
GOVERNMENT OF UTTARAKHAND

Uttarakhand Green Resilient & Inclusive Development Project
 Project Management Unit, UGRIDP (World Bank),
 DDPM Tower, 4th Floor, Ajabpur Khurd,
 Haridwar Bypass Road, Dehradun – 248171, Uttarakhand

NATIONAL OPEN COMPETITIVE PROCUREMENT

(Two-Envelope Bidding Process with e-Procurement)

***(FOR ITEM RATE/ADMEASUREMENT CONTRACTS IN CIVIL
 WORKS)***

| | |
|---|---|
| NAME OF WORK | : Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi- Lambgaon- Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri |
| PERIOD OF SALE OF BIDDING DOCUMENT | : FROM 22/04/2023 To 26/05/2023 |
| TIME AND DATE OF PRE-BID MEETING ¹ | : DATE 04/05/2023 TIME 1100 HOURS |
| LAST DATE AND TIME FOR RECEIPT OF BIDS | : DATE 26/05/2023 TIME 1130 HOURS |
| * TIME AND DATE OF OPENING OF BIDS – Technical Part | : DATE 26/05/2023 TIME 1500 HOURS |
| PLACE OF OPENING OF BIDS | : Office of UGRIDP, 4 th Floor, DDPM Tower, Haridwar Bypass, Dehradun |
| OFFICER INVITING BIDS | : Program Director, UGRIDP |

REQUEST FOR BIDS

(RFB)

GOVERNMENT OF UTTARAKHAND

Uttarakhand Green Resilient & Inclusive Development Project
Project Management Unit, UGRIDP (World Bank),
DDPM Tower, 4th Floor, Ajabpur Khurd,
Haridwar Bypass Road, Dehradun – 248171, Uttarakhand

REQUEST FOR BIDS (RFB) E-Procurement Notice (Two-Envelope Bidding Process with e-Procurement)

NATIONAL OPEN COMPETITIVE PROCUREMENT

Name of Project: Uttarakhand Green Resilient & Inclusive Development Project (UGRIDP)

Contract Title: Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambdaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri

Project ID: P179749

RFB Reference No.: 01/BR/RFB/UGRIDP/2023

Date: 22 April 2023

1. The Government of India has applied for financing from the World Bank toward the cost of the Uttarakhand Green Resilient & Inclusive Development Project, and intends to apply part of the proceeds toward payments under the contract for construction of works as detailed below:

Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambdaon- Ghansali- Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri

2. Bidding will be conducted through national open competitive procurement using a Request for Bids (RFB) as specified in the World Bank's "Procurement Regulations for IPF Borrowers, Fourth Edition November 2020. ("Procurement Regulations"), and is open to all Bidders as defined in the Procurement Regulations.
3. Bidders from India should, however, be registered with the Government of Uttarakhand 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 **Program Director, Uttarakhand Green Resilient & Inclusive Development Project (UGRIDP)** now invites online Bids from eligible Bidders for the construction

of works detailed below in the table. Interested bidders may obtain further information and inspect the bidding document at the address given below during office hours. Bidders are advised to note the clauses on eligibility (Section I Clause 4) and minimum qualification criteria (Section III – Evaluation and Qualification Criteria), to qualify for the award of the contract. In addition, please refer to paragraphs 3.14 and 3.15 of the “Procurement Regulations” setting forth the World Bank’s policy on conflict of interest.

5. The bidding document is available online on <http://uktenders.gov.in> for a nonrefundable price as indicated below in the form of a Demand Draft of any Scheduled bank in favour of **Program Director, Uttarakhand Disaster Recovery Project-Additional Financing, Dehradun payable at Dehradun** (Demand draft is to be submitted subsequently as per the procedure described in paragraph 8 below). Bidders will be required to register on the website, which is free of cost. 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 (DSC) from one of the authorized Certifying Authorities authorised by Government of India for issuing DSC. Aspiring bidders who have not obtained the user ID and password for participating in e-procurement in this Project, may obtain the same from the website: <http://uktenders.gov.in>. A non-refundable fee of **Rs 5000.00** is required to be paid (to be submitted along with other documents listed in paragraph 8 below) before the bid submission deadline. The mode of payment shall be in the form of DD drawn in favour of **Program Director, Uttarakhand Disaster Recovery Project-Additional Financing, Dehradun payable at Dehradun**, from any Scheduled/Nationalized Bank. Payment documents are to be submitted along with other documents listed in paragraph 9 below before the bid submission deadline.
7. The Bid must be submitted online on <http://uktenders.gov.in> on or before the deadline for submission of bids, and the ‘Technical Part’ of bids will be opened online at the specified time and date for opening of bids, as given above. 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. The electronic bidding system would not allow any late submission of bids.
8. All Bids must be accompanied by an original affidavit of “Bid Securing Declaration” in the prescribed format for the work in the table below. Procedure for submission of bid securing declaration is described in Para 9.
9. The bidders are required to submit (a) original payment documents towards the cost of bid document; and registration on e-procurement website (if applicable); (b) original bid security or Bid-Securing Declaration in approved form; and (c) original affidavit

regarding correctness of information furnished with bid document in the office of Program Director, Project Management Unit, UGRIDP (World Bank), DDPM Tower 4th Floor, DDPM Tower, Ajabpur Khurd, Haridwar Bypass Road, Dehradun, before the bid submission deadline, either by registered post/speed post/courier or by hand, failing which the bids will be declared non-responsive and will not be opened.

10. A pre-bid meeting will be held on **04 May 2023 at 1100 hours** at the office of Program Director, Project Management Unit, UGRIDP (World Bank), DDPM Tower 4th Floor, DDPM Tower, Ajabpur Khurd, Haridwar Bypass Road, Dehradun to clarify the issues and to answer questions on any matter that may be raised at that stage as stated in ITB Clause 7.4 of 'Instructions to Bidders' of the bidding document. Bidders are advised to download the bidding document prior to the pre-bid meeting in order for bidders to have a good understanding of the scope of work under this contract for discussion and clarification at the pre-bid meeting.
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.
12. The address for communication is as under:

Program Director
 Project Management Unit, UGRIDP (World Bank),
 DDPM Tower, 4th Floor, Ajabpur Khurd,
 Haridwar Bypass Road, Dehradun, Uttarakhand
 PIN Code: 248171
 Country: India
 Telephone: 9837748148, 8126148268
 Electronic mail address: ugridp@gmail.com
 Website- <http://ukdisasterrecovery.in/>

TABLE

| Package No. | Name of Work | Bid Security (in INR Lakh) | Cost of Document (in INR) | Period of Completion |
|-------------------------------|---|-------------------------------|---------------------------------|-------------------------|
| 1 | 2 | 3 | 4 | 5 |
| 01/BR/RFB/ UGRIDP/20 23 | Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi- Lambgaon- Ghansali- Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri | 13.00 Lakh | 5000/- | 15 months |

(The bid security mentioned in the Tender Notice published vide L.No. 53/PMU/UDRP-AF/2023 dated 19/04/2023 has been revised as above. Therefore, bidders are requested to submit the bid security of above mentioned amount)

Seal of office

Table of Contents

| | |
|---|------------|
| PART 1 – Bidding Procedures..... | 8 |
| Section I - Instructions to Bidders | 9 |
| Section II - Bid Data Sheet (BDS)..... | 37 |
| Section III - Evaluation and Qualification Criteria..... | 45 |
| Section IV - Bidding Forms..... | 61 |
| Section V - Eligible Countries | 115 |
| Section VI - Fraud and Corruption | 116 |
| PART 2 – Works’ Requirements..... | 118 |
| Section VII - Works’ Requirements | 117 |
| PART 3 – Conditions of Contract and Contract Forms | 154 |
| Section VIII - General Conditions of Contract..... | 155 |
| Section IX - Particular Conditions of Contract..... | 195 |
| Section X - Contract Forms | 270 |

PART 1 – Bidding Procedures

Section I - Instructions to Bidders

A. General

1. Scope of Bid

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

advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by the Contractor's Personnel with other Contractor's or Employer's Personnel;

(g) "Contractor's Personnel" is as defined in Sub-Clause 1 (ii) of the General Conditions of Contract; and

(h) "**Employer's personnel**" is as defined in GCC Sub-Clause 1 (nn) of the General Conditions of Contract.

