper waste and labelled in both Hindi and English with suitable symbols.

- The Contractor shall provide separate storage area for hazardous material such as chemicals, oils, lubricants, cleaners etc. and it should be away from heat and direct sunlight. The area shall be demarcated with proper warning signs as well as safety instructions.
- The contractor shall prepare and submit Spill prevention and control plans before the start of construction, clearly stating measures to stop the source of the spill, to contain the spill, to dispose the contaminated material and hazardous wastes, and stating designation of personnel trained to prevent and control spills. Hazardous wastes include pesticides, paints, cleaners, lubricant and petroleum products.
- Contractor shall collect & submit the relevant material certificates for materials with high recycled (both post-industrial and post-consumer) content, including materials like RMC mix with fly-ash, glass with recycled content, calcium silicate boards, etc.
- Contractor shall collect the relevant material certificates for rapidly renewable materials such as bamboo, wool, cotton insulation, Agri fiber, linoleum, wheat board, strawboard and cork etc.
- Where possible, the contractor shall select materials/vendors, harvested and manufactured regionally, within an 800-km radius of the project site.
- Contractor shall adopt an IAQ (Indoor Air Quality) management plan to protect the HVAC system during construction, control pollutant sources, and interrupt pathways for contamination. He shall sequence installation of materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile, and gypsum wallboard. He shall also protect stored on-site or installed absorptive materials from moisture damage. Air quality shall be tested on quarterly basis
- The contractor shall ensure that a flush out of all internal spaces is conducted prior to handover. This shall comprise an opening of all doors and windows for 14 days to vent out any toxic fumes due to paints, varnishes, polishes, etc.
- Contractor shall make efforts to reduce the quantity of indoor air contaminants that are odorous or potentially irritating harmful to the comfort and well-being of installer and building occupants. Contractor shall ensure that the VOC (Volatile Organic Compounds) content of paints, coatings and primers used must not exceed the VOC content limits mentioned below:
    - Paints:
    - Non-flat - 150 g/L Flat (Mat) - 50 g/L
    - Anti corrosive/ anti rust - 250 g/L Coatings / Clear wood finishes Varnish - 350 g/L Lacquer - 550 g/L
    - Floor coatings - 100 g/L Stains - 250 g/L Sealers
    - Waterproofing sealer - 250 g/L
    - Sanding sealer - 275 g/L Other sealers - 200 g/L
    - The VOC (Volatile Organic Compounds) content of adhesives and sealants used must be less than VOC content limits mentioned:
    - Architectural Applications VOC Limit (g/l less water)

- Indoor Carpet adhesives - 50 g/L Carpet Pad Adhesives - 50 g/L Wood Flooring Adhesive - 100 g/L Rubber Floor Adhesives - 60 g/L Sub Floor Adhesives . 50 g/L Ceramic Tile Adhesives - 65 g/L
- VCT and Asphalt Tile adhesives - 50 g/L Dry Wall and Panel Adhesives - 50 g/L Structural Glazing Adhesives
- 100 g/L Multipurpose Construction Adhesives . 70 g/L
- Substrate Specific Application VOC Limit (g/l less water) Metal to Metal - 30 g/L Plastic Foams - 50 g/L
- Porous material (except wood) - 50 g/L Wood - 30 g/L Fiber Glass . 80 g/L

- Wherever required, Contractor shall meet and carry out documentation of all activities on site, supplementation of information, and submittals in accordance with IGBC LEED India New Construction v1.0 standards and guidelines. Towards meeting the aforementioned building environmental rating standard(s) expert assistance shall be provided to him up on request.

- Water Use during Construction

  (a) Contractor should spray curing water on concrete structure and shall not allow free flow of water. Concrete structures should be kept covered with hessian cloth/gunny bags and water should be sprayed on them. Contractor shall do water ponding on all sunken slabs using cement and sand mortar.

  (b) The Contractor shall remove from site all rubbish and debris generated by the Works and keep Works clean and tidy throughout the Contract Period. All the serviceable and non- serviceable (debris) material shall be segregated and stored separately. The debris obtained during construction shall be collected in well-formed heaps at properly selected places, keeping in a view safe condition for workmen in the area. Materials which are likely to cause dust nuisance or undue environmental pollution in any other way, shall be removed from the site at the earliest and till then they shall be suitable covered. Glass & steel should be dumped or buried separately to prevent injury. The work of removal of debris should be carried out during day. In case of poor visibility artificial light may be provided.

  (c) The contractor shall provide O & M Manuals wherever applicable.

  (d) The contractor shall make himself conversant with the Site Waste Management Program Manual and actively contribute to its compilation by estimating the nature and volume of waste generated by the process/installation in question.

xxviii. Materials & Fixtures for The Project

- Contractor will produce wherever feasible certificate regarding distance of the source of the relevant material.

- Unless otherwise stated cement used at site for reinforced concrete, precast members, mortar, plaster, building blocks, etc. shall be PPC(Portland Pozzolana Cement) of the highest grade. The PPCmust meet the requirements of IS 1489 (Part I) as regards to fly ash content in cement. The contractor shall obtain from the PPCmanufacturer the certificate regarding fly ash content in the PPCin each batch of consignment.

- The contractor has to comply as per MoEF issued notification 8.0.763(E) dated 14th Sept.1999 & latest notification of Jan. 2016 containing directive for greater fly ash utilization.
- The contractor shall ensure that all paints, polishes, adhesives and sealants used both internally and externally, on any surface, shall be Low VOC products. The contractor shall get prior approval from the Authority's Engineer before the application of any such material.
- All plumbing and sanitary fixtures installed shall be as per the direction of the Authority's Engineer and shall adhere to the minimum LPM (litres per minute) and LPF (litres per flush) mentioned. The contractor shall employ 100% zero ODP (ozone depletion potential) insulation; HCFC (hydro-chlorofluorocarbon)/ and CFC (chlorofluorocarbon) free HVAC and refrigeration equipment and/halon-free fire suppression and fire extinguishing systems.

xxix. Resources Consumed During Construction

- The contractor shall ensure that the water and electricity is not wasted during construction. The Authority's Engineer can bring to the attention any such wastage and the contractor will have to ensure that such bad practices are corrected.
- The contractor shall install necessary meters and measuring devices to record the consumption of water, electricity and diesel on a monthly basis for the entire tenure of the project.
- The contractor shall ensure that all run-off water from the site, during construction is collected and reused to the maximum.
- The contractor shall use treated recycled water of appropriate quality standards for construction, if available.
- No lights shall be turned on during the period between 6:00 AM to 4:00 PM, without the permission of the Authority's Engineer.

xxx. Construction Waste

- Contractor shall ensure that wastage of construction material is within 3%.
- All construction debris generated during construction shall be carefully segregated and stored in a demarcated waste yard. Clear, identifiable areas shall be provided for each waste type. Employ measures to segregate the waste on site into inert, chemical, or hazardous wastes.
- All construction debris shall be used for road preparation, back filling, etc, as per the instructions of the Authority's Engineer, with necessary activities of sorting, crushing, etc.
- No construction debris shall be taken away from the site, without the prior approval of the Authority's Engineer.
- The contractor shall recycle the unused chemical/hazardous wastes such as oil, paint, batteries, and asbestos.
- If and when construction debris is taken out of the site, after prior permissions from the Authority's Engineer, then the contractor shall ensure the safe

disposal of all wastes and will only dispose of any such construction waste in approved dumping sites.

xxxi. Documentation

- The contractor shall, during the entire tenure of the construction phase, submit the following records to the Authority's Engineer on a monthly basis:
- Electricity consumption in kwh units
- Digital photo documentation to demonstrate compliance of safety guidelines as specified here and in the Appendix on Safety Conditions.
- The contractor shall, during the entire tenure of the construction phase, submit the following records to the Authority's Engineer on monthly basis:
- Quantities of material brought into the site, including the material issued to the contractor by the Authority's Engineer.
- Inventories of materials used in the work including cement, reinforcement, bricks etc.
- Quantities of construction debris (if at all) taken out of the site
- Digital photographs of the works at site, the workers facilities, the waste and other material storage yards, pre-fabrication and block making works, etc. as guided by the Authority's Engineer.
- No. of different categories of labours deployed at site for work (shift wise).
- The contractor shall submit a document after construction of the buildings, a brief description along with photographic records to show that other areas have not been disturbed during construction. The document should also include brief explanation and photographic records to show erosion and sedimentation control measures adopted. (Document CAD drawing showing site plan details of existing vegetation, existing buildings, existing slopes and site drainage pattern, staging and spill prevention measures, erosion and sedimentation control measures and measures adopted for top soil preservation during construction
- The contractor shall submit to the Authority's Engineer after construction of the buildings, a detailed as built quantification of the following:
    - Total materials consumed,
    - Total earth excavated
    - Total waste reused,
    - Total water consumed,
    - Total electricity consumed, and
    - Provide supporting document from the manufacturer of the cement specifying the fly ash content in PPC used in reinforced concrete.
- The contractor shall submit the following information to the Authority's Engineer at the end of construction, for all material brought to site for construction purposes, including manufacturer's certifications, verifying information, and test data, where Specifications sections require data relating to environmental issues including but not limited to:

- Source of products: Supplier details and location of the supplier.
- Project Recyclability: Submit information to assist Owner and Contractor in recycling materials involved in shipping, handling, and delivery, and for temporary materials necessary for installation of products.
- Recycled Content: Submit information regarding product post-industrial recycled and post-consumer recycled content; Use the Recycled Content Certification Form, to be provided by the Commissioning Authority appointed for the Project.

xxxii. Equipment

- To ensure energy efficiency during and post construction all pumps, motors and engines used during construction or installed, shall be subject to approval of the Authority's Engineer.
- All lighting installed by the contractor around the site and at the labour quarters during construction shall be CFL / LED bulbs of the appropriate illumination levels. This condition is a must, unless specifically prescribed.
- In case any penalty is imposed by any Hon'ble Court, NGT or any other authority due to non-compliance of any statutory order, or law or guidelines or pollution control or environmental norms, the same will be borne by the contractor.

xxxiii. Submission of Pollution Control Plan

- The contractor shall submit the detailed action plan for control of pollution and for adherence to all the environmental guidelines/ Laws/ statutes/ Court Orders/ NGT orders/ orders of pollution control authorities through the entire period of construction at site. The detailed action plan shall be submitted to the Authority's Engineer within 15 days of the stipulated date of start of work and shall be got approved from the Authority's E&S team &Engineer.
- The contractor shall arrange for control measures of all dust/noise/emission from the construction activities at site of work and shall install screens/curtains/ covers/dust trappers etc. as per guidelines/orders of the NGT/Court of law/ statutory authorities etc. No hindrance shall be allowed, arising out of any stay/stopping of work from any court/statutory authority/NGT/Govt. Authorities as a consequence of the contractor not adhering to any pollution control guideline/ law/ order of the state bodies during the construction period. Nothing shall be paid to the contractor on account of expenses for any dust/pollution/ emission control measures at the site of work or any delay in work due to any orders passed by any court/ statutory authority/Govt. Authorities during the period of construction.Air quality be tested quarterly basis
- The contractor is strongly advised to study all dust/ Noise/ emission/ pollution control norms/ laws/ Court Orders before bidding for the work and quote his rates accordingly for any liability which may arise on this account during the period of construction.

xxxiv. Mode Of Measurements

- The measurements shall be recorded and entered in computerized format in the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly as per the existing procedure.
- These measurements shall then be 100% checked by the Authority's Engineer. The contractor shall incorporate all such changes or corrections, as may be done during these checks, to his draft computerized measurement, and submit to the department the corrected computerized measurement Books now in use, and with its pages machine numbered.
- The Authority's Engineer shall test check these computerized measurement as per the existing instructions. This book shall be treated as a Computerized Measurement Book.
- The Executive Engineer shall record the necessary certificates for their checks and test checks as per the existing procedure in this Computerized Measurement Book.
- The Computerized Measurement Book shall be allotted a serial number as per the Register of Computerized Measurement Books.
- A separate Computerized Measurement Book (as mentioned at pt 5 above) for measurement of items of work of electrical works to be maintained which will have to be verified and checked by the Authority's Engineer (Electrical)
- The water proofing works, all aluminium works & structural glazing etc. shall be carried out through specialized agency. The Contractor shall apply for approval of specialized agencies within two weeks of start of work and delay on this account shall rest with the contractor only. The specialized agencies shall be approved by the Authority's Engineer.
- Electrical work (Steel conduit & G.I. wires) shall be carried out as per specifications for Electrical works. This work shall be supervised and Material shall be got approved by Authority's Engineer before its use at site.

4. SPECIAL CONDITIONS FOR CEMENT & STEEL

4.1 SPECIAL CONDITIONS FOR CEMENT

- The contractor shall procure 43 grade Ordinary Portland (OPC) conforming to IS:8112/Portland Pozzolana Cement (PPC) [conforming to IS:1489 (Part-I)], as required in the work, from reputed manufacturers of grey cement such as ACC, Ultra tech, Vikram, Shree Cement, Ambuja, Jaypee Cement & J. K. Cement from any other reputed cement Manufacturer having a production capacity not less than one million tonnes per annum.The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves right to accept or reject name(s) of cement manufacturer(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturers, given by the tenderer, fully or partially.
- Supply of cement shall be taken in 50 Kg. bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got tested in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.
- PPC (Portland Puzzolana Cement) shall be used in RCC structures in accordance with the circular issued by the Directorate General of Works vide No.CDO/SE(RR)/Fly Ash (Main)/102 dt.09.04.2009. The use of PPC shall be regulated as per the following conditions stipulated in the circular dt.09.04.2009:-
- IS 456-2000 Code of Practice for Plain and Reinforced Concrete (as amended upto date) shall be followed in regard to Concrete Mix Portion and its production as under:
- The concrete mix design shall be done as "Design Mix Concrete" as prescribed in clause-9 of IS: 456 mentioned above.
- Concrete shall be manufactured in accordance with clause 10 of above mentioned IS:456 covering quality assurance measures both technical and organizational, which shall also necessarily require a qualified Concrete Technologist to be available during manufacture of concrete for certification of quality of concrete.
- Minimum M25 grade of concrete shall be used in all structural elements made with RCC both in load bearing and framed structure. For foundations M30 to be used wherever required.
- The mechanical properties such as modulus of elasticity, tensile strength, creep and shrinkage of fly ash mixed concrete or concrete using flyash blended cements (PPCs) are not likely to be significantly different and their values are to be taken same as those used for concrete made with OPC.
- To control higher rate of carbonation in early ages of concrete both in flyash admixed as well as PPC based concrete, water/binder ratio shall be kept as low as possible, which shall be closely monitored during concrete manufacture.
- If necessitated due to low water/binder ratio, required workability shall be achieved by use of chloride free chemical admixtures conforming to IS: 9103. Thecompatibility of chemical admixtures and super plasticizers with each set OPC, fly ash and /or PPC received from different sources shall be ensured by trails.
- In environment subjected to aggressive chloride or sulphate attack in particular, use of flyash admixed or PPC based concrete is recommended. In case, where structural concrete is exposed to excessive magnesium sulphate, flyash substitution/content shall

be limited to 18% by weight. Special type of cement with low C3A content may also be alternatively used. Durability criteria like minimum binder content and maximum water/binder ratio also need to be given due consideration is such environment.

- Wet curing period shall be enhanced to a minimum of 10 days or its equivalent. In hot & arid regions, the minimum curing period shall be 14 days or its equivalent.
- Subject to General Guidelines detailed out as above, PPC manufactured conforming to IS: 1489 (Part-I) shall be treated at par with OPC for manufacture of Design Mix Concrete for structural use in RCC.
- Till the time, BIS makes it mandatory to print the % age of flyash on each bag of cement, the certificate from the PPC manufacturer indicating the same shall be insisted upon before allowing use of such cements in works.
- While using PPC for structural concrete work, no further admixing of flyash shall be permitted.
- The cement shall be brought at site in bulk supply of approximately 50 tonnesor as decided by the Engineer-in-charge.
- The cement godown of the capacity to store a minimum of 2000 bags of cement shall be constructed by the contractor at the site of work for which no extra payment shall be made.
- Double lock provision shall be made to the door of the cement godown. The keys of one lock shall remain with the Engineer-in-charge or his authorized representative and the keys of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-charge at any time.
- The cement shall be got tested by Engineer-in-charge and shall be used on work only after test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to test laboratories. The cost of tests shall be borne by the contractor.
- The actual issue and consumption of cement on work shall be regulated and proper accounts maintained. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by conditions laid therein. In case the cement consumption is less than theoretical consumption including permissible variation, recovery at the rate so prescribed shall be made. In case of excess consumption, no adjustments need to be made.
- Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-charge.

- Damaged cement shall be removed from site immediately by the contractor on receipt of notice in writing from the Engineer-in-charge. If he does not do so within three days of receipt of such notice, the Engineer-in-charge shall get it removed at the cost of the contractor.
- Cement bags shall be stored in two separate godowns, one for tested cement and the other for fresh cement (under testing) to be constructed by the contractor at his own cost as per sketches given in C.P.W.D Specifications– 2019 Vol. I to II with upto date correction slips having weatherproof roofs and walls. The size of the cement go down is indicated in the sketch for guidance. The actual size of godown shall be as per site requirements and nothing extra shall be paid for the same. The decisions of the Engineer-in-Charge regarding the capacity needed will be final. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with Engineer-in-Charge of the work and that of other lock with the authorized agent of the contractor at the site of work so that the cement is issued from godown according to the

daily requirement with the knowledge of both parties. The account of daily receipt and issue of cement shall be maintained in a register in the prescribed performa and signed daily by the contractor or his authorized agent in token its correctness.

- Separate cement registers showing the receipt of the OPC and PPC shall be maintained at site. The contractor shall construct separate godowns for storage of OPC & PPC at site and nothing extra on this account shall be payable.
- Cement register should be maintained at the site of work..
- In order to have an effective control over the issue of cement, the following drill should be observed:
- The cement godown(s) should be properly and effectively double locked, keys of one of thelocks remaining with the department and that of the other with the contractor
- The pages of the Cement Register should be as per Appendix-28 of CPWD Works Manual, machine numbered and each page initialed by the Executive Engineer
- Periodical checking of cement godown.: The cement godown and the Cement Register should be checked by the Assistant Engineer/Executive Engineer in- charge of the work as per following schedule
- At least weekly or fortnightly, respectively, in case of works at the headquarters of the Assistant Engineer/Executive Engineer
  Whenever they visit the site of work in case of works that are located outside the Sub-Divisional/Divisional headquarters.

4.2 SPECIAL CONDITIONS FOR STEEL:

- The PWD/Contractor shall procure IS marked TMT bars of various grades from Primary Steel manufacturers such as SAIL, TATA steel Ltd., RINL, Jindal Steel & Power Ltd., and JSW steel Ltd. Or any other steel manufacturers or their authorized dealers having valid BIS license for IS:1786:2008 (Amendment -1 November 2012).
- The Steel manufacturers or their authorized dealers (as per following selection criteria) having valid BIS license for IS: 1786:2008 (Amendment-1 November 2012) The procured steel should have following qualities: -
- Excellent ductility, bend ability and elongation of finished product due to possible refining technology.
- Consumption of steel should be accurate as per design.
- Steel should have no brittleness problem in finished product.
- Steel should carry the quality of corrosion and earthquake resistance.
- Quality steel with achievement of proper level of sulphur and phosphorus as per IS: 1786:2008.
- Selection Criteria of steel manufacturers
- The supply of reinforcement steel for all PWD works should have following selection criteria of steel manufacturers:-

Steel producers of any capacity using iron ore/processed iron ore as the basic raw material adopting advanced refining technologies as given hereunder:-

DRI-EAF = Direct Reduced iron – Electric arc furnace.
Or
BF-BOF = Blast furnace – Basic oxygen furnace
Or
COREX-BOF = COREX – Basic oxygen furnace.

For production of liquid steel to finish product at single/multiple locations with NABL or any other similarly placed accrediting Government body which operates in accordance with ISO/IEC17011 and accredits labs as per ISO/IEC 17025 conforming to IS: 1786:2008 (Amendement-1 November 2012).

- Chief Engineer/CPM/PM shall approve the steel manufactures for projects under their jurisdiction
- The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so.
- The steel reinforcement bars shall be brought to the site in bulk supply of ten tonnes or more as decided by the Engineer-in-charge.
- The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.

- For checking nominal mass, tensile strength, bend test, re-bend test etc. specimen of sufficient length shall be cut from each size of the bar at random.
- The contractor shall supply free of charge the steel required for testing including transportation to testing laboratories. The cost of tests shall be borne by the contractor.
- The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as procedure prescribed in clause 38 of the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to be made.
- Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.
- The following procedure should be followed in case of removal of rejected/sub-standard materials from the site of work.
- Whenever any material brought by the contractor to the site of work is rejected, entry thereof should invariably be made in the site order book under the signature of the AE/AEE giving approximate quantity of such materials.
- As soon as the material is removed, a certificate to that effect may be recorded by the AE/AEE against the original entry, giving the date of removal a mode of removal i.e. whether by truck, carts or by manual labour. If removal is by truck, the registration number of the truck should be recorded
- When it is not possible for the AE/AEE to be present at the site of work at the time of actual removal of the rejected/sub-standard materials from the site the required certificate should be recorded by the Junior Engineer and the AE/AEE should countersign the certificate recorded by the Junior Engineer.
- In case the contractor brings surplus quantity of steel the same after completion of the work will be removed from the site by the contractor at his own cost after approval of the Engineer-in-Charge.

- Reinforcement including authorized spacer bars and overlaps shall be measured in length of different diameters, as actually (not more than as specified in the drawing) used in the work, nearest to a centimetre. Wastage and unauthorized overlaps shall not be measured.
- The standard sectional weights referred to as in Table 5.4 under para 5.3.4 in CPWD Specifications for works 2009 Vol. 1 will be considered for conversion of length of various sizes of MS bars, Tor steel bars and TMT bars into standard weight Records of actual sectional weight shall also be kept dia-wise & lot-wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer-in-Charge shall be final for the procedure to be followed for determining the average sectional weight of each lot.
- Quantity of each diameter of steel received at site of work each day will constitute on single lot for the purpose. The weight of steel by conversion of length of various sizes of bar based on the actual weighted average sectional weight shall be termed as derived actual weight. If the derived weight as in para 2.14 above is lesser than the standard weight as in para above, the derived actual weight shall be taken for payment. If the derived actual weight is found more than the standard weight then the standard weight as worked out in para 2.13 above shall be taken for payment. In such case nothing extra shall be paid for the difference between the derived actual weight and the standard weight.
- Mixing of different type of steel/different grades of steel shall not be allowed in the same structural members as main reinforcement to satisfy clause 26.1 of IS:456.
- Tolerances on Nominal Mass (individual sample) shall be as under:

S. No.	**Nominal size mm**	**Tolerances on the Nominal Mass (in %age)**
1	Upto and including 10 mm	-8%
2	Over 10 upto& including 16 mm	-6%
3	Over 16 mm	-4%

4.2.1 Special Conditions for Steel

Sl. No.	Item	Checkpoint	Remarks
1	Steel producer having manufacturing facilities at plant	a. Factory address and Registration no.	
		b. Certificate of manufacturing process	
		c. Refining process of steel Producer	
		c.1 BF-BOF route	
		c.2 Corex-BOF route	
		c.3 DRI-EAF route	
		With documentary evidence either for BOF or EAF	
		d. Steel plant having infrastructure for producing sponge iron, billete and TMT Rebars	
		e. Production and quality flow chart	
		f. Plant evaluation and process verification	
		g. List of plant & machinery	
2	Established	Document verification for:	
		a. Govt./PSU Approvals	
		b. Supply orders of TMT Re-bars in Govt. Projects(Minimum-5 years)	
		c. Verification of direct supply orders to any State/Central Govt. Department	
		d. User Certificate issued by any Govt. Department directly.	
3.	Indigenous	Documentary evidence like;	
		a. Certificate of incorporation.	
		b. Memorandum of articles of association	
		c. Credit rating of the company from CARE/CRISIL/ICRA should not be C/D grade (minimum last 3 year)	
		d.Test results from Govt./NABL accredited laboratories	
		e. In house testing facility for physical/chemical tests(NABL accredited)	
4	Reliable	f. Calibration certificates	
		g. List of lab equipments:	
		g1 Calibration certificates	
		g.2 Computerized UTM	
5	Use of Iron-Ore/Processes Iron are as basic raw materials	Verification of Iron-Ore/Process iron ore invoices	

6.	In-house rolling facility	Plant verification to identify in house rolling facilities, production of liquid steel & crude steel	
7.	Licences& certificates	a. ISO 9001:2008 Certification	
		b. ISO 14001:2004 Certification	
		c. OHSAS 18001 : 2007 certificate	
		d. IS 1786:2008(TMT Re-bars)	
		e. IS 2830:1992 (Billets)	
8.	Product Range	TMT Re-bars FE 415/415D/500/500D/550/550D	
		CRS (Corrosion Resistant)& EQR (Earthquake Resistant) TMT Re-bars Size 8 to 36 mm dia	

Note:
DRI-EAF->Direct Reduce Iron-Electric ARC Furnace BF-BOF-> Blast Furnace – Basic Oxygen Furnace COREX-BOF->COREX Furnace- Basic Oxygen Furnace.

4.3 SPECIAL CONDITIONS FOR PREVENTION OF AIR, WATER, LAND POLUTION, GREEN BUILDING CONSTRUCTION SITE:

The contractor shall strictly adhere to the following conditions as part of his contractual obligations:

- The contractor shall not store/dump construction material or debris on metalled road.The contractor shall ensure that adequate measures are taken for the prevention of erosion of the top soil during the construction phase. The contractor shall implement the Erosion and Sedimentation Control Plan (ESCP) provided to him by the Engineer in Charge as part of the larger Construction Management Plan (CMP). The contractor shall obtain the Erosion and Sedimentation Control Plan (ESCP) Guidelines from the Engineer in Charge and then prepare working plan for the following month activities as a CAD drawing showing the construction management, staging & ESCP. At no time soil should be allowed to erode away from the site and sediments should be trapped where necessary.
- The contractor shall ensure that all the top soil excavated during construction works is neatly stacked and is not mixed with other excavated earth. The contractors shall take the clearance of the Engineer in Charge before any excavation. Top soil should be stripped to a depth of 20 cm (centimeters) from the areas to be disturbed, for example proposed area for buildings, roads, paved areas, external services and area required for construction activities etc. It shall be stockpiled to a maximum height of 40 cm in designated areas, covered or stabilized with temporary seeding for erosion prevention and shall be reapplied to site during plantation, landscaping etc. of the proposed vegetation. Top soil shall be separated from subsoil, debris and stones larger than 50 mm (millimeter) diameter. The stored top soil may be used as finished grade for planting areas.
- The Contractor should follow the construction plan as proposed by the Architect / Engineer in Charge to minimize the site disturbance such as soil pollution due to spilling. Use staging and spill prevention and control plan to restrict the spilling of the contaminating material on site. Protect top soil from erosion by collection storage and reapplication of top soil, Construction of sediment basin, contour trenching, mulching etc.
- The surplus excavated earth if any shall be disposed of by the contractor at his own cost from the campus after approval from E-in-C. The cost of disposal of surplus earth is inclusive in the cost of item of schedule of quantities.
- Required filling of site as per Level indicated in Master Plan and upto extent required has to be done by Contractor with sweet earth/sand.
- The contractor shall not change the natural gradient of the ground unless specifically instructed by the Engineer in Charge. This shall cover all natural features like water bodies, drainage gullies, slopes, mounds, depressions, etc. Existing drainage patterns through or into any preservation area shall not be modified unless specifically directed by the Engineer-in-charge.
- The contractor shall not carry out any work which results in the blockage of natural drainage.
- The contractor shall ensure that existing grades of soil shall be maintained around existing vegetation and lowering or raising the levels around the vegetation is not allowed unless specifically directed by the Engineer-in-charge Contractor shall reduce pollution and land development impacts from automobiles use during construction.

- Overloading of trucks is unlawful and creates the erosion and sedimentation problems, especially when loose materials like stone dust, excavated earth, sand etc. are moved. Proper covering must take place. No overloading shall be permitted.
- Surplus dismantle material/building rubbish received from dismantling/demolishing shall be dumped to the dumping ground in properly covered truck with precaution. Agency shall submit the hard copy of photograph showing the properly covered truck disposing the dismantles material/building rubbish. Failure of which shall be sternly dealt and a penalty stipulated in the Schedule of Performance Guarantee and Performance Damages
- Agency/contractor shall not dump the construction material on the metalled road and shall keep the construction material on the physically demarcated space by the Engineer-in-Charge.
- All the building material responsible for pollution shall be brought at site from sources covered by tarpaulin and shall take all precautionary measure to ensure that no dust particles are permitted to pollute the air quality, failure of which Agency shall be liable to pay damages as decided by Engineer-in-Charge. The decision of Engineer-in-Charge shall be final & binding.
- There shall be no burning of leaves, plastic etc. at construction site.

4.4 CONSTRUCTION PHASE AND WORKER FACILITIES

The contractor shall specify and limit construction activity in pre-planned/ designated areas and shall start construction work after securing the approval for the same from the Engineer in Charge. This shall include areas of construction, storage of materials, and material and personnel movement.

4.5 PRESERVE AND PROTECT LANDSCAPE DURING CONSTRUCTION

- The contractor shall ensure that no trees, existing or otherwise, shall be harmed and damage to roots should be prevented during trenching, placing backfill, driving or parking heavy equipment, dumping of trash, oil, paint, and other materials detrimental to plant health. These activities should be restricted to the areas outside of the canopy of the tree, or, from a safe distance from the tree/plant by means of barricading. Trees will not be used for support; their trunks shall not be damaged by cutting and carving or by nailing posters, advertisements or other material. Lighting of fires or carrying out heat or gas emitting construction activity within the ground, covered by canopy of the tree is not to be permitted.
- The contractor shall take steps to protect trees or saplings identified for preservation within the construction site using tree guards of approved specification.
- Contractor should limit all construction activity within the specified area as per the Construction Management Plan (CMP) approved by Engineer in Charge.
- The contractor shall avoid cut and fill in the root zones, through delineating and fencing the drip line (the spread limit of a canopy projected on the ground) of all the trees or group of trees. Separate the zones of movement of heavy equipment, parking, or excessive foot traffic from the fenced plant protection zones.
- The contractor shall ensure that maintenance activities during construction period shall be performed as needed to ensure that the vegetation remains healthy.

- Contractor shall be required to develop and implement a waste management plan, quantifying material diversion goals. He shall establish goals for diversion from disposal in landfills and incinerators and adopt a construction waste management plan to achieve these goals. A project-wide policy of nothing leaves the Site, should be followed, in such a case when strictly followed, care would automatically be taken in ordering and timing of materials such that excess does not become waste. Consider recycling cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wallboard, carpet and insulation. Designate a specific area(s) on the construction site for segregated or commingled collection of recyclable material, and track recycling efforts throughout the construction process. Identify construction haulers and recyclers to handle the designated materials. The diversion may include donation of materials to charitable organizations and salvage of materials on-site.
- Contractor shall collect all construction waste generated on site. Segregate these wastes based on their utility and examine means of sending such waste to manufacturing units which use them as raw material or other site which require it for specific purpose. Typical construction debris could be broken bricks, steel bars, broken tiles, spilled concrete and mortar etc.
- The contractor shall provide potable water for all workers
- The contractor shall provide the minimum level of sanitation and safety facilities for the workers at their camp/labour site. The contractor shall ensure cleanliness of workplace with regard to the disposal of waste and effluent; provide clean drinking water and latrines and urinals as per applicable standard. Adequate toilet facilities shall be provided for the workman within easy access of their place of work. The total no. to be provided shall not be less than 1 per 30 employees in any one shift. Toilet facilities shall be provided from the start of building operations, connection to a sewer shall be made as soon as practicable. Every toilet shall be so constructed that the occupant is sheltered from view and protected from the weather and falling objects. Toilet facilities shall be maintained in a sanitary condition. A sufficient quantity of disinfectant shall be provided. Natural or artificial illumination shall be provided.
- The contractor shall ensure that air pollution due to dust/generators is kept to a minimum, preventing any adverse effects on the workers and other people in and around the site. The contractor shall ensure proper screening, covering stockpiles, covering brick and loads of dusty materials, wheel-washing facility, gravel pit, and water spraying. Contractor shall ensure the following activities to prevent air pollution during construction:
- Clear vegetation only from areas where work will start right away
- Vegetate / mulch areas where vehicles do not ply.
- Apply gravel / landscaping rock to the areas where mulching / paving is impractical
- Identify roads on-site that would be used for vehicular traffic. Upgrade vehicular roads (if these are unpaved) by increasing the surface strength by improving particle size, shape and mineral types that make up the surface & base. Add surface gravel to reduce source of dust emission. Limit amount of fine particles (smaller than 0.075mm) to 10 - 20%
- Water spray, through a simple hose for small projects, to keep dust under control. Fine mists should be used to control fine particulate. However, this should be done with care so as not to waste water. Heavy watering can also create mud, which when tracked onto paved public roadways, must be promptly removed. Also, there must be an adequate supply of clean water nearby to ensure that spray nozzles don't get plugged.

- Water spraying shall be done on:
    - Any dusty materials before transferring, loading and unloading
    - Area where demolition work is being carried out
    - Any un-paved main haul road
    - Areas where excavation or earth moving activities are to be carried out
- The contractor shall ensure that the speed of vehicles within the site is limited to 10 km/hr.
- All material storages should be adequately covered and contained so that they are not exposed to situations where winds on site could lead to dust / particulate emissions.
- Spills of dirt or dusty materials will be cleaned up promptly so the spilled material does not become a source of fugitive dust and also to prevent of seepage of pollutant laden water into the ground aquifers. When cleaning up the spill, ensure that the clean-up process does not generate additional dust. Similarly, spilled concrete slurries or liquid wastes should be contained / leaned up immediately before they can infiltrate into the soil / ground or runoff in nearby areas
- Provide dust screens or netting to scaffold along the perimeter of the building
- Cover stockpiles of dusty material with impervious sheeting
- Cover dusty load on vehicles by impervious sheeting before they leave the site
- Contractor shall be required to provide an easily accessible area that serves the entire building and is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals. He shall coordinate the size and functionality of the recycling areas with the anticipated collections services for glass, plastic, office paper, newspaper, cardboard, and organic wastes to maximize the effectiveness of the dedicated areas. Consider employing cardboard balers, aluminium can crushers, recycling chutes, and collection bins at individual workstations to further enhance the recycling program.
- The contractor shall ensure that no construction leachate (e.g. cement slurry etc.), is allowed to percolate into the ground. Adequate precautions are to be taken to safeguard against this including recycling of wasteful materials, reduction of wasteful curing process, collection, basic filtering and reuse. The contractor shall follow requisite measures for collecting drainage water run-off from construction areas and material storage sites anddiverting water flow away from such polluted areas. Temporary drainage channels, perimeter dike/swale, etc. shall be constructed to carry the pollutant-laden water directly to the treatment device or facility (municipal sewer line).
- Staging (dividing a construction area into two or more areas to minimize the area of soil that will be exposed at any given time) should be done to separate undisturbed land from land disturbed by construction activity and material storage.
- The contractor shall comply with the safety procedures, norms and guidelines (as applicable) as outlined in the document Part 7 Constructional practices and safety, 2005, National Building code of India, Harmonised Guidelines & Standards for Universal Accessibility in India 2021, Bureau of Indian Standards. A copy of all pertinent regulations and notices concerning accidents, injury and first-aid shall be prominently exhibited at the work site. Depending upon the scope & nature of work, a person qualified in first-aid shall be available at work site to render and direct first-aid to causalities. A telephone may be provided to first-aid assistant with telephone numbers. Complete reports of all accidents and action taken thereon shall be forwarded to the competent authorities.

- The contractor shall ensure the following activities for construction workers safety, among other measures:
    - Guarding all parts of dangerous machinery.
    - Precautionary signs for working on machinery
    - Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
    - Durable and reusable formwork systems to replace timber formwork and ensure that formwork where used is properly maintained.
    - Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
    - Provide protective equipment; helmets etc.
    - Provide measures to prevent fires. Fire extinguishers and buckets of sand to be provided in the fire-prone area and elsewhere.
    - Provide sufficient and suitable light for working during night time.
- The storage of material shall be as per standard good practices as specified in Part 7, Section 2. Storage, stacking and Handling practices, NBC 2016 and shall be to the satisfaction of the Engineer in Charge to ensure minimum wastage and to prevent any misuse, damage, inconvenience or accident. Watch and ward of the Contractors materials shall be his own responsibility. There should be a proper planning of the layout for stacking and storage of different materials, components and equipments with proper access and proper maneuverability of the vehicles carrying the materials. While planning the layout, the requirements of various materials, components and equipments at different stages of construction shall be considered.
- The contractor shall provide for adequate number of garbage bins around the construction site and the workers facilities and will be responsible for the proper utilisation of these bins for any solid waste generated during the construction. The contractor shall ensure that the site and the workers facilities are kept litter free. Separate bins should be provided forplastic, glass, metal, biological and paper waste and labelled in both Hindi and English with suitable symbols.
- The contractor shall prepare and submit spill prevention and control plans before the start of construction, clearly stating measures to stop the source of the spill, to contain the spill, to dispose the contaminated material and hazardous wastes, and stating designation of personnel trained to prevent and control spills. Hazardous wastes include pesticides, paints, cleaners, and petroleum products.
- Contractor shall collect & submit the relevant material certificates for materials with high recycled (both post-industrial and post-consumer) content, including materials like RMC mix with fly-ash, glass with recycled content, calcium silicate boards etc..
- Contractor shall collect the relevant material certificates for rapidly renewable materials such as bamboo, wool, cotton insulation, agrifiber, linoleum, wheat board, strawboard and cork etc.Where possible, the contractor shall select materials/vendors, harvested and manufactured regionally, within a 800-km radius of the project site.
- Contractor shall adopt an IAQ (Indoor Air Quality) management plan to protect the HVAC system during construction, control pollutant sources, and interrupt pathways for contamination. He shall sequence installation of materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile, and gypsum wallboard. He shall also protect stored on-site or installed absorptive materials from moisture damage.The

contractor shall ensure that a flush out of all internal spaces is conducted prior to handover. This shall comprise an opening of all doors and windows for 14 days to vent out any toxic fumes due to paints, varnishes, polishes, etc.

- Contractor shall make efforts to reduce the quantity of indoor air contaminants that are odorous or potentially irritating harmful to the comfort and well-being of installer and building occupants. Contractor shall ensure that the VOC (Volatile Organic Compounds) content of paints, coatings and primers used must not exceed the VOC content limits mentioned below:

  Paints
  Non-flat - 150 g/L Flat (Mat) - 50 g/L
  Anti corrosive/ anti rust - 250 g/L
  Coatings / Clear wood finishes
  Varnish - 350 g/L Lacquer - 550 g/L
  Floor coatings - 100 g/L Stains - 250 g/L
  Sealers
  Waterproofing sealer - 250 g/L Sanding sealer - 275 g/L
  Other sealers - 200 g/L

- The VOC (Volatile Organic Compounds) content of adhesives and sealants used must be less than VOC content limits mentioned:
  Architectural Applications VOC Limit (g/l less water)
  Indoor Carpet adhesives - 50 g/L Carpet Pad Adhesives - 50 g/L Wood Flooring Adhesive - 100 g/L Rubber Floor Adhesives - 60 g/L Sub Floor Adhesives - 50 g/L Ceramic Tile Adhesives - 65 g/L
  VCT and Asphalt Tile adhesives - 50 g/L DryWall and Panel Adhesives - 50 g/L Structural Glazing Adhesives - 100 g/L Multipurpose Construction Adhesives - 70 g/L
  Substrate Specific Application VOC Limit (g/l less water) Metal to Metal - 30 g/L Plastic Foams - 50 g/L
  Porous material (except wood) - 50 g/L Wood - 30 g/L
  Fiber Glass - 80 g/L
- Wherever required, Contractor shall meet and carry out documentation of all activities on site, supplementation of information, and submittals in accordance with 3 STAR TERI-GRIHA star program standards and guidelines. Towards meeting the aforementioned building environmental rating standard(s) expert assistance shall be provided to him up on request.
- Water Use during Construction
  - Contractor should spray curing water on concrete structure and shall not allow free flow of water. Concrete structures should be kept covered with thick cloth/gunny bags and water should be sprayed on them. Contractor shall do water ponding on all sunken slabs using cement and sand mortar.
- The Contractor shall remove from site all rubbish and debris generated by the Works and keep Works clean and tidy throughout the Contract Period. All the serviceable and non-serviceable (malba) material shall be segregated and stored separately. The malba obtained during construction shall be collected in well formed heaps at properly selected places,

keeping in a view safe condition for workmen in the area. Materials which are likely to cause dust nuisance or undue environmental pollution in any other way, shall be removed from the site at the earliest and till then they shall be suitable covered. Glass & steel should be dumped or buried separately to prevent injury. The work of removal of debris should be carried out during day. In case of poor visibility artificial light may be provided.

- The contractor shall provide O & M Manuals wherever applicable.
- The contractor shall make himself conversant with the Site Waste Management Program Manual and actively contribute to its compilation by estimating the nature and volume of waste generated by the process/installation in question.

4.6 MATERIALS & FIXTURES FOR THE PROJECT

- Contractor will produce wherever feasible certificate regarding distance of the source of the relevant material.
- Unless otherwise stated cement used at site for reinforced concrete, precast members, mortar, plaster, building blocks, etc shall be PPC (Portland Puzzolana Cement). The PPC must meet the requirements of IS 1489 (Part I) as regards to fly ash content in cement The contractor shall obtain from the PPC manufacturer the certificate regarding fly ash content in the PPC in each batch of consignment.
- The contractor has to comply as per MoEF issued notification 8.0.763(E) dated 14th Sept.1999 & latest notification of Jan. 2016 containing directive for greater fly ash utilization.
- The contractor shall ensure that all paints, polishes, adhesives and sealants used both internally and externally, on any surface, shall be Low VOC products. The contractor shall get prior approval from the Engineer in Charge before the application of any such material.
- All plumbing and sanitary fixtures installed shall be as per the direction of the Engineer in Charge and shall adhere to the minimum LPM (litres per minute) and LPF (litres per flush)(Wash basin: 6.3 Litre per minute, WC flushing: 4/6 Litre per flushing, Urinal Flushing: 3/6 litre per flush).The contractor shall employ 100% zero ODP (ozone depletion potential) insulation; HCFC (hydro-chlorofluorocarbon)/ and CFC (chlorofluorocarbon) free HVAC and refrigeration equipments and/halon-free fire suppression and fire extinguishing systems.