A non-exhaustive list of (i) behaviors which constitute SEA and (ii) behaviors which constitute SH is attached to the Code of Conduct form in Section IV.

2. Source of Funds

2.1 The Borrower or Recipient (hereinafter called "Borrower") **specified in the BDS** has received or has applied for financing (hereinafter called "funds") from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called "the Bank") in an amount **specified in the BDS**, toward the project **named in the BDS**. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this bidding document is issued.

2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank, and will be subject, in all respects, to the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, equipment, plant, or materials, if such payment or import is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).

3. Fraud and Corruption

3.1 The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Section VI.

3.2 In further pursuance of this policy, bidders shall permit and shall cause their agents (whether declared or not), subcontractors, sub-consultants, service providers, suppliers, and personnel, to permit the Bank to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, bid submission, proposal submission,

and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders

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

services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm;

- (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the contract, and/or the Bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the contract.

4.3 A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative Bids. This includes participation as a Subcontractor in other Bids. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member may participate as a subcontractor in more than one Bid.

4.4 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or sub-consultants for any part of the Contract including related Services.

4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in Section VI paragraph 2.2 d., shall be ineligible to be prequalified for, initially selected for, bid for, propose for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available

at the electronic address **specified in the BDS**.

- 4.6 Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not under supervision of the Employer.
- 4.7 A Bidder shall not be under suspension from Bidding by the Employer as the result of the operation of a Bid-Securing or Proposal-Securing Declaration.
- 4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country. When the Works are implemented across jurisdictional boundaries (and more than one country is a Borrower, and is involved in the procurement), then exclusion of a firm or individual on the basis of ITB 4.8 (a) above by any country may be applied to that procurement across other countries involved, if the Bank and the Borrowers involved in the procurement agree.
- 4.9 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.

5. Eligible Materials, Equipment and Services

- 5.1 The materials, equipment, and services to be supplied under the Contract and financed by the Bank may have their origin in any country subject to the restrictions specified in Section V, Eligible Countries, and all expenditures under the Contract will not contravene such restrictions. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.

B. Contents of Bidding Document

6. Sections of Bidding Document

6.1 The bidding document consists of Parts 1, 2, and 3, which include all the sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITB 8.

PART 1 Bidding Procedures

- Section I - Instructions to Bidders (ITB)
- Section II - Bid Data Sheet (BDS)
- Section III - Evaluation and Qualification Criteria
- Section IV - Bidding Forms
- Section V - Eligible Countries
- Section VI - Fraud and Corruption

PART 2 Works 'Requirements'

- Section VII- Works' Requirements

PART 3 Conditions of Contract and Contract Forms

- Section VIII - General Conditions of Contract (GCC)
- Section IX - Particular Conditions of Contract (PCC)
- Section X - Contract Forms

6.2 The Specific Procurement Notice - Request for Bids (RFB) issued by the Employer is not part of this bidding document.

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

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

7. Clarification of Bidding Document, Site

7.1 The electronic bidding system **specified in the BDS** provides for online clarifications. A Bidder requiring any clarification on the bidding document may notify the Employer

Visit, Pre-Bid Meeting

online or raise its inquiries during the pre-Bid meeting if provided for in accordance with ITB 7.4. Clarifications requested through any other mode shall not be considered by the Employer. The Employer will respond to any request for clarification, provided that such request is received prior to the deadline for submission of Bids within a period **specified in the BDS**. Description of clarification sought and the response of the Employer shall be uploaded for information of all Bidders without identifying the source of request for clarification. Should the clarification result in changes to the essential elements of the bidding document, the Employer shall amend the bidding document following the procedure under ITB 8 and ITB 22.2. It is the bidder's responsibility to check on the e-procurement system, for any addendum/ amendment/ corrigendum to the bidding document.

7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

7.4 If so **specified in the BDS**, the Bidder's designated representative is invited to attend a pre-Bid meeting and/or a Site of Works visit. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

7.5 The Bidder is requested, to submit any questions only through the e-procurement portal, not later than one week before the meeting. Clarifications requested through any other mode shall not be considered by the Employer.

7.6 Minutes of the pre-Bid meeting, if applicable, including the text of the questions asked by Bidders, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be uploaded online on e-

procurement system. Any modification to the bidding document that may become necessary as a result of the pre-Bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-Bid meeting. It is the bidder's responsibility to check on the e- procurement system, for any addendum/ amendment/ corrigendum to the bidding document. Nonattendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

8. Amendment of Bidding Document

- 8.1 At any time prior to the deadline for submission of bids, the Employer may amend the bidding document by issuing addenda.
- 8.2 Any addendum issued shall be part of the bidding document and shall be deemed to have been communicated to all the bidders. The addenda will appear on the e-procurement system under "Latest Corrigendum", and Email notification is also automatically sent to those bidders who have started working on the tender, unless otherwise **specified in the BDS**. The Employer shall not be liable for any information not received by the bidder. It is the bidders' responsibility to verify the website for the latest information related to this bid.
- 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 22.2.

C. Preparation of Bids

9. Cost of Bidding

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

10. Language of Bid

- 10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in English. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents Comprising the Bid

- 11.1 The Bid shall comprise two Parts, namely the Technical Part and the Financial Part. These two Parts shall be submitted simultaneously.

11.2 The Technical Part shall contain the following:

- (a) **Letter of Bid– Technical Part** prepared in accordance with ITB 12 and ITB 14;
- (b) **Bid-Securing Declaration** in accordance with ITB 19.1;
- (c) **Alternative Bid – Technical Part**, if permissible, in accordance with ITB 13, the Technical Part of any Alternative Bid;
- (d) **Authorization:** written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.3, and in accordance with ITB 20.4 in case of a JV;
- (e) **Bidder's Eligibility:** documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to Bid;
- (f) **Qualifications:** documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract if its Bid is accepted;
- (g) **Conformity:** a technical proposal in accordance with ITB 16;
- (h) **Construction methodology** as detailed in Para 1.1 of Section III Evaluation Criteria;
- (i) Contractor Registration certificate (as per RFB); and
- (j) any other document **required in the BDS.**

11.3 The **Financial Part** shall contain the following:

- (a) **Letter of Bid – Financial Part:** prepared in accordance with ITB 12 and ITB 14;
- (b) **Completed Schedules** including priced Bill of Quantities in accordance with ITB 12 and ITB 14, as **specified in BDS;**
- (c) **Alternative Bid - Financial Part:** if permissible in accordance with ITB 13; and
- (d) Any other document required **in the BDS.**

11.4 The Technical Part shall not include any information related to the Bid price. Where material financial information related to the Bid price is contained in the Technical Part the Bid shall be

declared non-responsive.