4.7 RESOURCES CONSUMED DURING CONSTRUCTION

- The contractor shall ensure that the water and electricity is not wasted during construction. The Engineer in Charge can bring to the attention any such wastage and the contractor will have to ensure that such bad practices are corrected.
- The contractor shall install necessary meters and measuring devices to record the consumption of water, electricity and diesel on a monthly basis for the entire tenure of the project.
- The contractor shall ensure that all run-off water from the site, during construction is collected and reused to the maximum.
- The contractor shall use treated recycled water of appropriate quality standards for construction, if available.

- No lights shall be turned on during the period between 6:00 AM to 6:00 PM, without the permission of the Engineer in Charge.

4.8 CONSTRUCTION WASTE

- Contractor shall ensure that wastage of construction material is within 3%.
- All construction debris generated during construction shall be carefully segregated and stored in a demarcated waste yard. Clear, identifiable areas shall be provided foreach waste type. Employ measures to segregate the waste on site into inert, chemical, or hazardous wastes.
- All construction debris shall be used for road preparation, back filling, etc, as per the instructions of the Engineer in Charge, with necessary activities of sorting, crushing, etc.
- No construction debris shall be taken away from the site, without the prior approval of the Engineer in Charge.
- The contractor shall recycle the unused chemical/hazardous wastes such as oil, paint, batteries, and asbestos.
- If and when construction debris is taken out of the site, after prior permissions from the Engineer in Charge, then the contractor shall ensure the safe disposal of all wastes and will only dispose of any such construction waste in approved dumping sites.
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4.9 DOCUMENTATION

- The contractor shall, during the entire tenure of the construction phase, submit the following records to the Engineer in Charge on a monthly basis:
    - Water consumption in litres
    - Electricity consumption in kwh units
    - Diesel consumption in litres
    - Quantum of waste (volumetric/weight basis) generated at site and the agregated waste types divided into inert, chemical and hazardous wastes.
    - Digital photo documentation to demonstrate compliance of safety guidelines as specified here and in the Appendix on Safety Conditions.
    - The contractor shall, during the entire tenure of the construction phase, submit the following records to the Engineer in Charge on fortnightly basis:
    - Quantities of material brought on the site, including the material issued to the contractor by the Engineer in charge.
    - Inventories of materials used in the work i/c. flyash, flyash bricks etc.
    - Quantities of construction debris (if at all) taken out of the site
    - Digital photographs of the works at site, the workers facilities, the waste and other material storage yards, pre-fabrication and block making works, etc as guided by the Engineer in Charge.
    - No. of different categories of labours deployed at site for work (shift wise).
    - The contractor shall submit a document after construction of the buildings, a brief description along with photographic records to show that other areas have not been disturbed during construction. The document should also include brief explanation and photographic records to show erosion and sedimentation control measures adopted. (Document CAD drawing showing site plan details of existing vegetation,

existing buildings, existing slopes and site drainage pattern, staging and spill prevention measures, erosion and sedimentation control measures and measures adopted for top soil preservation during construction

- The contractor shall submit to the Engineer in Charge after construction of the buildings, a detailed as built quantification of the following:
  - Total materials used,
  - Total top soil stacked and total reused
  - Total earth excavated
  - Total waste generated,
  - Total waste reused,
  - Total water used,
  - Total electricity, and
  - Total diesel consumed.

- The contractor shall submit to the Engineer in Charge, before the start of construction, a site plan along with a narrative to demarcate areas on site from which top soil has to be gathered, designate area where it will be stored, measures adopted for top soil preservation and indicate areas where it will be reapplied after construction is complete.
- The contractor shall submit to the Engineer in Charge, a detailed narrative (not more than 250 words) on provision for safe drinking water and sanitation facility for construction workers and site personnel.
- Provide supporting document from the manufacturer of the cement specifying the flyash content in PPC used in reinforced concrete.
- The contractor shall submit the following information to the Engineer-in-charge at the end of construction, for all material brought to site for construction purposes, including manufacturer's certifications, verifying information, and test data, where Specifications sections require data relating to environmental issues including but not limited to:
- Source of products: Supplier details and location of the supplier.
- Project Recyclability: Submit information to assist Owner and Contractor in recycling materials involved in shipping, handling, and delivery, and for temporary materials necessary for installation of products.
- Recycled Content: Submit information regarding product post industrial recycled and post consumer recycled content, Use the Recycled Content Certification Form, to be provided by the Commissioning Authority appointed for the Project.
- Product Recyclability: Submit information regarding product and products component's recyclability including potential sources accepting recyclable materials where ever applicable.
- Certifications from manufacturers of Low VOC paints, adhesives, sealant and polishes used at this particular project site
- Submit environmental and pollution clearance certificates for all diesel generators installed as part of this project. Provide total support to Engineer in Charge and Green Building Consultants appointed by the Engineer in charge in completing all Green Building Rating related formalities, including signing of forms, providing signed letters in the contractor's letterhead whenever required
- Provide final certification of well-managed forest of origin to provide final documentation of certified sustainably harvested status: Acceptable wood, certified sustainably harvested, certifications shall include:

- Clean tech: Provide pollution clearance certificates from all manufacturers of materials
- Indoor Air quality and Environmental Issues: Submit emission test data, sourced from the manufacturers, produced by acceptable testing laboratory listed in Quality Assurance Article for materials as required in each specific Specification section.
- Certifications from manufacturers of Low VOC paints, adhesives, sealant and polishes used at this particular project site.
- Certification from manufacturers of composite wood products/agrofibre products on the absence of added urea formaldehyde resin in the products supplied to them to this particular site.

- Submit environmental and pollution clearance certificates for all diesel generators installed as part of this project. Provide total support to Engineer in Charge and Green Building Consultants appointed in completing all Green Building Rating related formalities, including signing of forms, providing signed letters in the contractor's letter head whenever required.
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4.10 EQUIPMENT

- To ensure energy efficiency during and post construction all pumps, motors and engines used during construction or installed, shall be subject to approval of the Engineer-in-Charge.
- All lighting installed by the contractor around the site and at the labour quarters during construction shall be led fixtures of the appropriate illumination levels. This condition is a must, unless specifically prescribed.
- The contractor is expected to go through all other conditions of the minimum 3 star GRIHA rating system. Failure to adhere to any of the above mentioned items, without approval of the Engineer in Charge, shall be deemed as a violation of contract and the contractor shall be held liable for penalty as per terms of the agreement.
- In case any penalty is imposed by any Hon'ble Court, NGT or any other authority due to non-compliance of any statutory order, or law or guidelines or pollution control or environmental norms, the same will be borne by the contractor.

4.11 SUBMISSION OF POLLUTION CONTROL PLAN

- The contractor shall submit the detailed action plan for control of pollution and for adherence to all the environmental guidelines/Laws/statutes/Court Orders/NGT orders/orders of pollution control authorities through the entire period of construction at site. The detailed action plan shall be submitted to the Engineer-in-Charge within 15 days of the stipulated date of start of work and shall be got approved from the Engineer-in-Charge.
- The contractor shall arrange for control measures of all dust/noise/emission from the construction activities at site of work and shall install screens/curtains/ covers/dust trappers etc. as per guidelines/orders of the NGT/Court of law/ statutory authorities etc. No hindrance shall be allowed, arising out of any stay/stopping of work from any court/statutory authority/NGT/Govt. Authorities as a consequence of the contractor not adhering to any pollution control guideline/law/order of the state bodies during the

construction period. Nothing shall be paid to the contractor on account of expenses for any dust/pollution/emission control measures at the site of work or any delay in work due to any orders passed by any court/ statutory authority/Govt. Authorities during the period of construction.

- Compensation per day will be levied and recovered from the dues of the contractor for each day of delay beyond 15 days for non submission of pollution control plan as stipulated in the Schedule of Performance Guarantee and Performance Damages
- The contractor is strongly advised to study all dust/Noise/emission/ pollution control norms/laws/Court Orders before bidding for the work and quote his rates accordingly for any liability which may arise on this account during the period of construction.
- Nothing extra, whatsoever, shall be paid beyond the quoted rates on the account of compliance of conditions and instructions prescribed under special conditions for prevention of air water land pollution, green building construction and its sub clauses thereof, and the rates already quoted by the contractor shall be deemed to be inclusive of all such provisions except for provided otherwise
- For certain item, if frequency of tests is not mentioned in the CPWD Specifications, then relevant IS code shall be followed and tests shall be carried out as per the frequency specified therein.

Quality of Materials

- Door/window frames/shutters and other factory-made materials shall be procured from reputed and approved manufacturers or their authorized dealers as approved by Engineer in charge. Decision of Engineer-in-charge in this regard shall be final and binding.
- All CP brass water supply fittings and fixtures mentioned anywhere in the agreement shall be single lever in case of mixers and quarter turn in case of rest and shall be of make and model as per the list of approved makes provided in the agreement.
- All the CP brass/ SS fittings and fixtures for toilets like towel rod, towel rack, rob hook, angle valve and other such wellness products/accessories shall be of make and model as per the list of approved makes provided in the agreement, except otherwise mentioned.
- CP brass nipple/GI hexa nipple of appropriate dia and length, wherever required to be provided, shall be of make as per list of approved makes and nothing extra shall be paid on this account and the overall quoted cost shall be deemed to be inclusive of all such provisions.
- All sanitary wares and fittings shall conform to IS standards and to be procured from approved makes. The contractor shall submit minimum three samples of different makes of approved/ preffered make list for all fittings and fixtures proposed to be used, to the Engineer-in-charge for his approval and decision of engineer-in-charge regarding selection of any sample shall be final and binding. The approved samples shall remain with the Engineer-in-charge till the completion of the work.The items of stainless steel railing mentioned in the agreement shall be modular in construction as per the list of approved makes provided in the agreement. Welding of joints shall be resorted to in exceptional cases only with the approval of engineer-in-charge.
- All kind of hardware to be used for fire doors like door closer, hinges, panicbar, trim latch, mortice latch and lock etc. shall be certified having valid certificate of approval from third party reputed International certifying agency like certifire or equivalent.

- Items of aluminium provided for shutter and fixed portion in the agreement shall be of section compatible with euro hinges/ butt hinges/concealed hinges/3d hinges or rollers for use in casement / sliding shutters as directed by the engineer-in-charge, for which nothing extra shall be paid and the decision of engineer-in-charge in this regard shall be final and binding.
- All the aluminium doors and windows shall be factory fabricated through specialized agencies as per the list of approved makes. In case no agency is provided in the list of approved makes, specialized agency shall be got approved from engineer-in-charge after submitting all required document like previous work done, completion certificate, copy of work order, IT TDS certificates for the work done etc. as may have been prescribed in the agreement to the satisfaction of the engineer-in-charge including inspection of work if required. The decision of engineer-in-charge regarding acceptance or rejection of such agency proposed by the contractor shall be final and binding. In no case fabrication of aluminium door and windows shall be allowed at site.
- Contractor shall have to strictly abide and follow all the terms and conditions prescribed by ministry of environment and forest (MoEF), GOI, NGT, CPCB, state PCB, available on their website or any other appropriate government authority for construction works in Jorhat or elsewhere, for which nothing extra shall be paid on this account except for provided otherwise in the agreement. The quoted rate shall be deemed to be inclusive of all such provision and conditions and provisions as aforementioned. In case of non-fulfillment of any of the conditions/provisions prescribed by the aforementioned authorities, as the case may be, engineer-in-charge shall get it done at the risk and cost of contractor after giving him a notice in writing and such decision of engineer-in-charge shall be final and binding in the contractor.
- Contractor shall be mandatorily be required to provide to the engineer-in charge certified copies of original invoices of all kind of materials, T&P etc. being used or procured for this agreement. Failure to provide any of such information to engineer-in-charge to his satisfaction shall render the contractor ineligible for payment for such items and no claim what so ever on this account shall be admissible and decision of engineer-in-charge in this regard shall be final and binding.
- Contractor shall provide minimum three samples of three different makes for each item of work as per the list of approved makes for the approval of engineer-in-charge. It shall be the discretion of Engineer-in-charge to approve any of the three samples to be submitted bythe contractor and decision of engineer-in-charge in this regard shall be final and binding and nothing extra, whatsoever, shall be admissible on this ground.
- The site for execution of work is very congested and there is no space for labour hutments, batching plant or stacking of construction materials. Therefore, the agency shall have to arrange space outside the campus at its own risk and cost for labour huts, batching plant and stacking of materials required for construction, cost of which may be factored in, while quoting for the work. No claim, whatsoever, shall be admissible on account of hindrance or additional cost being incurred for these activities.
- The land for labour camps & batching Plant and storage/dumping of construction materials shall be arranged by the contractor at his risk and cost. The lease/rent charges shall be borne by the contractor. The Engineer-in-Charge shall extend necessary help and issue necessary recommendations etc. to the concerned clients / department for temporary allotment of land during construction period, if land is available with them. In such cases, the contractor shall

vacate the land after completion of work in same condition as was at the time of allotment.Rates being quoted by the tenderers shall be deemed to be inclusive of all kind of multiple handling of materials including manual carriage and wastage involved thereto, including all lifts and leads up to the work site. No claim, whatsoever, shall be admissible on account of hindrance or additional cost being incurred for these activities.

- Rates quoted by the tenderers shall be deemed to be inclusive of loading, unloading, carrying away and dumping the malba, rubbish or surplus earth being generated during construction or due to dismantling, outside the campus including all lifts and leads, at any government approved location or any other suitable location in conformity with the laws of land at contractors risk and cost. The entire responsibility and any kind of legal and financial liabilities arising out of such activity including identification of suitable dumping ground (government/private) shall lie completely over the contractor.
- Only river sand/fine aggregates shall be allowed for concrete/mortar/plaster works. Manufactured sand shall not be allowed.
- No hindrance shall be applicable/allowed for bad weather, snowfall, rainfall, hurricane, non-motor able roads, mud, slush etc. and alike conditions and any delay, if any, caused on account of such factors, shall have to be covered up by deploying additional labor, resources and working in shifts. Nothing extra shall be paid on this account over and above the quoted rates.
- The ridges used in metal sheet roofing shall be cut and notched down as per the directions of the Engineer in charge in the trough/valley portions of the metal sheet roofing. In case of pre coated metal profile sheet roofing, self-tapping/drilling screws as per the specifications shall be provided on each crest/ridge on each purlin. The quoted rates shall be inclusive of all such operations and nothing extra shall be paid on this account.
- All corner joints of tiles in dado shall be made by chamfering the edges of tiles to 45 degree to produce a fine mitred joint and filling same with matching grout. Nothing extra shall be paid on this account.
- All joints of stones in wall claddings shall be made as per the architectural drawings or directions given by Engineer in charge. Making of all kind of such stone joints such as V groove, butt joint, partial butt joint etc., including polishing of the edge of stone in such groove/joint shall be deemed to be included in the quoted cost, unless mentioned otherwise and nothing extra shall be paid on this account.
- Moisture barrier membrane required in the items of modular expansion joint shall be of EPDM membrane of minimum 1.1 mm thickness of make as approved by Engineer in charge. The cost of such membrane and fixing it using epoxy adhesive and putty is deemed included in the quoted rates and nothing extra shall be paid on this account.
- Painting on interior and exterior surfaces of building shall be done using rollers only and nothing extra shall be paid on this account. Painting of corners flat brushes may be used.
- Contractor shall comply with all statutory rules and regulations w.r.t royalty and other levies and taxes. Royalty at the prevalent rates prescribed by govt., shall be paid by the Contractor or his associate supplier as per Government rules, on all applicable materials such as boulders, metals, all sizes stone aggregates, brick aggregates, coarse and fine aggregates, moorum, river sand, gravels, earth and bajri etc. collected by him for the execution of the work, directly to the revenue authority of the state government concerned. Further, contractor needs to submit proof of submission of full royalty to the state government or local authority. Nothing extra shall be payable on this account.

- The hindrances in execution of work, if any, whether on part of the contractor or department, as required for determining extension of time/rescheduling of milestones etc., with or without levy of compensation, shall be judged/worked out/based on the correspondences and site order book records between the department and the contractor.

APPLICABLE PERMITS

1 Applicable Permits

1.1 The Contractor shall obtain, as required under the Applicable Laws, the following Applicable Permits:

(a) Permission of the State Government for extraction of stone from quarry;

(b) Permission of Village Panchayats and Pollution Control Board for installation of crushers;

(c) Licence for use of explosives, if required

(d) Permission of the State Government/ local bodies for drawing water for construction;

(e) Licence from inspector of factories or other competent Authority for setting up batching plant;

(f) Clearance of Pollution Control Board for setting up batching plant;

(g) Clearance of Village Panchayats and Pollution Control Board for setting up asphalt plant;

(h) Permission of Village Panchayats and State Government for borrow earth; and

(i) Permission of the State Government for felling of trees or jungle clearance, if necessary

(j) Any other permits or clearances required under Applicable Laws.

1.2 Applicable Permits, as required, relating to environmental protection and conservation shall have been procured by the Authority in accordance with the provisions of this Agreement.

Site Information

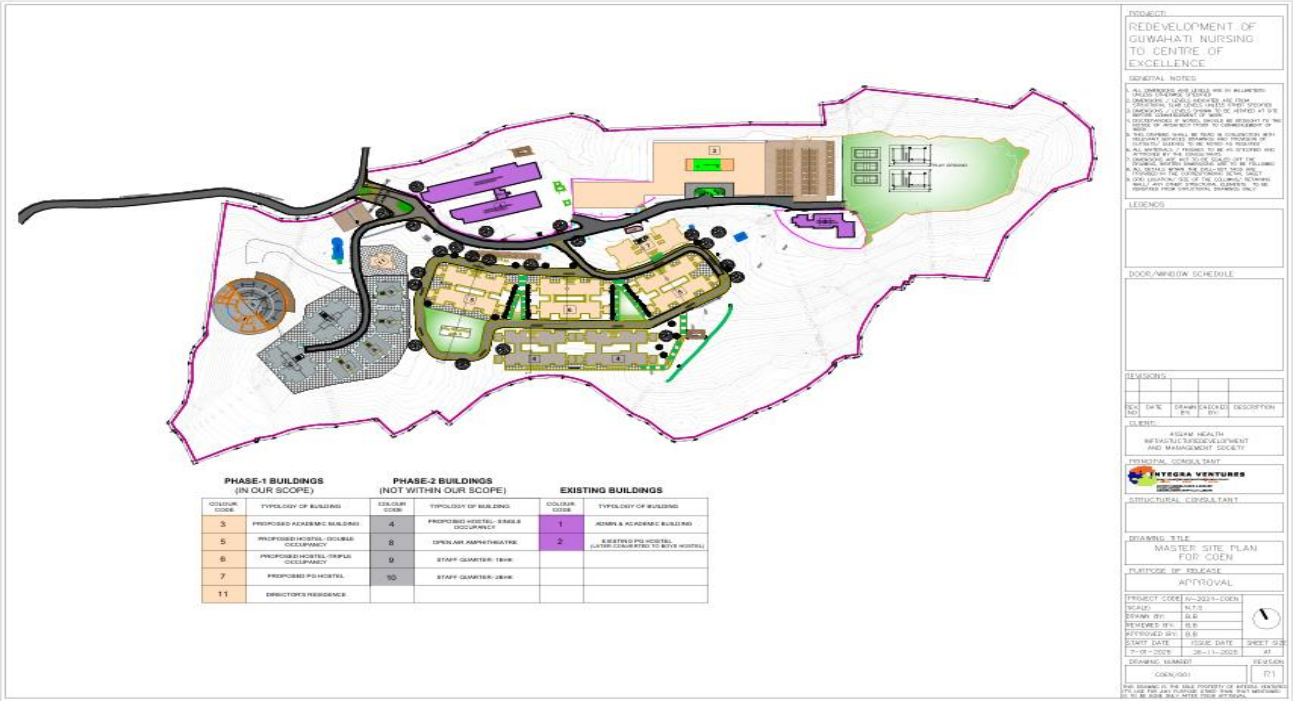
1. PROPOSED LOCATION OF "CENTRE OF EXCELLENCE FOR NURSING"

Location: The Regional Nursing College is situated in the Guwahati City under Kamrup Metropolitan district in the state of Assam and located at 26°09'14"N latitude and 91°45'57"E longitude. The Regional Nursing college is surrounded by Guwahati Medical College in North side, Medical College Hill top road in South side, Sib mandir Path in East side and National Forensic Science University.

Terrain Characteristics:

Medical Collage Hill top road in South side, Sib mandir Path in East side and National Forensic Science University.

Topography:



Please refer to 'detailed drawing set' attached for reference

1. ***Ground condition information:-***

The project site is situated in central Guwahati within a hilly terrain, characterized by uneven ground levels and hard rock strata. Development of the hostel buildings will involve systematic vegetation clearance, step-cut excavation of the hill slope, and controlled chemical rock blasting to achieve the required formation levels. Slope stabilization and structural safety will be ensured through the provision of appropriately designed retaining walls to mitigate soil movement and prevent differential settlement. For the proposed Academic and Administrative Blocks, the existing hostel building is to be fully demolished, and the adjoining playground area is to be regraded and redeveloped in accordance with the approved layout plan. All works shall be executed in compliance with relevant environmental, geotechnical, and statutory requirements.

2. ***Utility records:-***

Review of existing utilities within and around the site indicates the presence of certain service lines that must be considered during planning and execution. Along the approach road, a **municipal water supply main** runs parallel to the site, which will serve as the primary source for the new facility's water connection. Additionally, an **HT/LT electrical armoured cable** is laid underground along the northern edge of the site, supplying power to adjacent institutional buildings.

Overhead electrical distribution lines are also present along the eastern perimeter. No sewerage, stormwater drains, or telecom OFC ducts were found crossing the proposed construction area; however, nearby utility corridors exist and will be utilized for future service integration. All existing utilities must be protected, shifted, or upgraded as required, ensuring adequate safety clearances and coordination with respective service departments.

3. Land ownership information:-

Established on October 3, 1977, under the NEC scheme and managed by the Government of Assam, the Regional College of Nursing has been a pioneer in university-level nursing education. Officially inaugurated on December 5, 1977, by Governor L. P. Singh, the institution thrived under the leadership of Dr. J. Mahanta and Mrs. A. Kerketta, the first principal. Today, it serves as a premier nursing education centre for the Northeastern states, including Assam, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland, and Tripura.

Originally operating from Guwahati Medical College on Narakasur Hill, the college shifted to its dedicated building near Guwahati Medical College & Hospital in 2006. It began with a four-year B.Sc. Nursing program with 30 seats, expanding in 2008 to include a two-year M.Sc. Nursing program and increasing B.Sc. seats to 60. By 2020-21, intake capacity further grew to 75 for B.Sc. and 30 for M.Sc. Nursing. The institution also ran a Post Basic B.Sc. Nursing program from 1991 to 2007, graduating 215 students.

In 1994, the college became an Indira Gandhi National Open University (IGNOU) study centre for Post Basic B.Sc. Nursing, recognized as one of IGNOU's top-rated centres. It attracts students nationwide for its correspondence courses.

In 2016, the college was designated as a National Nodal Centre (NNC) for Maternal and Child Health (MCH) training. It has trained 14 batches of nursing faculty, emphasizing teaching skills, clinical expertise, mentorship, and MCH care quality improvement. The college continues to play a crucial role in advancing nursing education and training in Northeast India.

4. Details of known accommodation works requirements:-

Based on the current site conditions and the proposed development plan, several accommodation works have been identified to ensure uninterrupted access, safety, and service continuity during the execution of the project. Temporary diversion of pedestrian and vehicular access routes will be required in areas where construction interfaces with existing circulation paths. Existing utilities, including the municipal water supply main and underground electrical armored cable along the site boundary, shall be protected, supported, or temporarily relocated as necessary to avoid service disruption. Provision of temporary stormwater drainage channels, site barricading, safety signage, and controlled access gates will be essential for safe movement within and around the project zone. Where excavation or level

modification impacts adjoining properties or public pathways, temporary shoring or retaining measures shall be provided. All accommodation works shall be executed in coordination with relevant authorities and reinstated to approved standards upon completion of permanent works.

5. Ground water, surface water and hydrological information:-

The project area is predominantly composed of weathered rock strata, resulting in extremely poor groundwater potential. Hydrogeological observations confirm that the site is not suitable for borewell installation, and there is no feasible yield for groundwater extraction. As a result, the project will rely entirely on the existing JICA-supported municipal water supply system, from which a dedicated connection will be obtained. The supplied water will be conveyed to the proposed Underground Reservoir (UGR) for storage, pumping, and distribution to various buildings within the campus. No significant natural surface water bodies exist within the project footprint, and stormwater will be managed through a planned drainage network integrated with the site's grading design.

6. Statuary planning and zoning constraints:-

The proposed development shall comply with all statutory planning norms and zoning regulations prescribed by the local development authorities. This includes adherence to land-use classification, permissible building height, Floor Area Ratio (FAR), ground coverage limits, and mandatory open spaces. Setback requirements along all property boundaries must be maintained as per the prevailing building bylaws. Any construction within designated buffer zones—such as road widening corridors, utility corridors, or environmentally sensitive areas—shall be strictly avoided. Approvals from relevant departments, including Town & Country Planning, Fire Services, Pollution Control Board, and local municipal bodies, must be obtained prior to commencement of works. All project components shall be designed and executed in alignment with these statutory constraints to ensure full regulatory compliance and avoid future conflicts.

7. Orders consents permits, licenses and compliance requirements:-

All project activities shall be executed in accordance with the statutory orders, consents, permits, and licenses mandated by the competent authorities. Prior to commencement of construction, the Contractor/Project Authority must obtain all necessary clearances, including land-use approval, building permit, environmental consent (if applicable), tree-cutting permission, excavation and blasting permits, and utility shifting approvals from the relevant departments. Compliance with Fire NOC requirements, Pollution Control Board guidelines, Labour Department registrations, and safety regulations under the Building and Other Construction Workers (BOCW) Act is mandatory. Periodic inspection approvals, testing certifications, and occupancy or completion certificates shall also be secured as per governing norms. The project shall be implemented in full adherence to all

applicable national, state, and local regulations, ensuring regulatory compliance throughout the execution and operational phases.

8. Details of any risks or hazards:-

The project involves several potential risks and hazards associated with itslocation, construction methodology, and site conditions. As the site is situated in a hilly terrain with weathered rock strata, risks include slope instability, rockfall, and hazards related to controlled chemical blasting during excavation. Tree cutting and hill cutting operations pose additional safety concerns such as falling debris, equipment movement, and restricted access zones. Existing underground and overhead utilities—particularly water supply lines and electrical armoured cables—present risks of accidental damage if not properly identified and protected. Construction activities such as excavation, demolition of existing structures, handling of heavy machinery, and working at heights may lead to occupational hazards if adequate safety measures are not enforced. The site is also prone to heavy rainfall during monsoon, increasing the likelihood of erosion, flooding, and reduced soil stability. All identified risks shall be mitigated through strict adherence to safety protocols, environmental safeguards, and continuous monitoring throughout the project duration.

Contractor's Representative and Key Personnel

Requirement of Technical / Architectural Personnel required to be deployed by the Contractor for planning stage

Sl no.	**Position**	**No. Of Positions**	**Essential Qualification**	**Minimum Experience* (Years)**
1	Lead Architect	1	Bachelors in Architecture	12
2	Architect	1	Bachelors in Architecture	07
3	Structural Engineer	1	M.Tech in Civil Engineering	12
4	Electrical Engineer	1	B.E./B.Tech in Electrical Engineering	12
5	Mechanical Engineer	1	B.E./B.Tech in Mechanical Engineer	12
6	Landscape & Site Development Expert	1	Masters in Architecture (Landscape)	5
7	Environmental, Health & Safety Expert	1	B.E./ B. Tech in Environmental Engineering/M. Sc (Environment Science) and relevant experience in development of EIA/EMPs for construction projects	12 (Having core experience in Infrastructure Projects)
8	Social Expert	1	Master Degree in Sociology/ Social work	5
9	Fire Safety Expert	1	Master degree in Industrial Safety or equivalent	10

* Experience of Similar works is defined as design and Building of Institutional / Academic or Residential Complex

The Requirement of Technical / Architectural Personnel for the construction work:

Sl no.	Position	No. Of Positions	Essential Qualification	**Minimum Experience (Years)**
1	Project Manager	1	B.E./B.Tech in Civil Engineering	15 years (and having experience of one similar nature of work)
2	Project/ Site Engineer	1	B.E./B.Tech in Civil Engineering	5 years
3	Quality Manager	1	B.E./B.Tech in Civil Engineering	10 years experience in Quality assurance

4	Project Engineer	1	B.E./B.Tech in Mechanical Engineer	12 years (and having experience of one similar nature of work)
5	Site Engineer	1	B.E./B.Tech in Electrical Engineering	5 years
6	Project Planning/ billing Engineer/ Quantity Surveyor	1	B.E./B.Tech in Civil Engineering	6 years
7	Site Architect	1	Bachelors in Architecture	5 years
8	Environmental, Health & Safety Engineer	1	B.E./ B. Tech in Enviromental Engineering	12 years (Having core experience in Infrastructure Projects)
9	Horticulturist	1	BSc Agriculture/M. Sc (Botany)	5 years

The Bidder shall provide details of the proposed personnel and their experience records using Form PER-1 and PER-2 included in Section IV, Bidding Forms.

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 any State Government Departments of Govt of Assam .

[ii] without permission of Central/ State Government, any person who retired as gazetted officer in India within the last two years.

Specifications

Detailed Specification are attached as per the following Annexures –

Annexure III	**:**	**Technical specifications (Civil)**
Annexure IV	**:**	**Technical specifications (Electrical & LVS)**
Annexure V	**:**	**Technical specifications (Fire Fighting)**
Annexure VI	**:**	**Technical specifications (HVAC)**
Annexure VII	**:**	**Technical Specifications (Plumbing)**

Drawings

For detailed drawing please refer to Annexure No. II

Supplementary Information

Annexure VIII: Approved LOM

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

SECTION VIII - GENERAL CONDITIONS OF CONTRACT (GCC)

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.

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Appendix A

Appointment of Adjudicator

General Conditions of Contract

1. General Provisions	
1.1 Definitions	In the Contract the following words and expressions shall have the meanings stated, except where the context requires otherwise. Boldface type is used to identify defined terms. 1.1.1 "**Accepted Contract Amount**" means the amount accepted in the Letter of Acceptance for the execution of the Works in accordance with the Contract. 1.1.2 **"Adjudicator"** is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in S*ub-Clause 20 [Claims, Disputes and Arbitration]*. 1.1.3 "**Advance Payment Certificate**" means a Payment Certificate issued by the Engineer for advance payment under Sub-Clause 14.2.2 [*Advance Payment Certificate*]. 1.1.4 "**Advance Payment Guarantee**" means the guarantee under Sub-Clause 14.2.1 [*Advance Payment Guarantee*]. 1.1.5 "Unless stated otherwise **in the PCC**, **Base Date** means the latest date for submission of the Bid. 1.1.6 "**Claim**" means a request or assertion by one Party to the other Party (excluding a matter to be agreed or determined under sub-paragraph (a) of Sub-Clause 3.7 *[Agreement or Determination]*) for an entitlement or relief under any Clause of these Conditions or otherwise in connection with, or arising out of, the Contract or the execution of the Works. 1.1.7 "**Commencement Date**" means the date as stated in the Engineer's Notice issued under Sub-Clause 8.1 [*Commencement of Works*]. 1.1.8 "**Compliance Verification System**" means the compliance verification system to be prepared and implemented by the Contractor for the Works inaccordance with Sub-Clause 4.9.2 [*Compliance Verification System*]. 1.1.9 "**Conditions of Contract**" or "these Conditions" mean these General Conditions of Contract and the Particular Conditions. 1.1.10 "**Contract**" means the Contract Agreement, the Letter of Acceptance, the Letter of Bid, any addenda referred to in the Contract Agreement, these Conditions, the Employer's Requirements, the Schedules, the Contractor'sBid, the JV

		Undertaking (if applicable) and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance
	1.1.11	"**Contract Agreement**" means the agreement entered into by both Parties in accordance with Sub-Clause1.6 [*Contract Agreement*].
	1.1.12	Deleted.
	1.1.13	"**Contract Price**" means the price defined in Sub-Clause 14.1 [*The Contract Price*].
	1.1.14	"**Contractor**" means the person(s) named as contractor in the Letter of Bid accepted by the Employer and the legal successors in title of such person (s).
	1.1.15	"**Contractor's Documents**" means the documents prepared by the Contractor as described in Sub-Clause 5.2 [*Contractor's Documents*], including calculations, digital files, computer programs and other software, drawings, manuals, models, specifications and other documents of a technical nature.
	1.1.16	"**Contractor's Equipment**" means all apparatus, equipment, machinery, construction plant, vehicles and other items required by the Contractor for the execution of the Works. Contractor's Equipment excludes Temporary Works, Plant, Materials and any other things intended to form or forming part of the Permanent Works.
	1.1.17	"**Contractor's Personnel**" means the Contractor's Representative and all personnel whom the Contractor utilizes on Site or other places where the Works are being carried out, including the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.
	1.1.18	"**Contractor's Bid**" means the part of the Tender stated or implied as being the Contractor's Bid for execution of the Works, as included in the Contract. Such documents may include the Contractor's preliminary design.
	1.1.19	"**Contractor's Representative**" means the natural person named by the Contractor in the Contract or appointed by the Contractor under Sub-Clause 4.3 [*Contractor's Representative*], who acts on behalf of the Contractor.
	1.1.20	"**Cost**" means all expenditure reasonably incurred (or to be incurred) by the Contractor in performing the Contract, whether on or off the Site, including taxes, overheads and similar charges, but does not include profit. Where the Contractor is entitled under a Sub-Clause of these

		Conditions to payment of Cost, it shall be added to the Contract Price.
	1.1.21	"**Cost Plus Profit**" means Cost plus the applicable percentage for profit **stated in the PCC** (if not stated, five percent (5%)). Such percentage shall only be added to Cost, and Cost-Plus Profit shall only be added to the Contract Price, where the Contractor is entitled under a Sub-Clause of these Conditions to payment of Cost Plus Profit.
	1.1.22	"**Country**" means the country in which the Site (or most of it) is located, where the Permanent Works are to be executed,
	1.1.23	"**Date of Completion**" means the date stated in the Taking-Over Certificate issued by the Engineer under Sub-Clause 10.1 [*Taking Over the Works and Sections]* or the first paragraph of Sub-Clause 10.2 [*Taking Over Parts]*; or, if the last paragraph of Sub-Clause 10.1 [*Taking Over the Works and Sections*] applies, the date on which the Works or Section are deemed to have been completed in accordance with the Contract; or, if the second paragraph of Sub-Clause 10.2 [*Taking Over Parts*] or Sub-Clause 10.3. [*Interference with Tests on Completion*] applies, the date on which the Works or Section or Part are deemed to have been taken over by the Employer.
	1.1.24	"**day**" means a calendar day.
	1.1.25	"**Daywork Schedule**" means the document entitled daywork schedule (if any) included in the Contract, showing the amounts and manner of payments to be made to the Contractor for labour, materials and equipment used for daywork under Sub-Clause 13.5 [*Daywork*].
	1.1.26	"**Defects Notification Period**" or "**DNP**" means the period for notifying defects and/or damage in the Works or a Section or a Part (as the case may be) under Sub-Clause 11.1 [*Completion of Outstanding Work and Remedying Defects*], as **stated in the PCC** (if not stated, one year), and as may be extended under Sub-Clause 11.3 [*Extension of Defects Notification Period*]. This period is calculated from the Date of Completion of the Works or Section or Part.
	1.1.27	"**Delay Damages**" means the damages for which the Contractor shall be liable under Sub-Clause 8.8 [*Delay Damages*] for failure to comply with Sub-Clause 8.2 [*Time for Completion*].
	1.1.28	"**Dispute**" means any situation where:

	(a) one Party has made a Claim, or there has been a matter to be agreed or determined under sub-paragraph (a) of Sub-Clause 3.7 [Agreement or Determination]; (b) the Engineer's determination under Sub-Clause 3.7.2 [*Engineer's Determination*] was a rejection (in whole or in part) of; (i) the Claim (or there was a deemed rejection under sub-paragraph (i) of Sub-Clause 3.7.3 [*Time limits]);* or (ii) a Party's assertion(s) in respect of the matter as the case may be; and (c) either Party has given a NOD under Sub-Clause 3.7.5 *[Dissatisfaction with Engineer's determination]*.
	1.1.29 "**Employer**" means the person named as the Employer **in the PCC** and the legal successors in title to this person.
	1.1.30 "**Employer's Equipment**" means the apparatus, equipment, machinery, construction plant and/or vehicles (if any) to be made available by the Employer for the use of the Contractor under Sub-Clause 2.6 [*Employer-Supplied Materials and Employer's Equipment*]; but does not include Plant which has not been taken over under Clause 10 *[Employer's Taking Over]*.
	1.1.31 "**Employer's Personnel**" means the Engineer, the Engineer's Representative (if appointed), the assistants described in Sub-Clause 3.4 [*Delegation by the Engineer*] and all other staff, labour and other employees of the Engineer 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 Engineer to the Contractor.
	1.1.32 **Deleted.**
	1.1.33 "**Employer's Requirements**" means the document entitled employer's requirements, as included in the Contract, and any additions and modifications to such document in accordance with the Contract. Such document describes the purpose(s) for which the Works are intended, and specifies Key Personnel (if any), the scope, and/or design and/or other performance, technical and evaluation criteria, for the Works.
	1.1.34 "**Employer - Supplied Materials**" means the materials (if any) to be supplied by the Employer to the Contractor under Sub-Clause 2.6 *[Employer-Supplied Materials and Employer's Equipment]*.

	1.1.35	"**Engineer**" means the person **named in the PCC** appointed by the Employer to act as the Engineer for the purposes of the Contract, or any replacement appointed under Sub-Clause 3.6 [*Replacement of the Engineer*].
	1.1.36	"**Engineer's Representative**" means the natural person who may be appointed by the Engineer under Sub-Clause 3.3 [*Engineer's Representative*].
	1.1.37	"**Exceptional Event**" means an exceptional event or circumstance as defined in Sub-Clause 18.1 [*Exceptional Events*].
	1.1.38	"**Extension of Time**" or "**EOT**" means an extension of the Time for Completion under Sub-Clause 8.5 [*Extension of Time for Completion*].
	1.1.39	Deleted.
	1.1.40	"**Final Payment Certificate**" or "**FPC**" means the payment certificate issued by the Engineer under Sub-Clause 14.13 [*Issue of FPC*].
	1.1.41	"**Final Statement**" means the Statement defined in Sub-Clause 14.11.2 [*Agreed Final Statement*].
	1.1.42	"**Foreign Currency**" means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.
	1.1.43	"**General Conditions of Contract**" means "General Conditions of Contract for Design-Build of Infrastructure Works" as incorporated in this Section.
	1.1.44	"**Goods**" means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
	1.1.45	"**Interim Payment Certificate**" or "**IPC**" means a Payment Certificate issued by the Engineer for an interim payment under Sub-Clause 14.6 [*Issue of IPC*].
	1.1.46	"**Joint Venture**" or "**JV**" means a joint venture, association, consortium or other unincorporated grouping of two or more persons, whether in the form of a partnership or otherwise.
	1.1.47	"**JV Undertaking**" means the letter provided to the Employer as part of the Bid setting out the legal undertaking between the two or more persons constituting the Contractor as a JV. This letter shall be signed by all the persons who are members of the JV, shall be addressed to the Employer and shall include: (a) each such member's undertaking to be jointly and severally liable to the Employer for the performance of the Contractor's obligations under the Contract; (b) identification and authorization of the leader of the JV;

		and (c) Identification of the separate scope or part of the Works (if any) to be carried out by each member of the JV.
	1.1.48	"**Key Personnel**" means the positions (if any) of the Contractor's Personnel, other than the Contractor's Representative, that are stated in the "Employer's Requirements".
	1.1.49	"**Laws**" means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority."
	1.1.50	"**Letter of Acceptance**" means the letter of formal acceptance, signed bythe Employer, of the Letter of Bid, including any annexed memoranda comprising agreements between and signed by both Parties. If there is nosuch letter of acceptance, the expression "Letter of Acceptance" means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement
	1.1.51	"**Letter of Bid**" means the letter of bid, signed by the Contractorstating the Contractor's offer to the Employer for the execution of the Works.
	1.1.52	"**Local Currency**" means the currency of the Country.
	1.1.53	"**Materials**" means things of all kinds (other than Plant), whether on the Site or otherwise allocated to the Contract and intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.
	1.1.54	"**month**" is a calendar month (according to the Gregorian calendar).
	1.1.55	"**No-objection**" means that the Engineer has no objection to the Contractor'sDocuments, or other documents submitted by the Contractor under these Conditions, and such Contractor's Documents or other documents may beused for the Works.
	1.1.56	"**Notice**" means a written communication identified as a Notice and issued in accordance with Sub-Clause 1.3 [*Notices and Other Communications].*
	1.1.57	"**Notice of Dissatisfaction**" or "**NOD**" means the Notice one Party may giveto the other Party if it is dissatisfied, either with an Engineer's determination under Sub-Clause 3.7 [*Agreement or Determination*] or with Adjudicator's under Sub-Clause 20.3.
	1.1.58	"**Part**" means a part of the Works or part of a Section (as the

		case may be) which is taken over by the Employer under the first paragraph, or used by the Employer and deemed to have been taken over under the second paragraph, ofSub-Clause 10.2 [*Taking Over Parts].*
	1.1.59	**"Particular Conditions"** means the particular conditions included in the Contract, and includes Appendices A to D.
	1.1.60	"**Party**" means the Employer or the Contractor, as the context requires. "**Parties**" means both the Employer and the Contractor.
	1.1.61	"**Payment Certificate**" means a payment certificate issued by the Engineer under Clause 14 [*Contract Price and Payment].*
	1.1.62	"**Performance Certificate**" means the certificate issued by the Engineer(or deemed to be issued) under Sub-Clause 11.9 [*Performance Certificate].*
	1.1.63	"**Performance Damages**" means the damages to be paid by the Contractorto the Employer, for the failure to achieve the guaranteed performance of thePlant and/or the Works or any part of the Works (as the case may be), as set out in the Schedule of Performance Guarantees.
	1.1.64	"**Performance Security**" means the security under Sub-Clause 4.2 [*Performance Security*].
	1.1.65	"**Permanent Works**" means the works of a permanent nature which are to be executed by the Contractor under the Contract.
	1.1.66	"**Plant**" means the apparatus, equipment, machinery and vehicles (including any components) whether on the Site or otherwise allocated to the Contract and intended to form or forming part of the Permanent Works.
	1.1.67	"**Programme**" means a detailed time programme prepared and submittedby the Contractor to which the Engineer has given (or is deemed to havegiven) a Notice of No-objection under Sub-Clause 8.3 [*Programme].*
	1.1.68	"**Provisional Sum**" means a sum (if any) which is specified in the Contract by the Employer as a provisional sum, for the execution of any part of theWorks or for the supply of Plant, Materials or services under Sub-Clause 13.4 [*Provisional Sums].*
	1.1.69	"**QM System**" means the Contractor's quality management system (as maybe updated and/or revised from time to time) in accordance with Sub-Clause 4.9.1 [*Quality Management System].*
	1.1.70	"**Retention Money**" means the accumulated retention moneys which theEmployer retains under Sub-Clause 14.3

		[*Application for Interim Payment*] and pays under Sub-Clause 14.9 [*Release of Retention Money].*
	1.1.71	"**Review**" means examination and consideration by the Engineer of a Contractor's submission in order to assess whether (and to what extent) itcomplies with the Contract and/or with the Contractor's obligations under or in connection with the Contract.
	1.1.72	"**Schedules**" means the document(s) entitled schedules prepared by the Employer and completed by the Contractor, as attached to the Letter of Bid and included in the Contract. Such document(s) may include data,lists and schedules of payments and/or rates and prices, and guarantees.
	1.1.73	"**Schedule of Payments**" means the document(s) entitled schedule of payments (if any) in the Schedules showing the amounts and manner of payments to be made to the Contractor.
	1.1.74	"**Schedule of Performance Guarantees**" means the document(s) entitled schedule of performance guarantees (if any) in the Schedules showing theguarantees required by the Employer for performance of the Works and/ or the Plant or any part of the Works (as the case may be), and stating theapplicable Performance Damages payable in the event of failure to attain any of the guaranteed performance(s).
	1.1.75	"**Schedule of Rates and Prices**" means the document(s) entitled schedule of rates and prices (if any) in the Schedules.
	1.1.76	"**Section**" means a part of the Works specified **in the PCC** as a Section (if any).
	1.1.77	"**Site**" means the places where the Permanent Works are to be executed, including storage and working area, and to which Plant and Materials are to be delivered, and any other places specified in the Contract as forming part of the Site."
	1.1.78	Deleted.
	1.1.79	"**Statement**" means a statement submitted by the Contractor as part of an application for a Payment Certificate under "Sub-Clause 14.2.1 [Advance Payment Guarantee] (if applicable), Sub-Clause 14.3*[Application for Interim Payment],* Sub-Clause 14.10 [*Statement at Completion] or Sub-Clause 14.11 [Final Statement]*".
	1.1.80	"**Subcontractor**" means any person named in the Contract as a subcontractor, or any person appointed by the Contractor

		as a subcontractoror designer, for a part of the Works; and the legal successors in title to each of these persons.
	1.1.81	"**Taking-Over Certificate**" means a certificate issued (or deemed to beissued) by the Engineer in accordance with Clause 10 [*Employer's TakingOver]*.
	1.1.82	"**Temporary Works**" means all temporary works of every kind (other thanContractor's Equipment) required on Site for the execution of the Works.
	1.1.83	"**Tender or Bid**" means the Letter of Bid, the Contractor's Bid, the JV Undertaking (if applicable), and all other documents which the Contractor submittedwith the Letter of Bid, as included in the Contract. "Tender is synonymous with "Bid", "tenderer" with "Bidder", "tender documents" with "Request for Bids documents".
	1.1.84	"**Tests after Completion**" means the tests (if any) which are stated in the Employer's Requirements and which are carried out under Clause "12 (*Tests after Completion]* after the Works or a Section (as the case may be) are taken over under Clause 10 [*Employer's Taking Over]*.
	1.1.85	"**Tests on Completion**" means the tests which are specified in the Contractor agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [*Tests on Completion*] before the Works or a Section (as the case may be) are taken over under Clause 10 [*Employer's Taking Over]*.
	1.1.86	"**Time for Completion**" means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [*Time for Completion*], as stated **in the PCC** as may be extended under Sub-Clause 8.5 [*Extension of Time for Completion*], calculated from the Commencement Date.
	1.1.87	"**Unforeseeable**" means not reasonably foreseeable by an experienced contractor by the Base Date.
	1.1.88	"**Variation**" means any change to the Employer's Requirements or the Works, which is instructed as a variation under Clause 13 [*Variations and Adjustments]*.
	1.1.89	"**Works**" mean the Permanent Works and the Temporary Works, or either of them as appropriate.
	1.1.90	"**year**" means 365 days.
	1.1.91	"**Bank**" means the financing institution (if any) named i**n the PCC**.
	1.1.92	"**Borrower**" means the person (if any) named as the borrower **in the PCC**.
	1.1.93	"**ES**" means Environmental and Social (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment

	(SH)). 1.1.94 "**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; and **"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. 1.1.95 **"Milestone"** means a part of the Works stated **in the PCC** (if any), and described in detail in the Employer's Requirements as a Milestone, which is to be completed by the time for completion stated in Sub-Clause 4.26 [*Milestones]*. 1.1.96 **"Milestone certificate"** means the certificate issued by the Engineer under Sub-Clause 4.26 [*Milestones]*.
1.2 Interpretation	In the Contract, except where the context requires otherwise: (a) words indicating one gender include all genders; "he/she" is replaced with:" it"; "him/her" is replaced with "it"; "his" and "his/her" are replaced with: "its"; "himself/herself" are replaced with: "itself". (b) words indicating the singular also include the plural and words indicating the plural also include the singular; (c) provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing; (d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record; (e) "may" means that the Party or person referred to as the choice ofwhether to act or not in the matter referred to; (f) "shall" means that the Party or person referred to has an

	obligationunder the Contract to perform the duty referred to; (g) "consent" means that the Employer, the Contractor or the Engineer (as the case may be) agrees to, or gives permission for, the requestedmatter; (h) "including" "include" and "includes" shall be interpreted as not beinglimited to, or qualified by, the stated items that follow; (i) words indicating persons or parties shall be interpreted as referringto natural and legal persons (including corporations and other legal entities); (j) "execute the Works" or "execution of the Works" means the design, construction and completion of the Works and the remedying of any defects; and (k) The word "tender" is synonymous with "bid" or "proposal", the word tenderer with "bidder" or "proposer" and the words "tender documents" with "request for bids documents" or "request for proposal documents", as applicable. In any list in these Conditions, where the second-last item of the list is followed by "and" or "or" or "and/or" then all of the list items going before this item shall also be read as if they are followed by "and" or "or" or "and/or" (as the case may be). The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.
1.3 Notices and Other Communications	Wherever these Conditions provide for the giving of a Notice (including a Notice of Dissatisfaction) or the issuing, providing, sending, submitting or transmitting of another type of communication (including acceptance, acknowledgement, advising, agreement, approval, certificate, Claim, consent, decision, determination, disagreement, discharge, instruction, No-objection, record(s) of meeting, permission, proposal, record, reply, report, request,Review, Statement, statement, submission or any other similar type of communication), the Notice or other communication shall be in writing and: (a) shall be: (i) a paper-original signed by the Contractor's Representative, the Engineer, or the authorized representative of the Employer (as the case may be); or (ii) an electronic original generated from any of the systems of electronic transmission stated **in the PCC** (if not stated, system(s) acceptable to the Engineer), where the electronic original is transmitted by the electronic address uniquely assigned to each of such authorized representatives, or both, as stated in these Conditions; and

	(b) if it is a Notice, it shall be identified as a Notice. If it is another form of communication, it shall be identified as such and include reference to the provision(s) of the Contract under which it is issued where appropriate; (c) delivered by hand (against receipt), or sent by mail or courier (against receipt), or transmitted using any of the systems of electronic transmission under sub-paragraph (a)(ii) above; and (d) Delivered, sent or transmitted to the address for the recipient's communications as stated **in the PCC**. However, if the recipient gives a Notice of another address, all Notices and other communications shall be delivered accordingly after the sender receives such Notice. Where these Conditions state that a Notice or NOD or other communication is to be delivered, given, issued, provided, sent, submitted or transmitted, it shall have effect when it is received (or deemed to have been received) at the recipient's current address under sub-paragraph (d) above. An electronically transmitted Notice or other communication is deemed to have been received on the day after transmission, provided no non-delivery notification was received by the sender. All Notices, and all other types of communication as referred to above, shall not be unreasonably withheld or delayed. When a Notice or NOD or certificate is issued by a Party or the Engineer, the paper and/or electronic original shall be sent to the intended recipient and a copy shall be sent to the Engineer or the other Party, as the case may be. All other communications shall be copied to the Parties and/or the Engineer as stated under these Conditions or elsewhere in the Contract.
1.4 Law and Language	The Contract shall be governed by the law of the country (or other jurisdiction) stated **in the PCC** (if not stated, the law of the Country), excluding any conflict of law rules. The ruling language of the Contract shall be that stated **in the PCC** (if not stated, the language of these Conditions). If there are versions of any part of the Contract which are written in more than one language, the version which is in the ruling language shall prevail. The language for communications shall be that stated **in the PCC**. If no language is stated there, the language for communications shall be the ruling language of the Contract. 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.
1.5 Priority of Documents	The documents forming the Contract are to be taken as mutually explanatory of one another. If there is any conflict, ambiguity or discrepancy in the documents, the priority of the documents shall be in accordance with the following sequence: (a) the Contract Agreement; (b) the Letter of Acceptance; (c) the Letter of Bid, (d) Particular Conditions of Contract; (e) these General Conditions of Contract including its Appendices; (f) the Employer's Requirements; (g) the Schedules; (h) the Contractor's Bid; (i) the JV Undertaking (if the Contractor is a JV); and (j) any other documents forming part of the Contract. If a Party finds a conflict, ambiguity or discrepancy in the documents, that Party shall promptly give a Notice to the Engineer, describing the ambiguity or discrepancy. After receiving such Notice, or if the Engineer finds a conflict, ambiguity or discrepancy in the documents, the Engineer shall issue the necessary clarification or instruction.
1.6 Contract Agreement	The Parties shall sign a Contract Agreement within 35 days after the Contractor receives the Letter of Acceptance, unless they agree otherwise. The Contract Agreement shall be based on the form included in Section X, Contract Forms. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer. If the Contractor comprises a JV, the authorized representative of the JV shall sign the Contract Agreement in accordance with Sub-Clause 1.14 (Joint and Several Liability).

1.7 Assignment	Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party: (a) may assign the whole or any part of the Contract with the prior agreement of the other Party, at the sole discretion of such other Party; and (b) may, as security in favour of a bank or financial institution, assign the Party's right to any moneys due, or to become due, under the Contract without the prior agreement of the other Party.
1.8 Care and Supply of Documents	Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until submitted to the Engineer. The Contractor shall supply to the Engineer one paper-original, one electronic copy (in the form as specified in the Employer's Requirements or, if not stated, a form acceptable to the Engineer) and additional paper copies (if any) as stated **in the PCC** of each of the Contractor's Documents. The Contractor shall keep at all times, on the Site, a copy of: (a) the Contract; (b) the records under Sub-Clause 6.10 [*Contractor's Records*] and Sub-Clause 20.1 [*Contemporary records*]; (c) the publications (if any) named in the Employer's Requirements; (d) the Contractor's Documents; and (e) Variations, Notices and other communications given under the Contract. The Employer's Personnel shall have right of access to all these documents during all normal working hours, or as otherwise agreed with the Contractor. If a Party (or the Engineer) becomes aware of an error or defect (whether of a technical nature or otherwise) in a document which was prepared by (or on behalf of) the Contractor for use in the execution of the Works, the Party (or the Engineer) shall promptly give a Notice of such error or defect to the other Party (or to the Parties). The Contractor shall then promptly rectify the error or defect at the Contractor's risk and cost.
1.9 Errors in the Employer's Requirements	If the Contractor finds an error, fault or defect in the Employer's Requirements as a result of scrutinising them under Sub-Clause 5.1 [*General Design Obligations*], the Contractor shall give a Notice to the Engineer within the period stated **in the PCC** (if not stated, 42 days) calculated from the Commencement Date.

	If, after expiry of this period, the Contractor finds an error, fault or defect inthe Employer's Requirements, the Contractor shall also give a Notice to the Engineer describing the error, fault or defect. The Engineer shall then proceed as specified under Sub-Clause 3.7 [*Agreement or Determination*] to agree or determine: (a) whether or not there is an error, fault or defect in the Employer's Requirements; (b) whether or not (taking account of cost and time) an experienced contractor exercising due care would have discovered the error, fault or other defect: • when examining the Site and the Employer's Requirements before submitting the Bid; or • if the Contractor's Notice is given after the expiry of the period stated in the first paragraph of this Sub-Clause, when scrutinising the Employer's Requirements under Sub-Clause 5.1 [General Design Obligations]; (c) what measures (if any) the Contractor is required to take to rectify the error, fault or defect: If it is agreed or determined, under sub-paragraphs (a) and (b) above, that there is an error, fault or defect that an experienced contractor would not have discovered: (i) Sub-Clause 13.3.1 [*Variation by Instruction*] shall apply to the measures that the Contractor is required to take (if any); and (ii) if there are no such measures, and therefore no Variation, but the Contractor suffers delay and/or incurs Cost as a result of the error, fault or defect, the Contractor shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to EOT and/or payment of such Cost Plus Profit.
1.10 Employer's Use of Contractor's Documents	As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor. The Contractor shall be deemed (by signing the Contract Agreement) to give to the Employer a non-terminable transferable non-exclusive royalty-free licence to copy, use and communicate the Contractor's Documents and such other design documents, including making and using modifications ofthem. This licence shall: (a) apply throughout the actual or intended operational life (whichever is longer) of the relevant parts of the Works; (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents and such other design documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works;

	(c) in the case of Contractor's Documents and such other design documents which are in the form of electronic or digital files, computer programs and other software, permit their use on any computer on the Site and/or at the locations of the Employer and the Engineer and/ or at other places as envisaged by the Contract; and (d) in the event of termination of the Contract: (i) under Sub-Clause 15.2 [Termination for Contractor's Default], entitle the Employer to copy, use and communicate the Contractor's Documents and the other design documents made by or for the Contractor; or (ii) under Sub-Clause 15.5 [Termination for Employer's Convenience], Sub-Clause 16.2 [Termination by Contractor] or Sub-Clause 18.5 [Optional Termination], entitle the Employer to copy, use and communicate the Contractor's Documents for which the Contractor has received Payment. for the purpose of completing the Works and/or arranging for any other entities to do so. The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's prior consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.
1.11 Contractor's Use of Employer's Documents	As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Employer's Requirements and other documents made by (or on behalf of) the Employer. The Contractor may, at the Contractor's cost, copy, use and communicate these documents for the purposes of the Contract. These documents (in whole or in part) shall not, without the Employer's prior consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.
1.12 Confidentiality	The Contractor shall disclose all such confidential and other information as the Engineer may reasonably require in order to verify the Contractor's compliance with the Contract. The Contractor shall treat all documents forming the Contract as confidential, except to the extent necessary to carry out the Contractor's obligations under the Contract. The Contractor shall not publish, permit to be published, or disclose any particulars of the Contract in any trade or technical paper or elsewhere without the Employer's prior consent. The Contractor shall be permitted to disclose information required to establish its qualifications to compete for other projects.

	The Employer and the Engineer shall treat all information provided by the Contractor and marked "confidential", as confidential. The Employer shall not disclose or permit to be disclosed any such information to third parties, except as may be necessary when exercising the Employer's rights under Sub-Clause 15.2 [*Termination for Contractor's Default*]. A Party's obligation of confidentiality under this Sub-Clause shall not apply where the information: (a) was already in that Party's possession without an obligation of confidentiality before receipt from the other Party; (b) becomes generally available to the public through no breach of these Conditions; (c) is lawfully obtained by the Party from a third party which is not bound by an obligation of confidentiality; and (d) is being provided to the Bank.
1.13 Compliance with Laws	The Contractor and the Employer shall, in performing the Contract, comply with all applicable Laws. Unless otherwise stated in the Employer's Requirements: (a) the Employer shall have obtained (or shall obtain) the planning, zoning or building permit or similar permits, permissions, licences and/or approvals for the Permanent Works, and any other permits, permissions, licenses and/or approvals described in the Employer's Requirements as having been (or being) obtained by the Employer. The Employer shall indemnify and hold the Contractor harmless against and from the consequences of any delay or failure to do so, unless the failure is caused by the Contractor's failure to comply with sub-paragraph (c) below; (b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all other permits, permissions, licences and/or approvals, as required by the Laws in relation to the execution of the Works. The Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so unless the failure is caused by the Employer's failure to comply with Sub-Clause 2.2 [*Assistance*]; (c) within the time(s) stated in the Employer's Requirement's the Contractor shall provide such assistance and all documentation, as described in the Employer's Requirements or otherwise reasonably required by the Employer, so as to allow the Employer to obtain any permit, permission, licence or approval under sub-paragraph (a) above; and (d) the Contractor shall comply with all permits, permissions, licences and/ or approvals obtained by the Employer under sub-paragraph (a) above.

	If, having complied with sub-paragraph (c) above, the Contractor suffers delay and/or incurs Cost as a result of the Employer's delay or failure to obtain any permit, permission, licence or approval under sub-paragraph (a) above, the Contractor shall be entitled subject to Sub-Clause 20.1to EOT and/or payment of such Cost Plus Profit. If the Employer incurs additional costs as a result of the Contractor's failure to comply with: (i) sub-paragraph (c) above; or (ii) sub-paragraph (b) or (d) above, provided that the Employer shall have complied with Sub-Clause 2.2 [*Assistance*], the Employer shall be entitled subject to Sub-Clause 20.2 to payment of these costs by the Contractor.
1.14 Joint and Several Liability	If the Contractor is a Joint Venture: (a) the members of the JV shall be jointly and severally liable to the Employer for the performance of the Contractor's obligations under the Contract; (b) the JV leader shall have authority to bind the Contractor and each member of the JV; and (c) neither the members nor (if known) the scope and parts of the Works to be carried out by each member nor the legal status of the JV shall be altered without the prior consent of the Employer (but such consent shall not relieve the altered JV from any liability under sub-paragraph (a) above).
1.15 Limitation of Liability	Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than under: (a) Sub-Clause 8.8 [*Delay Damages*]; (b) sub-paragraph (c) of Sub-Clause 13.3.1 [*Variation by Instruction*]; (c) Sub-Clause 15.7 [*Payment after Termination for Employer's Convenience*]; (d) Sub-Clause 16.4 [*Payment after Termination by Contractor*]; (e) Sub-Clause 17.3 [*Intellectual and Industrial Property Rights*]; (f) the first paragraph of Sub-Clause 17.4 [*Indemnities by Contractor*]; and (g) Sub-Clause 17.5 [*Indemnities by Employer*]. The total liability of the Contractor to the Employer under or in connection with the Contract, other than under: (i) Sub-Clause 2.6 [*Employer-Supplied Materials and Employer's Equipment*]; (ii) Sub-Clause 4.19 [*Temporary Utilities*];

	(iii) Sub-Clause 17.3 [*Intellectual and Industrial Property Rights*]; and (iv) the first paragraph of Sub-Clause 17.4 [Indemnities by Contractor], shall not exceed the sum stated **in the PCC** or (if a sum is not so stated) the Accepted Contract Amount. This Sub-Clause shall not limit liability in any case of fraud, gross negligence, deliberate default or reckless misconduct by the defaulting Party.
1.16 Contract Termination	Subject to any mandatory requirements under the governing law of the Contract, termination of the Contract under any Sub-Clause of these Conditions shall require no action of whatsoever kind by either Party other than as stated in the Sub-Clause.
1.17 Inspections & Audit by the Bank	Pursuant to paragraph 2.2 e. of Appendix B to the General Conditions of Contract, 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 Sub-Clause 15.8 (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).
2. The Employer	
2.1 Right of Access to the Site	The Employer shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated **in the PCC**. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Employer's Requirements. However, the Employer may withhold any such right or possession until the Performance Security has been received. If no such time is stated in the PCC, the Employer shall give the Contractor right of access to, and possession of, those parts of the Site within such times as may be required to enable the Contractor to proceed in accordance with the Programme or, if there is no

	Programme at that time, the initial programme submitted under Sub-Clause 8.3 [*Programme*]. If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost Plus Profit. However, if and to the extent that the Employer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the applicable Contractor's Documents, the Contractor shall not be entitled to such EOT and/or Cost-Plus Profit. If, under the Contract, the Employer is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such Contractor's Documents to the Engineer in the time and manner stated in the Employer's Requirements.
2.2 Assistance	If requested by the Contractor, the Employer shall promptly provide reasonable assistance to the Contractor so as to allow the Contractor to obtain; (a) copies of the Laws of the Country which are relevant to the Contract but are not readily available; and (b) any permits, permissions, licences or approvals required by the Laws of the Country (including information required to be submitted by the Contractor in order to obtain such permits, permissions, licences or approvals): (i) which the Contractor is required to obtain under Sub-Clause 1.13 [*Compliance with Laws*]; (ii) for the delivery of Goods, including clearance through customs; and (iii) for the export of Contractor's Equipment when it is removed from the Site.
2.3 Employer's Personnel and Other Contractors	The Employer shall be responsible for ensuring that the Employer's Personnel and the Employer's other contractors (if any) on or near the Site: (a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [*Co-operation*]; and (b) comply with the same obligations which the Contractor is required to comply with under sub-paragraphs (a) to (e) of Sub-Clause4.8 [*Health and Safety Obligations*] and under Sub-Clause 4.18 [*Protection of the Environment*]. The Contractor may require the Employer to remove (or cause to be removed) any person of the Employer's Personnel or of the

	Employer's other contractors (if any) who is found, based on reasonable evidence, to have engaged in corrupt, fraudulent, collusive or coercive practice.
2.4 Employer's Financial Arrangements	The Employer shall submit, before the Commencement Date, reasonable evidence that financial arrangements have been made for financing the Employer's obligations under the Contract. If the Employer intends to make any material change (affecting the Employer's ability to pay the part of the Contract Price remaining to be paid at that time as estimated by the Engineer) to these financial arrangements, or has to do so because of changes in the Employer's financial situation, the Employer shall immediately give a Notice to the Contractor with detailed supporting particulars. If the Contractor: (a) receives an instruction to execute a Variation with a price greater than ten percent (10%) of the Accepted Contract Amount, or the accumulated total of Variations exceeds thirty percent (30%) of the Accepted Contract Amount; (b) does not receive payment in accordance with Sub-Clause 14.7 [*Payment*]; or (c) becomes aware of a material change in the Employer's financial arrangements of which the Contractor has not received a Notice under this Sub-Clause, the Contractor may request and the Employer shall, within 28 days after receiving this request, provide reasonable evidence that financial arrangements have been made and are being maintained which will enable the Employer to pay the part of the Contract Price remaining to be paid at that time (as estimated by the Engineer). In addition, if the Bank has notified to the Borrower that the Bank has suspended disbursements under its loan, which finances in whole or in part the execution of the Works, the Employer shall give notice of such suspension to the Contractor with detailed particulars, including the date of such notification, with a copy to the Engineer, within 7 days of the Borrower having received the suspension notification from the Bank. If alternative funds will be available in appropriate currencies to the Employer to continue making payments to the Contractor beyond a date 60 days after the date of Bank notification of the suspension, the Employer shall provide reasonable evidence in its notice of the extent to which such funds will be available.
2.5 Site Data and Items of Reference	The Employer shall have made available to the Contractor for information, before the Base Date, all relevant data in the Employer's possession on the topography of the Site and on sub-surface, hydrological, climatic and environmental conditions at the Site. The Employer shall promptly make available to the Contractor

	all such data which comes into the Employer's possession after the Base Date. The original survey control points, lines and levels of reference (the "items of reference" in these Conditions) shall be specified in the Employer's Requirements or issued to the Contractor by a Notice from the Engineer.
2.6 Employer-Supplied Materials and Employer's Equipment	(a) If Employer-Supplied Materials and/or Employer's Equipment are listed in the Employer's Requirements for the Contractor's use in the execution of the Works, the Employer shall make such materials and/or equipment available to the Contractor in accordance with the details, times, arrangements, rates and prices stated in the Employer's Requirements. The Contractor shall be responsible for each item of Employer's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it, using it, or in control of it. The Employer shall supply to the Contractor the Employer-Supplied Materials listed in the Employer's Requirements, at the time(s) stated in the Employer's Requirements (if not stated, within the times that shall be required to enable the Contractor to proceed with execution of the Works in accordance with the Programme). When made available by the Employer, the Contractor shall visually inspect the Employer-Supplied Materials and shall promptly give a Notice to the Engineer of any shortage, defect or default in them. Thereafter, the Contractor shall rectify such shortage, defect or default to the extent instructed by the Engineer. Such instruction shall be deemed to have been given under Sub-Clause 13.3.1 [*Variation by Instruction*]. After this visual inspection, the Employer-Supplied Materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody, and control shall not relieve the Employer of liability of any shortage, defect or default not apparent from a visual inspection. (b) If Employer's Equipment are listed in the Employer's Requirements for the Contractor's use in the execution of Works, the Employer shall make the Employer's Equipment listed in the Employer's Requirements available to the Contractor at the time(s) stated in the Employer's Requirements (if not stated, within the times that shall be required to enable the Contractor to proceed with execution of the Works in accordance with the Programme). Unless expressly stated otherwise in the Employer's Requirements, the Employer's Equipment shall be provided for the exclusive use of the Contractor.

	When made available by the Employer, the Contractor shall visually inspect the Employer's Equipment and shall promptly give a Notice to the Engineer of any shortage, defect or default in them. Thereafter, the Contractor shall rectify such shortage, defect or default to the extent instructed by the Engineer. Such instruction shall be deemed to have been given under Sub-Clause 13.3.1 [*Variation by Instruction*]. The Contractor shall be responsible for the Employer's Equipment while it is under the Contractor's control and/or any of the Contractor's Personnel is operating it, driving it, directing it, using it, or in control of it. The Contractor shall not remove from the Site any items of the Employer's Equipment without the consent of the Employer. However, consent shall not be required for vehicles transporting Goods or Contractor's personnel to or from the Site.
2.7 SEA/SH Conference	The Employer shall organize and run a SEA/SH orientation conference as soon as possible after the appointment of the Adjudicator and prior to the commencement of any physical work. The SEA/SH orientation conference shall be attended by the Contractor, its Subcontractors, the Engineer, the Adjudicator and all other relevant persons. The objective of the SEA/SH orientation conference shall be to ensure a common understanding of all SEA contractual requirements and remedies.
3. The Engineer	
3.1 The Engineer	The Employer shall appoint the Engineer, who shall carry out the duties assigned to the Engineer in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties. The Engineer shall be vested with all the authority necessary to act as the Engineer under the Contract. If the Engineer is a legal entity, a natural person employed by the Engineer shall be appointed and authorized to act on behalf of the Engineer under the Contract. The Engineer (or, if a legal entity, the natural person appointed to act on its behalf) shall be: (a) a professional engineer having suitable qualifications, experience and competence to act as the Engineer under the Contract; and (b) fluent in the ruling language defined in Sub-Clause 1.4 [*Law and Language*]. Where the Engineer is a legal entity, the Engineer shall give a Notice to the Parties of the natural person (or any replacement) appointed

	and authorized to act on its behalf. The authority shall not take effect until this Notice has been received by both Parties. The Engineer shall similarly give a Notice of any revocation of such authority. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties
3.2 Engineer's Duties and Authority	The Engineer shall obtain the consent in writing of the Employer before taking action under the following Sub-Clauses of these Conditions: (a) Sub-Clause 13.1: Right to vary - instructing a variation, except; (i) in an emergency situation as determined by the Engineer; or (ii) if such a Variation would increase the Accepted Contract Amount by less than the percentage specified **in the PCC**. (b) Sub-Clause 13.2 (Value Engineering): stating consent or otherwise to a value engineering Bid submitted by the Contractor in accordance with Sub-Clause 13.2. Notwithstanding the obligation, as set out above, to obtain consent in writing, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, it may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of consent of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, and EOT if any, in accordance with Clause 13 and shall notify the Contractor accordingly, with a copy to the Employer.
3.3 Engineer's Representative	The Engineer may appoint an Engineer's Representative and delegate to him/her in accordance with Sub-Clause 3.4 [*Delegation by the Engineer*] the authority necessary to act on the Engineer's behalf at the Site, except to replace the Engineer's Representative. The Engineer's Representative (if appointed) shall comply with sub-paragraphs (a) and (b) of Sub-Clause 3.1 [*The Engineer*] and shall be based at the Site for the whole time that the Works are being executed at the Site. If the Engineer's Representative is to be temporarily absent from the Site during the execution of the Works, an equivalently qualified, experienced and competent replacement shall be appointed by the Engineer, and the Contractor shall be given a Notice of such replacement.

	The Engineer shall obtain the consent of the Employer before appointing or replacing an Engineer's Representative.
3.4 Delegation by the Engineer	The Engineer may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation, by giving a Notice to the Parties, describing the assigned duties and the delegated authority of each assistant. The assignment, delegation or revocation shall not take effect until this Notice has been received by both Parties. However, the Engineer shall not delegate the authority to: (a) act under Sub-Clause 3.7 [*Agreement or Determination*]; and/or (b) issue a Notice to Correct under Sub-Clause 15.1 [*Notice to Correct*]. Assistants shall be suitably qualified natural persons, who are experienced and competent to carry out these duties and exercise this authority, and who are fluent in the language for communications defined in Sub-Clause 1.4 [*Law and Language*]. If any assistants are not fluent in this language, the Engineer shall make competent interpreters available during all working hours, in a number sufficient for those assistants to properly perform their assigned duties and/or exercise their delegated authority. Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the Contractor to the extent defined by the Engineer's Notice of delegation under this Sub-Clause. Any act by an assistant, in accordance with the Engineer's Notice of delegation, shall have the same effect as though the act had been an act of the Engineer. However, if the Contractor questions any instruction or Notice given by an assistant, the Contractor may by giving a Notice refer the matter to the Engineer. The Engineer shall be deemed to have confirmed the assistant's instruction or Notice if the Engineer does not respond, within 7 days after receiving the Contractor's Notice, by giving a Notice reversing or varying the assistant's instruction or Notice (as the case may be).
3.5 Engineer's Instructions	The Engineer may issue to the Contractor (at any time) instructions which may be necessary for the execution of the Works, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from the Engineer's Representative (if appointed) or an assistant to whom the appropriate authority to give instruction has been delegated under Sub-Clause 3.4 [*Delegation by the Engineer*]. Subject to the following provisions of this Sub-Clause, the Contractor shall comply with the instructions given by the Engineer

	or the Engineer's Representative (if appointed) or delegated assistant, on any matter related to the Contract. If an instruction states that it constitutes a Variation, Sub-Clause 13.3.1 [*Variation by Instruction*] shall apply. If not so stated, and the Contractor considers that the instruction: (a) constitutes a Variation (or involves work that is already part of an existing Variation); or (b) does not comply with applicable Laws or will reduce the safety of the Works or is technically impossible the Contractor shall immediately, and before commencing any work related to the instruction, give a Notice to the Engineer with reasons. If the Engineer does not respond within 7 days after receiving this Notice, by giving a Notice confirming, reversing or varying the instruction, the Engineer shall be deemed to have revoked the instruction. Otherwise, the Contractor shall comply with and be bound by the terms of the Engineer's response.
3.6 Replacement of the Engineer	If the Employer intends to replace the Engineer, the Employer shall, not less than 21 days before the intended date of replacement, give a Notice to the Contractor of the name, address and relevant experience of the intended replacement Engineer. If the Contractor does not respond within 14 days after receiving this Notice, by giving a Notice stating an objection to such replacement with reasons, the Contractor shall be deemed to have accepted the replacement. The Employer should not replace the Engineer with a person (whether a legal entity or a natural person) against whom the Contractor has raised reasonable objection by a Notice under this Sub-Clause. If the Engineer is unable to act as a result of death, illness, disability or resignation (or, in the case of a legal entity, the Engineer becomes unable or unwilling to carry out any of its duties, other than for a cause attributable to the Employer) the Employer shall be entitled to immediately appoint a replacement by giving a Notice to the Contractor with reasons and the name, address and relevant experience of the replacement. This appointment shall be treated as a temporary appointment until this replacement is accepted by the Contractor, or another replacement is appointed, under this Sub-Clause
3.7 Agreement or Determination	When carrying out his/her duties under this Sub-Clause, the Engineer shall act neutrally between the Parties and shall not be deemed to act for the Employer. Whenever these Conditions provide that the Engineer shall proceed under this Sub-Clause to agree or determine either:

	(a) any matter as provided for in Sub-Clauses 1.9, 4.7.3, 10.2, 11.2, 13.3.1, 13.5, 14.4, 14.5, 14.6.3, 15.3, 15.6 and 18.5, identifying in the same Sub-Clause the date of commencement of the corresponding time limit for agreement under Sub-Clause 3.7.3 [*Time limits*]; or (b) any Claim, the following procedure shall apply: 3.7.1 Consultation to reach agreement The Engineer shall consult with both Parties jointly and/or separately, and shall encourage discussion between the Parties in an endeavour to reach agreement. The Engineer shall commence such consultation promptly to allow adequate time to comply with the time limit for agreement under Sub-Clause 3.7.3 [Time limits]. Unless otherwise proposed by the Engineer and agreed by both Parties, the Engineer shall provide both Parties with a record of the consultation. If agreement is achieved within the time limit for agreement under Sub-Clause 3.7.3 [Time limits] the Engineer shall give a Notice to both Parties of the agreement, which agreement shall be signed by both Parties. This Notice shall state that it is a "Notice of the Parties' Agreement" and shall include a copy of the agreement. If (a) no agreement is achieved within the time limit for agreement under Sub-Clause 3.7.3 [*Time limits*]; or (b) both Parties advise the Engineer that no agreement can be achieved within this time limit whichever is the earlier, the Engineer shall give a Notice to the Parties accordingly and shall immediately proceed under Sub-Clause 3.7.2 [Engineer's Determination]. 3.7.2 Engineer's Determination The Engineer shall make a fair determination of the matter or Claim, in accordance with the Contract, taking due regard of all relevant circumstances. Within the time limit for determination under Sub-Clause 3.7.3 [Time limits], the Engineer shall give a Notice to both Parties of his/her determination. This Notice shall state that it is a "Notice of the Engineer's Determination", and shall describe the determination in detail with reasons and detailed supporting particulars. 3.7.3 Time limits The Engineer shall give the Notice of agreement, if agreement is achieved, within 42 days or within such other time limit as may be

	proposed by the Engineer and agreed by both Parties (the "time limit for agreement" in these Conditions), after: (a) in the case of a matter to be agreed or determined under sub-paragraph (a) of Sub-Clause 3.7 [*Agreement or Determination*], the date of commencement of the time limit for agreement as stated in the applicable Sub-Clause of these Conditions; (b) in the case of a Claim under Sub-Clause 20.1, the date the Engineer receives a Notice under Sub-Clause 20.1 from the claiming Party; or The Engineer shall give the Notice of his/her determination within 42 days or within such other time limit as may be proposed by the Engineer and agreed by both Parties (the "time limit for determination" in these Conditions), after the date corresponding to his/her obligation to proceed under the last paragraph of Sub-Clause 3.7.1 [Consultation to reach agreement]. If the Engineer does not give the Notice of agreement or determination within the relevant time limit: (i) in the case of a Claim, the Engineer shall be deemed to have given a determination rejecting the Claim; or (ii) in the case of a matter to be agreed or determined under sub-paragraph (a) of Sub-Clause 3.7 [Agreement or Determination], the matter shall be deemed to be a Dispute which may be referred by either Party to the Adjudicator for his decision under GCC Clause 20, without the need for a NOD. 3.7.4 Effect of the agreement or determination Each agreement or determination shall be binding on both Parties (and shall be complied with by the Engineer) unless and until corrected under this Sub-Clause or, in the case of a determination, it is revised under Clause 20 [*Claims, Disputes and Arbitration*]. If an agreement or determination concerns the payment of an amount from one Party to the other Party, the Contractor shall include such an amount in the next Statement and the Engineer shall include such amount in the Payment Certificate that follows that Statement. If, within 14 days after giving or receiving the Engineer's Notice of agreement or determination, any error of a typographical or clerical or arithmetical nature is found: (a) by the Engineer: then he/she shall immediately advise the Parties accordingly; or (b) by a Party: then that Party shall give a Notice to the Engineer, stating that it is given under this Sub-Clause

	3.7.4 and clearly identifying the error. If the Engineer does not agree there was an error, he/she shall immediately advise the Parties accordingly. The Engineer shall within 7 days of finding the error, or receiving a Notice under sub-paragraph (b) above (as the case may be), give a Notice to both Parties of the corrected agreement or determination. Thereafter, the corrected agreement or determination shall be treated as the agreement or determination for the purpose of these Conditions. 3.7.5 Dissatisfaction with Engineer's determination If either Party is dissatisfied with a determination of the Engineer: (a) the dissatisfied Party may give a NOD to the other Party, with a copy to the Engineer; (b) this NOD shall state that it is a "Notice of Dissatisfaction with the Engineer's Determination" and shall set out the reason(s) for dissatisfaction; (c) this NOD shall be given within 28 days after receiving the Engineer's Notice of the determination under Sub-Clause 3.7.2 [*Engineer's Determination*] or, if applicable, his/her Notice of the corrected determination under Sub-Clause 3.7.4 [*Effect of the agreement or determination*] (or, in the case of a deemed determination rejecting the Claim, within 28 days after the time limit for determination under Sub-Clause 3.7.3 [*Time limits*] has expired); and (d) thereafter, either Party may refer the matter to Adjudicator under GCC Clause 20. If no NOD is given by either Party within the period of 28 days stated in sub-paragraph (c) above, the determination of the Engineer shall be deemed to have been accepted by both Parties and shall be final and binding on them. If the dissatisfied Party is dissatisfied with only part(s) of the Engineer's determination: (i) this part(s) shall be clearly identified in the NOD; (ii) this part(s), and any other parts of the determination that are affected by such part(s) or rely on such part(s) for completeness, shall be deemed to be severable from the remainder of the determination; and (iii) the remainder of the determination shall become final and binding on both Parties as if the NOD had not been given. In the event that a Party fails to comply with an agreement of the Parties under this Sub-Clause 3.7 or a final and binding

	determination of the Engineer, the other Party may, without prejudice to any other rights it may have, refer the failure itself directly to arbitration under GCC Clause 20.
3.8 Meetings	The Engineer or the Contractor's Representative may require the other to attend a management meeting to discuss arrangements for future work and/ or other matters in connection with execution of the Works. The Employer's other contractors, the personnel of legally constituted public authorities and/or private utility companies, and/or Subcontractors may attend any such meeting, if requested by the Engineer or the Contractor's Representative. The Engineer shall keep a record of each management meeting and supply copies of the record to those attending and to the Employer. At any such meeting, and in the record, responsibilities for any actions to be taken shall be in accordance with the Contract.
4. The Contractor	
4.1 Contractor's General Obligations	The Contractor shall execute the Works in accordance with the Contract. When completed, the Works (or Section or Part or major item of Plant, if any) shall be fit for the purpose(s) for which they are intended, as defined and described in the Employer's Requirements (or, where no purpose(s) are so defined and described, fit for their ordinary purpose(s)). The Contractor shall not post and shall ensure that its Subcontractors/suppliers/manufacturers and Contractors' Personnel shall not post, any signage on the Site, or in any other place where the Works will be carried out, except such signage as is required under the Contract, including by the Laws of the Country, or has been approved by the Employer. For the purposes of this sub-clause, signage shall include, inter alia, flags, billboards, advertising materials and any other similar item separately posted on the Site. The Contractor shall provide the Plant (and spare parts, if any) and Contractor's Documents specified in the Employer's Requirements, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required to fulfill the Contractor's obligations under the Contract. All equipment, material, and services to be incorporated in or required for the Works shall have their origin in any eligible source country as defined by the Bank. The Works shall include any work which is necessary to satisfy the Employer's Requirements, Contractor's Bid and Schedules, or is implied by the Contract, and all works which (although not

	mentioned in the Contract) are necessary for stability or for the completion, or safe and proper operation, of the Works. The Contractor shall be responsible for the adequacy, stability and safety of all the Contractor's operations and activities, of all methods of construction and of all the Works. The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this alteration having been submitted to the Engineer. The Contractor shall not carry out mobilization to Site (e.g. clearance for haul roads, site accesses and work site establishment, geotechnical investigations or investigations to select ancillary features such as quarries and borrow pits) unless the Engineer gives consent, a consent that shall not be unreasonably delayed, to the measures the Contractor proposes to manage the environmental and social risks and impacts, which at a minimum shall include applicable Management Strategies and Implementation Plans (MSIPs) and applying the 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 Engineer for Review, any additional MSIPs as are necessary to manage the ES risks and impacts of ongoing Works. (e.g. excavation, earth works, bridge and structure works, stream and road diversions, quarrying or extraction of materials, concrete batching and asphalt manufacture). 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 Engineer for Review. The C-ESMP shall be part of the Contractor's Documents. The procedures for Review of the C-ESMP and its updates shall be as described in Sub-Clause 5.2.2 *[Review by Engineer]*. The Contractor shall provide relevant contract- related information, as the Employer and/or Engineer 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 shall also directly participate in Stakeholder engagements, as the Employer and/or Engineer may reasonably request.