- 11.5 In addition to the requirements under ITB 11.2, Bids submitted by a JV (where permitted) shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed Agreement.
 - 11.6 The Bidder shall furnish in the Letter of Bid – Financial Part information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.
- | | |
|--------------------------------------|--|
| 12. Process of Bid Submission | <ul style="list-style-type: none"> 12.1 The Letter of Bid – Technical Part, Letter of Bid – Financial Part, Schedules including Bill of Quantities, and all documents listed under Clause 11, shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.3. All blank spaces shall be filled in with the information requested. 12.2 Entire Bid including the Letters of Bid, Schedules and filled-up Bill of Quantities shall be submitted online on e-procurement system specified in ITB 7.1. Details and process of online submission of the tender and relevant documents are given in the website mentioned above. Scanned copies of documents listed in ITB Clauses 11 and 12.3 should also be uploaded on this website. 12.3 Submission of Original Documents: The bidders are required to separately submit (i) original payment documents towards the cost of bid document; and registration on e-procurement website (if applicable); (ii) original bid security or Bid-Securing Declaration in approved form; and (iii) original affidavit regarding correctness of information furnished with bid document, with the office specified in the BDS, before the Bid submission deadline, either by registered/speed post/courier or by hand, failing which the bids will be declared non-responsive and will not be opened. Hard copy of rest of the bid or any other document are not to be submitted. |
| 13. Alternative Bids | <ul style="list-style-type: none"> 13.1 Unless otherwise specified in the BDS, alternative Bids shall not be considered. 13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the BDS and the |

method of evaluating different alternative times for completion will be described in Section III, Evaluation and Qualification Criteria.

- 13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the bidding document must first price the Employer's design as described in the bidding document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Bidder with the Most Advantageous Bid conforming to the basic technical requirements shall be considered by the Employer.
 - 13.4 When specified **in the BDS**, Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be identified **in the BDS** and described in Section VII, Works' Requirements. The method for their evaluation will be stipulated in Section III, Evaluation and Qualification Criteria.
- | | |
|-------------------------------------|--|
| 14. Bid Prices and Discounts | <ul style="list-style-type: none"> 14.1 The prices and discounts quoted by the Bidder in the Letter of Bid –Financial Part and in the Schedules including Bill of Quantities shall conform to the requirements specified below. 14.2 The Bidder shall submit a Bid for the whole of the Works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section IV - Bidding Forms alongwith the total bid price (both in figures and words). The Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities. Corrections if any, in the bid can be carried out by editing the information before electronic submission on e-procurement portal. 14.3 The price to be quoted in the Letter of Bid – Financial Part, in accordance with ITB 12.1, shall be the total price of the Bid, excluding any discounts offered. 14.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid – Financial Part in accordance with ITB 12.1. 14.5 Unless otherwise specified in the BDS and the Conditions of |
|-------------------------------------|--|

Contract, the prices quoted by the Bidder shall be fixed.

- 14.6 If so specified in ITB 1.1, Bids are invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer discounts for the award of more than one Contract shall specify in their Bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4, provided the Bids for all lots (contracts) are opened at the same time.
- 14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the deadline for submission of Bids, shall be included in the rates and prices and the total Bid price submitted by the Bidder.
- 14.8 Bidders may like to ascertain availability of tax/duty exemption benefits available in India. They are solely responsible for obtaining such benefits which they have considered in their bid and in case of failure to receive such benefits for reasons whatsoever, the Employer will not compensate the bidder (Contractor). The bidder shall furnish alongwith his bid a declaration to this effect in the Declaration Format provided in Section IV of the bidding document.

Where the bidder has quoted taking into account such benefits, it must give all information required for issue of certificates in terms of the Government of India's relevant Notifications as per the declaration format. In case the bidder has not provided the required information or has indicated to be furnished later on in the Declaration Format, the same shall be construed that the goods/construction equipment for which certificate is required is Nil.

To the extent the Employer determines the quantities indicated therein are reasonable keeping in view the quantities in bill of quantities, construction program and methodology, the certificates will be issued within 60 days of signing of the contract and no subsequent changes will be permitted. In case of materials pertaining to Variation items and quantities, the certificate shall be issued only on request from the Contractor when in need and duly certified by the Project Manager.

No certificate will be issued for items where no quantity/capacity of equipment is indicated in the statement.

If the bidder has considered the tax/duty exemption for materials/construction equipment to be bought for the work, the

bidder shall confirm and certify that the Employer will not be required to undertake any responsibilities of the Government of India Scheme or the said exemptions being available during the contract execution, except issuing the required certificate. The bids which do not conform to the above provisions or any condition by the bidder which makes the bid subject to availability of tax/duty exemption for materials/construction equipment or compensation on withdrawal of any variations to the said exemptions will be treated as non-responsive and rejected.

Any delay in procurement of the construction equipment/machinery/goods as a result of the above shall not be a cause for granting any extension of time.

- | | |
|--|--|
| 15. Currencies of Bid and Payment | 15.1 The unit rates and prices shall be quoted by the Bidder and shall be paid for, entirely in Indian Rupees. |
| 16. Documents Comprising the Technical Proposal | 16.1 The Bidder shall furnish a technical proposal in the Technical Part of the Bid, including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, Bidding Forms, in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work's requirements and the completion time. |
| 17. Documents Establishing the Eligibility and Qualifications of the Bidder | 17.1 To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid – Technical Part, included in Section IV, Bidding Forms. 17.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms. |
| 18. Period of Validity of Bids | 18.1 Bids shall remain valid for 90 days or for the Bid Validity period specified in the BDS . The Bid Validity period starts from the date fixed for the Bid submission deadline (as prescribed by the Employer in accordance with ITB 22.1). A Bid valid for a shorter period shall be rejected by the Employer as nonresponsive. 18.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 19, it shall also be extended for forty- |

five (45) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 18.3.

18.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial Bid validity period, the Contract price shall be determined as follows:

- (a) in the case of **fixed price** contracts, the Contract price shall be the Bid price adjusted by the factor **specified in the BDS**;
- (b) in the case of **adjustable** price contracts, no adjustment shall be made; or
- (c) in any case, Bid evaluation shall be based on the Bid price without taking into consideration the applicable correction from those indicated above.

19. Bid Security

19.1 The Bidder shall furnish as part of the Technical Part of its Bid, either a Bid-Securing Declaration or a Bid Security as specified in the BDS, in original form and, in the case of a Bid security, for the amount **specified in the BDS**.

19.2 A Bid Securing Declaration shall use the form included in Section IV, Bidding Forms.

19.3 If a Bid Security is specified pursuant to ITB 19.1, the Bid Security shall be a demand guarantee in any of the following forms at the Bidder's option:

- (a) an unconditional bank guarantee issued by a Nationalized or Scheduled bank located in India;
- (b) an irrevocable letter of credit issued by a Nationalized or Scheduled bank located in India;
- (c) a cashier's or certified check or demand draft issued by a Nationalized or Scheduled bank located in India;
- (d) another security **specified in the BDS**,

In the case of a bank guarantee, the Bid Security shall be submitted using the Bid Security Form included in Section IV, Bidding Forms. The form must include the complete name of the Bidder. The Bid Security shall be valid for forty-five (45) days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 18.2.