	Cyber security-Contractor's Obligations: Unless specified otherwise in the PCC, the Contractor, including its Subcontractors/ suppliers/ manufacturers shall take all technical and organizational measures necessary to protect the information technology systems and data used in connection with the Contract. Without limiting the foregoing, the Contractor, including its Subcontractors/ suppliers/ manufacturers, shall use all reasonable efforts to establish, maintain, implement and comply with, reasonable information technology, information security, cyber security and data protection controls, policies and procedures, including oversight, access controls, encryption, technological and physical safeguards and business continuity/disaster recovery and security plans that are designed to protect against and prevent breach, destruction, loss, unauthorized distribution, use, access, disablement, misappropriation or modification, or other compromise or misuse of or relating to any information technology system or data used in connection with the Contract.
4.2 Performance Security and ES Performance Security	The Contractor shall obtain (at its cost) a Performance Security for proper performance and, if applicable, an Environmental and Social (ES) Performance Security for compliance with the Contractor's ES obligations, in the amounts stated **in the PCC** and denominated in the currency(ies) of the Contract or in a freely convertible currency acceptable to the Employer. If amounts are not stated **in the PCC**, this Sub-Clause shall not apply." In the following Sub-Clauses of the General Conditions of Contract, the term "Performance Security" is replaced with: "Performance Security and, if applicable, an Environmental and Social (ES) Performance Security": 2.1- Right of Access to the Site; 14.2- Advance Payment; 14.6- Issue of IPC; 14.12- Discharge; 14.13- Issue of FPC; 14.14 Cessation of Employer's Liability; 15.2- Termination for Contractor's Default; 15.5- Termination for Employer's Convenience.
4.2.1 Contractor's Obligations	The Contractor shall deliver the Performance Security and, if applicable, an ES Performance Security to the Employer within 28 days after receiving the Letter of Acceptance and shall send a copy to the Engineer. The Performance Security and ES Performance Security, if applicable shall be issued by a reputable bank or financial institution selected by the Contractor and shall be in the forms included in Section X, Contract Forms.

	The Contractor shall ensure that the Performance Security and, if applicable, ES Performance Security remains valid and enforceable until the issue of the Performance Certificate and the Contractor has complied with Sub-Clause 11.11 [*Clearance of Site*]. If the terms of the Performance Security specify an expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 days before the expiry date, the Contractor shall extend the validity of the Performance Security until the issue of the Performance Certificate and the Contractor has complied with Sub-Clause 11.11 [*Clearance of Site*]. Whenever Variations and/or adjustments under Clause 13 [*Variations and Adjustments*] result in an accumulative increase or decrease of the Contract Price in one currency by more than twenty percent (20%) of the Accepted Contract Amount in that currency: (a) in the case of such an increase, at the Employer's request the Contractor shall promptly increase the amount of the Performance Security and, if applicable, ES Performance Security in that currency by a percentage equal to the accumulative increase. If the Contractor incurs Cost as a result of this Employer's request, Sub-Clause 13.3.1 [*Variation by Instruction*] shall apply as if the increase had been instructed by the Engineer; or (b) in the case of such a decrease, subject to the Employer's prior consent the Contractor may decrease the amount of the Performance Security in that currency by a percentage equal to the accumulative decrease.
4.2.2 Claims under the Performance Security	The Employer shall not make a claim under the Performance Security and, if applicable, ES Performance Security, except for amounts for which the Employer is entitled under the Contract. The Employer shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security and, if applicable, ES Performance Security to the extent that the Employer was not entitled to make the claim. Any amount which is received by the Employer under the Performance Security and, if applicable, ES Performance Security shall be taken into account: (i) in the Final Payment Certificate under Sub-Clause 14.13 [*Issue of FPC*]; or *(ii) if the Contract is terminated, in payment due to the Contractor under Sub-Clause 15.4 [Payment after Termination for Contractor's Default], Sub-Clause 15.7 [Payment after Termination for Employer's Convenience], Sub-Clause 16.4 [Payment after Termination by Contractor], Sub-Clause 18.5*

	[Optional Termination], or Sub-Clause 18.6 [Release from Performance under the Law] (as the case may be).
4.2.3 Return of Performance Security	The Employer shall return the Performance Security and, if applicable, ES Performance Security to the Contractor: (a) within 28 days after the issue of the Performance Certificate and the Contractor has complied with Sub-Clause 11.11 [*Clearance of Site*]; or (b) promptly after the date of termination if the Contract is terminated in accordance with Sub-Clause 15.5 [*Termination for Employer's Convenience*], Sub-Clause 16.2 [*Termination by Contractor*], Sub-Clause 18.5 [*Optional Termination*] or Sub-Clause 18.6 [*Release from Performance under the Law*].
4.3 Contractor's Representative	The Contractor shall appoint the Contractor's Representative and shall give him/her all authority necessary to act on the Contractor's behalf under the Contract, except to replace the Contractor's Representative. The Contractor's Representative shall be qualified, experienced and competent in the main engineering discipline applicable to the Works and fluent in the language for communications defined in Sub-Clause 1.4 [*Law and Language*]. Unless the Contractor's Representative is named in the Contract, the Contractor shall, before the Commencement Date, submit to the Engineer for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked, or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable replacement for such appointment. If the Engineer does not respond within 28 days after receiving this submission, by giving a Notice to the Contractor objecting to the proposed person or replacement, the Engineer shall be deemed to have given his/her consent. The Contractor shall not, without the Engineer's prior consent, revoke the appointment of the Contractor's Representative or appoint a replacement (unless the Contractor's Representative is unable to act as a result of death, illness, disability or resignation, in which case his/her appointment shall be deemed to have been revoked with immediate effect and the appointment of a replacement shall be treated as a temporary appointment until the Engineer gives his/her consent to this replacement, or another replacement is appointed, under this Sub-Clause). The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. The Contractor's Representative shall act for and on behalf of the Contractor at all times during the performance of the Contract,

	including issuing and receiving all Notices and other communications under Sub-Clause 1.3 [*Notices and Other Communications*] and for receiving instructions under Sub-Clause 3.5 [*Engineer's Instructions].* The Contractor's Representative shall be based at the Site for the whole time that the Works are being executed at the Site. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement shall be temporarily appointed, subject to the Engineer's prior consent. The Contractor's Representative may delegate any powers, functions and authority except: (a) the authority to issue and receive Notices and other communications under Sub-Clause 1.3 [*Notices and Other Communications*]; and (b) the authority to receive instructions under Sub-Clause 3.5 [*Engineer's Instructions*]), to any suitably competent and experienced person and may at any time revoke the delegation. A ny delegation or revocation shall not take effect until the Engineer has received a Notice from the Contractor's Representative, naming the person, specifying the powers, functions and authority being delegated or revoked, and stating the timing of the delegation or revocation. All these persons shall be fluent in the language for communications defined in Sub-Clause 1.4 [*Law and Language].* If any of these persons is not fluent in this language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer.
4.4 Subcontractors	The Contractor shall not subcontract: (a) works with a total accumulated value greater than the percentage of the Accepted Contract Amount stated **in the PCC** (if not stated, the whole of the Works); or (b) any part of the Works for which subcontracting is not permitted as stated **in the PCC**. The Contractor shall require in all subcontracts relating to the Works that Subcontractors execute the Works in accordance with the Contract, including complying with the relevant ES requirements and the SEA/SH Prevention and the obligations set out in Sub-Clause 4.25. All subcontracts relating to the Works shall include a provision stipulating that the Subcontractor accepts that the Bank may disqualify the Subcontractor from being awarded a Bank financed contract for a period of two years if the Subcontractor is determined

	to have failed to comply with its SEA/SH Prevention and Response Obligations. The Contractor shall be responsible for the work of all Subcontractors, for managing and coordinating all the Subcontractors' works, and for the acts or defaults of any Subcontractor, any Subcontractor's agents or employees, as if they were the acts or defaults of the Contractor. The Contractor shall obtain the Engineer's prior consent to all proposed Subcontractors, except: (i) suppliers of Materials; or (ii) a subcontract for which the Subcontractor is named in the Contract. Where the Contractor is required to obtain the Engineer's consent to a proposed Subcontractor, the Contractor shall submit to the Engineer the name, address, detailed particulars and relevant experience of such Subcontractor and the work intended to be subcontracted to the Engineer and further information which the Engineer may reasonably require. The Contractor's submission to the Engineer shall also include such a Subcontractor's declaration in accordance with the General Conditions of Contract Appendix D - Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment Performance Declaration for Subcontractors. If the Engineer does not respond within 14 da ys after receiving this submission (or further information if requested), by giving a Notice objecting to the proposed Subcontractor, the Engineer shall be deemed to have given his/her consent. The Contractor shall give a Notice to the Engineer not less than 28 days before the intended date of the commencement of each Sub contractor's work, and of the commencement of such work on the Site. All subcontracts relating to the Works shall include provisions which entitle the Employer to require the subcontract to be assigned to the Employer under sub-paragraph (a) of Sub-Clause 15.2 [*Termination for Contractor's Default*]. Where practicable, the Contractor shall give fair and reasonable opportunity for contractors from the Country to be appointed as Subcontractors.
4.5 Nominated Subcontractors	In this Sub-Clause, "nominated Subcontractor" means a Subcontractor named as such in the Employer's Requirements or whom the Engineer, under Sub-Clause 13.4 [*Provisional Sums*], instructs the Contractor to employ as a Subcontractor.
4.5.1 Objection to nomination	The Contractor shall not be under any obligation to employ a nominated Subcontractor whom the Engineer instructs and against

	whom the Contractor raises reasonable objection by giving a Notice to the Engineer, with detailed supporting particulars, no later than 14 days after receiving the Engineer's instruction. An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Employer agrees to indemnify the Contractor against and from the consequences of the matter: (a) there are reasons to believe that the nominated Subcontractor does not have sufficient competence, resources or financial strength; (b) the subcontract does not specify that the nominated Subcontractor shall indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, the nominated Subcontractor's agents and employees; or (c) the subcontract does not specify that, for the subcontracted work (including design, if any), the nominated Subcontractor shall: (i) undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge the Contractor's corresponding obligations and liabilities under the Contract; (ii) indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or to fulfill these liabilities; and (iii) be paid only if and when the Contractor has received from the Employer payments for sums due under the Subcontract referred to under Sub-Clause 4.5.2 [*Payment to nominated Subcontractors*].
4.5.2 Payments to Nominated Subcontractors	The Contractor shall pay to the nominated Subcontractor the amounts due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with sub-paragraph (b) of Sub-Clause 13.4 [*Provisional Sums*], except as stated in Sub-Clause 4.5.3 [*Evidence of Payments]*.
4.5.3 Evidence of Payments	Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Engineer may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor: (a) submits this reasonable evidence to the Engineer, or

	(b) (i) satisfies the Engineer in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and (ii) submits to the Engineer reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement, then the Employer may (at the Employer's sole discretion) pay, directly to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. Thereafter, the Engineer shall give a Notice to the Contractor stating the amount paid directly to the nominated Subcontractor by the Employer and, in the next IPC after this Notice, shall include this amount as a deduction under sub-paragraph (b) of Sub-Clause 14.6.1 [*The IPC]*.
4.6 Co-operation	The Contractor shall, as specified in the Employer's Requirements or as instructed by the Engineer, co-operate with and allow appropriate opportunities for carrying out work by: (a) the Employer's Personnel; (b) any other contractors employed by the Employer; and (c) the personnel of any legally constituted public authorities and private utility companies, who may be employed in the carrying out, on or near the Site, of any work not included in the Contract. Such appropriate opportunities may include the use of the Contractor's Equipment, Temporary Works, access arrangements which are the responsibility of the Contractor, and/or other of the Contractor's facilities or services on the Site. The Contractor shall also, as stated in the Employer's Requirements or as instructed by the Engineer, cooperate with and allow appropriate opportunities for the Employer's Personnel to conduct any environmental and social assessment. The Contractor shall be responsible for the Contractor's construction activities on the Site, and shall use all reasonable endeavors to co-ordinate these activities with those of other contractors to the extent (if any) specified in the Employer's Requirements or as instructed by the Engineer. If the Contractor suffers delay and/or incurs Cost as a result of an instruction under this Sub-Clause, to the extent (if any) that co-operation, allowance of opportunities and coordination was unforeseeable having regard to that specified in the Employer's Requirements, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/ or payment of such Cost Plus Profit.

4.7 Setting Out	The Contractor shall set out the Works in relation to the items of reference under Sub-Clause 2.5 [*Site Data and Items of Reference*].
4.7.1 Accuracy	The Contractor shall: (a) verify the accuracy of all these items of reference before they are used for the Works; (b) promptly deliver the results of each verification to the Engineer; (c) rectify any error in the positions, levels, dimensions or alignment of the Works; and (d) be responsible for the correct positioning of all parts of the Works.
4.7.2 Errors	If the Contractor finds an error in any items of reference, the Contractor shall give a Notice to the Engineer describing it: (a) within the period stated **in the PCC** (if not stated, 28 days) calculated from the Commencement Date, if the items of reference are specified in the Employer's Requirements; or (b) as soon as practicable after receiving the items of reference, if they are issued by the Engineer under Sub-Clause 2.5 [Site Data and Items of Reference].
4.7.3 Agreement or Determination of rectification measures, delay and/or Cost	After receiving a Notice from the Contractor under Sub-Clause 4.7.2 [*Errors*], the Engineer shall proceed under Sub-Clause 3.7 [*Agreement or Determination*] to agree or determine: (a) whether or not there is an error in the items of reference; (b) whether or not (taking account of cost and time) an experienced contractor exercising due care would have discovered such error • when examining the Site and the Employer's Requirements before submitting the Bid; or • when scrutinising the Employer's Requirements under Sub-Clause 5.1 [*General Design Obligations*], if the items of reference are specified in the Employer's Requirements and the Contractor's Notice is given after the expiry of the period stated in sub-paragraph (a) of Sub-Clause 4.7.2; and (c) what measures (if any) the Contractor is required to take to rectify the error (and, for the purpose of Sub-Clause 3.7.3 [Time limits], the date the Engineer receives the Contractor's Notice under Sub-Clause 4.7.2 [Errors] shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3). If it is agreed or determined, under sub-paragraphs (a) and (b) above, that there is an error in the items of reference that an experienced contractor would not have discovered:

	(i) Sub-Clause 13.3.1 [*Variation by Instruction*] shall apply to the measures that the Contractor is required to take (if any); and (ii) if there are no such measures, and therefore no Variation, but the Contractor suffers delay and/or incurs Cost as a result of the error, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost Plus Profit.
4.8 Health and Safety Obligations	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) comply with all directives issued by the Contractor's health and safety officer (appointed under Sub-Clause 6.7 [*Health and Safety of Personnel*]); (d) take care of the health and safety of all persons entitled to be on the Site and other places (if any) where the Works are being executed; (e) keep the Site, Works (and the other places (if any) where the Works are being executed) clear of unnecessary obstruction so as to avoid danger to these persons; (f) provide fencing, lighting, safe access, guarding and watching of: (i) the Works, until the Works are taken over under Clause 10 [*Employer's Taking Over*]; and (ii) any part of the Works where the Contractor is executing outstanding works or remedying any defects during the DNP; (g) 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 and property; and (h) provide health and safety training of Contractor's Personnel as appropriate and maintain training records; (i) 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, and provision of personal protective equipment without expense to the Contractor's Personnel; (j) 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; (k) 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; (l) subject to Sub-Clause 4.6, collaborate with the entities and Personnel under paragraph (a), (b) and (c) of Sub-Clause 4.6, in applying the health and safety requirements. This is without prejudice to the responsibility of the relevant entities for the health and safety of their own personnel; and (m) establish and implement a system for regular (not less than six-monthly) review of health and safety performance and the working environment. Subject to Sub-Clause 4.1, the Contractor shall submit to the Engineer for Review 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 procedures for Review of the health and safety manual and its updates shall be as described in Sub-Clause 5.2 *[Contractor's Documents]*. 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) 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, (v) 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 labour; (vi) 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 Sub-Clause 6.6; and (b) any other requirements stated in the Employer's Requirements. This manual shall be revised as necessary by the Contractor or the Contractor's health and safety officer, or at the reasonable request of the Engineer. Each revision of the manual shall be submitted promptly to the Engineer. The Contractor shall, as specified in the Employer's Requirements and as the Engineer may reasonably require, maintain records and make reports (in compliance with the applicable health and safety regulations and Laws) concerning the health and safety of persons and any damage to property.
4.9 Quality Management and Compliance Verification Systems	
4.9.1 Quality Management	The Contractor shall prepare and implement a QM System to demonstrate compliance with the requirements of the Contract. The QM System shall be specifically prepared for the Works and

	submitted to the Engineer within 28 days of the Commencement Date. Thereafter, whenever the QM System is updated or revised, a copy shall promptly be submitted to the Engineer. The QM System shall be in accordance with the details stated in the Employer's Requirements (if any) and shall include the Contractor's procedures: (a) to ensure that all Notices and other communications under Sub-Clause (b) to ensure proper coordination and management of interfaces between the stages of execution of the Works, and between Subcontractors; and (c) for the submission of Contractor's Documents to the Engineer for Review. The Engineer may Review the QM System and may give a Notice to the Contractor stating the extent to which it does not comply with the Contract. Within 14 days after receiving this Notice, the Contractor shall revise the QM System to rectify such non-compliance. If the Engineer does not give such a Notice within 21 days of the date of submission of the QM System, the Engineer shall be deemed to have given a Notice of No-objection. The Engineer may, at any time, give a Notice to the Contractor stating the extent to which the Contractor is failing to correctly implement the QM System to the Contractor's activities under the Contract. After receiving this Notice, the Contractor shall immediately remedy such failure. The Contractor shall carry out internal audits of the QM System regularly, and at least once every 6 months. The Contractor shall submit to the Engineer a report listing the results of each internal audit within 7 days of completion. Each report shall include, where appropriate, the proposed measures to improve and/or rectify the QM System and/or its implementation. If the Contractor is required by the Contractor's quality assurance certification to be subject to external audit, the Contractor shall immediately give a Notice to the Engineer describing any failing(s) identified in any external audit. If the Contractor is a JV, this obligation shall apply to each member of the JV.
4.9.2 Compliance Verification System	The Contractor shall prepare and implement a Compliance Verification System to demonstrate that the design, Materials, Employer-Supplied Materials (if any), Plant, work and workmanship comply in all respects with the Contract. The Compliance Verification System shall be in accordance with the details stated in the Employer's Requirements (if any) and shall include a method for reporting the results of all inspections and tests carried out by the Contractor. In the event that any inspection or test

	identifies a non-compliance with the Contract, Sub-Clause 7.5 [*Defects and Rejection*] shall apply. The Contractor shall prepare and submit to the Engineer a complete set of compliance verification documentation for the Works or Section (as the case may be), fully compiled and collated in the manner described in the Employer's Requirements or, if not so described, in a manner acceptable to the Engineer.
4.9.3 General provision	Compliance with the QM System and/or Compliance Verification System shall not relieve the Contractor from any duty, obligation or responsibility under or in connection with the Contract.
4.10 Use of Site Data	The Contractor shall be responsible for interpreting all data referred to under Sub-Clause 2.5 [*Site Data and Items of Reference*]. To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Bid or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, access to the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Bid as to all matters relevant to the execution of the Works, including: (a) the form and nature of the Site, including sub-surface conditions; (b) the hydrological and climatic conditions, and the effects of climatic conditions at the Site; (c) the extent and nature of the work and Goods necessary for the execution of the Works; (d) the Laws, procedures and labour practices of the Country; and (e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and any other utilities or services.
4.11 Sufficiency of the Accepted Contract Amount	The Contractor shall be deemed to: (a) have satisfied himself/herself as to the correctness and sufficiency of the Accepted Contract Amount; and (b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters described in Sub-Clause 4.10 [*Use of Site Data*] and any further data relevant to the Contractor's design. Unless otherwise stated in the Contract, the Accepted Contract Amount shall be deemed to cover all the Contractor's obligations under the Contract and all things necessary for the proper execution of the Works in accordance with the Contract.

4.12 Unforeseeable Physical Conditions	In this Sub-Clause, "physical conditions" means natural physical conditions and physical obstructions (natural or man-made) and pollutants, which the Contractor encounters at the Site during execution of the Works, including sub-surface and hydrological conditions but excluding climatic conditions at the Site and the effects of those climatic conditions. If the Contractor encounters physical conditions which the Contractor considers to have been Unforeseeable and that will have an adverse effect on the progress and/or increase the Cost of the execution of the Works, the following procedure shall apply:
4.12.1 Contractor's Notice	After discovery of such physical conditions, the Contractor shall give a Notice to the Engineer, which shall: (a) be given as soon as practicable and in good time to give the Engineer opportunity to inspect and investigate the physical conditions promptly and before they are disturbed; (b) describe the physical conditions, so that they can be inspected and/ or investigated promptly by the Engineer; (c) set out the reasons why the Contractor considers the physical conditions to be Unforeseeable; and (d) describe the manner in which the physical conditions will have an adverse effect on the progress and/or increase the Cost of the execution of the Works.
4.12.2 Engineer's inspection and investigation	The Engineer shall inspect and investigate the physical conditions within 7 days, or longer period agreed with the Contractor, after receiving the Contractor's Notice. The Contractor shall continue execution of the Works, using such proper and reasonable measures as are appropriate for the physical conditions and to enable the Engineer to inspect and investigate them.
4.12.3 Engineer's instructions	The Contractor shall comply with any instructions which the Engineer may give for dealing with the physical conditions and, if such an instruction constitutes a Variation, Sub-Clause 13.3.1 [*Variation by Instruction*] shall apply.
4.12.4 Delay and/or cost	If and to the extent that the Contractor suffers delay and/or incurs Cost due to these physical conditions, having complied with Sub-Clauses 4.12.1 to 4.12.3 above, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost.
4.12.5 Agreement or Determination of Delay and/or Cost	The agreement or determination, under GCC Clause 20, of any Claim under Sub-Clause 4.12.4 [*Delay and/or Cost*] shall include consideration of whether and (if so) to what extent the physical conditions were Unforeseeable.

	The Engineer may also review whether other physical conditions in similar parts of the Works (if any) were more favourable than could reasonably have been foreseen by the Base Date. If and to the extent that these more favourable conditions were encountered, the Engineer may take account of the reductions in Cost which were due to these conditions in calculating the additional Cost to be agreed or determined under this Sub-Clause 4.12.5. However, the net effect of all additions and reductions under this Sub-Clause 4.12.5 shall not result in a net reduction in the Contract Price. The Engineer may take account of any evidence of the physical conditions foreseen by the Contractor by the Base Date, which the Contractor may include in the supporting particulars for the Claim under Sub-Clause 20.1, but shall not be bound by any such evidence.
4.13 Rights of Way and Facilities	The Contractor shall bear all costs and charges for special and/or temporary rights-of-way which may be required for the purposes of the Works, including those for access to the Site. The Contractor shall also obtain, at the Contractor's risk and cost, any additional facilities outside the Site which may be required for the purposes of the Works.
4.14 Avoidance of Interference	The Contractor shall not interfere unnecessarily or improperly with: (a) the convenience of the public; or (b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others. The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.
4.15 Access Route	The Contractor shall be deemed to have been satisfied, at the Base Date, as to the suitability and availability of the access routes to the Site. The Contractor shall take all necessary measures to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These measures shall include the proper use of appropriate vehicles (conforming to legal load and width limits (if any) and any other restrictions) and routes. Except as otherwise stated in these Conditions: (a) the Contractor shall (as between the Parties) be responsible for repair of any damage caused to, and any maintenance which may be required for the Contractor's use of, access routes; (b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permissions or permits which may be required from the relevant authorities, for the Contractor's use of routes, signs and directions;

	(c) the Employer shall not be responsible for any third party claims which may arise from the Contractor's use or otherwise of any access route; (d) the Employer does not guarantee the suitability or availability of particular access routes; and (e) all Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor. To the extent that non-suitability or non-availability of an access route arises as a result of changes to that access route by the Employer or a third party after the Base Date, and as a result the Contractor suffers delay and/or incurs Cost, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost. 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, Contractor's Equipment on public roads or other public infrastructure. The Contractor shall monitor and use road safety incidents and accidents reports to identify negative safety issues and establish and implement necessary measures to resolve them.
4.16 Transport of Goods	The Contractor shall: (a) give a Notice to the Engineer not less than 21 days before the date on which any Plant, or a major item of other Goods (as specified in the Employer's Requirements), will be delivered to the Site; (b) be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; (c) be responsible for customs clearance, permits, fees and charges related to the import, transport and handling of all Goods, including all obligations necessary for their delivery to the Site; and (d) indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the import, transport and handling of all Goods, and shall negotiate and pay all third party claims arising from their import, transport and handling.
4.17 Contractor's Equipment	The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works. The Contractor shall not remove from the Site any major items of Contractor's Equipment without the Engineer's consent. However,

	consent shall not be required for vehicles transporting Goods or Contractor's Personnel off Site. In addition to any Notice given under Sub-Clause 4.16 [*Transport of Goods*], the Contractor shall give a Notice to the Engineer of the date on which any major item of Contractor's Equipment has been delivered to the Site. This Notice shall be given within 7 days of the delivery date, shall identify whether the item of Contractor's Equipment is owned by the Contractor or a Subcontractor or another person and, if rented or leased, shall identify the rental or leasing entity.
4.18 Protection of the Environment	The Contractor shall take all necessary measures to: (a) protect the environment (both on and off the Site); and (b) 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 Employer's Requirements, 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 Engineer 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 Engineer. 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 there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any 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 some of the major laws that are applicable for protection of environment are given in Appendix 1
4.19 Temporary Utilities	The Contractor shall, except as stated below, be responsible for the provision of all temporary utilities, including electricity, gas, telecommunications, water and any other services the Contractor may require for the execution of the Works. The following provisions of this Sub-Clause shall only apply if, as stated in the Employer's Requirements, the Employer is to provide utilities for the Contractor's use. The Contractor shall be entitled to use, for the purposes of the Works, the utilities on the Site for which details and prices are given in the Employer's Requirements. The Contractor shall, at the Contractor's risk and cost, provide any

	apparatus necessary for the Contractor's use of these services and for measuring the quantities consumed. The apparatus provided for measuring quantities consumed shall be subject to the Engineer's consent. The quantities consumed (if any) during each period of payment stated **in the PCC** (if not stated, each month) shall be measured by the Contractor, and the amount to be paid by the Contractor for such quantities (at the prices stated in the Employer's Requirements) shall be included in the relevant Statement.
4.20 Progress Reports	Monthly progress reports, in the format stated in the Employer's Requirements (if not stated, in a format acceptable to the Engineer), shall be prepared by the Contractor and submitted to the Engineer. Each progress report shall be submitted in one paper-original, one electronic copy and additional paper copies (if any) as stated **in the PCC**. The first report shall cover the period up to the end of the first month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the month to which it relates. Reporting shall continue until the Date of Completion of the Works or, if outstanding work is listed in the Taking-Over Certificate, the date on which such outstanding work is completed. Unless otherwise stated in the Employer's Requirements, each progress report shall include: (a) charts, diagrams and detailed descriptions of progress, including each stage of design, Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection, testing, commissioning and trial operation; (b) photographs and/or video recordings showing the status of manufacture and of progress on and off the Site; (c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of: (i) commencement of manufacture, (ii) Contractor's inspections, (iii) tests, and (iv) shipment and arrival at the Site; (d) the details described in Sub-Clause 6.10 [*Contractor's Records*]; (e) copies of quality management documents, inspection reports, test results, and compliance verification documentation (including certificates of Materials); (f) a list of Variations, and any Notices given (by either Party) under Sub-Clause 20.1 and Sub-Clause 20.2;

	(g) the Environmental and Social (ES) metrics set out in Appendix C to the General Conditions of Contract; and (h) comparisons of actual and planned progress, with details of any events or circumstances which may adversely affect the completion of the Works in accordance with the Programme and the Time for Completion, and the measures being (or to be) adopted to overcome delays. Unless otherwise stated **in the PCC**, progress reports shall include status of compliance to cyber security risks management, and any foreseeable cyber security risk and mitigation However, nothing stated in any progress report shall constitute a Notice under a Sub-Clause of these Conditions. In addition to the reporting requirement of this sub-paragraph (g) of Sub-Clause 4.20 [*Progress Reports*], the Contractor shall inform the Engineer immediately of any allegation, incident or accident, 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 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; any cyber security incidents as specified in the Contract Data; 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 Engineer 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 Engineer within the timeframe agreed with the Engineer. 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.
4.21 Security of the Site	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 authorised personnel

	(including the Employer's other contractors on the Site), by a Notice from the Employer or the Engineer to the Contractor. Subject to Sub-Clause 4.1, the Contractor shall submit for the Engineer'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 Employer's Requirements. 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 Employer's Requirements.
4.22 Contractor's Operations on Site	The Contractor shall confine the Contractor's operations to the Site, and to any additional areas which may be obtained by the Contractor and acknowledged by the Engineer as working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land. At all times, the Contractor shall keep the Site free from all unnecessary obstruction, and shall properly store or remove from the Site any Contractor's Equipment (subject to Sub-Clause 4.17 [*Contractor's Equipment*]) and/or surplus materials. The Contractor shall promptly clear away and remove from the Site any wreckage, rubbish, hazardous waste and Temporary Works which are no longer required. Promptly after the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus material, wreckage, rubbish, hazardous waste and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain at locations on the Site agreed with the Engineer, during the DNP, such Goods as are required for the Contractor to fulfill obligations under the Contract.

4.23 Archaeological and Geological Findings	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 Employer's Requirements and relevant Laws. The Contractor shall, as soon as practicable after discovery of any such finding, give a Notice to the Engineer in good time to give the Engineer opportunity to promptly inspect and/or investigate the finding before it is disturbed. This Notice shall describe the finding and the Engineer shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the Engineer's instructions, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost.
4.24 Suppliers (other than Subcontractors)	
4.24.1 **Forced Labour**	The Contractor shall take measures to require its suppliers (other than Subcontractors) not to employ or engage forced labour including trafficked persons as described in Sub-Clause 6.21. If forced labour/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.
4.24.2 **Child labour**	The Contractor shall take measures to require its suppliers (other than Subcontractors) not to employ or engage child labour as described in Sub-Clause 6.22. If child labour 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.

4.24.3 **Serious Safety Issues**	The Contractor, including its Subcontractors, shall comply with all applicable safety obligations, including as stated in Sub-Clauses 4.4, 4.8 and 6.7. 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.
4.24.4 **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.
4.25 Code of Conduct	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.
4.26 Milestones	If no Milestones are specified **in the PCC**, this Sub-Clause shall not apply. The Contractor shall complete the works of each Milestone (including the all work which is stated in the Employer's Requirements as being required for the Milestone to be considered complete) within the time for completion of the milestone, as stated **in the PCC**, calculated from the Commencement Date. The Contractor shall include, in the initial programme and each revised programme, under sub-paragraph (a) of Sub-Clause 8.3 [*Programme*], the time for completion of each Milestone. Sub-paragraph 9d) of Sub-Clause 8.4 [*Advance Warning*] and Sub-Clause 8.5 [*Extension of the Time for Completion*] shall apply to each Milestone, such that "Time for Completion" under Sub-Clause 8.5 shall be read as the time for completion of a Milestone under this Sub-Clause. The Contractor may apply, by Notice to the Engineer, for a Milestone certificate not earlier than 14 days before the works of a Milestone will, in the Contractor's opinion, be complete. The Engineer shall, within 28 days after receiving the Contactor's Notice: 19 issue the Milestone Certificate to the Contractor, stating the date on which the works of a Milestone were completed in accordance with the Contract, except for any minor outstanding work and defects (as shall be listed in the Milestone Certificate); or 20 reject the application, giving reasons and specifying the work required to be done and defects required to be remedied by the Contractor to enable the Milestone Certificate to be issued. The Contractor shall then complete the work referred to in subparagraph (b) of this Sub-Clause before issuing a further Notice of application under this Sub-Clause. If the Engineer fails either to issue the Milestone Certificate or to reject the Contractor's application within the above period of 28 days, and if the works of a Milestone are completed in accordance with the Contract, the Milestone Certificate shall be deemed to have been issued on the date which is 14 days after the date stated in the Contractor's Notice of application. If delay damages for a Milestone are stated **in the PCC**, and if the Contractor fails to complete the works of the Milestone within the

	time for completion of the Milestone (with any extension under this Sub-Clause): (i) the Contractor shall, subject to Sub-Clause 20.2, pay delay damages to the Employer for this default; (ii) such delay damages shall be the amount stated **in the PCC**, for every day which shall elapse between the time for completion for the Milestone (with any extension under this Sub-Clause) and the date stated in the Milestone Certificate; (iii) these delay damages shall be the only damages due from the Contractor for such default; and (iv) the total amount of delay damages for all Milestones shall not exceed the maximum amount stated **in the PCC** (this shall not limit the Contractor's liability for delay damages in any case of fraud, gross negligence, deliberate default or reckless misconduct by the Contractor)
5. Design	
5.1 General Design Obligations	The Contractor shall carry out, and be responsible for, the design of the Works. Design shall be prepared by designers who: (a) are engineers or other professionals, qualified, experienced and competent in the disciplines of the design for which they are responsible; (b) comply with the criteria (if any) stated in the Employer's Requirements; and (c) are qualified and entitled under applicable Laws to design the Works. Unless otherwise stated in the Employer's Requirements, the Contractor shall submit to the Engineer for consent the name, address, detailed particulars and relevant experience of each proposed designer/design Subcontractor. The Contractor warrants that the Contractor, the Contractor's designers and design Subcontractors have the experience, capability and competence necessary for the design. The Contractor undertakes that the designers and design Subcontractors shall be available to attend discussions with the Engineer and/or the Employer at all reasonable times (on or off the Site), until the issue of the Performance Certificate.

	Promptly after receiving a Notice under Sub-Clause 8.1 [*Commencement of Works*], the Contractor shall scrutinize the Employer's Requirements (including design criteria and calculations, if any). If the Contractor discovers any error, fault or other defect in the Employer's Requirements, Sub-Clause 1.9 [*Errors in the Employer's Requirements*] shall apply (unless it is an error in the items of reference specified in the Employer's Requirements, in which case Sub-Clause 4.7 [*Setting Out*] shall apply).
5.2 Contractor's Documents	The Contractor's Documents shall comprise the documents: (a) specified in the Employer's Requirements; (b) required to satisfy all permits, permissions, licences and other regulatory approvals which are the Contractor's responsibility under Sub-Clause 1.13 [*Compliance with Laws*]; and (c) described in Sub-Clause 5.6 [*As-Built Records*] and Sub-Clause 5.7 [*Operation and Maintenance Manuals]*.
5.2.1 Preparation by Contractor	Unless otherwise stated in the Employer's Requirements, the Contractor's Documents shall be written in the language for communications defined in Sub-Clause 1.4 [*Law and Language*]. The Contractor shall prepare all Contractors' Documents, and any other documents necessary to complete and implement the design during execution of the Works and to instruct the Contractor's Personnel. The Employer's Personnel shall have the right to inspect the preparation of all these documents (including any investigation, modelling and testing), wherever they are being prepared.
5.2.2 Review by Engineer	In this Sub-Clause 5.2.2: - "Review Period" means the period not exceeding 21 days, or as otherwise stated in the Employer's Requirements, calculated from the date on which the Engineer receives a Contractor's Document and a Contractor's Notice; - "Contractor's Document" excludes any of the Contractor's Documents which are not specified in the Employer's Requirements or these Conditions as being required to be submitted for Review, but includes all documents on which a specified Contractor's Document relies for completeness; and - "Contractor's Notice" means the Notice which shall state that the relevant Contractor's Document is considered by the Contractor to be ready for Review under this Sub-Clause 5.2.2 and for use, and that it complies with the Employer's Requirements and these Conditions, or the extent to which it does not do so.

	If the Employer's Requirements or these Conditions specify that a Contractor's Document is to be submitted to the Engineer for Review, it shall be submitted accordingly, together with a Contractor's Notice. The Engineer shall, within the Review Period, give a Notice to the Contractor: (a) of No-objection (which may include comments concerning minor matters which will not substantially affect the Works); or (b) that the Contractor's Document fails (to the extent stated) to comply with the Employer's Requirements and/or the Contract, with reasons. If the Engineer gives no Notice within the Review Period, the Engineer shall be deemed to have given a Notice of No-objection to the Contractor's Document (provided that all other Contractor's Documents on which that Contractor's Document relies (if any) have been given, or are deemed to have been given, a Notice of No-objection). If the Engineer instructs that further Contractor's Documents are reasonably required to demonstrate that the Contractor's design complies with the Contract, the Contractor shall prepare and submit them promptly to the Engineer at the Contractor's cost. If the Engineer gives a Notice under sub-paragraph (b) above, the Contractor shall: (i) revise the Contractor's Document; (ii) resubmit it to the Engineer for Review in accordance with this Sub-Clause 5.2.2, and the Review Period shall be calculated from the date that the Engineer receives it; and (iii) not be entitled to EOT for any delay caused by any such revision and resubmission and/or by subsequent Review by the Engineer. If the Employer incurs additional costs as a result of such resubmission and subsequent Review, the Employer shall be entitled subject to Sub-Clause 20.2 to payment by the Contractor of the costs reasonably incurred.
5.2.3 Construction	Except for Contractor's Documents under Sub-Clause 5.6 [*As-Built Records*] and Sub-Clause 5.7 [*Operation and Maintenance Manuals*], for each part of the Works requiring Contractor's Documents to be submitted for Review: (a) construction of such a part shall not commence until a Notice of No-objection is given (or is deemed to have been given) by

	the Engineer for all the Contractor's Documents which are relevant to its design and execution; (b) construction of such a part shall be in accordance with these Contractor's Documents; and (c) the Contractor may modify any design or Contractor's Documents which have previously been submitted for Review, by giving a Notice to the Engineer with reasons. If the Contractor has commenced construction of the part of the Works to which such design or Contractor's Documents are relevant: (i) work on this part shall be suspended; (ii) the provisions of Sub-Clause 5.2.2 [*Review by Engineer*] shall apply as if the Engineer had given a Notice in respect of the Contractor's Documents under sub-paragraph (b) of Sub-Clause 5.2.2; and (iii) work on this part shall not resume until a Notice of No-objection is given (or is deemed to have been given) by the Engineer for the revised documents.
5.3 Contractor's Undertaking	The Contractor undertakes that the design, the Contractor's Documents, the execution of the Works and the completed Works will be in accordance with: (a) the Laws of the Country; and (b) the documents forming the Contract, as altered or modified by Variations.
5.4 Technical Standards and Regulations	The Contractor's Documents, the execution of the Works and the completed Works (including defects remedied by the Contractor) shall comply with the Country's technical standards, building, construction and environmental Laws, Laws applicable to the product being produced from the Works, and other standards specified in the Employer's Requirements, applicable to the Works, or defined by applicable Laws. If so stated in the Employer's Requirements, the Contractor shall: (a) take into account climate change considerations in the design of structural elements of the Works and new buildings if any; and (b) apply the concept of universal access to the design and construction of structures and new buildings if any (the concept of universal access means unimpeded access for people of all ages and abilities in different situations and under various circumstances.) All these technical or other standards and Laws shall, in respect of the Works, and each Section and Part, be those in force when the

	Works or Section or Part are taken over under Clause 10 [Employer's Taking Over]. References in the Contract to published standards shall be understoodto be references to the edition applicable on the Base Date, unless statedotherwise. If changed or new applicable standards come into force in the Country after the Base Date, the Contractor shall promptly give a Notice to the Engineer and (if appropriate or requested by the Engineer) submit Bids for compliance. To the extent that: (a) the Engineer considers that compliance is required and such compliance requires change(s) to the execution of the Works; and (b) the Contractor's Bids for compliance constitute a Variation; then the Engineer shall initiate a Variation in accordance with Clause 13 [*Variations and Adjustments*].
5.5 Training	The Contractor shall carry out training of employees of the Employer (and/or other personnel identified in the Employer's Requirements) in the operation and maintenance of the Works, and any other aspect of the Works, to the extent specified in the Employer's Requirements. If the Employer's Requirements specify training which is to be carried out before taking over, the Works shall not be considered to be completed for the purposes of taking over under Sub-Clause 10.1 [T*aking Over the Works and Sections*] until this training has been completed in accordance with the Employer's Requirements. The timing of the training shall be as stated in the Employer's Requirements (if not stated, as acceptable to the Employer). The Contractor shall provide qualified and experienced training staff, training facilities and all training materials as necessary and/or as stated in the Employer's Requirements.
5.6 As-Built Records	The Contractor shall prepare, and keep up-to-date, a complete set of "as-built" records of the execution of the Works, showing the exact as-built locations, sizes and details of the work as executed by the Contractor. The format, referencing system, system of electronic storage and other relevant details of the as-built records shall be as stated in the Employer's Requirements (if not stated, as acceptable to the Engineer). These records shall be kept on the Site and shall be used exclusively for the purposes of this Sub-Clause. The Contractor shall submit to the Engineer under Sub-Clause 5.2.2 [*Review by Engineer*]: (a) the as-built records for the Works or Section (as the case may be) before the commencement of the Tests on Completion; and

	(b) updated as-built records to the extent that any work is executed by the Contractor: (i) during and/or after the Tests on Completion, before the issue of any Taking-Over Certificate under Sub-Clause 10.1 [*Taking Over the Works and Sections*]; and (ii) after taking over under Sub-Clause 10.1 [*Taking Over the Works and Sections*], before the issue of the Performance Certificate. The number of copies of as-built records to be submitted by the Contractor under this Sub-Clause shall be as required under Sub-Clause 1.8 [*Care and Supply of Documents*].
5.7 Operation and Maintenance Manuals	The Contractor shall prepare, and keep up-to-date, a complete set of operation and maintenance manuals for the Works (the "O&M Manuals" in these Conditions). The format and other relevant details of the O&M Manuals shall be as stated in the Employer's Requirements and, in any case, these manuals shall: (a) be in sufficient detail for the Employer to: (i) operate, maintain and adjust the Works to ensure that the performance of the Works, Section and/or Plant (as the case may be) continues to comply with the performance criteria specified in the Employer's Requirements and the Schedule of Performance Guarantees; and (ii) operate, maintain, dismantle, reassemble, adjust and repair the Plant; and (b) include an inventory of spare parts required for the Employer's future operation and maintenance of the Plant. Before commencement of the Tests on Completion, the Contractor shall submit provisional O&M Manuals for the Works or Section (as the case may be) to the Engineer under Sub-Clause 5.2.2 [*Review by Engineer*]. If during the Tests on Completion any error or defect is found in the provisional O&M Manuals, the Contractor shall promptly rectify the error or defect at the Contractor's risk and cost. Before the issue of any Taking-Over Certificate under Sub-Clause 10.1 [*Taking Over the Works and Sections*], the final O&M Manuals shall be submitted to the Engineer under Sub-Clause 5.2.2 [*Review by Engineer*].
5.8 Design Error	If errors, omissions, ambiguities, inconsistencies, inadequacies or other defects are found in the Contractor's design and/or the Contractor's Documents, they and the Works shall be corrected in accordance with Sub-Clause 7.5 [*Defects and Rejection*]. If such Contractor's Documents were previously the subject of a Notice of

	No-objection given (or deemed to be given) by the Engineer under Sub-Clause 5.2.2 [*Review by Engineer*], the provisions of Sub-Clause 5.2.2 shall apply as if the Engineer had given a Notice in respect of the Contractor's Documents under sub-paragraph (b) of Sub-Clause 5.2.2. All corrections and resubmissions under this Sub-Clause shall be at the Contractor's risk and cost.
6. Staff and Labour	
6.1 Engagement of Staff and Labour	Except as otherwise stated in the Employer's Requirements, the Contractor shall make arrangements for the engagement of all Contractor's Personnel, and for their payment, accommodation, feeding, transport and welfare. 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 labour 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 Employer's Requirements. The Contractor's Personnel shall be informed when any material changes to their terms or conditions of employment occur. The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour with appropriate qualifications and experience from sources within the Country.
6.2 Rates of Wages and Conditions of Labour	The Contractor shall pay rates of wages, and observe conditions of labour, which comply with all applicable Laws and are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor. 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 Employer's Requirements; 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 Employer's Requirements, 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.
6.3 Recruitment of Persons	The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Employer's Personnel. Neither the Employer nor the Engineer shall recruit, or attempt to recruit, staff and labour from amongst the Contractor's Personnel.
6.4 Labour Laws	The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment (including wages and working hours), health, safety, welfare, immigration and emigration, and shall allow them all their legal rights. The Contractor shall require the Contractor's Personnel to obey all applicable Laws, including those concerning health and safety at work. 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.
6.5 Working Hours	No work shall be carried out on the Site on locally recognized days of rest, or outside the normal working hours stated **in the PCC**, unless: (a) otherwise stated in the Contract; (b) the Engineer gives consent; or (c) the work is unavoidable or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately give a Notice to the Engineer with reasons and describing the work required. 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 Employer's Requirements.
6.6 Facilities for Staff and Labour	Except as otherwise stated in the Employer's Requirements, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. If such accommodation and facilities are to be located on the Site, except where the Employer has given the Contractor prior

	permission, they shall be located within the areas identified in the Employer's Requirements. If any such accommodation or facilities are found elsewhere within the Site, the Contractor shall immediately remove them at the Contractor's risk and cost. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Employer's Requirements. If stated in the Employer's Requirements, 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 as stated in the Employer's Requirements.
6.7 Health and Safety of Personnel	In addition to the requirements of Sub-Clause 4.8 [*Health and Safety Obligations*], the Contractor shall at all times take all necessary precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that (a) medical staff, first aid facilities, sick bay, ambulance services and any other medical services stated in the Employer's Requirements are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel; and (b) suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics. Except as otherwise stated in the Employer's Requirements, the Contractor shall appoint a health and safety officer at the Site, responsible for maintaining health, safety and protection against accidents. This officer shall: (i) be qualified, experienced and competent for this responsibility; and (ii) have the authority to issue directives for the purpose of maintaining the health and safety of all personnel authorized to enter and/or work on the Site and to take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.
6.8 Contractor's Superintendence	From the Commencement Date until the issue of the Performance Certificate, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect, test and monitor the execution of the Works. Superintendence shall be given by a sufficient number of persons:

	(a) who are fluent in or have adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]); and (b) who have adequate knowledge of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.
6.9 Contractor's Personnel	The Contractor's Personnel (including Key Personnel, if any) shall be appropriately qualified, skilled, experienced and competent in their respective trades or occupations. The Engineer may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative and 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 in breach of Sub-Clause 6.3 [Recruitment of Persons]; (g) undertakes behaviour 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. In the case of replacement of the Contractor's Representative, Sub-Clause 4.3 [*Contractor's Representative*] shall apply. In the case of replacement of Key Personnel (if any), Sub-Clause 6.12 [*Key Personnel*] shall apply. Subject to the requirements in Sub-Clause 4.3 [*Contractor's Representative*] and 6.12 [*Key Personnel*], and notwithstanding any requirement from the Engineer 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.