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

validity specified by the Bidder in the Letters of Bid or any extended date provided by the Bidder; or

- (b) if the successful Bidder fails to: sign the Contract in accordance with ITB 49; or furnish a Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with ITB 50;

the Borrower may, if provided for **in the BDS**, declare the Bidder ineligible to be awarded a contract by the Employer for a period of time as **stated in the BDS**.

20. Format and Signing of Bid

- 20.1 The Bidder shall prepare the Bid as per details given in ITB 21.
- 20.2 Bidders shall mark as “CONFIDENTIAL” information in their Bids which is confidential to their business.
- 20.3 The Bid shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as **specified in the BDS** and shall be uploaded alongwith the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature.
- 20.4 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives. Documents establishing authority to sign the bid on behalf of the JV shall be uploaded alongwith the bid.
- 20.5 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the Bid.

D. Online Submission and Opening of Bids

21. Preparation of Bids

- 21.1 Bids, both Technical and Financial Parts, shall be submitted online on the e-procurement system specified in BDS 7.1. Detailed guidelines for viewing bids and submission of online bids are given on the website. The Request for Bids under this Project is published on this website. Any citizen or prospective bidder can logon to this website and view the Request for Bids and can view the details of works for which bids are invited. A prospective bidder can submit its bid online; however, the bidder is required to have enrolment/registration in the website, and should have valid Digital Signature Certificate

(DSC) in the form of smart card/e-token obtained from any certifying agency authorised by the Government of India (for class of DSC **specified in BDS**). The bidder should register in the website using the relevant option available. Then the Digital Signature registration has to be done with the e-token, after logging into the website. The bidder can then login the website through the secured login by entering the password of the e-token & the user id/ password chosen during registration. After getting the bid schedules, the Bidder should go through them carefully and submit the specified documents, alongwith the bid, otherwise the bid will be rejected.

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

be considered as the bid. For this purpose, modification/withdrawal by other means will not be accepted. In online system of bid submission, the modification and consequential re-submission of bids is allowed any number of times. A bidder may withdraw his bid by using the appropriate option for bid withdrawal, before the deadline for submission of bids, however, if the bid is withdrawn, re-submission of the bid is not allowed (or allowed if specified in BDS).

24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall not be opened.

24.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Letter of Bid or any extension thereof. This will result in the forfeiture of the Bid Security pursuant to ITB 19.7.

E. Public Opening of Technical Parts of Bids

25. PublicOpening of Technical Parts of Bids

25.1 The Employer shall publicly open Technical Parts of all Bids received by the deadline, at the date, time and place **specified in the BDS**, in the presence of Bidders' designated representatives and anyone who chooses to attend, and this could also be viewed by the bidders online. The Financial Parts of the bids shall remain unopened in the e-procurement system, until the subsequent public opening, following the evaluation of the Technical Parts of the Bids. In all cases, original documents submitted as specified in ITB 12.3 shall be first scrutinized, and Bids that do not comply with the provisions of ITB 12.3 will be declared non-responsive and will not be opened. Thereafter, bidders' names, the presence or absence of a Bid Security or Bid Securing Declaration, if one was required, alternative bids – technical parts, if any, and such other details as the Employer may consider appropriate will be notified, online by the Employer at the time of bid opening.

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

25.2 The electronic summary of the bid opening will be generated and uploaded online. The Employer will also prepare minutes of the Bid opening, including the information disclosed and upload the same for viewing online. Only Technical Parts of Bids, and technical parts of Alternative Bids if any, that are opened at technical Bid opening shall be considered further for evaluation.

F. Evaluation of Bids – General Provisions

- 26. Confidentiality**
- 26.1 Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until information on Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 45. In cases where ITB 45 is not applicable, such information shall not be disclosed until Notification of Award is transmitted in accordance with ITB 47.
- 26.2 Any effort by a Bidder to influence the Employer in the evaluation of the Bids or Contract award decisions may result in the rejection of its Bid.
- 26.3 Notwithstanding ITB 26.2, from the time of Bid opening to the time of Contract award, if a Bidder wishes to contact the Employer on any matter related to the Bidding process, it shall do so in writing.
- 27. Clarification of Bids**
- 27.1 To assist in the examination, evaluation, and comparison of the Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid giving a reasonable time for a response. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 36.
- 27.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.
- 28. Deviations, Reservations, and Omissions**
- 28.1 During the evaluation of Bids, the following definitions apply:
- (a) “Deviation” is a departure from the requirements specified in the bidding document;
 - (b) “Reservation” is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
 - (c) “Omission” is the failure to submit part or all of the

| | | |
|--|------|---|
| | | information or documentation required in the bidding document. |
| 29. Nonmaterial Nonconformities | 29.1 | Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid which do not constitute a material deviation, reservation or omission. |
| | 29.2 | Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price or substance of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid. |
| | 29.3 | Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or nonconforming item or component in the manner specified in the BDS. |
| | | G. Evaluation of Technical Parts of Bids |
| 30. Evaluation of Technical Parts | 30.1 | In evaluating the Technical Parts of each Bid, the Employer shall use the criteria and methodologies listed in this ITB and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted. |
| 31. Determination of Responsiveness | 31.1 | The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11. |
| | 31.2 | A substantially responsive Bid is one that meets the requirements of the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that: |
| | (a) | if accepted, would: |
| | (i) | affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or |
| | (ii) | limit in any substantial way, inconsistent with the bidding document, the Employer's rights or the |

- Bidder's obligations under the proposed Contract; or
- (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.
- 31.3 The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 16, in particular, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.
- 31.4 If a Bid is not substantially responsive to the requirements of the bidding document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.
- 32. Qualification of the Bidder**
- 32.1 The Employer shall determine to its satisfaction whether the eligible Bidders that have submitted substantially responsive Bid - Technical Parts meet the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- 32.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the bidding document), or any other firm different from the Bidder.
- 32.3 If a Bidder does not meet the qualifying criteria specified in Section III, Evaluation and Qualification Criteria, its Bid shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.
- 32.4 Only Bids that are both substantially responsive to the bidding document, and meet all Qualification Criteria shall have the Financial Parts of their Bids opened at the second public opening.
- 33. Subcontractors**
- 33.1 Unless otherwise stated **in the BDS**, the Employer does not intend to execute any specific elements of the Works by subcontractors selected in advance by the Employer.
- 33.2 The subcontractor's qualifications shall not be used by the Bidder to qualify for the Works unless their specialized parts of the Works were previously designated by the Employer **in the BDS** as can be met by subcontractors referred to hereafter as

‘Specialized Subcontractors’, in which case, the qualifications of the Specialized Subcontractors proposed by the Bidder may be added to the qualifications.

- 33.3 Bidders may propose subcontracting up to the percentage of total value of contracts or the volume of works as **specified in the BDS**. Subcontractors proposed by the Bidder shall be fully qualified for their parts of the Works.

H. Public Opening of Financial Parts of Bids

34. Public Opening of Financial Parts

- 34.1 Following the completion of the evaluation of the Technical Parts of the Bids, and the Bank has issued its no objection (if applicable), the Employer shall notify in writing those Bidders whose Bids were considered non-responsive to the bidding document or failed to meet the Qualification Criteria, advising them of the following information:
- (a) the grounds on which their Technical Part of Bid failed to meet the requirements of the bidding document;
 - (b) their Financial Part of Bid shall not be opened; and
 - (c) notify them of the date, time, and location for public opening of Financial Parts of the Bids.
- 34.2 The Employer shall, simultaneously, notify in writing those Bidders whose Technical Part have been evaluated as substantially responsive to the bidding document and met all Qualifying Criteria, advising them of the following information:
- (a) their Bid has been evaluated as substantially responsive to the bidding document and met the Qualification Criteria;
 - (b) their Financial Part of Bid will be opened at the public opening of the Financial Parts; and
 - (c) notify them of the date, time and location for public opening of the Financial Parts of the Bids, **as specified in the BDS**.
- 34.3 The opening date should allow Bidders sufficient time to make arrangements for attending the opening. The Financial Part of the Bids shall be opened publicly in the presence of Bidders’ designated representatives and anyone who chooses to attend, and this could also be viewed by the bidders online. The bidder’s names, the Bid prices, per lot (contract) if applicable, including any discounts and Alternative Bid - Financial Part if any, and such other details as the Employer may consider

appropriate, will be notified online by the Employer at the time of bid opening.

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

- 34.4 The electronic summary of the bid opening will be generated and uploaded online. The Employer will also prepare minutes of the Bid opening, including the information disclosed and upload the same for viewing online. Only Financial Parts of Bids, Financial Parts of Alternative Bids, and discounts that are opened at Bid opening shall be considered further for evaluation.

I. Evaluation of Financial Parts of Bids

35. Evaluation of Financial Parts

- 35.1 To evaluate the Financial Part, the Employer shall consider the following:
- (a) the Bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities for admeasurement contracts, but including Daywork² items, where priced competitively;
 - (b) price adjustment for correction of arithmetic errors in accordance with ITB 36.1;
 - (c) price adjustment due to discounts offered in accordance with ITB 14.4;
 - (d) Not used;
 - (e) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 29.3; and
 - (f) the additional evaluation factors are specified in Section III, Evaluation and Qualification Criteria.
- 35.2 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 35.3 If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the contract combinations, including any discounts offered in the Letter of Bid – Financial Part, is
-

| | | |
|--|------|---|
| | | specified in Section III, Evaluation and Qualification Criteria |
| 36. Correction of Arithmetical Errors | 36.1 | In evaluating the Financial Part of each Bid, the Employer shall correct arithmetical errors on the following basis: |
| | (a) | only for admeasurement contracts, if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected; |
| | (b) | if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and |
| | (c) | if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above. |
| | 36.2 | Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 36.1 shall result in the rejection of the Bid and the Bid Security may be forfeited in accordance with ITB Sub-Clause 19.7. |
| 37. Conversion to Single Currency | 37.1 | Not used. |
| 38. Margin of Preference | 38.1 | Not applicable. |
| 39. Comparison of Financial Parts | 39.1 | The Employer shall compare the evaluated costs of all responsive and qualified Bids to determine the Bid that has the lowest evaluated cost. |
| 40. Abnormally Low Bids | 40.1 | An Abnormally Low Bid is one where the Bid price, in combination with other constituent elements of the Bid, appears unreasonably low to the extent that the Bid price raises material concerns as to the capability of the Bidder to perform the Contract for the offered Bid price. |
| | 40.2 | In the event of identification of a potentially Abnormally Low Bid, the Employer, unless otherwise specified in the BDS, shall seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the bidding |

| | | |
|--|------|---|
| | | document. |
| | 40.3 | After evaluation of the price analyses, in the event that the Employer determines that the Bidder has failed to demonstrate its capability to perform the Contract for the offered Bid Price, the Employer shall reject the Bid. |
| 41. Unbalanced or Front-Loaded Bids | 41.1 | If the Bid for an admeasurement contract, which results in the lowest evaluated costis, in the Employer's opinion, seriously unbalanced or, front-loaded, the Employer may require the Bidder to provide written clarifications. Clarifications may include detailed price analyses (with breakdown of unit rates) to demonstrate the consistency of the Bid prices with the scope of works, proposed methodology, schedule and any other requirements of the bidding document. |
| | 41.2 | After the evaluation of the information and detailed price analysis presented by the Bidder, the Employer may as appropriate: |
| | (a) | accept the Bid without any additional Performance Security; or |
| | (b) | require that the amount of the Performance Security be increased at the expense of the Bidder to a level not exceeding twenty percent (20%) of the Contract Price to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract; or |
| | (c) | Reject the Bid if the risk cannot be mitigated through additional performance security. |
| 42. Most Advantageous Bid | 42.1 | Having compared the evaluated costs of Bids, the Employer shall determine the Most Advantageous Bid. The Most Advantageous Bid is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be: |
| | (a) | substantially responsive to the bidding document; and |
| | (b) | the lowest evaluated cost. |
| 43. Employer's Right to Accept Any Bid, and to Reject Any or All Bids | 43.1 | The Employer reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all documents submitted and specifically, Bid securities, shall be promptly returned to the Bidders. |
| 44. Standstill Period | 44.1 | Standstill Period shall not apply. |

| | | |
|---|------|-----------|
| 45. Notice of Intention to Award | 45.1 | Not used. |
|---|------|-----------|

J. Award of Contract

| | | |
|----------------------------------|------|---|
| 46. Award Criteria | 46.1 | Subject to ITB 43, the Employer shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid as specified in ITB 42. |
| 47. Notification of Award | 47.1 | Prior to the expiration of the Bid Validity Period, the Employer shall transmit the Letter of Acceptance to the successful Bidder. The Letter of Acceptance shall specify the sum that the Employer will pay the Contractor in consideration of the execution of the contract (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price"). |
| | 47.2 | Within ten (10) Business Days after the date of transmission of the Letter of Acceptance, the Employer shall publish the Contract Award Notice which shall contain, at a minimum, the following information: |
| | | (a) name and address of the Employer; |
| | | (b) name and reference number of the contract being awarded, and the selection method used; |
| | | (c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated; |
| | | (d) names of all Bidders whose Bids were rejected either as nonresponsive or as not meeting qualification criteria, or were not evaluated, with the reasons therefore; and |
| | | (e) the name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope. |
| | 47.3 | The Contract Award Notice shall be published on a National website (GoI website http://tenders.gov.in or GoI Central Public Procurement Portal https://eprocure.gov.in/cppp/) or on the Employer's website, and on the e-procurement system. |
| | 47.4 | Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract. |

| | | |
|---------------------------------------|------|--|
| 48. Debriefing by the Employer | 48.1 | Not used. |
| 49. Signing of Contract | 49.1 | Promptly upon Notification of Award, the Employer shall prepare the Contract Agreement, and keep it ready in the office of the Employer for the signature of the Employer and the successful Bidder, within 21 days following the date of Letter of Acceptance. The Contract Agreement shall incorporate all agreements between the Employer and the successful Bidder. |
| | 49.2 | Within twenty-one (21) days of receipt of the Letter of Acceptance, the successful Bidder shall (a) furnish the performance security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with ITB Clause 50 and revised construction methodology; (b) if the successful bidder is a JV, it shall also furnish the JV agreement duly signed by all the members, if it had submitted only a letter of intent to execute the JV agreement along with the bid; and (c) shall sign, date and return the Agreement to the Employer alongwith the documents stated at (a) and (b) above. |
| 50. Performance Security | 50.1 | 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 41.2 (b), using for that purpose the Performance Security and ES Performance Security Forms included in Section X, Contract Forms. The performance security and if required in the BDS, the Environmental and Social (ES) Performance Security of a Joint Venture shall be in the name of the Joint Venture specifying the names of all members. |
| | 50.2 | Failure of the successful Bidder to submit the above-mentioned Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Employer may award the Contract to the Bidder offering the next Most Advantageous Bid. |
| | 50.3 | Upon the successful Bidder's signing the Agreement and furnishing of the Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security pursuant to ITB Clause 50.1, the Employer shall promptly notify the name of the winning bidder to each unsuccessful bidder and shall discharge the Bid Securities of the bidders pursuant to ITB |

Clause 19.5 and 19.6.