6.10 Contractor's Records	Unless otherwise proposed by the Contractor and agreed by the Engineer, in each progress report under Sub-Clause 4.20 [*Progress Reports*], the Contractor shall include records of: (a) occupations and actual working hours of each class of Contractor's Personnel; (b) the type and actual working hours of each of the Contractor's Equipment; (c) the types of Temporary Works used; (d) the types of Plant installed in the Permanent Works; and (e) the quantities and types of Materials used for each work activity shown in the Programme, at each work location and for each day of work.
6.11 Disorderly Conduct	The Contractor shall at all times take all necessary precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.
6.12 Key Personnel	If no Key Personnel are specified in the Employer's Requirements this Sub-Clause shall not apply. The Contractor shall appoint the natural persons named in the Bid to the positions of Key Personnel. If not so named, or if an appointed person fails to act in the relevant position of Key Personnel, the Contractor shall submit to the Engineer for consent the name and particulars of another person the Contractor proposes to appoint to such position. If consent is withheld or subsequently revoked, the Contractor shall similarly submit the name and particulars of a suitable replacement for such position. If the Engineer does not respond within 14 days after receiving any such submission, by giving a Notice stating his/her objection to the appointment of such person (or replacement) with reasons, the Engineer shall be deemed to have given his/her consent. The Contractor shall not, without the Engineer's prior consent, revoke the appointment of any of the Key Personnel or appoint a replacement (unless the person is unable to act as a result of death, illness, disability or resignation, in which case the appointment shall be deemed to have been revoked with immediate effect and the appointment of a replacement shall be treated as a temporary appointment until the Engineer gives his/her consent to this replacement, or another replacement is appointed, under this Sub-Clause).

	All Key Personnel shall be based at the Site (or, where Works are being executed off the Site, at the location of the Works) for the whole time that the Works are being executed. If any of the Key Personnel is to be temporarily absent during execution of the Works, a suitable replacement shall be temporarily appointed, subject to the Engineer's prior consent. All Key Personnel shall be fluent in the language for communications defined in Sub-Clause 1.4 [*Law and Language*]. If any of the Key Personnel are not fluent in this language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer.
6.13 Foreign Personnel	The Contractor may bring in to 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 endeavours 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. The Contractor shall be responsible for the return of these personnel to the place where they were recruited or to their domicile. In the event of the death in the Country of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.
6.14 Supply of Foodstuffs	The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Employer's Requirements at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract.
6.15 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.
6.16 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.
6.17 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.

6.18 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.
6.19 Festivals and Religious Customs	The Contractor shall respect the Country's recognized festivals, days of rest and religious or other customs.
6.20 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.
6.21 Forced Labour	The Contractor, including its Subcontractors, shall not employ or engage forced labour. Forced labour 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 labour, such as indentured labour, bonded labour or similar labour-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.
6.22 Child Labour	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 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 children between the minimum age and the age of 18 after an appropriate risk assessment has been conducted by the Contractor with the Engineer's consent. The Contractor shall be subject to regular monitoring by the Engineer 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 transport of heavy loads; (d) in unhealthy environments exposing children to hazardous substances, agents, or processes, or to temperatures, noise or vibration damaging to health; or (e) under difficult conditions such as work for long hours, during the night or in confinement on the premises of the employer.
6.23 Employment Records of Workers	The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked, and wages paid to all workers. These records shall be summarised on a monthly basis and submitted to the Engineer. These records shall be included in the details to be submitted by the Contractor under Sub-Clause 6.10 [*Contractor's Records*].
6.24 Workers' Organisations	In countries where the relevant labour laws recognise 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 labour 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.
6.25 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 nondiscrimination and equal opportunity, including for specific groups such as women, people with disabilities, migrant workers and children (of working age in accordance with Sub-Clause 6.22).
6.26 Contractor's Personnel Grievance Mechanism	The Contractor shall have a grievance mechanism for Contractor's Personnel, and where relevant the workers' organizations stated in Sub-Clause 6.24, 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.
6.27 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 health and safety training referred to in Sub-Clause 4.8 As stated in the Employer's Requirements or as instructed by the Engineer, 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, including its prevention, to any of its personnel who has a role to supervise other Contractor's Personnel.
7. Plant, Materials and Workmanship	
7.1 Manner of Execution	The Contractor shall carry out the manufacture, supply, installation, testing and commissioning and/or repair of Plant, the production, manufacture, supply and testing of Materials, and all other operations and activities during the execution of the Works: (a) in the manner (if any) specified in the Contract; (b) in a proper workmanlike and careful manner, in accordance with recognised good practice; and with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.
7.2 Samples	The Contractor shall submit the following samples of Materials, and relevant information, to the Engineer for consent prior to using the Materials in or for the Works: (a) manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost; and (b) additional samples instructed by the Engineer as a Variation. Each sample shall be labelled as to origin and intended use in the Works.
7.3 Inspection	The Employer's Personnel (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), shall during all the normal working hours stated in the Sub-clause GCC 6.5 and at all other reasonable times: (a) have full access to all parts of the Site and to all places from which natural Materials are being obtained; (b) during production, manufacture and construction (at the Site and elsewhere), be entitled to: (i) examine, inspect, measure and test (to the extent stated in the Employer's Requirements) the Materials, Plant and workmanship, (ii) check the progress of manufacture of Plant and production and manufacture of Materials, and (iii) make records (including photographs and/or video recordings); and

	(iv) carry out an environmental and social audit; and (c) carry out other duties and inspections, as specified in these Conditions and the Employer's Requirements. The Contractor shall give the Employer's Personnel full opportunity to carry out these activities, including providing safe access, facilities, permissions and safety equipment. The Contractor shall give the Employer's Personnel full opportunity to carry out these activities, including providing safe access, facilities, permissions and safety equipment. The Contractor shall give a Notice to the Engineer whenever any Materials, Plant or work is ready for inspection, and before it is to be covered up, put out of sight, or packaged for storage or transport. The Employer's Personnel shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or the Engineer shall promptly give a Notice to the Contractor that the Employer's Personnel do not require to do so. If the Engineer gives no such Notice and/or the Employer's Personnel do not attend at the time stated in the Contractor's Notice (or such time as may be agreed with the Contractor), the Contractor may proceed with covering up, putting out of sight or packaging for storage or transport. If the Contractor fails to give a Notice in accordance with this Sub-Clause, the Contractor shall, if and when required by the Engineer, uncover the work and thereafter reinstate and make good, all at the Contractor's risk and cost.
7.4 Testing by the Contractor	This Sub-Clause shall apply to all tests specified in the Contract, other than the Tests after Completion (if any). The Contractor shall provide all apparatus, assistance, documents and other information, temporary supplies of electricity and water, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified, experienced and competent staff, as are necessary to carry out the specified tests efficiently and properly. All apparatus, equipment and instruments shall be calibrated in accordance with the standards specified in the Employer's Requirements or defined by applicable Laws and, if requested by the Engineer, the Contractor shall submit calibration certificates before carrying out testing. The Contractor shall give a Notice to the Engineer, stating the time and place for the specified testing of any Plant, Materials and other parts of the Works. This Notice shall be given in reasonable time, having regard to the location of the testing, for the Employer's Personnel to attend. The Engineer may, under Clause 13 [*Variations and Adjustments*], vary the location or timing or details of specified tests, or instruct the

	Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the Cost and any delay incurred in carrying out this Variation shall be borne by the Contractor. The Engineer shall give a Notice to the Contractor of not less than 72 hours of his/her intention to attend the tests. If the Engineer does not attend at the time and place stated in the Contractor's Notice under this Sub-Clause, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer, which tests shall then be deemed to have been made in the Engineer's presence. If the Contractor suffers delay and/or incurs Cost from complying with any such instruction or as a result of a delay for which the Employer is responsible, the Contractor shall be entitled subject to GCC Clause 20 to EOT and/or payment of Cost-Plus Profit. If the Contractor causes any delay to specified tests (including varied or additional tests) and such delay causes the Employer to incur costs, the Employer shall be entitled subject to GCC Clause 20 to payment of these costs by the Contractor. The Contractor shall promptly forward to the Engineer duly certified reports of the tests. When the specified tests have been passed, the Engineer shall endorse the Contractor's test certificate, or issue a test certificate to the Contractor, to that effect. If the Engineer has not attended the tests, he/she shall be deemed to have accepted the readings as accurate. Sub-Clause 7.5 [*Defects and Rejection*] shall apply in the event that any Plant, Materials and other parts of the Works fails to pass a specified test.
7.5 Defects and Rejection	If, as a result of an examination, inspection, measurement or testing, any Plant, Materials, design or workmanship is found to be defective or otherwise not in accordance with the Contract, the Engineer shall give a Notice to the Contractor describing the item of Plant, Materials, design or workmanship that has been found to be defective. The Contractor shall then promptly prepare and submit a Proposal for necessary remedial work. The Engineer may Review this Proposal, and may give a Notice to the Contractor stating the extent to which the proposed work, if carried out, would not result in the Plant, Materials, design or workmanship complying with the Contract. After receiving such a Notice, the Contractor shall promptly submit a revised Proposal to the Engineer. If the Engineer gives no such Notice within 14 days after receiving the Contractor's Proposal (or revised Proposal), the Engineer shall be deemed to have given a Notice of No-objection.

	If the Contractor fails to promptly submit a Proposal (or revised Proposal) for remedial work, or fails to carry out the proposed remedial work to which the Engineer has given (or is deemed to have given) a Notice of No-objection, the Engineer may: (a) instruct the Contractor under sub-paragraph (a) and/or (b) of Sub-Clause 7.6 [*Remedial Work*]; or (b) reject the design, Plant, Materials or workmanship by giving a Notice to the Contractor, with reasons, in which case sub-paragraph (a) of Sub-Clause 11.4 [*Failure to Remedy Defects*] shall apply. After remedying defects in any Plant, Materials, design or workmanship, if the Engineer requires any such items to be retested, the tests shall be repeated in accordance with Sub-Clause 7.4 [*Testing by the Contractor*] at the Contractor's risk and cost. If the rejection and retesting cause the Employer to incur additional costs, the Employer shall be entitled subject to Sub-Clause 20.2 to payment of these costs by the Contractor.
7.6 Remedial Work	In addition to any previous examination, inspection, measurement or testing, or test certificate or Notice of No-objection by the Engineer, at any time before the issue of the Taking Over Certificate for the Works the Engineer may instruct the Contractor to: (a) repair or remedy (if necessary, off the Site), or remove from the Site and replace any Plant or Materials which are not in accordance with the Contract; (b) repair or remedy, or remove and re-execute, any other work which is not in accordance with the Contract; and (c) carry out any remedial work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise. The Contractor shall comply with the instruction as soon as practicable and not later than the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c) above. The Contractor shall bear the cost of all remedial work required under this Sub-Clause, except to the extent that any work under sub-paragraph (c) above is attributable to: (i) any act by the Employer or the Employer's Personnel. If the Contractor suffers delay and/or incurs Cost in carrying out such work, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost Plus Profit; or

	(ii) an Exceptional Event, in which case Sub-Clause 18.4 [Consequences of an Exceptional Event] shall apply. If the Contractor fails to comply with the Engineer's instruction, the Employer may (at the Employer's sole discretion) employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for work under this Sub-Clause, the Employer shall be entitled subject to Sub-Clause 20.2 to payment by the Contractor of all costs arising from this failure. This entitlement shall be without prejudice to any other rights the Employer may have, under the Contract or otherwise.
7.7 Ownership of Plant and Materials	Except as otherwise provided in the Contract, each item of Plant and Materials shall, to the extent consistent with the mandatory requirements of the Laws of the Country, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances: (a) when it is delivered to the Site; (b) when the Contractor is paid the value of the Plant and Materials under Sub-Clause 8.11 [*Payment for Plant and Materials after Employer's Suspension*]; or (c) when the Contractor is paid the amount determined for the Plant and Materials under Sub-Clause 14.5 [*Plant and Materials intended for the Works*].
7.8 Royalties	Unless otherwise stated in the Employer's Requirements, the Contractor shall pay all royalties, rents and other payments for: (a) natural Materials obtained from outside the Site; and (b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site are specified in the Employer's Requirements.
8. Commencement, Delays and Suspension	
8.1 Commencement of Works	The Engineer shall give a Notice to the Contractor stating the Commencement Date, not less than 14 days before the Commencement Date. The Notice shall be issued promptly after the Engineer determines the fulfillment of the following conditions: (a) signature of the Contract Agreement by both Parties, and if required, approval of the Contract by relevant authorities of the Country;

	(b) delivery to the Contractor of reasonable evidence of the Employer's financial arrangements (under Sub-Clause 2.4 [Employer's Financial Arrangements]); (c) except if otherwise specified **in the PCC**, effective access to and possession of the Site given to the Contractor together with such permission(s) under (a) of Sub-Clause 1.13 [Compliance with Laws] as required for the commencement of the Works; (d) receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 [Advance Payment] provided that the corresponding bank guarantee has been delivered by the Contractor; and (e) appointment of the Adjudicator in accordance with Sub-Clause 20.3 Subject to Sub-Clause 4.1 on the Management Strategies and Implementation Plans and the C-ESMP and Sub-Clause 4.8 on the health and safety manual, the Contractor, shall commence the execution of the Works as soon as is reasonably practicable after the Commencement Date, and shall then proceed with the Works with due expedition and without delay.
8.2 Time for Completion	The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including completion of all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking over under Sub-Clause 10.1 [*Taking Over the Works and Sections*].
8.3 Programme	The Contractor shall submit an initial programme for the execution of the Works to the Engineer within 28 days after receiving the Notice under Sub-Clause 8.1 [*Commencement of Works*]. This programme shall be prepared using programming software stated in the Employer's Requirements (if not stated, the programming software acceptable to the Engineer). The Contractor shall also submit a revised programme which accurately reflects the actual progress of the Works, whenever any programme ceases to reflect actual progress or is otherwise inconsistent with the Contractor's obligations. The initial programme and each revised programme shall be submitted to the Engineer in one paper copy, one electronic copy and additional paper copies (if any) as stated **in the PCC**, and shall include: (a) the Commencement Date and the Time for Completion, of the Works and of each Section (if any);

	(b) the date right of access to and possession of (each part of) the Site is to be given to the Contractor in accordance with the time (or times) stated **in the PCC**. If not so stated, the dates the Contractor requires the Employer to give right of access to and possession of (each part of) the Site; (c) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design, preparation and submission of Contractor's Documents, procurement, manufacture, inspection, delivery to Site, construction, erection, installation, work to be undertaken by any nominated Subcontractor (as defined in Clause 4.5 [*Nominated Subcontractors*]), testing, commissioning and trial operation; (d) the Review periods under Sub-Clause 5.2.2 [Review by Engineer], and periods for Review for any other submissions specified in the Employer's Requirements or required under these Conditions; (e) the sequence and timing of inspections and tests specified in, or required by, the Contract; (f) for a revised programme: the sequence and timing of the remedial work (if any) to which the Engineer has given a Notice of No-objection under Sub-Clause 7.5 [Defects and Rejection] and/or the remedial work (if any) instructed under Sub-Clause 7.6 [Remedial Work]; (g) all activities (to the level of detail specified in the Employer's Requirements), logically linked and showing the earliest and latest start and finish dates for each activity, the float (if any), and the critical path(s); (h) the dates of all locally recognised days of rest and holiday periods (if any); (i) all key delivery dates of Plant and Materials; (j) for a revised programme and for each activity: the actual progress to date, any delay to such progress and the effects of such delay on other activities (if any); and (k) a supporting report which includes: (i) a description of all the major stages of the execution of the Works; (ii) a general description of the methods which the Contract or intends to adopt in the execution of the Works; (iii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel, and

	of each type of Contractor's Equipment, required on the Site, for each major stage of the execution of the Works; (iv) if a revised programme, identification of any significant change(s) to the previous programme submitted by the Contractor; and (v) the Contractor's Bids to overcome the effects of any delay (s) on progress of the Works. The Engineer shall Review the initial programme and each revised programme submitted by the Contractor and may give a Notice to the Contractor stating the extent to which it does not comply with the Contract or ceases to reflect actual progress or is otherwise inconsistent with the Contractor's obligations. If the Engineer gives no such Notice: - within 21 days after receiving the initial programme; or - within 14 days after receiving a revised programme, the Engineer shall be deemed to have given a Notice of No-objection and the initial programme or revised programme (as the case may be) shall be the Programme. The Contractor shall proceed in accordance with the Programme, subject to the Contractor's other obligations under the Contract. The Employer's Personnel shall be entitled to rely on the Programme when planning their activities. Nothing in any programme, the Programme or any supporting report shall be taken as, or relieve the Contractor from any obligation to give, a Notice under the Contract. If, at any time, the Engineer gives a Notice to the Contractor that any programme fails (to the extent stated) to comply with the Contract or ceases to reflect actual progress or is otherwise inconsistent with the Contractor's obligations, the Contractor shall within 14 days after receiving this Notice submit a revised programme to the Engineer in accordance with this Sub-Clause.
8.4 Advance Warning	Each Party shall advise the other and the Engineer, and the Engineer shall advise the Parties, in advance of any known or probable future events or circumstances which may: (a) adversely affect the work of the Contractor's Personnel; (b) adversely affect the performance of the Works when completed; (c) increase the Contract Price; and/or (d) delay the execution of the Works or a Section (if any).

	The Engineer may request the Contractor to submit a Proposal under Sub-Clause 13.3.2 [*Variation by Request for Proposal*] to avoid or minimise the effects of such event(s) or circumstance(s).
8.5 Extension of Time for Completion	The Contractor shall be entitled subject to Sub-Clause 20.1 to Extension of Time if and to the extent that completion for the purposes of Sub-Clause 10.1 [*Taking Over the Works and Sections*] is or will be delayed by any of the following causes: (a) a Variation (except that there shall be no requirement to comply with Sub-Clause 20 *[Claims, Disputes and Arbitration]*); (b) a cause of delay giving an entitlement to EOT under a Sub-Clause of these Conditions; (c) exceptionally adverse climatic conditions, which for the purpose of these Conditions shall mean adverse climatic conditions at the Site which are Unforeseeable having regard to climatic data made available by the Employer under Sub-Clause 2.5 [*Site Data and Items of Reference*] and/or climatic data published in the Country for the geographical location of the Site; (d) Unforeseeable shortages in the availability of personnel or Goods (or Employer-Supplied Materials, if any) caused by epidemic or governmental actions; or (e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors on the Site. When agreeing or determining each EOT under Sub-Clause 20.1, the Engineer shall review previous agreements and determinations of EOT under Sub-Clause 3.7 [*Agreement or Determination*] and may increase, but shall not decrease, the total EOT. If a delay caused by a matter which is the Employer's responsibility is concurrent with a delay caused by a matter which is the Contractor's responsibility, the Contractor's entitlement to EOT shall be assessed in accordance with the rules and procedures stated in the Special Provisions (if not stated, as appropriate taking due regard of all relevant circumstances).
8.6 Delays Caused by Authorities	If: (a) the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities or private utility entities in the Country;

	(b) these authorities or entities delay or disrupt the Contractor's work; and (c) the delay or disruption was Unforeseeable, then this delay or disruption will be considered as a cause of delay under sub-paragraph (b) of Sub-Clause 8.5 [*Extension of Time for Completion*].
8.7 Rate of Progress	If, at any time: (a) actual progress is too slow to complete the Works or a Section (if any) within the relevant Time for Completion; and/or (b) progress has fallen (or will fall) behind the Programme (or the initial programme if it has not yet become the Programme) under Sub-Clause8.3 [*Programme*], other than as a result of a cause listed in Sub-Clause 8.5 [*Extension of Time for Completion*], then the Engineer may instruct the Contractor to submit, under Sub-Clause 8.3 [*Programme*], a revised programme describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete the Works or a Section (if any) within the relevant Time for Completion. Unless the Engineer gives a Notice to the Contractor stating otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or the Goods, at the Contractor's risk and cost. If these revised methods cause the Employer to incur additional costs, the Employer shall be entitled subject to Sub-Clause 20.2 to payment of these costs by the Contractor, in addition to Delay Damages (if any). Sub-Clause 13.3.1 [*Variation by Instruction*] shall apply to revised methods, including acceleration measures, instructed by the Engineer to reduce delays resulting from causes listed under Sub-Clause 8.5 [*Extension of Time for Completion*].
8.8 Delay Damages	If the Contractor fails to comply with Sub-Clause 8.2 [*Time for Completion*], the Employer shall be entitled subject to Sub-Clause 20.2 to payment of Delay Damages by the Contractor for this default. Delay Damages shall be the amount stated **in the PCC**, which shall be paid for every day which shall elapse between the relevant Time for Completion and the relevant Date of Completion of the Works or Section. The total amount due under this Sub-Clause shall not exceed the maximum amount of Delay Damages (if any) stated **in the PCC**. These Delay Damages shall be the only damages due from the Contractor for the Contractor's failure to comply with Sub-Clause 8.2 [*Time for Completion*], other than in the event of termination under

	Sub-Clause 15.2 [*Termination for Contractor's Default*] before completion of the Works. These Delay Damages shall not relieve the Contractor from the obligation to complete the Works, or from any other duties, obligations or responsibilities which the Contractor may have under or in connection with the Contract. This Sub-Clause shall not limit the Contractor's liability for Delay Damages in any case of fraud, gross negligence, deliberate default or reckless misconduct by the Contractor.
8.9 Employer's Suspension	The Engineer may at any time instruct the Contractor to suspend progress of part or all of the Works, which instruction shall state the date and cause of the suspension. During such suspension, the Contractor shall protect, store and secure such part or all of the Works (as the case may be) against any deterioration, loss or damage. To the extent that the cause of such suspension is the responsibility of the Contractor, Sub-Clauses 8.10 [*Consequences of Employer's Suspension*], [*Payment for Plant and Materials after Employer's Suspension*] and [*Prolonged Suspension*] shall not apply.
8.10 Consequences of Employer's Suspension	If the Contractor suffers delay and/or incurs Cost from complying with an Engineer's instruction under Sub-Clause 8.9 [*Employer's Suspension*] and/ or from resuming the work under Sub-Clause 8.13 [*Resumption of Work*], the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost Plus Profit. The Contractor shall not be entitled to EOT, or to payment of the Cost incurred, in making good: (a) the consequences of the Contractor's faulty or defective design, workmanship, Plant or Materials; and/or (b) any deterioration, loss or damage caused by the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.9 [*Employer's Suspension*].
8.11 Payment for Plant and Materials after Employer's Suspension	The Contractor shall be entitled to payment of the value (as at the date of suspension instructed under Sub-Clause 8.9 [*Employer's Suspension*]) of Plant and/or Materials which have not been delivered to Site, if: (a) the work on Plant, or delivery of Plant and/or Materials, has been suspended for more than 28 days and (i) the Plant and/or Materials were scheduled, in accordance with the Programme, to have been completed and ready for delivery to the Site during the suspension period; and

	(ii) the Contractor provides the Engineer with reasonable evidence that the Plant and/or Materials comply with the Contract; and (b) the Contractor has marked the Plant and/or Materials as the Employer's property in accordance with the Engineer's instructions.
8.12 Prolonged Suspension	If the suspension under Sub-Clause 8.9 [*Employer's Suspension*] has continued for more than 84 days, the Contractor may give a Notice to the Engineer requesting permission to proceed. If the Engineer does not give a Notice under Sub-Clause 8.13 [Resumption of Work] within 28 days after receiving the Contractor's Notice under this Sub-Clause, the Contractor may either: (a) agree to a further suspension, in which case the Parties may agree the EOT and/or Cost-Plus Profit (if the Contractor incurs Cost), and/or payment for suspended Plant and/or Materials, arising from the total period of suspension; or (and if the Parties fail to reach agreement under this sub-paragraph (a)) (b) after giving a (second) Notice to the Engineer, treat the suspension as an omission of the affected part of the Works (as if it had been instructed under Sub-Clause 13.3.1 [*Variation by Instruction*]) with immediate effect including release from any further obligation to protect, store and secure under Sub-Clause 8.9 [E*mployer's Suspension*]. If the suspension affects the whole of the Works, the Contractor may give a Notice of termination under Sub-Clause 16.2 [*Termination by Contractor*].
8.13 Resumption of Work	The Contractor shall resume work as soon as practicable after receiving a Notice from the Engineer to proceed with the suspended work. At the time stated in this Notice (if not stated, immediately after the Contractor receives this Notice), the Contractor and the Engineer shall jointly examine the Works and the Plant and Materials affected by the suspension. The Engineer shall record any deterioration, loss, damage or defect in the Works or Plant or Materials which has occurred during the suspension and shall provide this record to the Contractor. The Contractor shall promptly make good all such deterioration, loss, damage or defect so that the Works, when completed, shall comply with the Contract.
9. Tests on Completion	

9.1 Contractor's Obligations	The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [*Testing by the Contractor*], after submitting the documents under Sub-Clause 5.6 [*As-Built Records*] and Sub-Clause 5.7 [*Operation and Maintenance Manuals*]. The Contractor shall submit to the Engineer, not less than 42 days before the date the Contractor intends to commence the Tests on Completion, a detailed test programme showing the intended timing and resources required for these tests. The Engineer may Review the proposed test programme and may give a Notice to the Contractor stating the extent to which it does not comply with the Contract. Within 14 days after receiving this Notice, the Contractor shall revise the test programme to rectify such non-compliance. If the Engineer gives no such Notice within 14 days after receiving the test programme (or revised test programme), the Engineer shall be deemed to have given a Notice of No-objection. The Contractor shall not commence the Tests on Completion until a Notice of No-objection is given (or is deemed to have been given) by the Engineer. In addition to any date(s) shown in the test programme, the Contractor shall give a Notice to the Engineer, of not less than 21 days, of the date after which the Contractor will be ready to carry out each of the Tests on Completion. The Contractor shall commence the Tests on Completion within 14 days after this date, or on such day or days as the Engineer shall instruct, and shall proceed in accordance with the Contractor's test programme to which the Engineer has given (or is deemed to have given) a Notice of No-objection. Unless otherwise stated in the Employer's Requirements, the Tests on Completion shall be carried out in stages in the following sequence: (a) pre-commissioning tests (on or off the Site, as appropriate), which shall include the appropriate inspections and ("dry" or "cold") functional tests to demonstrate that each item of the Works or Section can safely undertake the next stage under sub-paragraph (b) below; (b) commissioning tests, which shall include the operational tests specified in the Employer's Requirements to demonstrate that the Works or Section can be operated safely and as specified in the Employer's Requirements, under all available operating conditions; and (c) trial operation (to the extent possible under available operating conditions), which shall demonstrate that the Works or Section perform reliably and in accordance with the Contract.

	The tests of each stage described in sub-paragraphs (b) and (c) above shall not be commenced until the Works or Section have passed the previous stage. During trial operation, when the Works or Section (as the case may be) are operating under stable conditions, the Contractor shall give a Notice to the Engineer that they are ready for any other Tests on Completion, including performance tests. Performance tests shall be carried out to demonstrate whether the Works or Section comply with the performance criteria specified in the Employer's Requirements and with the Schedule of Performance Guarantees. Trial operation, including performance testing, shall not constitute a taking over under Clause 10 [*Employer's Taking Over*]. Any product produced by, and any revenue or other benefit resulting from, trial operation under this Sub-Clause shall be the property of the Employer. As soon as the Works or Section have, in the Contractor's opinion, passed each stage of the Tests on Completion described in sub-paragraphs (a) to (c) above, the Contractor shall submit a certified report of the results of these tests to the Engineer. The Engineer shall Review each such report and may give a Notice to the Contractor stating the extent to which the results of the tests do not comply with the Contract. If the Engineer does not give such a Notice within 14 days after receiving the results of the tests, the Engineer shall be deemed to have given a Notice of No-objection. In considering the results of the Tests on Completion, the Engineer shall make allowances for the effect of any use of (any part of) the Works by the Employer on the performance or other characteristics of the Works.
9.2 Delayed Tests	If the Contractor has given a Notice under Sub-Clause 9.1 [*Contractor's Obligations*] that the Works or Section (as the case may be) are ready for Tests on Completion, and these tests are unduly delayed by the Employer's Personnel or by a cause for which the Employer is responsible, Sub-Clause 10.3 [*Interference with Tests on Completion*] shall apply. If the Tests on Completion are unduly delayed by the Contractor, the Engineer may by giving a Notice to the Contractor require the Contractor to carry out the tests within 21 days after receiving the Notice. The Contractor shall carry out the tests on such day or days within this period of 21 days as the Contractor may fix, for which the Contractor shall give a prior Notice to the Engineer of not less than 7 days.

	If the Contractor fails to carry out the Tests on Completion within this period of 21 days: (a) after a second Notice is given by the Engineer to the Contractor, the Employer's Personnel may proceed with the tests; (b) the Contractor may attend and witness these tests; (c) within 28 days of these tests being completed, the Engineer shall send a copy of the test results to the Contractor; and (d) if the Employer incurs additional costs as a result of such testing, the Employer shall be entitled subject to Sub-Clause 20.2 to payment by the Contractor of the costs reasonably incurred. Whether or not the Contractor attends, these Tests on Completion shall be deemed to have been carried out in the presence of the Contractor and the results of these tests shall be accepted as accurate.
9.3 Retesting	If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [*Defects and Rejection*] shall apply. The Engineer or the Contractor may require these failed tests, and the Tests on Completion on any related work, to be repeated under the same terms and conditions. Such repeated tests shall be treated as Tests on Completion for the purposes of this Clause.
9.4 Failure to Pass Tests on Completion	If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [*Retesting*], the Engineer shall be entitled to: (a) instruct further repetition of Tests on Completion under Sub-Clause 9.3 [*Retesting*]; (b) reject the Works if the effect of the failure is to deprive the Employer of substantially the whole benefit of the Works, in which event the Employer shall have the same remedies as are provided in sub-paragraph (d) of Sub-Clause 11.4 [*Failure to Remedy Defects*]; (c) reject the Section if the effect of the failure is that the Section cannot be used for its intended purpose(s) under the Contract, in which event the Employer shall have the same remedy as is provided in sub-paragraph (c) of Sub-Clause 11.4 [*Failure to Remedy Defects*]; or (d) issue a Taking-Over Certificate, if the Employer so requests. In the event of sub-paragraph (d) above, the Contractor shall then proceed in accordance with all other obligations under the Contract, and the Employer shall be entitled subject to Sub-Clause 20.2 to

	payment by the Contractor or a reduction in the Contract Price as described under sub-paragraphs (b) (i) or (b) (ii) of Sub-Clause 11.4 [*Failure to Remedy Defects*], respectively. This entitlement shall be without prejudice to any other rights the Employer may have, under the Contract or otherwise.
10. Employer's Taking Over	
10.1 Taking Over the Works and Sections	Except as stated in Sub-Clause 9.4 [*Failure to Pass Tests on Completion*], Sub-Clause 10.2 [*Taking Over Parts*] and Sub-Clause 10.3 [*Interference with Tests on Completion*], the Works shall be taken over by the Employer when: (a) the Works have been completed in accordance with the Contract, including the passing of the Tests on Completion and except as allowed in sub-paragraph (i) below; (b) the Engineer has given (or is deemed to have given) a Notice of No-objection to the as-built records submitted under sub-paragraph (a) or sub-paragraph (b)(i) (as the case may be) of Sub-Clause 5.6 [*As-Built Records*]; (c) the Engineer has given (or is deemed to have given) a Notice of No-objection to the final O&M Manuals for the Works submitted under Sub-Clause 5.7 [*Operation and Maintenance Manuals*]; (d) the Contractor has carried out the training (if any) as described under Sub-Clause 5.5 [*Training*]; and (e) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause. The Contractor may apply for a Taking-Over Certificate by giving a Notice to the Engineer not more than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section. If any Part is taken over or is deemed to have been taken over under Sub-Clause 10.2 [*Taking Over Parts*], the remaining Works or Section shall not be taken over until the conditions described in sub-paragraphs (a) to (e) above have been fulfilled. The Engineer shall, within 28 days after receiving the Contractor's Notice, either: (i) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects (as listed in the Taking-Over

	Certificate) which will not substantially affect the safe use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or (ii) reject the application by giving a Notice to the Contractor, with reasons. This Notice shall specify the work required to be done, the defects required to be remedied and/or the documents required to be submitted by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work, remedy such defects and/or submit such documents before giving a further Notice under this Sub-Clause. If the Engineer does not issue the Taking-Over Certificate or reject the Contractor's application within this period of 28 days, and if the conditions described in sub-paragraphs (a) to (d) above have been fulfilled, the Works or Section shall be deemed to have been completed in accordance with the Contract on the fourteenth day after the Engineer receives the Contractor'sNotice of application and the Taking-Over Certificate shall be deemed to have been issued.
10.2 Taking Over Parts	The Engineer may, at the sole discretion of the Employer, issue a Taking-Over Certificate for any part of the Permanent Works. The Employer shall not use any part of the Works (other than as a temporary measure, which is either specified in the Employer's Requirements or with the prior agreement of the Contractor) unless and until the Engineer has issued a Taking-Over Certificate for this part. However, if the Employer does use any part of the Works before the Taking-Over Certificate is issued the Contractor shall give a Notice to the Engineer identifying such part and describing such use, and: (a) that Part shall be deemed to have been taken over by the Employer as from the date on which it is used; (b) the Contractor shall cease to be liable for the care of such Part as from this date, when responsibility shall pass to the Employer; and (c) the Engineer shall immediately issue a Taking-Over Certificate for this Part, and any outstanding work to be completed (including Tests on Completion) and/or defects to be remedied shall be listed in this certificate. After a Part has been taken over or is deemed to have been taken over, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out the outstanding work (including Tests on Completion) and/or remedial work for any

	defects listed in the certificate. The Contractor shall carry out these works as soon as practicable and, in any case, before the expiry date of the relevant DNP. If the Contractor incurs Cost as a result of the taking over or deemed taking over of a Part, the Contractor shall be entitled subject to Sub-Clause 20.2 [*Claims For Payment and/or EOT*] to payment of such Cost Plus Profit. For any period of delay after the date that a Part has been taken over or is deemed to have been taken over, the Delay Damages for completion of the Works or the Section (as the case may be) in which this Part is included shall be reduced. This reduction shall be calculated as the proportion which the value of the Part (except the value of any outstanding works and/or defects to be remedied) bears to the value of the Works or Section (as the case may be) as a whole. The Engineer shall proceed under Sub-Clause 3.7 [*Agreement or Determination*] to agree or determine this reduction (and, for the purpose of Sub-Clause 3.7.3 [*Time limits*], the date the Engineer issues the Taking-Over Certificate under the first paragraph of, or receives the Contractor's Notice under the second paragraph of, this Sub-Clause (as the case may be) shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3). The provisions of this paragraph shall only apply to the daily rate of Delay Damages, and shall not affect the maximum amount of these damages.
10.3 Interference with Tests on Completion	If the Contractor is prevented, for more than 14 days (either a continuous period, or multiple periods which total more than 14 days), from carrying out the Tests on Completion by the Employer's Personnel or by a cause for which the Employer is responsible (including any performance test that is not possible due to available operating conditions during trial operation: (a) the Contractor shall give a Notice to the Engineer describing such prevention; (b) the Employer shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed; and (c) the Engineer shall immediately issue a Taking-Over Certificate for the Works or Section (as the case may be). After the Engineer has issued this Taking-Over Certificate, the Contractor shall carry out the Tests on Completion as soon as practicable and, in any case, before the expiry date of the DNP. The Engineer shall give a Notice to the Contractor, of not less than 14 days, of the date after which the Contractor may carry out each of the

	Tests on Completion. Thereafter, Sub-Clause 9.1 [Contractor's Obligations] shall apply. If the Contractor suffers delay and/or incurs Cost as a result of being prevented from carrying out the Tests on Completion, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost Plus Profit.
10.4 Surfaces Requiring Reinstatement	Except as otherwise stated in the Taking-Over Certificate, a certificate for a Section or Part shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.
11. Defects After Taking Over	
11.1 Completion of Outstanding Work and Remedying Defects	In order that the Works and Contractor's Documents, and each Section and/or Part, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable thereafter, the Contractor shall: (a) complete any work which is outstanding on the relevant Date of Completion, within the time(s) stated in the Taking-Over Certificate or such other reasonable time as is instructed by the Engineer; and (b) execute all work required to remedy defects or damage, of which a Notice is given to the Contractor by (or on behalf of) the Employer on or before the expiry date of the DNP for the Works or Section or Part (as the case may be). If a defect appears or damage occurs during the relevant DNP, a Notice shall be given to the Contractor accordingly, by (or on behalf of) the Employer. Promptly thereafter: (i) the Contractor and the Employer's Personnel shall jointly inspect the defector damage; (ii) the Contractor shall then prepare and submit a Bid for necessary remedial work; and (iii) the second, third and fourth paragraphs of Sub-Clause 7.5 [Defects and Rejection] shall apply.
11.2 Cost of Remedying Defects	All work under sub-paragraph (b) of Sub-Clause 11.1 [*Completion of Outstanding Work and Remedying Defects*] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to: (a) the design of the Works, other than a part of the design for which the Employer is responsible (if any);

	(b) Plant, Materials or workmanship not being in accordance with the Contract; (c) improper operation or maintenance which was attributable to matters for which the Contractor is responsible (under Sub-Clause 5.5 [*Training*], Sub-Clause 5.6 [*As-Built Records*] and/or Sub-Clause 5.7 [*Operation and Maintenance Manuals*] or otherwise); or (d) failure by the Contractor to comply with any other obligation under the Contract. If the Contractor considers that the work is attributable to any other cause, the Contractor shall promptly give a Notice to the Engineer and the Engineer shall proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine the cause (and, for the purpose of Sub-Clause 3.7.3 [Time limits], the date of this Notice shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3). If it is agreed or determined that the work is attributable to a cause other than those listed above, Sub-Clause 13.3.1 [Variation by Instruction] shall apply as if such work had been instructed by the Engineer.
11.3 Extension of Defects Notification Period	The Employer shall be entitled to an extension of the DNP for the Works, or a Section or a Part: (a) if and to the extent that the Works, Section, Part or a major item of Plant (as the case may be, and after taking over) cannot be used for the intended purpose(s) by reason of a defect or damage which is attributable to any of the causes under sub-paragraphs (a) to (d) of Sub-Clause 11.2 [*Cost of Remedying Defects*]; and (b) subject to Sub-Clause 20.2. However, a DNP shall not be extended by more than a period of two years after the expiry of the DNP stated **in the PCC**. If delivery and/or erection of Plant and/or Materials was suspended under Sub-Clause 8.9 [*Employer's Suspension*] (other than where the cause of such suspension is the responsibility of the Contractor) or Sub-Clause 16.1 [*Suspension by Contractor*], the Contractor's obligations under this Clause shall not apply to any defects or damage occurring more than two years after the DNP for the Works, of which the Plant and/or Materials form part, would otherwise have expired.
11.4 Failure to Remedy Defects	If the remedying of any defect or damage under Sub-Clause 11.1 [*Completion of Outstanding Works and Remedying Defects]* is unduly delayed by the Contractor, a date may be fixed by (or on behalf of) the Employer, on or by which the defect or damage is to be remedied. A Notice of this fixed date shall be given to the Contractor

	by (or on behalf of) the Employer, which Notice shall allow the Contractor reasonable time (taking due regard of all relevant circumstances) to remedy the defect or damage. If the Contractor fails to remedy the defect or damage by the date stated in this Notice and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2 [*Cost of Remedying Defects*], the Employer may (at the Employer's sole discretion): (a) carry out the work or have the work carried out by others (including any retesting), in the manner required under the Contract and at the Contractor's cost, but the Contractor shall have no responsibility for this work. The Employer shall be entitled subject to Sub-Clause 20.2 to payment by the Contractor of the costs reasonably incurred by the Employer in remedying the defect or damage; (b) accept the damaged or defective work, in which case the Employer shall be entitled subject to Sub-Clause 20.2 to: (i) payment of Performance Damages by the Contractor in full satisfaction of this failure; or (ii) if there is no Schedule of Performance Guarantees under the Contract, or no applicable Performance Damages, a reduction in the Contract Price. The reduction shall be in full satisfaction of this failure only and shall be in the amount as shall be appropriate to cover the reduced value to the Employer as a result of this failure; (c) require the Engineer to treat any part of the Works which cannot be used for its intended purpose(s) under the Contract by reason of this failure as an omission, as if such omission had been instructed under Sub-Clause 13.3.1 [*Variation by Instruction*]; or (d) terminate the Contract as a whole with immediate effect (and Sub-Clause 15.2 [*Termination for Contractor's Default*] shall not apply) if the defect or damage deprives the Employer of substantially the whole benefit of the Works. The Employer shall then be entitled subject to Sub-Clause 20.2 to recover from the Contractor all sums paid for the Works, plus financing charges and any costs incurred in dismantling the same, clearing the Site and returning Plant and Materials to the Contractor. The exercise of discretion by the Employer under sub-paragraph (c) or (d) above shall be without prejudice to any other rights the Employer may have, under the Contract or otherwise.