51. Adjudicator

51.1 The Employer proposes the person **named in the BDS** to be appointed as Adjudicator under the Contract, at the daily fee **specified in the BDS**, plus reimbursable expenses (actual boarding, lodging, travel and other incidental expenses). If the Bidder disagrees with this proposal, the Bidder should so state in his Bid. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated in the Particular Conditions of Contract (PCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

Section II - Bid Data Sheet (BDS)

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

| ITB Reference | A. General |
|--|---|
| ITB 1.1 | <p>The Employer is: <i>Program Director</i>, Uttarakhand Green Resilient & Inclusive Development Project (UGRIDP)</p> <p>The reference number of the Request for Bids (RFB) is: 01/BR/RFB/UGRIDP/2023</p> <p>Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri</p> |
| ITB 1.2 | The Employer shall use the e-procurement system specified in BDS 7.1. |
| ITB 2.1 | <p>The Borrower is Government of Uttarakhand though Government of India (GoI)</p> <p>The name of the Project is: Uttarakhand Green Resilient & Inclusive Development Project(UGRIDP)</p> |
| ITB 4.1 | Bids from Joint ventures are NOT acceptable. |
| ITB 4.5 | A list of debarred firms and individuals is available on the Bank's external website: <u>http://www.worldbank.org/debarr</u> . |
| ITB 4.7 | Deleted |
| B. Contents of Bidding Document | |
| ITB 7.1 | <p>Electronic –Procurement System</p> <p>The Purchaser shall use the following electronic-procurement system to manage this Bidding process:</p> <p><u>www.uktenders.gov.in</u></p> <p>Requests for clarification should be received by 03 May 2023</p> |
| ITB 7.4 | <p>A Pre-Bid meeting shall take place at the following date, time and place:</p> <p>Date – 04 May 2023</p> <p>Time- 11.00 AM</p> <p>Place -Project Management Unit, UGRIDP</p> <p>DDPM Tower, 4th Floor, Ajabpur Khurd, Haridwar Bypass Road, Dehradun</p> |

| | |
|-------------------------------|--|
| | <p>– 248171, Uttarakhand</p> <p>A site visit conducted by the Bidder shall not be organized by the Employer.</p> |
| ITB 8.2 | <p>The addendum will appear on the e-procurement system under www.uktenders.gov.in and email notification is also automatically sent to those bidders who have started working on this tender.</p> |
| C. Preparation of Bids | |
| ITB 11.2 (j) | <p>The Bidder shall submit the following additional documents in its Bid:</p> <p>(i) Contractor Registration certificate on e-procurement system as per RFB,</p> <p>(ii) Code of Conduct for Contractor's Personnel (ES)</p> <p>The Bidder shall submit its Code of Conduct that will apply to Contractor's Personnel (as defined in Sub-Clause 1 (ii) of the General Conditions of Contract), to ensure compliance with the Contractor's 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.</p> <p>Management Strategies and Implementation Plans (MSIP) to manage the (ES) risks</p> <p>The Bidder shall submit Management Strategies and Implementation Plans (MSIPs) to manage the following key Environmental and Social (ES) risks:</p> <ul style="list-style-type: none"> • Traffic Management Plan to ensure safety of road users, workers and local communities from construction traffic; • Water Resource Protection and Pollution Prevention Plan to prevent contamination of water bodies/streams/springs and other sources; • Occupational Health and Safety Plan, including first aid and emergency response arrangements • Boundary Marking and Protection Strategy for mobilization and construction to prevent offsite adverse impacts; • Strategy for obtaining all applicable Consents/Permits/NOCs prior to the start of relevant works; • Sexual Exploitation, and Abuse (SEA) prevention and response action plan. |
| ITB 11.3 (b) | <p>The following schedules shall be submitted with the bid:</p> <p>The Price Schedule Form (in Excel Format) documented separately and can be downloaded from e-procurement portal http://uktenders.gov.in</p> |

| | |
|---------------------|--|
| | <p>along with the bid document.</p> <p>Important: The Financial Bid Submission Form must be completed and submitted /uploaded on the e-portal (www.uktenders.gov.in) in PDF form in the Financial Envelope along with the BOQ. The Financial Bid Submission Form shall be the part of Commercial Bid and if the bidder fails to submit Financial Bid Submission Form, the bid shall be deemed non-responsive.</p> |
| ITB 11.3 (d) | <p>The bidder must submit technical parts of the bid in the technical envelop and financial parts (BOQ & Financial Bid Submission Form) in the Financial envelop. If the bidder submits technical information in the financial envelop or vice versa, the bid shall be deemed non-responsive.</p> <p>The Financial Bid Submission Form must be completed and submitted /uploaded on the e-portal (www.uktenders.gov.in) in PDF form in the Financial Envelope along with the BOQ. The Financial Bid Submission Form shall be the part of Commercial Bid and if the bidder fails to submit Financial Bid Submission Form, the bid shall be deemed non-responsive.</p> |
| ITB 12 | <p>Note for Bidders: Bidders have to submit the bids on the e-procurement portal along with the relevant required documents. For this purpose, the bidders shall fill up online, the forms that are available for online filling on the e-portal. The rest of the forms shall be download by the bidders and filled up. The filled up pages shall then be scanned and uploaded on the e-procurement portal along with the scanned copies of the supporting documents.</p> |
| ITB 12.3 | <p>For submission of original documents, the Employer's address is:</p> <p>Project Management Unit, UGRIDP DDPM Tower, 4th Floor, Ajabpur Khurd, Haridwar Bypass Road, Dehradun – 248171, Uttarakhand</p> <p>The following documents shall be submitted through post/courier/person to the Purchaser for verification and scrutiny by 26 May 2023 till 1100 HOURS.</p> <ul style="list-style-type: none"> (a) Original Bid security in the form of Bank Guarantee/ FDR in favour of Program Director, Uttarakhand Disaster Recovery Project-Additional Financing, Dehradun payable at Dehradun. The value of bid security is INR 13,00,000.00; (<i>The bid security mentioned in the Tender Notice published vide L.No. 53/PMU/UDRP-AF/2023 dated 19/04/2023 has been revised as above. Therefore, bidders are requested to submit the bid security of above mentioned amount</i>). (b) Original affidavit vouching for the correctness of the information furnished and documents uploaded (On Rs.100/- Stamp Paper); (c) Non-refundable Tender Fee in the name of Program Director, Uttarakhand Disaster Recovery Project-Additional Financing, Dehradun payable at Dehradun, in the form of DD only INR 5000. Tender Fee in any other form part from DD shall not be accepted. |

| | |
|---------------------|--|
| | Note: In case of non-submission/late submission of original documents mentioned in ITB 12.3, the bid shall be considered as non-responsive. |
| ITB 13.1 | Alternative Bids shall not be permitted. |
| ITB 13.2 | Alternative times for completion shall not be permitted. |
| ITB 13.3 | Not Applicable. |
| ITB 13.4 | Not Permitted. |
| ITB 14.5 | The prices quoted by the Bidder shall not be subject to adjustment during the performance of the Contract. |
| ITB 18.1 | The Bid validity period shall be 120 days. |
| ITB 18.3 (a) | Not Applicable |
| ITB 19.1 | <p>A Bid Security shall be required.</p> <p>The Bidder shall furnish a Bid Security in the amount of INR 13.00 Lakh (Original Bid security in the form of Bank Guarantee/ FDR in favour of Program Director, Uttarakhand Disaster Recovery Project-Additional Financing, Dehradun payable at Dehradun)</p> <p>A Bid-Securing Declaration shall not be required and shall not be accepted.</p> <p><i>(The bid security mentioned in the Tender Notice published vide L.No. 53/PMU/UDRP-AF/2023 dated 19/04/2023 has been revised as above. Therefore, bidders are requested to submit the bid security of above mentioned amount)</i></p> |
| ITB 19.3 (d) | None. |
| ITB 19.9 | Deleted |
| ITB 20.3 | <p>The written confirmation of authorization to sign on behalf of the Bidder shall consist of:</p> <p>Legally valid Power of Attorney is required to demonstrate the authority of the signatory to sign the Bid; and</p> |

D. Online Submission and Opening of Bids

| | |
|-----------------|--|
| ITB 21.1 | The bidding under this contract is electronic bid submission through website http://uktenders.gov.in . Detailed guidelines for viewing bids and submission of online bids are given on the website. The Invitation for Bids under Project Management Unit, UGRIDP is published on this website. Any citizen or prospective bidder can logon to this website and view the Invitation for Bids and can view the details of package for which bids are invited. The perspective bidder can submit bids on line; however, the bidder is required to have enrolment/registration in the website and should have valid Digital Signature Certificate (DSC), for signing and encryption issued by the same Certifying Authority, in the form of smart card/e-token. |
|-----------------|--|

| | |
|---|--|
| | <p>The DSC can be obtained from any authorized certifying agencies. The bidder should register in the web site http://uktenders.gov.in using the relevant option available. Then the Digital Signature registration has to be done with the e-token, after logging into the site. After this, the bidder can login the site through the secured login by entering the password of the e-token & the user id/ password chosen during registration.</p> <p>After getting the bid schedules, the Bidder should go through them carefully and then submit the documents as asked, otherwise, the bid will be rejected.</p> <p>The completed bid comprising of documents should be uploaded on the website given above through e-tendering along with scanned copies (clearly readable) of requisite certificates as are mentioned in different sections in the bidding document and scanned copy of bid security in case it is provided in the form of BG.</p> |
| ITB 22.1 | <p>The deadline for uploading the Bids is:</p> <p>Date: 26 May, 2023</p> <p>Time: 11.30 a.m.</p> |
| ITB 24.1 | Re-submission of the bid is not allowed , if withdrawn. |
| E. Public Opening of Technical Parts of Bids | |
| ITB 25.1 | <p>The online Bid opening shall take place on:</p> <p>Date: 26/May, 2023</p> <p>Time: 03.00 p.m.</p> <p>The bid opening shall take place at Project Management Unit, UGRIDP DDPM Tower, 4th Floor, Ajabpur Khurd, Haridwar Bypass Road, Dehradun – 248171, Uttarakhand</p> <p>The purchaser inviting bids or its authorized representatives shall open the bids online which could be viewed by the bidders also online. In the event of the specified date for the opening of bids being declared a holiday, the bids shall be opened at the appointed time on the next working day.</p> |
| F. Evaluation of Bids – General Provisions | |
| ITB 29.3 | N/A |
| G. Evaluation of Bids - Technical Parts | |
| ITB 33.1 | At this time the Employer does not intend to execute any parts of the Works by subcontractors selected in advance. |

| | |
|-----------------|---|
| ITB 33.2 | <p>The parts of the Works for which the Employer permits Bidders to propose Specialized Subcontractors are designated as follows:</p> <p>Supply and fabrication of steel truss bridge</p> <p>For the above-designated parts of the Works that may require Specialized Subcontractors, the relevant qualifications of the proposed Specialized Subcontractors will be added to the qualifications of the Bidder for the purpose of evaluation.</p> |
| ITB 33.3 | <p>(a) Contractor's proposed subcontracting: Maximum percentage of subcontracting permitted is: 25% of the total contract amount.</p> <p>(b) Bidders planning to subcontract more than 10% of total volume of work shall specify, in the Letter of Bid, the activity (ies) or parts of the Works to be subcontracted along with complete details of the subcontractors and their qualification and experience. The qualification and experience of the sub-contractors must meet the minimum criteria for the relevant work to be sub-contracted failing which such sub-contractors will not be permitted to participate.</p> <p>(c) Subcontractors' qualification and experience will not be considered for evaluation of the Bidder. The Bidder on its own (without taking into account the qualification and experience of the sub-contractor) should meet the qualification criteria.</p> |

H. Public Opening of Financial Parts

| | |
|---------------------|---|
| ITB 34.2 (c) | <p>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.</p> <p>The online bid opening of Financial Parts of Bids shall take place at:</p> <p>Project Management Unit, UGRIDP DDPM Tower, 4th Floor, Ajabpur Khurd, Haridwar Bypass Road, Dehradun – 248171, Uttarakhand</p> <p>Country: INDIA</p> <p>In addition to the above the Purchaser shall publish a notice of the public opening of the Financial Parts of the Bid on its website http://uktenders.gov.in</p> |
|---------------------|---|

I. Evaluation of Bids - Financial Parts

| | |
|-----------------|-----|
| ITB 40.2 | N/A |
|-----------------|-----|

| | |
|-----------------|--|
| ITB 41.2 | <p>a) The additional performance security for unbalanced bids will be required if the overall Bid Price offered by the Contractor is lower by more than 10% with respect to the Estimated cost of the work. The additional Performance Security shall be calculated as below:</p> <ul style="list-style-type: none"> i. If the overall bid price offered by the Contractor is lower than 10% but upto 20% of the Estimated Cost, then the Additional Performance Security shall be calculated @ 20% of the difference in the (a) Estimated Cost and (b) the overall Bid Price offered by the selected Bidder. ii. If the overall bid price offered by the Contractor is lower than 20% of the Estimated Cost, then the Additional Performance Security shall be calculated @ 30% of the difference in the (a) Estimated Cost and (b) the overall Bid Price offered by the selected Bidder. <p>b) The Additional Performance Security shall be valid till the contract completion date.</p> |
|-----------------|--|

J. Award of Contract

| | |
|--------------------------|--|
| ITB 50.1 and 50.2 | <p>The successful Bidder shall also be required to submit an Environmental and Social (ES) Performance Security.</p> <p>Throughout this bidding document the term 'performance security,' unless the context clearly indicates otherwise, means and includes both 'the performance security and the ES performance security' to be submitted by the successful bidder in the amounts specified in GCC/ PCC 54.</p> |
| ITB 51 | <p>The Adjudicator proposed by the Employer is: <i>Er. Pramod Kumar, Retired Chief Engineer Level-1, PWD, Uttarakhand, R/O Flat No. A-132, Hansmukhi Apartments, Sahashtradhara Road, Dehradun.</i> The daily fee for this proposed Adjudicator shall be: <i>Rs.10, 000 per day.</i> The biographical data of the proposed Adjudicator is as follows:</p> <p>Education- M.Tech (Structural Engineering).</p> <p>Experience – Minimum 35 years' experience in civil construction and retired from Chief Engineer position of PWD.</p> <p>Age – 60 years</p> <p>Nationality – Indian</p> |

Section III - Evaluation and Qualification Criteria

1. Technical Part

1.1 Adequacy of Technical Proposal

Evaluation of the Bidder's Technical Proposal will include

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

For this purpose, the Bidder should also submit:

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

- (ii) 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 furnish details whether the identified Sub-contractor possesses the required qualifications and experiences to execute that element satisfactorily. [Work should not be split into small parts and sub-contracted].
- (iii) Bidders shall submit an undertaking from each proposed subcontractor to confirm that they have read, understand, and will comply with the ES obligations and code of conduct for Contractor's Personnel.