11.5 Remedying of Defective Work off Site	If, during the DNP, the Contractor considers that any defect or damage in any Plant cannot be remedied expeditiously on the Site the Contractor shall give a Notice, with reasons, to the Employer requesting consent to remove the defective or damaged Plant off the Site for the purposes of repair. This Notice shall clearly identify each item of defective or damaged Plant, and shall give details of: (a) the defect or damage to be repaired; (b) the place to which defective or damaged Plant is to be taken for repair; (c) the transportation to be used (and insurance cover for such transportation); (d) the proposed inspections and testing off the Site; (e) the planned duration required before the repaired Plant returned to the Site; and (f) the planned duration for reinstallation and retesting of the repaired Plant (under Sub-Clause 7.4 [Testing by the Contractor] and/or Clause 9 [Tests on Completion] if applicable). The Contractor shall also provide any further details that the Employer may reasonably require. When the Employer gives consent (which consent shall not relieve the Contractor from any obligation or responsibility under this Clause), the Contractor may remove from the Site such items of Plant as are defective or damaged. As a condition of this consent, the Employer may require the Contractor to increase the amount of the Performance Security by the full replacement cost of the defective or damaged Plant.
11.6 Further Tests after Remedying Defects	Within 7 days of completion of the work of remedying of any defect or damage, the Contractor shall give a Notice to the Engineer describing the remedied Works, Section, Part and/or Plant and the proposed repeated tests (under Clause 9 [*Tests on Completion*] or Clause 12 [*Tests after Completion*], as applicable). Within 7 days after receiving this Contractor's Notice, the Engineer shall give a Notice to the Contractor either: (a) agreeing with such proposed testing; or (b) instructing the repeated tests that are necessary to demonstrate that the remedied Works, Section, Part and/or Plant comply with the Contract. If the Contractor fails to give such a Notice within the 7 days, the Engineer may give a Notice to the Contractor, within 14 days after

	the defect or damage is remedied, instructing the repeated tests that are necessary to demonstrate that the remedied Works, Section, Part and/or Plant comply with the Contract. All repeated tests under this Sub-Clause shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [*Cost of Remedying Defects*], for the cost of the remedial work.
11.7 Right of Access after Taking Over	Until the date 28 days after issue of the Performance Certificate, the Contractor shall have the right of access to all parts of the Works and to records of the operation, maintenance and performance of the Works, except as may be inconsistent with the Employer's reasonable security restrictions. Whenever, until the date 28 days after issue of the Performance Certificate, the Contractor intends to access any part of the Works: (a) the Contractor shall request access by giving a Notice to the Employer, describing the parts of the Works and/or records to be accessed, the reasons for such access, and the Contractor's preferred date for access. This Notice shall be given in reasonable time in advance of the preferred date for access, taking due regard of all relevant circumstances including the Employer's security restrictions; and (b) within 7 days after receiving the Contractor's Notice, the Employer shall give a Notice to the Contractor either: (i) stating the Employer's consent to the Contractor's request; or (ii) proposing reasonable alternative date(s), with reasons. If the Employer fails to give this Notice within the 7 days, the Employer shall be deemed to have given consent to the Contractor's access on the preferred date stated in the Contractor's Notice. If the Contractor incurs additional Cost as a result of any unreasonable delay by the Employer in permitting access to the Works or such records by the Contractor, the Contractor shall be entitled subject to Sub-Clause 20.1 to payment of any such Cost Plus Profit.
11.8 Contractor to Search	The Contractor shall, if instructed by the Engineer, search for the cause of any defect, under the direction of the Engineer. The Contractor shall carry out the search on the date(s) stated in the Engineer's instruction or other date(s) agreed with the Engineer.

	Unless the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [*Cost of Remedying Defects*], the Contractor shall be entitled subject to Sub-Clause 20.1 to payment of the Cost Plus Profit of the search. If the Contractor fails to carry out the search in accordance with this Sub-Clause, the search may be carried out by the Employer's Personnel. The Contractor shall be given a Notice of the date when such a search will be carried out and the Contractor may attend at the Contractor's own cost. If the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [*Cost of Remedying Defects*], the Employer shall be entitled subject to Sub-Clause 20.2 to payment by the Contractor of the costs of the search reasonably incurred by the Employer.
11.9 Performance Certificate	Performance of the Contractor's obligations under the Contract shall not be considered to have been completed until the Engineer has issued the Performance Certificate to the Contractor, stating the date on which the Contractor fulfilled the Contractor's obligations under the Contract. The Engineer shall issue the Performance Certificate to the Contractor (with a copy to the Employer and to the Adjudicator within 28 days after the latest of the expiry dates of the Defects Notification Periods, or as soon thereafter as the Contractor has: (a) supplied all the Contractor's Documents, and the Engineer has given (or is deemed to have given) a Notice of No-objection to the as-built records under sub-paragraph (b) of Sub-Clause 5.6 [*As-Built Records*]; and (b) completed and tested all the Works (including remedying any defects) in accordance with the Contract. If the Engineer fails to issue the Performance Certificate within this period of 28 days, the Performance Certificate shall be deemed to have been issued on the date 28 days after the date on which it should have been issued, as required by this Sub-Clause. Only the Performance Certificate shall be deemed to constitute acceptanceof the Works.
11.10 Unfulfilled Obligations	After the issue of the Performance Certificate, each Party shall remain liable for the fulfillment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force. However, in relation to Plant, the Contractor shall not be liable for any defects or damage occurring more than two years after expiry of

	the DNP for the Plant except if prohibited by law or in any case of fraud, gross negligence, deliberate default or reckless misconduct.
11.11 Clearance of Site	Promptly after the issue of the Performance Certificate, the Contractor shall: (a) remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site; (b) reinstate all parts of the Site which were affected by the Contractor's activities during the execution of the Works and are not occupied by the Permanent Works; and (c) leave the Site and the Works in the condition stated in the Employer's Requirements (if not stated, in a clean and safe condition). If the Contractor fails to comply with sub-paragraphs (a), (b) and/or (c) above within 28 days after the issue of the Performance Certificate, the Employer may sell (to the extent permitted by applicable Laws) or otherwise dispose of any remaining items and/or may reinstate and clean the Site (as may be necessary) at the Contractor's cost. The Employer shall be entitled subject to Sub-Clause 20.2 to payment by the Contractor of the costs reasonably incurred in connection with, or attributable to, such sale or disposal and reinstating and/or cleaning the Site, less an amount equal to the moneys from the sale(if any).
12. Tests after Completion	
12.1 Procedure for Tests after Completion	If Tests after Completion are specified in the Employer's Requirements, this Clause shall apply. The Employer shall: (a) provide all electricity, water, sewage (if applicable), equipment, fuel, consumables, instruments, labour, materials, and suitably qualified, experienced and competent staff, as are necessary to carry out the Tests after Completion efficiently and properly; and (b) carry out the Tests after Completion in accordance with: (i) the Employer's Requirements, (ii) the O&M Manuals to which the Engineer has given (or is deemed to have given) a Notice of No-objection, under Sub-Clause, 5.7 [*Operation and Maintenance Manuals*], and

	(iii) such guidance as the Contractor may be required to give during the course of these tests; and in the presence of such Contractor's Personnel as either Party may reasonably request. The timing of the Tests after Completion shall be as stated in the Employer's Requirements (if not stated, as soon as is reasonably practicable) after the Works or Section (as the case may be) have been taken over under Clause 10 [*Employer's Taking Over*]. The Engineer shall give a Notice to the Contractor, of not less than 21 days, of the date on which and place at which the Tests after Completion will be carried out. This Notice shall also include a test programme showing the estimated timing for each of such tests. Unless otherwise agreed with the Contractor, these tests shall be carried out on this date. If the Contractor does not attend at the time and place stated in the Engineer's Notice (or otherwise agreed with the Contractor), the Employer may proceed with the Tests after Completion, which shall be deemed to have been made in the Contractor's presence, and the Contractor shall be deemed to have accepted the readings as accurate. The results of the Tests after Completion shall be compiled and evaluated by both Parties. Appropriate account shall be taken of the effect of the Employer's prior use of the Works.
12.2 Delayed Tests	If the Contractor incurs Cost as a result of any unreasonable delay by the Employer in carrying out the Tests after Completion, the Contractor shall be entitled subject to Sub-Clause 20.1 to payment of such Cost Plus Profit. If, for reasons not attributable to the Contractor, a Test after Completion on the Works or any Section cannot be completed during the DNP (or any other period agreed by both Parties), then the Works or Section shall be deemed to have passed this Test after Completion.
12.3 Retesting	Subject to Sub-Clause 12.4 [*Failure to Pass Tests after Completion*], if the Works, or a Section, fail to pass the Tests after Completion: (a) sub-paragraph (b) of Sub-Clause 11.1 [*Completion of Outstanding Work and Remedying Defects*] shall apply; and (b) after remedying any defect or damage, Sub-Clause 11.6 [*Further Tests after Remedying Defects*] shall apply. If and to the extent that this failure and retesting are attributable to any of the matters listed in sub-paragraphs (a) to (d) of Sub-Clause 11.2 [*Cost of Remedying Defects*] and cause the Employer to incur additional costs, the Employer shall be entitled subject to Sub-Clause 20.2 to payment of these costs by the Contractor.

12.4 Failure to Pass Tests after Completion	If: (a) the Works, or a Section, fail to pass any or all of the Tests after Completion; and (b) applicable Performance Damages are set out in the Schedule of Performance Guarantees, the Employer shall be entitled subject to Sub-Clause 20.2 to payment of these Performance Damages by the Contractor in full satisfaction of this failure. If the Contractor pays these Performance Damages to the Employer during the DNP, then the Works or Section shall be deemed to have passed these Tests after Completion. If the Works, or a Section, fail to pass a Test after Completion and, by giving a Notice to the Employer, the Contractor proposes to make adjustments or modifications to the Works or such Section (including an item of Plant): (i) the Contractor may be instructed by a Notice given by the Employer that right of access to the Works or Section cannot be given until a time that is convenient to the Employer, which time shall be reasonable; (ii) the Contractor shall remain liable to carry out the adjustments or modifications and to satisfy this Test, within a reasonable period of receiving the Notice under sub-paragraph (i) above; and (iii) if the Contractor does not receive a Notice under sub-paragraph (i) above during the relevant DNP, the Contractor shall be relieved of the obligation to make such adjustments or modifications and the Works or Section (as the case may be) shall be deemed to have passed this Test after Completion. If the Contractor incurs additional Cost as a result of any unreasonable delay by the Employer in permitting access to the Works or Section by the Contractor, either to investigate the causes of a failure to pass a Test after Completion or to carry out any adjustments or modifications, the Contractor shall be entitled subject to Sub-Clause 20.1 to payment of any such Cost Plus Profit.
13. Variations and Adjustments	
13.1 Right to Vary	Variations may be initiated by the Engineer under Sub-Clause 13.3 [*Variation Procedure*] at any time before the issue of the Taking-Over Certificate for the Works. Other than as stated under Sub-Clause 11.4 [*Failure to Remedy Defects*], a Variation shall not comprise the omission of any work

	which is to be carried out by the Employer or by others unless otherwise agreed by the Parties. The Contractor shall be bound by each Variation instructed under Sub-Clause 13.3.1 [*Variation by Instruction*], and shall execute the Variation with due expedition and without delay, unless the Contractor promptly gives a Notice to the Engineer stating (with detailed supporting particulars) that: (a) the varied work was Unforeseeable having regard to the scope and nature of the Works described in the Employer's Requirements; (b) the Contractor cannot readily obtain the Goods required for the Variation; (c) it will adversely affect the Contractor's ability to comply with Sub-Clause 4.8 [*Health and Safety Obligations*] and/or Sub-Clause 4.18 [*Protection of the Environment*]; (d) it will have an adverse impact on the achievement of the Schedule of Performance Guarantees; or (e) it may adversely affect the Contractor's obligation to complete the Works so that they shall be fit for the purpose(s) for which they are intended under Sub-Clause 4.1 [*Contractor's General Obligations].* Promptly after receiving this Notice, the Engineer shall respond by giving a Notice to the Contractor cancelling, confirming or varying the instruction. Any instruction so confirmed or varied shall be taken as an instruction under Sub-Clause 13.3.1 [*Variation by instruction].*
13.2 Value Engineering	The Contractor may, at any time, submit to the Engineer a written proposal. which (in the Contractor's opinion) will, if adopted: (a) accelerate completion; (b) reduce the cost to the Employer of executing, maintaining or operating the Works; (c) improve the efficiency or value to the Employer of the completed Works; or (d) otherwise be of benefit to the Employer. The proposals shall be prepared at the cost of the Contractor and shall include the details as stated in sub-paragraphs (a) to (c) of Sub-Clause 13.3.1 [Variation by Instruction].

	The Engineer shall, as soon as practicable after receiving such a proposal, respond by giving a Notice to the Contractor stating his/her consent or otherwise. The Engineer's consent or otherwise shall be at the sole discretion of the Employer. The Contractor shall not delay any work while awaiting a response. If the Engineer gives his/her consent to the proposals, with or without comments, the Engineer shall then instruct a Variation. Thereafter: (i) the Contractor shall submit any further particulars that the Engineer may reasonably require; and (ii) then the third paragraph of Sub-Clause 13.3.1 [*Variation by Instruction*] shall apply, which shall include consideration by the Engineer of the sharing (if any) of the benefit, costs and/or delay between the Parties stated in the Particular Conditions.
13.3 Variation Procedure	Subject to Sub-Clause 13.1 [*Right to Vary*], Variations shall be initiated by the Engineer in accordance with either of the following procedures: 13.3.1 Variation by Instruction The Engineer may instruct a Variation by giving a Notice (describing the required change and stating any requirements for the recording of Costs) to the Contractor in accordance with Sub-Clause 3.5 [Engineer's Instructions]. The Contractor shall proceed with execution of the Variation and shall, within 28 days (or other period proposed by the Contractor and agreed by the Engineer) of receiving the Engineer's instruction, submit to the Engineer detailed particulars including: (a) a description of the varied work performed or to be performed, including details of the resources and methods adopted or to be adopted by the Contractor, and sufficient ES information to enable an evaluation of ES risks and impacts; and sufficient information to enable assessment of cyber security risks as specified in the PCC; (b) a programme for its execution and the Contractor's proposal for any necessary modifications (if any) to the Programme according to Sub-Clause 8.3 [Programme] and to the Time for Completion; and (c) the Contractor's proposal for adjustment to the Contract Price, with supporting particulars. Whenever the omission of any work forms part (or all) of a Variation, and if: • the Contractor has incurred or will incur cost which, if the work had not been omitted, would have been deemed to be

	covered by a sum forming part of the Accepted Contract Amount; and • the omission of the work has resulted or will result in this sum not forming part of the Contract Price this cost may be included in the Contractor's proposal (and, if so, shall be clearly identified). If the Parties have agreed to the omission of any work which is to be carried out by others, the Contractor's proposal may also include the amount of any loss of profit and other losses and damages suffered (or to be suffered) by the Contractor as a result of the omission. Thereafter, the Contractor shall submit any further particulars that the Engineer may reasonably require. The Engineer shall then proceed under Sub-Clause 3.7 [*Agreement or Determination*] to agree or determine: (i) EOT, if any; and/or (ii) the adjustments to the Contract Price and the Schedule of Payments, if any (and, for the purpose of Sub-Clause 3.7.3 [*Time limits*], the date the Engineer receives the Contractor's submission under this Sub-Clause (including any requested further particulars) shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3). The Contractor shall be entitled to such EOT and/or adjustments to the Contract Price, without any requirement to comply with Sub-Clause 20.1. If no Schedule of Rates and Prices is included in the Contract, the adjustments under sub-paragraph (ii) above shall be derived from the Cost-Plus Profit of executing the work. If a Schedule of Rates and Prices is included in the Contract, the following provisions of this Sub-Clause 13.3.1 shall apply to the adjustments under sub-paragraph (ii) above. For each item of work forming part (or all) of a Variation, the appropriate rate or price for the item shall be the rate or price specified for such item in the Schedule of Rates and Prices or, if there is no such item, the rate or price specified for similar work. However, a new rate or price shall be appropriate for an item of work if no rate or price for this item is specified in the Schedule of Rates and Prices and no specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the Contract. Each new rate or price shall be derived from any relevant rates or prices in the Schedule of Rates and Prices, with reasonable adjustments taking account of all relevant circumstances. If no rates

	or prices are relevant for the derivation of a new rate or price, it shall be derived from the Cost-Plus Profit of executing the work. Until such time as the adjustments under sub-paragraph (ii) above are agreed or determined, the Engineer shall assess a provisional rate or price for the purposes of Interim Payment Certificates. 13.3.2 Variation by Request for Proposal The Engineer may request a proposal, before instructing a Variation, by giving a Notice (describing the proposed change) to the Contractor. The Contractor shall respond to this Notice as soon as practicable, by either: (a) submitting a proposal, which shall include the matters as described in sub-paragraphs (a) to (c) of Sub-Clause 13.3.1 [*Variation by Instruction*]; or (b) giving reasons why the Contractor cannot comply (if this is the case), by reference to the matters described in sub-paragraphs (a) to (e) of Sub-Clause 13.1 [*Right to Vary*]. If the Contractor submits a proposal, the Engineer shall, as soon as practicable after receiving it, respond by giving a Notice to the Contractor stating his/her consent or otherwise. The Contractor shall not delay any work whilst awaiting a response. If the Engineer gives consent to the proposal, with or without comments, the Engineer shall then instruct the Variation. Thereafter, the Contractor shall submit any further particulars that the Engineer may reasonably require and the third paragraph of Sub-Clause 13.3.1 [*Variation by Instruction*] shall apply. If the Engineer does not give consent to the proposal, with or without comments, and if the Contractor has incurred Cost as a result of submitting it, the Contractor shall be entitled subject to Sub-Clause 20.1 to payment of such Cost
13.4 Provisional Sums	Each Provisional Sum shall only be used, in whole or in part, in accordance with the Engineer's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts for the work, supplies or services to which the Provisional Sum relates, as the Engineer shall have instructed. For each Provisional Sum, the Engineer may instruct: (a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor, and for which adjustments to the Contract Price and the Schedule of Payments (if any) shall

	be agreed or determined under Sub-Clause 13.3.1 [*Variation by Instruction*]; and/or (b) Plant, Materials, works or services to be purchased by the Contractor, from a nominated Subcontractor (as defined in Sub-Clause 4.5 [*Nominated Subcontractors*]) or otherwise, and for which there shall be included in the Contract Price: (i) the actual amounts paid (or due to be paid) by the Contractor; and (ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the applicable Schedule. If there is no such rate, the percentage rate stated **in the PCC** shall be applied. If the Engineer instructs the Contractor under sub-paragraph (a) and/or (b) above, this instruction may include a requirement for the Contractor to submit quotations from the Contractor's suppliers and/or subcontractors for all (or some) of the items of the work to be executed or Plant, Materials, works or services to be purchased. Thereafter, the Engineer may respond by giving a Notice either instructing the Contractor to accept one of these quotations (but such an instruction shall not be taken as an instruction under Sub-Clause 4.5 [*Nominated Subcontractors*]) or revoking the instruction. If the Engineer does not so respond within 7 days of receiving the quotations, the Contractor shall be entitled to accept any of these quotations at the Contractor's discretion, The Provisional Sum shall be used to cover the Employer's share of the Adjudicator's fees and expenses, in accordance with Clause 20.3. No prior instruction of the Engineer shall be required with respect to the work of the Adjudicator. The Contractor shall submit the Adjudicator's invoices and satisfactory evidence of having paid 100% of such invoices as part of the substantiation of those Statements submitted under Sub-Clause 14.3. Each Statement that includes a Provisional Sum shall also include all applicable invoices, vouchers and accounts or receipts in substantiation of the Provisional Sum.
13.5 Daywork	If a Daywork Schedule is not included in the Contract, this Sub-Clause shall not apply. For work of a minor or incidental nature, the Engineer may instruct that a Variation shall be executed on a day-work basis. The work shall then be valued in accordance with the Day-work Schedule, and the following procedure shall apply.

	Before ordering Goods for such work (other than any Goods priced in the Daywork Schedule), the Contractor shall submit one or more quotations from the Contractor's suppliers and/or subcontractors to the Engineer. Thereafter, the Engineer may instruct the Contractor to accept one of these quotations (but such an instruction shall not be taken as an instruction under Sub-Clause 4.5 [*Nominated Subcontractors*]). If the Engineer does not so instruct the Contractor within 7 days of receiving the quotations, the Contractor shall be entitled to accept any of these quotations at the Contractor's discretion. Except for any items for which the Daywork Schedule specifies that payment is not due, the Contractor shall deliver each day to the Engineer accurate statements in duplicate (and one electronic copy), which shall include records (as described under Sub-Clause 6.10 [*Contractor's Records*]) of the resources used in executing the previous day's work. One copy of each statement shall, if correct and agreed, be signed by the Engineer and promptly returned to the Contractor. If not correct or agreed, the Engineer shall proceed under Sub-Clause 3.7 [*Agreement or Determination*] to agree or determine the resources (and, for the purpose of Sub-Clause 3.7.3 [*Time limits*], the date the works which are the subject of the Variation under this Sub-Clause are completed by the Contractor shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3). In the next Statement, the Contractor shall then submit priced statements of the agreed or determined resources to the Engineer, together with all applicable invoices, vouchers and accounts or receipts in substantiation of any Goods used in the day-work (other than Goods priced in the Day-work Schedule). Unless otherwise stated in the Day-work Schedule, the rates and prices in the Day-work Schedule shall be deemed to include taxes, overheads and profit.
13.6 Adjustments for Changes in Laws	Subject to the following provisions of this Sub-Clause, the Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in: (a) the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws); (b) the judicial or official governmental interpretation or implementation of the Laws referred to in sub-paragraph (a) above;

	(c) any permit, permission, license or approval obtained by the Employer or the Contractor under sub-paragraph (a) or (b), respectively, of Sub-Clause 1.13 [*Compliance with Laws*]; or (d) the requirements for any permit, permission, licence and/or approval to be obtained by the Contractor under sub-paragraph (b) of Sub-Clause 1.13 [*Compliance with Laws*], made and/or officially published after the Base Date, which affect the Contractor in the performance of obligations under the Contract. In this Sub-Clause "change in Laws" means any of the changes under sub-paragraphs (a), (b), (c) and/or (d) above. If the Contractor suffers delay and/or incurs an increase in Cost as a result of any change in Laws, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost. If there is a decrease in Cost as a result of any change in Laws, the Employer shall be entitled subject to Sub-Clause 20.2 to a reduction in the Contract Price. If any adjustment to the execution of the Works becomes necessary as a result of any change in Laws: (i) the Contractor shall promptly give a Notice to the Engineer, or (ii) the Engineer shall promptly give a Notice to the Contractor. Thereafter, the Engineer shall either instruct a Variation under Sub-Clause 13.3.1 *[Variation by Instruction]* or request a proposal under Sub-Clause 13.3.2 *[Variation by Request for proposal] (with detailed supporting particulars).* Notwithstanding the foregoing, the Contractor shall not be entitled to an extension of time if the relevant delay has already been taken into account in the determination of a previous extension of time and such Cost shall not be separately paid if the same shall already have been taken into account in the indexing of any inputs to the Table of Adjustment Data in accordance with the provisions of Sub-Clause 13.7 [Adjustments for Changes in Cost].
13.7 Adjustments for Changes in Cost	If Schedule(s) of cost indexation are not included in the Contract, this Sub-Clause shall not apply. The amounts payable to the Contractor shall be adjusted for rises or falls in the cost of labor, Goods and other inputs to the Works, by the addition or deduction of the amounts calculated in accordance with the Schedule(s) of cost indexation. To the extent that full compensation for any rise or fall in Costs is not covered by this Sub-Clause or other Clauses of these Conditions, the

	Accepted Contract Amount shall be deemed to have included amounts to cover the contingency of other rises and falls in costs. The adjustment to be applied to the amount otherwise payable to the Contractor, as certified in Payment Certificates, shall be calculated for each of the currencies in which the Contract Price is payable. No adjustment shall be applied to work valued on the basis of Cost or current prices. Until such time as each current cost index is available, the Engineer shall use a provisional index for the issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly. If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices thereafter shall be made using either: (a) each index or price applicable on the date 49 days before the expiry of the Time for Completion of the Works; or (b) the current index or price whichever is more favourable to the Employer.
14. Contract price and payment	
14.1 The Contract Price	Unless otherwise stated in the Particular Conditions: (a) the Contract Price shall be the lump sum Accepted Contract Amount and be subject to adjustments, additions (including Cost or Cost-Plus Profit to which the Contractor is entitled under these Conditions) and/ or deductions in accordance with the Contract; (b) the Contractor shall pay all taxes, duties and fees required to be paid by the Contractor under the Contract, and the Contract Price shall not be adjusted for any of these costs, except as stated in Sub-Clause 13.6 [*Adjustments for Changes in Laws*]; (c) any quantities which may be set out in a Schedule are estimated quantity es and are not to be taken as the actual and correct quantities of the Works which the Contractor is required to execute; and (d) any quantities or price data which may be set out in a Schedule shall be used for the purposes stated in the Schedule and may be inapplicable for other purposes. However, if any part of the Works is to be paid according to quantity supplied or work done, the provisions for measurement and valuation shall be as stated in the Particular Conditions. The Contract Price shall be valued accordingly, subject to adjustments in accordance with the Contract.

14.2 Advance Payment	If no amount of advance payment is stated **in the PCC**, this Sub-Clause shall not apply. After receiving the Advance Payment Certificate, the Employer shall make an advance payment, as an interest-free loan for mobilisation and design. The amount of the advance payment and the currencies in which it is to be paid shall be as stated **in the PCC**. 14.2.1 Advance Payment Guarantee The Contractor shall obtain (at the Contractor's cost) an Advance Payment Guarantee in amounts and currencies equal to the advance payment and shall submit it to the Employer with a copy to the Engineer. This guarantee shall be issued by reputable bank or financial institution selected by the Contractor and shall be based on the sample form included in Section X, Contract Forms. The Contractor shall ensure that the Advance Payment Guarantee is valid and enforceable until the advance payment has been repaid, but its amount may be progressively reduced by the amount repaid by the Contractor as stated in the Payment Certificates. If the terms of the Advance Payment Guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 days before the expiry date: (a) the Contractor shall extend the validity of this guarantee until the advance payment has been repaid; (b) the Contractor shall immediately submit evidence of this extension to the Employer, with a copy to the Engineer; and (c) if the Employer does not receive this evidence 7 days before the expiry date of this guarantee, the Employer shall be entitled to claim under the guarantee the amount of advance payment which has not been repaid. When submitting the Advance Payment Guarantee, the Contractor shall include an application (in the form of a Statement) for the advance payment. 14.2.2 Advance Payment Certificate The Engineer shall issue an Advance Payment Certificate for the advance payment within 14 days after: (a) the Employer has received both the Performance Security and the Advance Payment Guarantee, in the form and issued by an entity in accordance with Sub-Clause 4.2.1 [*Contractor's Obligations*] and Sub-Clause 14.2.1 [*Advance Payment Guarantee*] respectively; and (b) the Engineer has received a copy of the Contractor's application

	for the advance payment under Sub-Clause 14.2.1 [*Advance Payment Guarantee*]. 14.2.3 Repayment of Advance payment The advance payment shall be repaid through percentage deductions in Payment Certificates. Unless other percentages are stated **in the PCC**: (a) deductions shall commence in the IPC in which the total of all certified interim payments in the same currency as the advance payment (excluding the advance payment and deductions and release of retention moneys) exceeds ten percent (10%) of the portion of the Accepted Contract Amount payable in that currency less Provisional Sums; and (b) deductions shall be made at the amortization rate of one quarter (25%) of the amount of each IPC (excluding the advance payment and deductions and release of retention moneys) in the currencies and proportions of the advance payment, until such time as the advance payment has been repaid.
14.3 Application for Interim Payment	The Contractor shall submit a Statement to the Engineer after the end of the period of payment stated **in the PCC** (if not stated, after the end of each month). Each Statement shall: (a) be in a form acceptable to the Engineer; (b) be submitted in one paper-original, one electronic copy and additional paper copies (if any) as stated **in the PCC**; and (c) show in detail the amounts to which the Contractor considers that the Contractor is entitled, with supporting documents which shall include sufficient detail for the Engineer to investigate these amounts together with the relevant report on progress in accordance with Sub-Clause 4.20 [*Progress Reports*]. The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed: (i) the estimated contract value of the Works executed, and the Contractor's Documents produced, up to the end of the period of payment (including Variations but excluding items described in sub-paragraphs (ii) to (x) below); (ii) any amounts to be added and/or deducted for changes in Laws under Sub-Clause 13.6 [*Adjustments for Changes in Laws*], and for changes in Cost under Sub-Clause 13.7 [*Adjustments for Changes in Cost*];

	(iii) any amount to be deducted for retention, calculated by applying the percentage of retention stated **in the PCC** to the total of the amounts under sub-paragraphs (i), (ii) and (vi) of this Sub-Clause, until the amount so retained by the Employer reaches the limit of Retention Money (if any) stated **in the PCC**; (iv) any amounts to be added and/or deducted for the advance payment and repayments under Sub-Clause 14.2 [*Advance Payment*]; (v) any amounts to be added and/or deducted for Plant and Materials under Sub-Clause 14.5 [*Plant and Materials intended for the Works*]; (vi) any other additions and/or deductions which have become due under the Contract or otherwise, including those under Sub-Clause 3.7 [*Agreement or Determination*]; (vii) any reimbursement due to the Contractor under the Adjudicator's decision, subject to Sub-Clause 20 *[Claims, Disputes and Arbitration]*. (viii) any amounts to be added for Provisional Sums under Sub-Clause13.4 [*Provisional Sums*]; (ix) any amount to be added for release of Retention Money under Sub-Clause 14.9 [*Release of Retention Money*]; (x) any amount to be deducted for the Contractor's use of utilities provided by the Employer under Sub-Clause 4.19 [*Temporary Utilities*]; and (xi) the deduction of amounts certified in all previous Payment Certificates.
14.4 Schedule of Payments	If the Contract includes a Schedule of Payments specifying the instalments in which the Contract Price will be paid then, unless otherwise stated in this Schedule: (a) the instalments quoted in the Schedule of Payments shall be treated as the estimated contract values for the purposes of sub-paragraph (i) of Sub-Clause 14.3 [*Application for Interim Payment*]; (b) Sub-Clause 14.5 [*Plant and Materials intended for the Works*] shall not apply; and (c) if: (i) these instalments are not defined by reference to the actual progress achieved in the execution of the Works; and

	(ii) actual progress is found by the Engineer to differ from that on which the Schedule of Payments was based, then the Engineer may proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine revised instalments (and, for the purpose of Sub-Clause 3.7.3 [Time limits], the date when the difference under sub-paragraph (ii) above was found by the Engineer shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3). Such revised instalments shall take account of the extent to which progress differs from that on which the Schedule of Payments was based. If the Schedule of Payments specifies payments to be made to the Contractor based on Milestones, payments shall be made upon completion of such Milestones. If the Contract does not include a Schedule of Payments, the Contractor shall submit non-binding estimates of the payments which the Contractor expects to become due during each period of 3 months. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates shall be submitted at intervals of 3 months, until the issue of the Taking-Over Certificate for the Works.
14.5 Plant and Materials intended for the Works	If no Plant and/or Materials are listed **in the PCC** for payment when shipped and/or payment when delivered, this Sub-Clause shall not apply. The Contractor shall include, under sub-paragraph (v) of Sub-Clause 14.3 [Application for Interim Payment]: - an amount to be added for Plant and Materials which have been shipped or delivered (as the case may be) to the Site for incorporation in the Permanent Works; and - an amount to be deducted when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (i) of Sub-Clause 14.3 [Application for Interim Payment]. The Engineer shall proceed under Sub-Clause 3.7 [*Agreement or Determination*] to agree or determine each amount to be added for Plant and Materials if the following conditions are fulfilled (and, for the purpose of Sub-Clause 3.7.3 [*Time limits*], the date these conditions are fulfilled shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3): (a) the Contractor has: (i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection by the Engineer;

	(ii) submitted evidence demonstrating that the Plant and Materials comply with the Contract (which may include test certificates under Sub-Clause 7.4 [Testing by the Contractor] and/or compliance verification documentation under Sub-Clause 4.9.2 [Compliance Verification System]) to the Engineer; and (iii) submitted a statement of the Cost of acquiring and shipping or delivering (as the case may be) the Plant and Materials to the Site, supported by satisfactory evidence; and either: (b) the relevant Plant and Materials: (i) are those listed **in the PCC** for payment when shipped; (ii) have been shipped to the Country, en route to the Site, in accordance with the Contract; and (iii) are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Engineer together with: • evidence of payment of freight and insurance; • any other documents reasonably required by the Engineer; and • a written undertaking by the Contractor that the Contractor will deliver to the Employer (prior to submitting the next Statement) a bank guarantee in a form and issued by an entity to which the Employer gives consent (but such consent shall not relieve the Contractor from any obligation in the following provisions of this sub-paragraph), in amounts and currencies equal to the amount due under this Sub-Clause. This guarantee shall be in a similar form to the form described in Sub-Clause 14.2.1 [Advance Payment Guarantee] and shall be valid until the Plant and Materials are properly stored on Site and protected against loss, damage or deterioration; or (c) the relevant Plant and Materials: (i) are those listed **in the PCC** for payment when delivered to the Site, and (ii) have been delivered to and are properly stored on the Site, are protected against loss, damage or deterioration, and appear to be in accordance with the Contract.

	The amount so agreed or determined shall take account of the evidence and documents required under this Sub-Clause and of the contract value of the Plant and Materials. If sub-paragraph (b) above applies, the Engineer shall have no obligation to certify any payment under this Sub-Clause until the Employer has received the bank guarantee in accordance with sub-paragraph (b)(iii) above. The sum to be certified by the Engineer in an IPC shall be the equivalent of eighty percent (80%) of this agreed or determined amount. The currencies for this certified sum shall be the same as those in which payment will become due when the contract value is included under sub-paragraph (i) of Sub-Clause 14.3 [*Application for Interim Payment*]. At that time, the Payment Certificate shall include the applicable amount to be deducted which shall be equivalent to, and in the same currencies and proportions as, this additional amount for the relevant Plant and Materials.
14.6 Issue of IPC	No amount will be certified or paid to the Contractor until: (a) the Employer has received the Performance Security in the form, and issued by an entity, in accordance with Sub-Clause 4.2.1 [Contractor's obligations]; and (b) the Contractor has appointed the Contractor's Representative in accordance with Sub-Clause 4.3 [Contractor's Representative]. 14.6.1 <u>The IPC</u> The Engineer shall, within 28 days after receiving a Statement and supporting documents, issue an IPC to the Employer, with a copy to the Contractor: (a) stating the amount which the Engineer fairly considers to be due; and (b) including any additions and/or deductions which have become due under Sub-Clause 3.7 [Agreement or Determination] or under the Contract or otherwise, with detailed supporting particulars (which shall identify any difference between a certified amount and the corresponding amount in the Statement and give the reasons for such difference). 14.6.2 <u>Withholding (amounts in) an IPC</u> Before the issue of the Taking-Over Certificate for the Works, the Engineer may withhold an IPC in an amount which would (after retention and other deductions) be less than the minimum amount of IPC (if any) stated **in the PCC**. In this event, the Engineer shall promptly give a Notice to the Contractor accordingly. An IPC shall not be withheld for any other reason, although:

	(a) if anything supplied or work done by the Contractor is not in accordance with the Contract, the estimated cost of rectification or replacement may be withheld until rectification or replacement has been completed; (b) if the Contractor was or is failing to perform any work, service or obligation in accordance with the Contract, the value of this work or obligation may be withheld until the work or obligation has been performed. In this event, the Engineer shall promptly give a Notice to the Contractor describing the failure and with detailed supporting particulars of the value withheld; and/or (c) 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 Engineer, may be withheld until the work or obligation has been performed, and/or the cost of rectification or replacement, as determined by the Engineer, may be withheld until rectification or replacement has been completed. Failure to perform includes, but is not limited to the following: (i) failure to comply with any ES obligations or work described in the Employer's Requirements which may include: working outside site boundaries, excessive dust, damage to offsite vegetation, pollution of water courses from oils or sedimentation, contamination of land e.g., from oils, human waste, damage to archaeology or cultural heritage features, air pollution as a result of unauthorized and/or inefficient combustion; (ii) failure to regularly review C-ESMP and/or update it in a timely manner to address emerging ES issues, or anticipated risks or impacts; (iii) failure to implement the C-ESMP e.g. failure to provide required training or sensitization; (iv) failing to have appropriate consents/permits prior to undertaking Works or related activities; (v) failure to submit ES report/s (as described in Appendix C to the General Conditions of Contract), or failure to submit such reports in a timely manner; (vi) failure to implement remediation as instructed by the Engineer within the specified timeframe (e.g. remediation addressing non-compliance/s).

	(d) if the Engineer finds any significant error or discrepancy in the Statement or supporting documents, the amount of the IPC may take account of the extent to which this error or discrepancy has prevented or prejudiced proper investigation of the amounts in the Statement until such error or discrepancy is corrected in a subsequent Statement. As specified **in the PCC**, if the Contractor fails to perform its cyber security obligations under the Contract, an assessed amount, as determined by the Engineer, may be withheld until the obligation has been performed. For each amount so withheld, in the supporting particulars for the IPC the Engineer shall detail his/her calculation of the amount and state the reasons for it being withheld. 14.6.3 Correction or modification The Engineer may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Engineer's acceptance, approval, consent or Notice of No-objection to any Contractor's Document or to (any part of) the Works. If the Contractor considers that an IPC does not include any amounts to which the Contractor is entitled, these amounts shall be identified in the next Statement (the "identified amounts" in this paragraph). The Engineer shall then make any correction or modification that should properly be made in the next Payment Certificate. Thereafter, to the extent that: (a) the Contractor is not satisfied that this next Payment Certificate includes the identified amounts; and (b) the identified amounts do not concern a matter for which the Engineer is already carrying out his/her duties under Sub-Clause 3.7 [*Agreement or Determination*] the Contractor may, by giving a Notice, refer this matter to the Engineer and Sub-Clause 3.7 [Agreement or Determination] shall apply (and, for the purpose of Sub-Clause 3.7.3 [Time limits], the date the Engineer receives this Notice shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3).
14.7 Payment	The Employer shall pay to the Contractor: (a) the amount certified in each Advance Payment Certificate within the period stated **in the PCC** (if not stated, 21 days) after the Employer receives the Advance Payment Certificate; (b) the amount certified in each IPC issued under:

	(i) Sub-Clause 14.6 [*Issue of IPC*], within the period stated **in the PCC** (if not stated, 56 days) after the Engineer receives the Statement and supporting documents; or (ii) Sub-Clause 14.13 [*Issue of FPC*], within the period stated **in the PCC** (if not stated, 28 days) after the Employer receives the IPC; or (iii) at a time when the Bank's loan or credit (from which part of the payments to the Contractor is being made) is suspended, the amount shown on any statement submitted by the Contractor within 14 days after such statement is submitted, any discrepancy being rectified in the next payment to the Contractor; and (c) the amount certified in the FPC within the period stated **in the PCC** (if not stated, 56 days) after the Employer receives the FPC; or, at a time when the Bank's loan or credit (from which part of the payments to the Contractor is being made) is suspended the undisputed amount shown in the Final Statement within 56 days after the date of notification of the suspension in accordance with Sub-Clause 16.2 [Termination by Contractor]. Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (for this currency) specified in the Contract.
14.8 Delayed Payment	If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [*Payment*], the Contractor shall be entitled to receive financing charges compounded monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the expiry of the time for payment specified in Sub-Clause 14.7 [*Payment*], irrespective (in the case of sub-paragraph (b) of Sub-Clause 14.7) of the date on which any IPC is issued. Unless otherwise stated **in the PCC**, these financing charges shall be calculated at the annual rate of three percent (3%) above: (a) the average bank short-term lending rate to prime borrowers prevailing for the currency of payment at the place for payment, or (b) where no such rate exists at that place, the same rate in the country of the currency of payment, or (c) in the absence of such a rate at either place, the appropriate rate fixed by the law of the country of the currency of payment. The Contractor shall by request be entitled to payment of these financing charges by the Employer without:

	(i) the need for the Contractor to submit a Statement or any formal Notice (including any requirement to comply with Sub-Clause 20.1 or certification; and (ii) prejudice to any other right or remedy.
14.9 Release of Retention Money	After the issue of the Taking-Over Certificate for: (a) the Works, the Contractor shall include the first half of the Retention Money in a Statement; or (b) a Section, the Contractor shall include the relevant percentage of the first half of the Retention Money in a Statement. After the latest of the expiry dates of the Defects Notification Periods, the Contractor shall include the second half of the Retention Money in a Statement promptly after such latest date. If a Taking-Over Certificate was (or was deemed to have been) issued for a Section, the Contractor shall include the relevant percentage of the second half of the Retention Money in a Statement promptly after the expiry date of the DNP for the Section. In the next IPC, or the FPC (as the case may be), after the Engineer receives any such Statement, the Engineer shall certify the release of the corresponding amount of Retention Money. However, when certifying any release of Retention Money under Sub-Clause 14.6 [*Issue of IPC*], if any work remains to be executed under Clause 11 [*Defects after Taking Over*] or Clause 12 [*Tests after Completion*], the Engineer shall be entitled to withhold certification of the estimated cost of this work until it has been executed. The relevant percentage for each Section shall be the percentage value of the Section as stated **in the PCC**. If the percentage value of a Section is not stated in the PCC, no percentage of either half of the Retention Money shall be released under this Sub-Clause in respect of such Section. Unless otherwise stated in 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 by the Engineer, the Contractor shall be entitled to substitute a guarantee, in the form included in Section X, Contract Forms and issued by a reputable bank or financial institution selected by the Contractor, for the second half of the Retention Money. The Contractor shall ensure that the guarantee is in the amounts and currencies of the second half of the Retention Money and is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects, as specified for the Performance Security and, if applicable, an ES Performance Security in Sub-Clause 4.2. On receipt by the Employer of the required guarantee, the Engineer shall certify, and

	the Employer shall pay the second half of the Retention Money. The release of the second half of the Retention Money against a guarantee shall then be in lieu of the release after the latest of the expiry dates of the Defects Notification Periods. The Employer shall return the guarantee to the Contractor within 21 days after receiving a copy of the Performance Certificate. If the Performance Security and, if applicable, an ES Performance Security required under Sub-Clause 4.2 is in the form of a demand guarantee, and the amount guaranteed under them when the Taking-Over Certificate is issued is more than half of the Retention Money, then the Retention Money guarantee will not be required. If the amount guaranteed under the Performance Security and, if applicable, an ES Performance Security, when the Taking-Over Certificate is issued is less than half of the Retention Money, the Retention Money guarantee will only be required for the difference between half of the Retention Money and the amount guaranteed under the Performance Security and, if applicable, an ES Performance Security.
14.10 Statement at Completion	Within 84 days after the Date of Completion of the Works, the Contractor shall submit to the Engineer a Statement at completion with supporting documents, in accordance with Sub-Clause 14.3 [*Application for Interim Payment*], showing: (a) the value of all work done in accordance with the Contract up to the Date of Completion of the Works; (b) any further sums which the Contractor considers to be due at the Date of Completion of the Works; and (c) an estimate of any other amounts which the Contractor considers have or will become due after the Date of Completion of the Works, under the Contract or otherwise. These estimated amounts shall be shown separately (to those of sub-paragraphs (a) and (b) above) and shall include estimated amounts for: (i) Claims for which the Contractor has submitted a Notice under Sub-Clause 20.1; (ii) any matter referred to the Adjudicator under Sub-Clause 20; and (iii) any matter for which a NOD has been given under Sub-Clause 20. The Engineer shall then issue an IPC in accordance with Sub-Clause 14.6 [*Issue of IPC*].
14.11 Final Statement	Submission by the Contractor of any Statement under the following provisions of this Sub-Clause shall not be delayed by reason of any referral under Sub-Clause 20 *[Claims, Disputes and Arbitration]*.

	14.11.1 Draft Final Statement Within 56 days after the issue of the Performance Certificate the Contractor shall submit to the Engineer a draft final Statement. This Statement shall: (a) be in the same form as Statements previously submitted under Sub-Clause 14.3 [*Application for Interim Payment*]; (b) be submitted in one paper-original, one electronic copy and additional paper copies (if any) as stated **in the PCC**; and (c) show in detail, with supporting documents: (i) the value of all work done in accordance with the Contract; (ii) any further sums which the Contractor considers to be due at the date of the issue of the Performance Certificate, under the Contract or otherwise; and (iii) an estimate of any other amounts which the Contractor considers have or will become due after the issue of the Performance Certificate, under the Contract or otherwise, including estimated amounts by reference to the matters described in sub-paragraphs (i) to (iii) of Sub-Clause 14.10 [*Statement at Completion*]. These estimated amounts shall be shown separately (to those of sub-paragraphs (i) and (ii) above). Except for any amount under sub-paragraph (iii) above, if the Engineer disagrees with or cannot verify any part of the draft final Statement, the Engineer shall promptly give a Notice to the Contractor. The Contractor shall then submit such further information as the Engineer may reasonably require within the time stated in this Notice, and shall make such changes in the draft as may be agreed between them. 14.11.2 Agreed Final Statement If there are no amounts under sub-paragraph (iii) of Sub-Clause 14.11.1 [*Draft Final Statement*], the Contractor shall then prepare and submit to the Engineer the final Statement as agreed (the "Final Statement" in these Conditions). However, if: (a) there are amounts under sub-paragraph (iii) of Sub-Clause 14.11.1 [*Draft Final Statement*]; and/or

	(b) following discussions between the Engineer and the Contractor, it becomes evident that they cannot agree any amount(s) in the draft final Statement, the Contractor shall then prepare and submit to the Engineer a Statement identifying separately: the agreed amounts, the estimated amounts and the disagreed amount(s) (the "Partially Agreed Final Statement" in these Conditions).
14.12 Discharge	When submitting the Final Statement or the Partially Agreed Final Statement (as the case may be), the Contractor shall submit a discharge which confirms that the total of such Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that the total of the Statement is subject to any payment that may become due in respect of any Dispute for which the Adjudicator is proceeding or arbitration is in progress under Sub-Clause 20 *[Claims, Disputes and Arbitration]* and/or that it becomes effective after the Contractor has received: (a) full payment of the amount certified in the FPC; and (b) the Performance Security. If the Contractor fails to submit this discharge, the discharge shall be deemed to have been submitted and to have become effective when the conditions of sub-paragraphs (a) and (b) have been fulfilled. A discharge under this Sub-Clause shall not affect either Party's liability or entitlement in respect of any Dispute for which Adjudicator is proceeding or arbitration is in progress under Sub-Clause 20 *[Claims, Disputes and Arbitration]*.
14.13 Issue of FPC	Within 28 days after receiving the Final Statement or the Partially Agreed Final Statement (as the case may be), and the discharge under Sub-Clause 14.12 [*Discharge*], the Engineer shall issue to the Employer (with a copy to the Contractor), the Final Payment Certificate which shall state: (a) the amount which the Engineer fairly considers is finally due, including any additions and/or deductions which have become due under Sub-Clause 3.7 [*Agreement or Determination*] or under the Contract or otherwise; and (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, and after giving credit to the Contractor for all amounts (if any) previously paid by the Contractor and/or received by the Employer under the Performance Security, the balance (if any) due from the Employer to the Contractor or from the Contractor to the Employer, as the case may be.

	If the Contractor has not submitted a draft final Statement within the time specified under Sub-Clause 14.11.1 [*Draft Final Statement*], the Engineer shall request the Contractor to do so. Thereafter, if the Contractor fails to submit a draft final Statement within a period of 28 days, the Engineer shall issue the FPC for such an amount as the Engineer fairly considers to be due If the Contractor has not submitted a discharge under Sub-Clause 14.12 [Discharge] but has either: (i) submitted a Partially Agreed Final Statement under Sub-Clause 14.11.2 [*Agreed Final Statement*]; or (ii) not done so but, to the extent that a draft final Statement submitted by the Contractor is deemed by the Engineer to be a Partially Agreed Final Statement the Engineer shall proceed in accordance with Sub-Clause 14.6 [*Issue of IPC*] to issue an IPC.
14.14 Cessation of Employer's Liability	The Employer shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it in: (a) the Final Statement or Partially Agreed Final Statement; and (b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) the Statement under Sub-Clause 14.10 [*Statement at Completion*]. Unless the Contractor makes or has made a Claim under Sub-Clause 20.1 in respect of an amount or amounts under the FPC within 56 days of receiving a copy of the FPC, the Contractor shall be deemed to have accepted the amounts so certified. The Employer shall then have no further liability to the Contractor, other than to pay the amount due under the FPC and return the Performance Security to the Contractor. However, this Sub-Clause shall not limit the Employer's liability under the Employer's indemnification obligations, or the Employer's liability in any case of fraud, gross negligence, deliberate default or reckless misconduct by the Employer.
14.15 Currencies of Payment	The Contract Price shall be paid in the currency or currencies named in the Schedule of Payment Currencies. If more than one currency is so named, payments shall be made as follows: (a) if the Accepted Contract Amount was expressed in Local Currency only or in Foreign Currency only:

	(i) the proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as stated in the Schedule of Payment Currencies, except as otherwise agreed by both Parties; (ii) payments and deductions under Sub-Clause 13.4 [*Provisional Sums*] and Sub-Clause 13.6 [*Adjustments for Changes in Laws*] shall be made in the applicable currencies and proportions; and (iii) other payments and deductions under sub-paragraphs (i) to (iv) of Sub-Clause 14.3 [*Application for Interim Payment*] shall be made in the currencies and proportions specified in sub-paragraph (a) (i) above. (b) Whenever an adjustment is agreed or determined under Sub-Clause 13.2 [*Value Engineering*] or Sub-Clause 13.3 [*Variation Procedure*], the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified in sub-paragraph (a)(i)above; (c) payment of Delay Damages shall be made in the currencies and proportions specified in the Schedule of Payment Currencies; (d) payment of Performance Damages shall be made in the currencies and proportions specified in the Schedule of Performance Guarantees; (e) other payments to the Employer by the Contractor shall be made in the currency in which the sum was expended by the Employer, or in such currency as may be agreed by both Parties; (f) if any amount payable by the Contractor to the Employer in a particular currency exceeds the sum payable by the Employer to the Contractor in that currency, the Employer may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and (g) if no rates of exchange are stated **in the PCC**, they shall be those prevailing on the Base Date and published by the central bank of the Country.
15. Termination by Employer	
15.1 Notice to Correct	If the Contractor fails to carry out any obligation under the Contract the Engineer may, by giving a Notice to the Contractor, require the

	Contractor to make good the failure and to remedy it within a specified time ("Notice to Correct" in these Conditions). The Notice to Correct shall: (a) describe the Contractor's failure; (b) state the Sub-Clause and/or provisions of the Contract under which the Contractor has the obligation; (c) specify the time within which the Contractor shall remedy the failure, which shall be reasonable, taking due regard of the nature of the failure and the work and/or other action required to remedy it; and (d) specify the time within which the Contractor shall respond to the Notice to Correct. After receiving a Notice to Correct the Contractor shall respond within the time specified in (d) by giving a Notice to the Engineer describing the measures the Contractor will take to remedy the failure, and stating the date on which such measures will be commenced in order to comply with the time specified in (c). The time specified in the Notice to Correct shall not imply any extension of the Time for Completion.
15.2 Termination for Contractor's Default	Termination of the Contract under this Clause shall not prejudice any other rights of the Employer under the Contract or otherwise. 15.2.1 Notice The Employer shall be entitled to give a Notice (which shall state that it is given under this Sub-Clause 15.2.1) to the Contractor of the Employer's intention to terminate the Contract or, in the case of sub-paragraph (f), (g) or (h) below a Notice of termination, if the Contractor: (a) fails to comply with: (i) a Notice to Correct; (ii) a binding agreement, or final and binding determination, under Sub-Clause 3.7 [*Agreement or Determination*]; or (iii) a decision of the Adjudicator (whether binding or final and binding) and such failure constitutes a material breach of the Contractor's obligations under the Contract; (b) abandons the Works or otherwise plainly demonstrates an intention not to continue performance of the Contractor's obligations under the Contract;

	(c) without reasonable excuse fails to proceed with the Works in accordance with Clause 8 [*Commencement, Delays and Suspension*] or, if there is a maximum amount of Delay Damages stated **in the PCC**, the Contractor's failure to comply with Sub-Clause 8.2 [*Time for Completion*] is such that the Employer would be entitled to Delay Damages that exceed this maximum amount; (d) without reasonable excuse fails to comply with a Notice of rejection given by the Engineer under Sub-Clause 7.5 [*Defects and Rejection*] or an Engineer's instruction under Sub-Clause 7.6 [*Remedial Work*], within 28 days after receiving it; (e) fails to comply with Sub-Clause 4.2 [*Performance Security*]; (f) subcontracts the whole, or any part of, the Works in breach of Sub-Clause 4.4 [*Subcontractors*], or assigns the Contract without the required agreement under Sub-Clause 1.7 [*Assignment*]; (g) becomes bankrupt or insolvent; goes into liquidation, administration, reorganization, winding-up or dissolution; becomes subject to the appointment of a liquidator, receiver, administrator, manager or trustee; enters into a composition or arrangement with the Contractor's creditors; or any act is done or any event occurs which is analogous to or has a similar effect to any of these acts or events under applicable Laws; or if the Contractor is a JV: (i) any of these matters apply to a member of the JV, and (ii) the other member(s) do not promptly confirm to the Employer that, in accordance with Sub-Clause 1.14(a) [Joint and Several Liability], such member's obligations under the Contract shall be fulfilled in accordance with the Contract; or (h) based on reasonable evidence, has engaged in Fraud and Corruption as defined in paragraph 2.2 of the Appendix B – Fraud and Corruption to these General Conditions of Contract, in competing for or in executing the Contract. 15.2.2 Termination Unless the Contractor remedies the matter described in a Notice given under Sub-Clause 15.2.1 [*Notice*] within 14 days of receiving the Notice, the Employer may by giving a second Notice to the Contractor immediately terminate the Contract. The date of termination shall be the date the Contractor receives this second Notice.

	However, in the case of sub-paragraph (f), (g) or (h) of Sub-Clause 15.2.1 [*Notice*], the Employer may by giving a Notice under Sub-Clause 15.2.1 immediately terminate the Contract and the date of termination shall be the date the Contractor receives this Notice. 15.2.3 <u>After Termination</u> After termination of the Contract under Sub-Clause 15.2.2 [*Termination*], the Contractor shall: (a) comply immediately with any reasonable instructions included in a Notice given by the Employer under Sub-Clause 15.2.2 [Termination]: (i) for the assignment of any subcontract; and (ii) for the protection of life or property or for the safety of the Works; (b) deliver to the Engineer: (i) any Goods required by the Employer, (ii) all Contractor's Documents, and (iii) all other design documents made by or for the Contractor; and (c) leave the Site and, if the Contractor does not do so, the Employer shall have the right to expel the Contractor from the Site. 15.2.4 <u>Completion of the Works</u> After termination under this Sub-Clause, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and/or these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor to complete the Works. After such completion of the Works, the Employer shall give another Notice to the Contractor that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall then promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Employer, these items may be sold (to the extent permitted by applicable Laws) by the Employer in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.
15.3 Valuation after Termination for	After termination of the Contract under Sub-Clause 15.2 [*Termination for Contractor's Default*], the Engineer shall proceed under Sub-Clause 3.7 [*Agreement or Determination*] to agree or determine the value of the Permanent Works, Goods and Contractor's

Contractor's Default	Documents, and any other sums due to the Contractor for work executed in accordance with the Contract (and, for the purpose of Sub-Clause 3.7.3 [*Time limits*], the date of termination shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3). This valuation shall include any additions and/or deductions, and the balance due (if any), by reference to the matters described in sub-paragraphs (a) and b) of Sub-Clause 14.13 [*Issue of FPC*]. This valuation shall not include the value of any Contractor's Documents, Materials, Plant and Permanent Works to the extent that they do not comply with the Contract.
15.4 Payment after Termination for Contractor's Default	The Employer may withhold payment to the Contractor of the amounts agreed or determined under Sub-Clause 15.3 [*Valuation after Termination for Contractor's Default*] until all the costs, losses and damages (if any) described in the following provisions of this Sub-Clause have been established. After termination of the Contract under Sub-Clause 15.2 [*Termination for Contractor's Default*], the Employer shall be entitled subject to Sub-Clause 20.2 to payment by the Contractor of: (a) the additional costs of execution of the Works, and all other costs reasonably incurred by the Employer (including costs incurred in clearing, cleaning and reinstating the Site as described under Sub-Clause 11.11 [*Clearance of Site*]), after allowing for any sum due to the Contractor under Sub-Clause 15.3 [*Valuation after Termination for Contractor's Default*]; (b) any losses and damages suffered by the Employer in completing the Works; and (c) Delay Damages, if the Works or a Section have not been taken over under Sub-Clause 10.1 [*Taking Over the Works and Sections*] and if the date of termination under Sub-Clause 15.2 [*Termination for Contractor's Default*] occurs after the date corresponding to the Time for Completion of the Works or Section (as the case may be). Such Delay Damages shall be paid for every day that has elapsed between these two dates.
15.5 Termination for Employer's Convenience	The Employer shall be entitled to terminate the Contract at any time for the Employer's convenience, by giving a Notice of such termination to the Contractor (which Notice shall state that it is given under this Sub-Clause 15.5). After giving a Notice to terminate under this Sub-Clause, the Employer shall immediately:

	(a) have no right to further use any of the Contractor's Documents, which shall be returned to the Contractor, except those for which the Contractor has received payment or for which payment is due under a Payment Certificate; (b) if Sub-Clause 4.6 [*Co-operation*] applies, have no right to allow the continued use (if any) of any Contractor's Equipment, Temporary Works, access arrangements and/or other of the Contractor's facilities or services; and (c) make arrangements to return the Performance Security to the Contractor. Termination under this Sub-Clause shall take effect 28 days after the later of the dates on which the Contractor receives this Notice or the Employer returns the Performance Security. Unless and until the Contractor has received payment of the amount due under Sub-Clause 15.6 [*Valuation after Termination for Employer's Convenience*], the Employer shall not execute (any part of) the Works or arrange for (any part of) the Works to be executed by any other entities. After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [*Contractor's Obligations After Termination*].
15.6 Valuation after Termination for Employer's Convenience	After termination under Sub-Clause 15.5 [*Termination for Employer's Convenience*] the Contractor shall, as soon as practicable, submit detailed supporting particulars (as reasonably required by the Engineer) of: (a) the value of work done, which shall include: (i) the matters described in sub-paragraphs (a) to (e) of Sub-Clause18.5 [*Optional Termination*], and (ii) any additions and/or deductions, and the balance due (if any), by reference to the matters described in sub-paragraphs (a) and (b) of Sub-Clause 14.13 [*Issue of FPC*]; and (b) the amount of any loss of profit or other losses and damages suffered by the Contractor as a result of this termination. The Engineer shall then proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine the matters described in sub-paragraphs (a) and (b) above (and, for the purpose of Sub-Clause 3.7.3 [Time limits], the date the Engineer receives the Contractor's particulars under this Sub-Clause shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3).

	The Engineer shall issue a Payment Certificate for the amount so agreed or determined, without the need for the Contractor to submit a Statement.
15.7 Payment after Termination for Employer's Convenience	The Employer shall pay the Contractor the amount certified in the Payment Certificate under Sub-Clause 15.6 [*Valuation after Termination for Employer's Convenience*] within 112 days after the Engineer receives the Contractor's submission under that Sub-Clause.
15.8 Fraud and Corruption	15.8.1 The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in Appendix B – Fraud and Corruption to these General Conditions of Contract. 15.8.2 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 request for Bids 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.
16. Suspension and Termination by Contractor	
16.1 Suspension by Contractor	If: (a) the Engineer fails to certify in accordance with Sub-Clause 14.6 [*Issue of IPC*]; (b) the Employer fails to provide reasonable evidence in accordance with Sub-Clause 2.4 [*Employer's Financial Arrangements*]; (c) the Employer fails to comply with Sub-Clause 14.7 [*Payment*]; or (d) the Employer fails to comply with: (i) a binding agreement, or final and binding determination under Sub-Clause 3.7 [*Agreement or Determination*]; or (ii) a decision of the Adjudicator under 20 (whether binding or final and binding) and such failure constitutes a material breach of the Employer's obligations under the Contract, the Contractor may, not less than 21 days after giving a Notice to the Employer (which Notice shall state that it is given under this Sub-

	Clause16.1), suspend work (or reduce the rate of work) unless and until the Employer has remedied such a default. Notwithstanding the above, if the Bank has suspended disbursements under the loan or credit from which payments to the Contractor are being made, in whole or in part, for the execution of the Works, and no alternative funds are available as provided for in Sub-Clause 2.4 [Employer's Financial Arrangements], the Contractor may by notice suspend work or reduce the rate of work at any time, but not less than 7 days after the Borrower having received the suspension notification from the Bank. This action shall not prejudice the Contractor's entitlements to financing charges under Sub-Clause 14.8 [*Delayed Payment*] and to termination under Sub-Clause 16.2 [*Termination by Contractor*]. If the Employer subsequently remedies the default as described in the above Notice before the Contractor gives a Notice of termination under Sub-Clause 16.2 [*Termination by Contractor*], the Contractor shall resume normal working as soon as is reasonably practicable. If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost Plus Profit.
16.2 Termination by Contractor	Termination of the Contract under this Clause shall not prejudice any other rights of the Contractor, under the Contract or otherwise. 16.2.1 <u>Notice</u> The Contractor shall be entitled to give a Notice (which shall state that it is given under this Sub-Clause 16.2.1) to the Employer of the Contractor's intention to terminate the Contract or, in the case of sub-paragraph (g) (ii), (h), (i) or (j) below, a Notice of termination, if: (a) the Contractor does not receive the reasonable evidence within 42 days after giving a Notice under Sub-Clause 16.1 [*Suspension by Contractor*] in respect of a failure to comply with Sub-Clause 2.4 [*Employer's Financial Arrangements*]; (b) the Engineer fails, within 56 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate; (c) the Contractor does not receive the amount due under any Payment Certificate within 42 days after the expiry of the time stated in Sub-Clause 14.7 [*Payment*]; (d) the Employer fails to comply with:

	(i) a binding agreement, or final and binding determination under Sub-Clause 3.7 [*Agreement or Determination*]; or (ii) a decision of the Adjudicator under Sub-Clause 20.3 (whether binding or final and binding) and such failure constitutes a material breach of the Employer's obligations under the Contract; (e) the Employer substantially fails to perform, and such failure constitutes a material breach of, the Employer's obligations under the Contract; (f) the Contractor does not receive a Notice of the Commencement Date under Sub-Clause 8.1 [*Commencement of Works*] within 180 days after receiving the Letter of Acceptance, for reasons not attributable to the Contractor; (g) the Employer: (i) fails to comply with Sub-Clause 1.6 [*Contract Agreement*], or (ii) assigns the Contract without the required agreement under Sub-Clause 1.7 [*Assignment*]; (h) a prolonged suspension affects the whole of the Works as described in sub-paragraph (b) of Sub-Clause 8.12 [Prolonged Suspension]; (i) the Employer becomes bankrupt or insolvent; goes into liquidation, administration, reorganization, winding-up or dissolution; becomes subject to the appointment of a liquidator, receiver, administrator, manager or trustee; enters into a composition or arrangement with the Employer's creditors; or any act is done or any event occurs which is analogous to or has a similar effect to any of these acts or events under applicable Laws. 16.2.2 Termination Unless the Employer remedies the matter described in a Notice given under Sub-Clause 16.2.1 [*Notice*] within 14 days of receiving the Notice, the Contractor may by giving a second Notice to the Employer immediately terminate the Contract. The date of termination shall then be the date the Employer receives this second Notice. However, in the case of sub-paragraph (g)(ii), (h), (i) or (j) of Sub-Clause 16.2.1 [*Notice*], by giving a Notice under Sub-Clause 16.2.1 the Contractor may terminate the Contract immediately and the date of termination shall be the date the Employer receives this Notice.

	If the Contractor suffers delay and/or incurs Cost during the above period of 14 days, the Contractor shall be entitled subject to Sub-Clause 20.1 to EOT and/or payment of such Cost-Plus Profit. In the event the Bank suspends the loan or credit from which part or whole of the payments to the Contractor are being made, if the Contractor has not received the sums due to him upon expiration of the 14 days referred to in Sub-Clause 14.7 [Payment] for payments under Interim Payment Certificates, the Contractor may, without prejudice to the Contractor's entitlement to financing charges under Sub-Clause 14.8 [Delayed Payment], take one of the following actions, namely (i) suspend work or reduce the rate of work under Sub-Clause 16.1 above, or (ii) terminate the Contract by giving notice to the Employer, with a copy to the Engineer, such termination to take effect 14 days after the giving of the notice.
16.3 Contractor's Obligations After Termination	After termination of the Contract under Sub-Clause 15.5 [*Termination for Employer's Convenience*], Sub-Clause 16.2 [*Termination by Contractor*] or Sub-Clause 18.5 [*Optional Termination*], the Contractor shall promptly: (a) cease all further work, except for such work as may have been instructed by the Engineer for the protection of life or property or for the safety of the Works. If the Contractor incurs Cost as a result of carrying out such instructed work the Contractor shall be entitled subject to Sub-Clause 20.1 to be paid such Cost-Plus Profit; (b) deliver to the Engineer all Contractor's Documents, Plant, Materials and other work for which the Contractor has received payment; (c) deliver to the Engineer all Employer- Supplied Materials and/or Employer's Equipment made available to the Contractor in accordance with Sub-Clause 2.6 [Employer-Supplied materials and Employer's Equipment]; and (d) remove all other Goods from the Site, except as necessary for safety, and leave the Site.".
16.4 Payment after Termination by Contractor	After termination under Sub-Clause 16.2 [*Termination by Contractor*], the Employer shall promptly: (a) pay the Contractor in accordance with Sub-Clause 18.5 [*Optional Termination*]; and (b) subject to the Contractor's compliance with Sub-Clause 20.1, pay the Contractor the amount of any loss of profit or other losses and damages suffered by the Contractor as a result of this termination.

17. Care of the Works and Indemnities	
17.1 Responsibility for Care of the Works	Unless the Contract is terminated in accordance with these Conditions or otherwise, subject to Sub-Clause 17.2 [*Liability for Care of the Works*] the Contractor shall take full responsibility for the care of the Works, Goods, Employer- Supplied Materials (if any), Employer's Equipment (if any) and Contractor's Documents from the Commencement Date until the issue (or deemed issue) of the Taking-Over Certificate for the Works, when responsibility for the care of the Works shall pass to the Employer. If a Taking-Over Certificate is issued (or is deemed to be issued) for any Section or Part, responsibility for the care of the Section or Part shall then pass to the Employer. If the Contract is terminated in accordance with these Conditions or otherwise, the Contractor shall cease to be responsible for the care of the Works from the date of termination. After responsibility has accordingly passed to the Employer, the Contractor shall take responsibility for the care of any work which is outstanding on the Date of Completion, until this outstanding work has been completed. If any loss or damage occurs to the Works, Goods, Employer-Supplied Materials (if any), Employer's Equipment (if any) or Contractor's Documents, during the period when the Contractor is responsible for their care, from any cause whatsoever except as stated in Sub-Clause 17.2 [*Liability for Care of the Works*], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods, Employer- Supplied Materials (if any), Employer's Equipment (if any) or Contractor's Documents (as the case may be) comply with the Contract.
17.2 Liability for Care of the Works	The Contractor shall be liable for any loss or damage caused by the Contractor to the Works, Goods or Contractor's Documents after the issue of a Taking-Over Certificate. The Contractor shall also be liable for any loss or damage, which occurs after the issue of a Taking-Over Certificate and which arose from an event which occurred before the issue of this Taking-Over Certificate, for which the Contractor was liable. The Contractor shall have no liability whatsoever, whether by way of indemnity or otherwise, for loss or damage to the Works, Goods or Contractor's Documents caused by any of the following events (except to the extent that such Works, Goods or Contractor's Documents have been rejected by the Engineer under Sub-Clause 7.5

	[*Defects and Rejection*] before the occurrence of any of the following events): (a) interference, whether temporary or permanent, with any right of way, light, air, water or other easement (other than that resulting from the Contractor's method of construction) which is the unavoidable result of the execution of the Works in accordance with the Contract; (b) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract; (c) fault, error, defect or omission in any element of the design of the Works by the Employer or which may be contained in the Employer's Requirements (and which an experienced contractor exercising due care would not have discovered when examining the Site and the Employer's Requirements before submitting the Bid), other than design carried out by the Contractor in accordance with the Contractor's obligations under the Contract; (d) any operation of the forces of nature (other than those allocated to the Contractor **in the PCC**) which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions; (e) any Exceptional Event; and/or (f) any act or default of the Employer, the Employer's Personnel or the Employer's other contractors. If any of the events described in sub-paragraphs (a) to (f) above occurs and results in loss and/or damage to the Works, Goods or Contractor's Documents the Contractor shall promptly give a Notice to the Engineer. Thereafter, the Contractor shall rectify any such loss and/or damage that may arise to the extent instructed by the Engineer. Such instruction shall be deemed to have been given under Sub-Clause 13.3.1 [Variation by Instruction] and, in the case of sub-paragraph (e) above, shall be without prejudice to any other rights the Contractor may have under Sub-Clause 18.4.[*Consequences of an Exceptional Event*]. If the loss and/or damage to the Works or Goods or Contractor's Documents results from a combination of: (i) any of the events described in sub-paragraphs (a) to (f) above, and (ii) a cause for which the Contractor is liable, and the Contractor suffers a delay and/or incurs Cost from rectifying the loss and/or damage, the Contractor shall subject to Sub-Clause

	20.1 be entitled to a proportion of EOT and/or Cost-Plus Profit to the extent that any of the above events have contributed to such delay and/or Cost.
17.3 Intellectual and Industrial Property Rights	In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trademark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" means a third-party claim (or proceedings pursuing a third-party claim) alleging an infringement. Whenever a Party receives a claim but fails to give a Notice to the other Party of the claim within 28 days of receiving it, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause. The Employer shall indemnify and hold the Contractor harmless against and from any claim (including legal fees and expenses) alleging an infringement which is or was: (a) an unavoidable result of the Contractor's compliance with the Employer's Requirements and/or any Variation; or (b) a result of any Works being used by the Employer: (i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or (ii) in conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor before the Base Date or is stated in the Contract. The Contractor shall indemnify and hold the Employer harmless against and from any other claim (including legal fees and expenses) alleging an infringement which arises out of or in relation to: (i) the Contractor's execution of the Works; or (ii) the use of Contractor's Equipment. If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at the indemnifying Party's cost) assume overall responsibility for negotiating the settlement of the claim, and/or any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and the Contractor's Personnel or the Employer's Personnel, as the case may be) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to promptly assume overall responsibility for the conduct of any negotiations, litigation or arbitration after being requested to do so by the other Party.

17.4 Indemnities by Contractor	The Contractor shall indemnify and hold harmless the Employer, the Employer's Personnel, and their respective agents, against and from all third party claims, damages, losses and expenses (including legal fees and expenses) in respect of: (a) bodily injury, sickness, disease or death of any person whatsoever arising out of or in the course of or by reason of the Contractor's execution of the Works, unless attributable to any negligence, willful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents; and (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss: (i) arises out of or in the course of or by reason of the Contractor's execution of the Works, and (ii) is attributable to any negligence, willful act or breach of the Contract by the Contractor, the Contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them. The Contractor shall also indemnify and hold harmless the Employer against all acts, errors or omissions by the Contractor in carrying out the Contractor's design obligations that result in the Works (or Section or Part or major item of Plant, if any), when completed, not being fit for the purpose(s) for which they are intended under Sub-Clause 4.1 [Contractor's General Obligations].
17.5 Indemnities by Employer	The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all third-party claims, damages, losses and expenses (including legal fees and expenses) in respect of: (a) bodily injury, sickness, disease or death, or loss of or damage to any property other than the Works, which is attributable to any negligence, willful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents; (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of any event described under sub-paragraphs (a) to (f) of Sub-Clause 17.2 [*Liability for Care of the Works*].
17.6 Shared Indemnities	The Contractor's liability to indemnify the Employer, under Sub-Clause 17.4 [*Indemnities by Contractor*] and/or under Sub-Clause 17.3 [*Intellectual and Industrial Property Rights*], shall be reduced proportionately to the extent that any event described under sub-

	paragraphs (a) to (f) of Sub-Clause 17.2 [*Liability for Care of the Works*] may have contributed to the said damage, loss or injury. Similarly, the Employer's liability to indemnify the Contractor, under Sub-Clause 17.5 [Indemnities by Employer] and/or under Sub-Clause 17.3 [Intellectual and Industrial Property Rights], shall be reduced proportionately to the extent that any event for which the Contractor is responsible under Sub-Clause 17.1 [Responsibility for Care of the Works] may have contributed to the said damage, loss or injury.
17.7 Use of Employer's Accommodation/ Facilities	The Contractor shall take full responsibility for the care of the Employer-provided accommodation and facilities, if any, as detailed in the Employer's Requirements, from the respective dates of hand-over to the Contractor until cessation of occupation (where hand-over or cessation of occupation may take place after the date stated in the Taking-Over Certificate for the Works). If any loss or damage happens to any of the above items while the Contractor is responsible for their care arising from any cause whatsoever other than those for which the Employer is liable, the Contractor shall, at its own cost, rectify the loss or damage to the satisfaction of the Engineer.
18. Exceptional Events	
18.1 Exceptional Events	"Exceptional Event" means an exceptional event or circumstance which: (i) is beyond a Party's control; (ii) the Party could not reasonably have provided against before entering into the Contract; (iii) having arisen, such Party could not reasonably have avoided or overcome; and (iv) is not substantially attributable to the other Party. An Exceptional Event may comprise but is not limited to any of the following events or circumstances provided that conditions (i) to (iv) above are satisfied: (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies; (b) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war; (c) riot, commotion, disorder or sabotage by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors;

	(d) strike or lockout not solely involving the Contractor's Personnel and other employees of the Contractor and Subcontractors; (e) encountering munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity; or (f) natural catastrophes such as earthquake, tsunami, volcanic activity, hurricane or typhoon.
18.2 Notice of an Exceptional Event	If a Party is or will be prevented from performing any obligations under the Contract due to an Exceptional Event (the "affected Party" in this Clause), then the affected Party shall give a Notice to the other Party of such an Exceptional Event, and shall specify the obligations, the performance of which is or will be prevented (the "prevented obligations" in this Clause). This Notice shall be given within 14 days after the affected Party became aware, or should have become aware, of the Exceptional Event, and the affected Party shall then be excused performance of the prevented obligations from the date such performance is prevented by the Exceptional Event. If this Notice is received by the other Party after this period of 14 days, the affected Party shall be excused performance of the prevented obligations only from the date on which this Notice is received by the other Party. Thereafter, the affected Party shall be excused performance of the prevented obligations for so long as such Exceptional Event prevents the affected Party from performing them. Other than performance of the prevented obligations, the affected Party shall not be excused performance of all other obligations under the Contract. However, the obligations of either Party to make payments due to the other Party under the Contract shall not be excused by an Exceptional Event.
18.3 Duty to Minimise Delay	Each Party shall at all times use all reasonable endeavours to minimise any delay in the performance of the Contract as a result of an Exceptional Event. If the Exceptional Event has a continuing effect, the affected Party shall give further Notices describing the effect every 28 days after giving the first Notice under Sub-Clause 18.2 [*Notice of an Exceptional Event*]. The affected Party shall immediately give a Notice to the other Party when the affected Party ceases to be affected by the Exceptional Event. If the affected Party fails to do so, the other Party may give a Notice to the affected Party stating that the other Party considers that

	the affected Party's performance is no longer prevented by the Exceptional Event, with reasons.
18.4 Consequences of an Exceptional Event	If the Contractor is the affected Party and suffers delay and/or incurs Cost by reason of the Exceptional Event of which he/she gave a Notice under Sub-Clause 18.2 [*Notice of an Exceptional Event*], the Contractor shall be entitled subject to Sub-Clause 20.1 to: (a) EOT; and/or (b) if the Exceptional Event is of the kind described in sub-paragraphs (a) to (e) of Sub-Clause 18.1 [*Exceptional Events*] and, in the case of sub-paragraphs (b) to (e) of that Sub-Clause, occurs in the Country, payment of such Cost including the costs of rectifying or replacing the Works and/or Goods damaged or destroyed by Exceptional Events, to the extent they are not indemnified through the insurance policy referred to in Sub-Clause 19.2 [Insurance to be provided by the Contractor].
18.5 Optional Termination	If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of an Exceptional Event of which Notice has been given under Sub-Clause 18.2 [*Notice of an Exceptional Event*], or for multiple periods which total more than 140 days due to the same Exceptional Event, then either Party may give to the other Party a Notice of termination of the Contract. In this event, the date of termination shall be the date 7 days after the Notice is received by the other Party, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [*Contractor's Obligations After Termination].* After the date of termination, the Contractor shall, as soon as practicable, submit detailed supporting particulars (as reasonably required by the Engineer) of the value of the work done, which shall include: (a) the amounts payable for any work carried out for which a price is stated in the Contract; (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery. This Plant and Materials shall become the property of (and be at the risk of) the Employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal; (c) any other Cost or liability which in the circumstances was reasonably and necessarily incurred by the Contractor in the expectation of completing the Works;

	(d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's place of business in the Contractor's country (or to any other destination(s) at no greater cost); and (e) the Cost of repatriation of the Contractor's staff and labour employed wholly in connection with the Works at the date of termination. The Engineer shall then proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine the value of work done (and, for the purpose of Sub-Clause 3.7.3 [Time limits], the date the Engineer receives the particulars under this Sub-Clause shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3). The Engineer shall issue a Payment Certificate, under Sub-Clause 14.6 [Issue of IPC], for the amount so agreed or determined, without the need for the Contractor to submit a Statement.
18.6 Release from Performance under the Law	In addition to any other provision of this Clause, if any event arises outside the control of the Parties (including, but not limited to, an Exceptional Event) which: (a) makes it impossible or unlawful for either Party or both Parties to fulfil their contractual obligations; or (b) under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, and if the Parties are unable to agree on an amendment to the Contract that would permit the continued performance of the Contract, then after either Party gives a Notice to the other Party of such event: (i) the Parties shall be discharged from further performance, and without prejudice to the rights of either Party in respect of any previous breach of the Contract; and (ii) the amount payable by the Employer to the Contractor shall be the same as would have been payable under Sub-Clause 18.5 [*Optional Termination*], and such amount shall be certified by the Engineer, as if the Contract had been terminated under that Sub-Clause.
19. Insurance	
19.1 General Requirements	Without limiting either Party's obligations or responsibilities under the Contract, the Contractor shall effect and maintain all insurances for which the Contractor is responsible with insurers and in terms, both of which shall be subject to consent by the Employer. These

	terms shall be consistent with terms (if any) agreed by both Parties before the date of the Letter of Acceptance. Wherever the Employer is the insuring Party, each insurance shall be effected with insurers and in terms acceptable to the Contractor. These terms shall be consistent with terms (if any) agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause. The insurances required to be provided under this Clause are the minimum required by the Employer, and the Contractor may, at the Contractor's own cost, add such other insurances that the Contractor may deem prudent. Whenever required by the Employer, the Contractor shall produce the insurance policies which the Contractor is required to effect under the Contract. As each premium is paid, the Contractor shall promptly submit either a copy of each receipt of payment to the Employer (with a copy to the Engineer), or confirmation from the insurers that the premium has been paid. If the Contractor fails to effect and keep in force any of the insurances required under Sub-Clause 19.2 [*Insurances to be provided by Contractor*] then, and in any such case, the Employer may effect and keep in force such insurances and pay any premium as may be necessary and recover the same from the Contractor from time to time by deducting the amount(s) so paid from any moneys due to the Contractor or otherwise recover the same as a debt from the Contractor. The provisions of Clause 20 [*Employer's and Contractor's Claims*] shall not apply to this Sub-Clause. If either the Contractor or the Employer fails to comply with any condition of the insurances effected under the Contract, the Party so failing to comply shall indemnify the other Party against all direct losses and claims (including legal fees and expenses) arising from such failure. The Contractor shall also be responsible for the following: (a) notifying the insurers of any changes in the nature, extent or programme for the execution of the Works; and (b) the adequacy and validity of the insurances in accordance with the Contract at all times during the performance of the Contract. The permitted deductible limits allowed in any policy shall not exceed the amounts stated **in the PCC** (if not stated, the amounts agreed with the Employer).

	Where there is a shared liability the loss shall be borne by each Party in proportion to each Party's liability, provided the non-recovery from insurers has not been caused by a breach of this Clause by the Contractor or the Employer. In the event that non-recovery from insurers has been caused by such a breach, the defaulting Party shall bear the loss suffered.
19.2 Insurance to be provided by the Contractor	The Contractor shall be entitled to place all insurances relating to the Contract (including, but not limited to the insurance referred to in Clause 19) with insurers from any eligible source country. The Contractor shall provide the following insurances: 19.2.1 <u>The Works</u> The Contractor shall insure and keep insured in the joint names of the Contractor and the Employer from the Commencement Date until the date of the issue of the Taking-Over Certificate for the Works: (a) the Works and Contractor's Documents, together with Materials and Plant for incorporation in the Works, for their full replacement value. The insurance cover shall extend to include loss and damage of any part of the Works as a consequence of failure of elements defectively designed or constructed with defective material or workmanship; and (b) an additional amount of fifteen percent (15%) of such replacement value (or such other amount as may be specified **in the PCC**) to cover any additional costs incidental to the rectification of loss or damage, including professional fees and the cost of demolition and removal of debris. The insurance cover shall cover the Employer and the Contractor against all loss or damage from whatever cause arising until the issue of the Taking-Over Certificate for the Works. Thereafter, the insurance shall continue until the date of the issue of the Performance Certificate in respect of any incomplete work for loss or damage arising from any cause occurring before the date of the issue of the Taking-Over Certificate for the Works, and for any loss or damage occasioned by the Contractor in the course of any operation carried out by the Contractor for the purpose of complying with the Contractor's obligations under Clause 11 *[Defects after Taking Over]* and Clause 12 *[Tests after Completion]*. However, the insurance cover provided by the Contractor for the Works may exclude any of the following: (i) the cost of making good any part of the Works which is defective (including defective material and workmanship) or otherwise does not comply with the Contract, provided that it does not exclude the cost of making good any loss or damage

	to any other part of the Works attributable to such defect or non-compliance; (ii) indirect or consequential loss or damage including any reductions in the Contract Price for delay; (iii) wear and tear, shortages and pilferages; and (iv) unless otherwise stated **in the PCC**, the risks arising from Exceptional Events. 19.2.2 Goods The Contractor shall insure, in the joint names of the Contractor and the Employer, the Goods and other things brought to Site by the Contractor to the extent specified and/or amount stated **in the PCC** (if not specified or stated, for their full replacement value including delivery to Site). The Contractor shall maintain this insurance from the time the Goods are delivered to the Site until they are no longer required for the Works. 19.2.3 Liability for breach of professional duty To the extent that the Contractor is responsible for the design of the Permanent Works, and consistent with the indemnities specified in Clause 17 [*Care of the Works and Indemnities*]: (a) the Contractor shall effect and maintain professional indemnity insurance against liability arising out of any act, error or omission by the Contractor in carrying out the Contractor's design obligations in an amount not less than that stated **in the PCC** (if not stated, the amount agreed with the Employer); and (b) if stated **in the PCC**, such professional indemnity insurance shall also indemnify the Contractor against liability arising out of any act, error or omission by the Contractor in carrying out the Contractor's design obligations under the Contract that results in the Works (or Section or Part or major item of Plant, if any), when completed, not being fit for the purpose(s) for which they are intended under Sub-Clause 4.1 *[Contractor's General Obligations]*. The Contractor shall maintain this insurance for the period specified **in the PCC**. 19.2.4 Injury to persons and damage to property The Contractor shall insure, in the joint names of the Contractor and the Employer, against liabilities for death or injury to any person, or loss of or damage to any property (other than the Works) arising out of the performance of the Contract and occurring before the issue of the Performance Certificate, other than loss or damage caused by an

	Exceptional Event. The insurance policy shall include a cross liability clause such that the insurance shall apply to the Contractor and the Employer as separate insureds. Such insurance shall be effected before the Contractor begins any work on the Site and shall remain in force until the issue of the Performance Certificate and shall be for not less than the amount stated **in the PCC** (if not stated, the amount agreed with the Employer). 19.2.5 Injury to employees The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising out of the execution of the Works in respect of injury, sickness, disease or death of any person employed by the Contractor or any of the Contractor's other personnel. The Employer and the Engineer shall also be indemnified under the policy of insurance, against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer or of the Employer's Personnel. The insurance shall be maintained in full force and effect during the whole time that the Contractor's Personnel are assisting in the execution of the Works. For any person employed by a Subcontractor, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for the Subcontractor's compliance with this Sub-Clause. 19.2.6 Other insurances required by Laws and by local practice The Contractor shall provide all other insurances required by the Laws of the countries where (any part of) the Works are being carried out, at the Contractor's own cost. Other insurances required by local practice (if any) shall be detailed **in the PCC** and the Contractor shall provide such insurances in compliance with the details given, at the Contractor's own cost.
20. Employer's & Contractor's Claims, Disputes and Arbitration	
20.1 Contractor's Claims	If the Contractor considers himself to be entitled to any Extension of the Time (EOT) for Completion and/or any payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall submit a notice to the Engineer,

	describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance. If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply. The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance. The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Engineer. Without admitting the Employer's liability, the Engineer may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Engineer to inspect all these records, and shall (if instructed) submit copies to the Engineer. Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect: (a) this fully detailed claim shall be considered as interim; (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Engineer may reasonably require; and (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer. Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Contractor, the Engineer shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further

	particulars, but shall nevertheless give his response on the principles of the claim within such time. Each Payment Certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate. The Engineer shall agree with the Contractor or estimate: (i) the extension (if any) of the Time for Completion of Design-Build (before or after its expiry) in accordance with GCC Clause 9.3, and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract. The requirements of this Sub-Clause are in addition to those of any other Sub-Clauses which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause. In the event that the Contractor does not agree on any matter relating to a claim, it may refer the matter to the Adjudicator pursuant to Sub-Clause 20.3 *[Disputes and Arbitration]* hereof.
20.2 Employer's Claims	If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract the Employer or the Engineer, shall give Notice and particulars to the Contractor. The Notice shall be given as soon as practicable after the Employer becomes aware, or should have become aware, of the event or circumstances giving rise to the claim. The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount to which the Employer considers himself to be entitled in connection with the Contract. The Engineer shall then proceed in accordance with Sub-Clause 3.7 *[Agreement or Determination]* to agree or determine the amount (if any) which the Employer is entitled to be paid by the Contractor. If either Party is dissatisfied with the determination of the Engineer, either Party may, within 28 days after receiving the determination, issue to the Engineer and the other Party, a Notice of Dissatisfaction, and thereafter refer the matter to Adjudicator pursuant to Sub-Clause 20.3 *[Disputes and Arbitration]* hereof. If no Notice of Dissatisfaction is issued by either Party within the said 28 days, the

	determination of the Engineer shall be deemed to have been accepted by both Parties. The amount determined by the Adjudicator may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.
20.3 Disputes and Arbitration	**1. Appointment of the Adjudicator:** (i) 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 proposed in the Contractor's Bid, the Employer will request the Appointing Authority designated **in the PCC**, to appoint the Adjudicator within 14 days of receipt of such request. 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 A. (ii) 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. (iii) If the Contractor believes that a decision taken by the Engineer was either outside the authority given to the Engineer 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 decision of the Engineer. (iv) The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute. (v) The Adjudicator shall be paid daily 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. **2. Arbitration** The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and in the place **specified in the PCC.**

APPENDIX A

Appointment of Adjudicator
Letter of Appointment of Adjudicator

(Sample Draft)

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, …… (*Insert 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 the above referred 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 upto the end of defects notification 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 Employer and the Contractor may, if necessary, 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 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 end of defects notification period and remedying of defects under GCC Clause 1.1.3.7 and GCC 11.

The Adjudicator will be paid a fee of Rs. _____ (Rupees _____only) per day of effective hearing/visit at the worksite. The actual expenses for boarding, lodging, travel and other incidental expenses 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 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.

Procedure for resolution of disputes by the Adjudicator is described in the subject Contract between the Employer and the Contractor vide GCC Sub-Clause 20.3. 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 standards 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 AJUDICATIOR'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 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.

Recommendations

The Adjudicator's specific recommendations 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: ……...

APPENDIX B
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;20 (ii) to be a nominated21 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 inspect[22] 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.

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20 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.

21 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.

22 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 C

Environmental and Social (ES) Metrics for Progress Reports

Metrics for regular reporting:

a. environmental incidents or non-compliances with contract requirements, including contamination, pollution or damage to ground or water supplies;

b. health and safety incidents, accidents, injuries that require treatment and all fatalities;

c. interactions with regulators: identify agency, dates, subjects, outcomes (report the negative if none);

d. status of all permits and agreements:

i. work permits: number required, number received, actions taken for those not received;

ii. status of permits and consents:

- list areas/facilities with permits required (quarries, asphalt & batch plants), dates of application, dates issued (actions to follow up if not issued), dates submitted to resident engineer (or equivalent), status of area (waiting for permits, working, abandoned without reclamation, decommissioning plan being implemented, etc.);
- list areas with landowner agreements required (borrow and spoil areas, camp sites), dates of agreements, dates submitted to resident engineer (or equivalent);
- identify major activities undertaken in each area in the reporting period and highlights of environmental and social protection (land clearing, boundary marking, topsoil salvage, traffic management, decommissioning planning, decommissioning implementation);
- for quarries: status of relocation and compensation (completed, or details of activities and current status in the reporting period).

e. health and safety supervision:

i. safety officer: number days worked, number of full inspections & partial inspections, reports to construction/project management;

ii. number of workers, work hours, metric of PPE use (percentage of workers with full personal protection equipment (PPE), partial, etc.), worker violations observed (by type of violation, PPE or otherwise), warnings given, repeat warnings given, follow-up actions taken (if any);

f. worker accommodations:

i. number of labours housed in accommodations, number of Local Workers (Workers from any parts of Assam), Migrant Workers (Workers from other States of India) and Expats (Workers from outside India.

ii. date of last inspection, and highlights of inspection including status of accommodations' compliance with national and local law and good practice, including sanitation, space, etc.;

iii. actions taken to recommend/require improved conditions, or to improve conditions.

g. Health services: provider of health services, information and/or training, location of clinic, number of non-safety disease or illness treatments and diagnoses (no names to be provided);

h. gender (for expats and locals separately): number of female workers, percentage of workforce, gender issues raised and dealt with (cross-reference grievances or other sections as needed);

i. training:

i. number of new workers, number receiving induction training, dates of induction training;

ii. number and dates of toolbox talks, number of workers receiving Occupational Health and Safety (OHS), environmental and social training;

iii. number and dates of communicable diseases (including STDs) sensitization and/or training, no. workers receiving training (in the reporting period and in the past); same questions for gender sensitization, flag person training.

iv. number and date of SEA and SH prevention sensitization and/or training events, including number of workers receiving training on Code of Conduct for Contractor's Personnel (in the reporting period and in the past), etc.

j. environmental and social supervision:

i. environmentalist: days worked, areas inspected and numbers of inspections of each (road section, work camp, accommodations, quarries, borrow areas, spoil areas, swamps, forest crossings, etc.), highlights of activities/findings (including violations of environmental and/or social best practices, actions taken), reports to environmental and/or social specialist/construction/site management;

ii. sociologist: days worked, number of partial and full site inspections (by area: road section, work camp, accommodations, quarries, borrow areas, spoil areas, clinic, HIV/AIDS center, community centers, etc.), highlights of activities (including

violations of environmental and/or social requirements observed, actions taken), reports to environmental and/or social specialist/construction/site management; and

iii. community liaison person(s): days worked (hours community center open), number of people met, highlights of activities (issues raised, etc.), reports to environmental and/or social specialist /construction/site management.

k. *Grievances*: list new grievances (e.g. number of allegations of SEA and SH) received in the reporting period and number of unresolved past grievances by date received, complainant's age and sex, how received, to whom referred to for action, resolution and date (if completed), data resolution reported to complainant, any required follow-up (Cross-reference other sections as needed):

i. Worker grievances;

ii. Community grievances

l. *Traffic, road safety and vehicles/equipment:*

i. traffic and road safety incidents and accidents involving project vehicles & equipment: provide date, location, damage, cause, follow-up;

ii. traffic and road safety incidents and accidents involving non-project vehicles or property (also reported under immediate metrics): provide date, location, damage, cause, follow-up;

iii. overall condition of vehicles/equipment (subjective judgment by environmentalist); non-routine repairs and maintenance needed to improve safety and/or environmental performance (to control smoke, etc.).

m. *Environmental mitigations and issues (what has been done):*

i. dust: number of working bowsers, number of waterings/day, number of complaints, warnings given by environmentalist, actions taken to resolve; highlights of quarry dust control (covers, sprays, operational status); % of rock/ spoil lorries with covers, actions taken for uncovered vehicles;

ii. erosion control: controls implemented by location, status of water crossings, environmentalist inspections and results, actions taken to resolve issues, emergency repairs needed to control erosion/sedimentation;

iii. quarries, borrow areas, spoil areas, asphalt plants, batch plants: identify major activities undertaken in the reporting period at each, and highlights of environmental and social protection: land clearing, boundary marking, topsoil salvage, traffic management, decommissioning planning, decommissioning implementation;

iv. blasting: number of blasts (and locations), status of implementation of blasting plan (including notices, evacuations, etc.), incidents of off-site damage or complaints (cross-reference other sections as needed);

v. spill clean-ups, if any: material spilled, location, amount, actions taken, material disposal (report all spills that result in water or soil contamination;

vi. waste management: types and quantities generated and managed, including amount taken offsite (and by whom) or reused/recycled/disposed on-site;

vii. details of tree plantings and other mitigations required undertaken in the reporting period;

viii. details of water and swamp protection mitigations required undertaken in the reporting period.

n. compliance:

i. compliance status for conditions of all relevant consents/permits, for the Work, including quarries, etc.): statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance;

ii. compliance status of C-ESMP/ESIP requirements: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance

iii. compliance status of SEA and SH prevention and response action plan: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance

iv. compliance status of Health and Safety Management Plan re: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance

v. other unresolved issues from previous reporting periods related to environmental and social: continued violations, continued failure of equipment, continued lack of vehicle covers, spills not dealt with, continued compensation or blasting issues, etc. Cross-reference other sections as needed.

vi. Drinking Water: In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking. Where drinking water is obtained from an Intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored. Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such

wells shall be entirely closed in and be provided with a trap door which shall be dust and waterproof. A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

vii. Sanitation: Latrines shall be provided in every work place on the following scale namely (a) Where female are employed, there shall be at least one latrine for every 25 females (b) Where males are employed, there shall be at least one latrine for every 25 males. Provided that, where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females as the case may be up to the first 100, and one for every 50 thereafter. Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings. Construction of latrines: The inside walls shall be constructed of masonry or some suitable heat-resisting nonabsorbent materials and shall be cement washed inside and outside at least once a year, Latrines shall not be of a standard lower than borehole system (i) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers “For Men only” or “For Women Only” as the case may be The notice shall also bear the figure of a man or of a woman, as the case may be. There shall be at least one urinal for male workers up to 50 and one for female workers up to fifty employedat a time, provided that where the number of male or female workmen, as the case may be exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females up to the first 500 and one for every 100 or part thereafter. The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times. Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities. Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals. Disposal of excreta: - Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn to manure). The contractor shall at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in respect of the contractor’s workmen or employees on the site. The contractor

shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority for execution of such on his behalf.

viii. Vector Control: Anti-Malarial Precautions: The contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineering- Charge including the filling up of any borrow pits which may have been dug by him.

ix. Epidemic Situation: In such situation contractor shall deploy special labour to keep the site, worker's hutments, rest rooms etc. neat and clean including sanitization. Contractor shall provide all epidemic related arrangements (at his cost following the guidelines issued by State/ Central Government in this regard.

APPENDIX D
Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment (SH) Performance Declaration for Subcontractors

[The following table shall be filled in by each subcontractor proposed by the Contractor, that was not named in the Contract]

Subcontractor's Name: *[insert full name]*
Date: *[insert day, month, year]*
Contract reference *[insert contract reference]*
Page *[insert page number]* of *[insert total number]* pages

SEA and/or SH Declaration
We: ☐ (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. ☐ (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. ☐ (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. An arbitral award on the disqualification case has been made in our favor. ☐ (d) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have subsequently demonstrated that we have adequate capacity and commitment to comply with SEA /SH obligations. ☐ (e) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have attached specific evidence demonstrating that we have adequate capacity and commitment to comply with SEA and SH obligations.
[*If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]*
[If (d) or (e) above are applicable, provide the following information:]
Period of disqualification: From: _____ To: _____
If previously provided on another Bank financed works contract, details of evidence that demonstrated adequate capacity and commitment to comply with SEA/SH obligations (**as per (d) above)** Name of Employer: _____ Name of Project: _____ Contract description: _____ Brief summary of evidence provided: _____

_____ Contact Information: (Tel, email, name of contact person): _____ _____
As an alternative to the evidence under (d), other evidence demonstrating adequate capacity and commitment to comply with SEA/SH obligations (**as per (e) above))** *[attach details as appropriate].* _____ _____

Name of the Subcontractor_____

Name of the person duly authorized to sign on behalf of the Subcontractor_____

Title of the person signing on behalf of the Subcontractor_____

Signature of the person named above_____

Date signed _____ day of _____, _____

Countersignature of authorized representative of the Contractor:

Signature: _____

SECTION IX - PARTICULAR CONDITIONS OF CONTRACT (PCC)

The following particular conditions of Contract shall supplement the GCC. Whenever there is a conflict, the provisions herein shall prevail over those in the GCC. Clause numbers in the PCC correspond to those in the GCC.

Section IX - Particular Conditions of Contract

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A. General Provisions	
GCC 1.1.5	**Base Date** means the last date for submission of bids
GCC 1.1.21	The percentage profit to be added to the Cost where the Contract allows for Cost Plus Profit is: 2 %
GCC 1.1.26	The Defects Notification Period is One Year
GCC 1.1.29	The Employer is The Project Director Assam Health Infrastructure Development & Management Society, Dept. of Medical Education & Research, Govt. of Assam 4th floor, Nayantara Supermarket Complex, Six Mile, Khanapara, Guwahati, Assam, India-781006
GCC 1.1.35 and GCC 3.1	There will be 2 tier Hierarchy of Qualified Engineers assigning different roles and responsibilities Authority Engineer – Mott Mac Donald Pvt Ltd Authority Supervising Engineer – PwD, Assam
GCC 4.3	The Contractor's Representative is …….. [*insert the name of the Contractor's Representative agreed by the Employer prior to Contract signature*]
GCC1.1.76	*Refer to Employer's requirement , scope of work and specification mentioned in Section VII.of RFB document*
GCC1.1.77	*The site is Regional Nursing College, Kamrup Metro, Assam*
GCC 1.1.48 & 6.9	Key Personnel are the Contractor's personnel *, agreed by the Employer prior to Contract signature*
GCC1.1.86	The Time for Completion of entire construction is 3 years
GCC 1.1.91	The financing institution is: 'World Bank (The Bank)'

GCC 1.1.92	The Borrower is: Government of India. The sub-Borrower is Government of Assam
GCC 1.1.95	Milestones are mentioned in Table No. 1.1 **Title - PROJECT MILESTONE/COMPLETION SCHEDULE/ PENALTIES**
GCC 1.1.42	All payments under the contract will be in Indian Rupees only.
GCC 1.1.52	Local Currency is Indian Rupees.
GCC 1.3(a)(ii) and GCC 1.3(d)	The Electronic transmission systems is Email:pmu.ahidms@gmail.com
GCC 1.4	The Law that applies to the Contract are the Laws of Union of India.
GCC 1.4	The language of the Contract is *English.* The language for communications is *English*/ Assamese *as local language for oral communication with workers*
GCC 1.5 (j)	The following documents also form part of the Contract: (i) the ES Management Strategies and Implementation Plans; and (ii) **Code of Conduct for Contractor's Personnel (ES).**
GCC 1.6	Replace the words '35 days' with '28 days' in the first line.
GCC 1.15	Total liability of the Contractor to the Employer under or in connection with the Contract shall not exceed - *1.10 times the Accepted Contract Amount*
GCC 2.1	The Employer shall give the Contractor access to the Site no later than 10 days from the Commencement Date,
GCC 2.4	Not Applicable
GCC 3.2(a)(ii)	The Engineer shall obtain the written consent of the Employer for: variations resulting in an increase of the Accepted Contract Amount in excess of 1% of the contract price in each case at a time and all variations in excess of gross total value of 10% of the contract Price in aggregate shall require approval of the Employer.
GCC 4.1	Cyber Security – Contractor's obligation is not applicable

<table>
<tr><td>GCC 4.2</td><td>The Performance Security and ES Performance Security will be in the form of demand guarantee(s) from Nationalized or Scheduled bank(s) in India, in the Performance Security and ES Performance Security Forms included in Section X, Contract Forms.

The Performance Security amount is 5% - Five percent of the Accepted Contract Amount ;

and the Environmental and Social (ES) Performance Security amount is 1%- One percent of the Accepted Contract Amount ..

The performance security of a Joint Venture shall be in the name of the Joint Venture specifying the names of all members.</td></tr>
<tr><td>GCC 4.4</td><td>Subcontracting including specialized sub contract should not exceed 20% of the accepted contract value.

Subcontracting whether through specialized subcontractor or other subcontractor may be allowed for Design , Drawing , Electrical, HVAC, Water Proofing of Roof, Painting , STP , Lifts work , Aluminium / glass work, structural glazing work, Wpc doors / flush doors & frames, premium interior & exterior finishes, signage work, playground development works, horticulture and landscaping work</td></tr>
<tr><td>GCC 4.20</td><td>Number of additional paper copies of progress reports required –

6 number of copies

Progress report shall not include status of compliance to cyber security risk management, and any forseeable cyber security risk and mitigation</td></tr>
<tr><td>GCC 4.26</td><td>The liquidated damages for not achieving the milestone within the stipulated time shall not exceed 5% (Five percent) of the Contract Price. If the damages exceed 5% (Five percent) of the Contract Price, the Contractor shall be deemed to be in default of this agreement having no cure and the Authority shall be entitled to terminate this Agreement by issuing a Termination Notice . The details of penalty is as mentioned below .

<table>
<tr><th>Sl. No.</th><th>Description of Mile stone</th><th>Time allowed in months (From date of start)</th><th>Penalty Amount to be deducted in case of Non-achievement of mile stone*</th></tr>
</table>
</td></tr>
</table>

	1.	Carry out Topographic survey of the entire land and thorough Geotechnical investigation surveys including report preparation as per the specifications.	3 Months	0.20%
	2.	Planning, Design & Engineering Works-architectural planning, designing of all structural design drawings of Hostel buildings, Academic blocks, Director bungalow, Substation etc. all complete to start the construction activities. Establishment of Site Office.	6 Months	0.30%
	For Construction work:			
	3.	25% of Total work in Financial Terms*	12 Months	0.50%
	4.	50% of Total work in Financial Terms	24 Months	0.75%
	5.	75% of Total work in Financial Terms	30 Months	0.75%
	6.	90% of Total work in Financial Terms	34 Months	1.25%
	7.	All civil, electrical & mechanical and horticulture work completed in all aspects in Residential & non-residential buildings with services, clearances from local body/ completion certificates/ GRIHA 3 Star Certificate (V.2019 or latest) etc.	36 Months	1.25%
	* Financial terms refer to submission of bill by the contractor to the employer. If the contractor achieves a subsequent milestone after failing to meet earlier milestone(s), the penalty imposed for the earlier milestone(s) shall be waived, and any penalty amount already deducted shall be refunded.			
GCC 5.1	Period for notifying unforeseeable errors, faults and defects in the Employer's Requirements is ____10___days after the commencement date. [*insert number of days*]			
GCC 6.5	The normal working hours are as per Assam State Labor department rules			

GCC 7.8	Royalties, if any shall be paid by the Contractor and should be included in the Bid price.
GCC 8.1	Sub section 'd' and 'e' is deleted
GCC 8.3	Number of additional paper copies of program to be submitted 5 copies or as intimated by the department subsequently
GCC 8.8 & 15.2 (c)	As mentioned in PCC GCC 4.26
GCC 13.2	Value Engineering provisions shall not apply to this procurement.
GCC 13.3.1(a)	*The schedule of rates and price applicable shall be latest CPWD SOR*
GCC 13.4(b)(ii)	No Provisional sum is stipulated under the contract
GCC 13.7	Price Adjustment: The contract is not subject to price adjustment in accordance with G.C.C. Clause 13.7
GCC 14.1	The Engineer shall agree or determine the value of those parts of the Works which are to be measured, in accordance with Sub-Clause 3.7 [*Agreement or Determination*]. Measurement shall be made of the net actual quantities of those parts notwithstanding local practice. Whenever the Engineer requires any part of the Works to be measured on Site. It shall give a Notice to the Contractor of not less than 7 days, of the part to be measured on the date on which and place on Site at which the measurement shall be made. Unless otherwise agreed with the Contarctor, the measuremnt on Site shall be made on this date and the Contractor's Representaive shall: (a) either attend or send another qualified representative to assist the Engineer and to endeavour to reach agreement of the measurement, and (b) supply any particulars requested by the Engineer. If the Contractor fails to attend or send a representative at the time and place stated in the Engineer's Notice (or otherwise agreed with the Contractor), the measurement made by (or on behalf of) the Engineer shall be deemed to have been made in the Contractor's presence and the Contractor shall be deemed to have accepted the measuremnt as accurate. Any part of the Permanent Works that is to be measured from records shall be identified in the Employer's Requirements and, except as otherwise stated in the Contarct, such records shall be prepared by the Engineer. Whenever the Engineer has prepared the records of such a part, it shall give a Notice to the Contarctor of not less than 7 days, stating the date on which and place at which the Contractor's Representative shall attend to examine and agree the

	records of the Engineer. If the Contractor fails to attend or send a representaive at the time and place stated in the Engineer's Notice (or otherwise agreed with the Contarctor), the Contarctor shall be deemed to have accepted the records as accurate. If, for any part of the Works, the Contractor attends the measuremnt on Site or examines the measurement records (as the case may be) but the Engineer and the Contractor are unable to agree the measurement, then the Contarctor shall give a Notice to the Engineer setting out the reasons why the Contractor considers the measuremnt on Site or records are inaccurate. If the Contractor does not give such a Notice to the Engineer within 14 days after attending the measuremnt on Site or examining the measurement records, the Contractor shall be deemed to have accepted the measurement as accurate. After receiving a Contractor's Notice under this Sub-Clause, unless at that time such measuremnt is already subject to the third paragraph of Sub-Clause 13.3.1 [*Variation by Instruction*], the Engineer shall: (a) proceed under Sub-Clause 3.7 [Agreeement or Determination] to agree or determine the measurement; and (b) For the purpose of Sub-Clause 3.7.3 [*Time Limits*], the date on which the Engineer receives the Contractor's Notice shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.3. Until such time as the measurement is agreed or determined, the Engineer shall assess a provisional measurement for the purposes of Interim Payment Certificates.
GCC 14.2	The Authority shall make an interest-free advance payment (the **"Advance Payment"**), equal in amount to 10 (ten) percent of the Contract Price, for mobilisation expenses and for acquisition of equipment. The Advance Payment shall be made in three installments. The first installment shall be an amount equal to 2% (two percent) of the Contract Price, to be released at any time after the Site Handover & issue of Notice to proceed with the work. The second installment shall be equal to 3% (three percent) of the Contract Price to be released after setting up of site office by the contractor The third installment shall be equal to 5% (five percent) of the Contract Price to be released after mobilization of Key-personnel & equipment stipulated in the RFB. All the mobilization advances will be released on submission of unconditional advance bank guarantee of equal amount to be valid for two years & forty five days from the date of issuance.

	Repayment of advance payment for mobilization and equipment: The advance shall be repaid with percentage deductions from the interim payments certified by the Project Manager under the Contract. Deductions shall commence when Interim Payment reach 5% and shall be made at a rate of 10 percent of the amounts of all Interim Payment Certificates until such time as the advance has been repaid, always provided that the advance shall be completely repaid no later than 730 days from the respective date of Advance Payment.
GCC 14.2.3	(a) Minimum amount of certified interim payments to commence repayment of the Advance Payment, as a percentage of the Accepted Contract Amount payable - 5 % of contract amount. (b) Minimum 10% of the advance will be deducted from each bill/ payment, being made to the contractor towards the work done during the construction period .
GCC 14.3	After the end of each month
GCC 14.3 (iii)	The proportion of payments retained is: 5% Limit of Retention money is: *5 % of the Accepted Contract Amount*
GCC 14.5(b)(i)	Deleted
GCC 14.5(c)(i)	Deleted
GCC 14.6.2	Payment schedule provided specially in Schedule of Payment
GCC 14.8	Financing charges for delayed payment are: 8 % per annum
GCC 14.9	Retention Money: Substitution of retention money should be in installments of not less than 1% of the accepted contract amount.
GCC 14.15	All payments shall be made in Indian Rupees only.
GCC 17.2(d)	Forces of nature, the risks of which are allocated to the Contractor: Natural calamities beyond the control of Contractor
GCC 17.6	Maximum total liability of the Contractor to the Employer shall not exceed: _Total Contract value
GCC 19.1	The minimum insurance amounts and deductibles shall be:

SN.	Description	Minimum cover for Insurance	Maximum deductible for Insurance
(i)	Works and Plant and Materials	Equal to 25% of Contract Amount	0.4% of the contract amount
(ii)	Loss or damage to Equipment	10% of the Contract Amount	0.4% of the contract amount
(iii)	Other Property (except the Works, Plant, Materials, and Equipment)	25% of the Contract Amount	0.4% of the contract amount
(iv)	Personal injury or death insurance: a) for other people;	As per workmen's compensation Act 1923 and other Acts in force	As per workmen's compensation Act 1923 and other Acts in force
	b) for Contractor's Employees	In accordance with the statutory requirements applicable in India	

The compliance of these Insurance provisions is mandatory for the Contractor. In case the Contractor does not provide these Insurances as per above provisions, the Employer shall deduct the amount of premium from the Contractor's payments as per above and shall ensure the compliances. In such case an additional penalty of INR 1,00,000/- may also be imposed to the Contractor for non-compliance of the Insurance provisions and/or delay in renewal, If not done before validity of the insurance for the required period expires, in each occasion except in the case of insurance for T&P and machinery, which will be penalized as per above table and any damage/incident to the work/workmen, that occur during the uninsured period, will be the sole responsibility of the contractor

GCC 19.2.1(b)	Additional amount to be insured (as a percentage of the replacement value, if less or more than 15%) - 25 *% of contract value* *[Insurance for Work, Plant, Materials and Contractor's Documents, with full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit**s etc.]***
GCC 19.2.1(iv)	List of risks arising from Exceptional Events which shall not be excluded from the insurance cover for the Works: - Force Majure events
GCC 19.2.2	Extent of insurance required for Goods and /or Amount of insurance required for Goods - 10% of the Contract Amount
GCC 19.2.3(a)	Amount of insurance required for liability for breach of professional duty: Contract amount for Design part
GCC 19.2.3(b)	Insurance required against liability for fitness for purpose: Yes
GCC 19.2.3	Period of insurance required for liability for breach of professional duty: Till Defect Liability Period
GCC 19.2.4	Amount of insurance required for injury to persons and damage to property: As per workmen's compensation Act 1923 and other Acts in force
GCC 19.2.6	Other insurances required by Laws and by local practice (give details): In accordance with the statutory requirements applicable in India
GCC 20.3(1)(i)	Name of the agreed Adjudicator ……... *(insert name before signing contract)*. Appointing Authority for the Adjudicator: *[insert name of Authority]*. *[Note: if ITB 47.1 provides for an Adjudicator from list provided by an Institution, insert the name of the same institution as the appointing authority]*
GCC 20.3(1)(v)	Daily rate and types of reimbursable expenses to be paid to the Adjudicator: daily fees - Rs 10,000/- per day, and reimbursable expenses – boarding/ lodging/ travel etc.
GCC 20.3(2)	**Arbitration** 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 (b) f 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, 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/, 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 Guwahati, 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.

	(g) The Arbitrator should give final award within180 days of starting of the proceedings. 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.

Table: Summary of Sections

Table 1.1

PROJECT MILESTONE/COMPLETION SCHEDULE/ PENALTIES

Sl. No.	Description of Mile stone	Time allowed in months (From date of start)	Penalty Amount to be deducted in case of Non-achievement of mile stone*
1.	Carry out Topographic survey of the entire land and thorough Geotechnical investigation surveys including report preparation as per the specifications. Complete site grading works including chemical (Non explosive) rock blasting and earth cutting as required at the site for construction of permanent structure. Necessary clearance to be obtained from the respective agencies. The contractor shall submit comprehensive Geotechnical Investigation Report and ensure that the final report is reviewed and vetted Authority Engineer as approved by the EIC.	3 Months	0.20%
2.	Planning, Design & Engineering Works-architectural planning, designing of all structural design drawings of Hostel buildings, Academic blocks, Director bungalow, Substation etc. all complete to start the construction activities. Establishment of Site Office. Design drawings of other works shall be done as per the requirement of the project.	6 Months	0.30%
(i) For Construction work:			
3.	25% of Total work in Financial Terms**	12 Months	0.50%
4.	50% of Total work in Financial Terms	24 Months	0.75%
5.	75% of Total work in Financial Terms	30 Months	0.75%
6.	90% of Total work in Financial Terms	34 Months	1.25%
7.	All civil, electrical & mechanical and horticulture work completed in all aspects in Residential & non-residential buildings with services, clearances from local body/ completion certificates/ GRIHA 3 Star Certificate (V.2019 or latest) etc. Required to declare buildings and campus authorized for occupation. All Tests for commissioning of engineering services are completed successfully and the Building is "Fit for Use".	36 Months	1.25%

* Maximum Penalty amounts deducted in case of Non Compliance/ failure to achieve the milestone are total of 5% of the Contract Price and are cumulative in nature.

** Financial terms refer to submission of bill by the contractor to the employer.

If the contractor achieves a subsequent milestone after failing to meet earlier milestone(s), the penalty imposed for the earlier milestone(s) shall be waived, and any penalty amount already deducted shall be refunded.

Appendices

Appendix 1
Salient Features of Labour & Environment Protection Laws[23]

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

(a) Employees Compensation Act 1923: The Act provides for compensation in case of injury, disease or death arising out of and during the course of employment.

(b) Payment of Gratuity Act 1972: gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 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) Employees P.F. and Miscellaneous Provision Act 1952 (*since amended*): 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) Maternity Benefit Act 1961: The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.

(e) Sexual Harassment of Women at the Workplace (Prevention, Prohibition and Redressal) Act, 2013: 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) Contract Labour (Regulation & Abolition) Act 1970: The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labour.

[23] 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.

(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 mattes 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.

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 the contract award.

SECTION X - CONTRACT FORMS

Table of Forms

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Letter of Acceptance

[letterhead paper of the Employer]

[The Letter of Acceptance shall be the basis for formation of the Contract as described in ITB Clause 47. This Standard Form of Letter of Acceptance shall be filled in and sent to the successful Bidder only after evaluation of bids has been completed, subject to any review by the World Bank required under the Loan Agreement.]

. . . . . ***[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]***, as corrected and modified[24] 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 40, and ES Performance Security ***[Delete ES Performance Security if it is not required under the contract]*** in the form detailed in ITB Clause 46 for amounts[25] 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 46.2 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 and the ES Performance Security Form ***[Delete reference to the ES Performance Security Form if it is not required under the contract]***, included in Section X - Contract Forms, of the bidding document.

[Choose one of the following statements:]

We accept that _____ ***[insert the name of Adjudicator proposed by the Bidder]*** be appointed as the Adjudicator[26].

[or]

We do not accept that _____***[insert the name of the Adjudicator proposed by the Bidder]*** be appointed as the Adjudicator, and by sending a copy of this Letter

[24] Delete "corrected and" or "and modified" if not applicable. See Notes on Standard Form of Agreement, next page.

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

[26] To be used only if the Contractor disagrees in the Bid with the Adjudicator proposed by the Employer in the Instructions to Bidders, and has accordingly offered another candidate.

of Acceptance to _____***[insert name of the Appointing Authority]***, the Appointing Authority, we are hereby requesting such Authority to appoint the Adjudicator in accordance with ITB 47.1 and GCC 20.3[27].

Authorized Signature: .....

Name and Title of Signatory: .....

Name of Agency: .....

Attachment: Contract Agreement

[27] To be used only if the Contractor disagrees in the Bid with the Adjudicator proposed by the Employer in the ITB, has accordingly offered another candidate, and the Employer does not accept the counterproposal.

Contract Agreement

THIS AGREEMENT made the _____ day of _____, _____, between _____of _____ (hereinafter "the Employer"), of the one part, and _____ of _____ (hereinafter "the Contractor"), of the other part:

WHEREAS the Employer desires that the Works known as _____ _____ 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.

   (a) the Letter of Acceptance

   (b) the Letter of Bid

   (c) the addenda Nos _____(if any)

   (d) the Particular Conditions of Contract

   (e) the General Conditions of Contract

   (f) the Employer's Requirements

   (g) the completed Schedules, and

   (h) the Contractor's Bid and any other documents forming part of the Contract including, but not limited to:

      i. Code of Conduct for Contractor's Personnel (ES).

   (i) Joint Venture Agreement [for JVs only]**.**

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:	Signed by: .....
for and on behalf of the Employer	for and on behalf the Contractor
in the presence of:	in the presence of: .....
Witness, Name, Signature, Address, Date	Witness, Name, Signature, Address, Date

Appendix: Schedule of Payments

[If payments are to be made in instalments pursuant to GCC Sub-Clause 14.4 then the Employer shall include a table of instalments here. If not already stated in the PCC, this section may include:

- *Table of Instalments*
- *Plant and Materials- If GCC Sub-Clause 14.5 applies:*
  -14.5(b)(i)-Plant and Materials for payment Free on Board _____ [Include list, or state N/A if this is already taken into consideration in the Table of Instalments].
  -14.5(c)(i)-Plant and Materials for payment when delivered to the Site _____ [Include list, or state N/A if this is already taken into consideration in the Table of Instalments]
  - Advance is payable only for non-perishable materials. No advance for sand, cement etc.
- *Procedures for certification of amounts due*
- *Documentation to be provided*
- *Schedule of Adjustment Data*
- *...]*

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 46.1, insurance policy as per GCC 19, 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)

Performance Security – Demand 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 Contractor[28]]* (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 guarantee[29]]* _____ *[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.

[28] In the case of a JV, insert the name of the Joint Venture

[29] 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 hereby waive the necessity of your demanding the said debt from the Applicant before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed 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 …… [30], 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.

[30] Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. 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 – 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 Contractor[31]]* (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 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 guarantee[32]]* _____ *[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.

[31] *In the case of a JV, insert the name of the Joint Venture*

[32] *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 hereby waive the necessity of your demanding the said debt from the Applicant before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed 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 …… [33], 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.

[33] Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. 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

Demand Guarantee

[Guarantor letterhead or SWIFT identifier code]

Advance Payment Guarantee No……. *[insert guarantee reference number]*
Date……. *[insert date of issue of the guarantee]*

To: _____ *[name of Employer]*

_____ *[address of Employer]*

_____ *[name of Contract]*

Gentlemen:

In accordance with the provisions of the Conditions of Contract, Subclause 14.2 ("Advance Payment") of the above-mentioned Contract, _____ *[name and address of Contractor[34]]* (hereinafter called "the Applicant") shall deposit with _____ *[name of Employer]* a bank guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of _____ *[amount of guarantee[35]]* _____ *[in words]*.

We, the _____ *[bank or financial institution]*, as instructed by the Applicant, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to _____ *[name of Employer]* on his first demand without whatsoever right of objection on our part and without his first claim to the Applicant, in the amount not exceeding _____ [amount of guarantee] _____ *[in words]*.

We further agree that no change or addition to or other modification of the terms of the Contract or of Works to be performed thereunder or of any of the Contract documents which may be made between _____ *[name of Employer]* and the Applicant, shall in any

[34] In the case of a JV, insert the name of the Joint Venture
[35] An amount shall be inserted by the bank representing the amount of the Advance Payment, and denominated in Indian Rupees.

way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until _____ *[name of Employer]* receives full repayment of the same amount from the Applicant. Consequently any demand for payment under this guarantee must be received by us at this office on or before that date.

Yours truly,

Signature and seal: _____

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.

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 contractor[36]]* (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 words[37]]* 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.

[36] *In the case of a JV, insert the name of the Joint Venture*

[37] *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.*

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]*.

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 Engineer. 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.