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

1.3 Specialized Subcontractors

If permitted under ITB 33, only the specific experience of Subcontractors for specialized works permitted by the Employer 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 specialized sub-contractors proposed shall be fully qualified for their work proposed, and meet the following criteria:

Required Experience for specialized subcontractor—Successful completion of minimum 1 similar contracts, of minimum value INR 2.00 Cr Within last 5 financial years.

Submission required- Contract completion certificate issued by the employer with following details –

- i) Name of work, ii) Date of work order, iii) Start date, iv) completion date, v) value of contract, vi) Name of employer , vii) Payment details

2.1 Qualification Criteria

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

| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) where permitted | | | Submission Requirements |
|-----------------------|--|---|-----------------------|--|-------------|---------------------|---|
| | | | | All members Combined | Each Member | At least one Member | |
| 1. Eligibility | | | | | | | |
| 1.1 | Nationality | Nationality in accordance with ITB 4.4 | Must meet requirement | N/A | N/A | N/A | Forms ELI – 1.1 and 1.2, with attachments |
| 1.2 | Conflict of Interest | No conflicts of interest in accordance with ITB 4.2 | Must meet requirement | N/A | N/A | N/A | Letter of Bid |
| 1.3 | Bank Eligibility | Not having been declared ineligible by the Bank, as described in ITB 4.5. | Must meet requirement | N/A | N/A | N/A | Letter of Bid |
| 1.4 | State-owned enterprise or institution of the Borrower country | Meets conditions of ITB 4.6 | Must meet requirement | N/A | N/A | N/A | Forms ELI – 1.1 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 4.8 and Section V. | Must meet requirement | N/A | N/A | N/A | Forms ELI – 1.1 and 1.2, with attachments |

| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) where permitted | | | Submission Requirements |
|---|--|--|-----------------------|--|-------------|---------------------|-------------------------|
| | | | | All members Combined | Each Member | At least one Member | |
| 2. Historical Contract Non-Performance | | | | | | | |
| 2.1 | History of Non-Performing Contracts | Non-performance of a contract ³ did not occur as a result of contractor default since 1 st January 2018 | Must meet requirement | N/A | N/A | N/A | Form CON-2 |
| 2.2 | Suspension Based on Execution of Bid/ Proposal Securing Declaration by the Employer or withdrawal of the Bid within Bid validity period | Not under suspension based on execution of a Bid/ Proposal Securing Declaration pursuant to ITB 4.7 or withdrawal of the Bid pursuant ITB 19.9 | Must meet requirement | N/A | N/A | N/A | Letter of Bid |
| 2.3 | Pending Litigation | Bidder's financial position and prospective long-term profitability sound according to criteria established in 3.1 below and assuming | Must meet requirement | N/A | N/A | N/A | Form CON – 2 |

³ 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.

| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) where permitted | | | Submission Requirements |
|-----|--|---|---|--|-------------|---------------------|---------------------------------------|
| | | | | All members Combined | Each Member | At least one Member | |
| | | that all pending litigation will be resolved against the Bidder | | | | | |
| 2.4 | Litigation History | No consistent history of court/arbitral award decisions against the Bidder ⁴ since 1 st January 2018 | Must meet requirement | N/A | N/A | 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, health, safety or social (including Sexual Exploitation, and Abuse) contractual | Must make the declaration. Where there are Specialized Sub-contractor/s, the Specialized Sub-contractor/s must also make the declaration. | N/A | N/A | N/A | Form CON-3 ES Performance Declaration |

⁴The 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.

| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) where permitted | | | Submission Requirements |
|---|-------------------------------|---|-----------------------|--|-------------|---------------------|----------------------------------|
| | | | | All members Combined | Each Member | At least one Member | |
| | | obligations in the past five years ⁵ . | | | | | |
| 3. Financial Situation and Performance | | | | | | | |
| 3.1 | Financial Capabilities | (i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit ⁶ , and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as <i>Rs.65.00 lakh (Rupees Sixty Five lakhs)</i> (about 1.5 months cash flow at peak construction period) for the subject contract(s) net of the Bidder's other commitments | Must meet requirement | N/A | N/A | N/A | Form FIN – 3.1, with attachments |

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

⁶In 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.

| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) where permitted | | | Submission Requirements |
|-----|---------|---|-----------------------|--|-------------|---------------------|--|
| | | | | All members Combined | Each Member | At least one Member | |
| | | (ii) The Bidders shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments. | Must meet requirement | N/A | N/A | N/A | Through, positive net worth, Bank dedicated limit and the working capital available with the bidder, which should be sufficient to meet the construction cash flow requirements. |
| | | (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 shall be submitted and must demonstrate the current soundness of the Bidder's financial position and indicate its prospective long-term profitability. | Must meet requirement | N/A | N/A | N/A | |

| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) where permitted | | | Submission Requirements |
|----------------------|---|---|-----------------------|--|-------------|---------------------|-------------------------|
| | | | | All members Combined | Each Member | At least one Member | |
| 3.2 | Average Annual Construction Turnover | Minimum average annual construction turnover of Rs. 13.00 Crore (Rs. Thirteen Crore) calculated as total certified payments received for contracts in progress and/or completed within the last five financial years, average of any three years in last five years. | Must meet requirement | N/A | N/A | N/A | Form FIN – 3.2 |
| 4. Experience | | | | | | | |
| 4.1 (a) | General Construction Experience | Experience under construction contracts (indicate details of acceptable similar works) in the role of prime contractor, JV member, subcontractor, or management contractor for at least the last five years, starting 1 st January 2018. | Must meet requirement | N/A | N/A | N/A | Form EXP – 4.1 |
| 4.2 | Specific | (i) A minimum | Must meet | N/A | N/A | N/A | Form EXP 4.2(a) |

| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) where permitted | | | Submission Requirements |
|-----|--|--|---------------|--|-------------|---------------------|-------------------------|
| | | | | All members Combined | Each Member | At least one Member | |
| (b) | Construction & Contract Management Experience | <p>number of 01 similar contracts specified below that have been satisfactorily and substantially⁷ completed as a prime contractor, joint venture member⁸, management contractor or sub-contractor⁹ between 1st January 2018 and bid submission deadline:</p> <p>(i) 01 contract, of minimum value Rs.5.20 Crore (Rs. Five Crore Twenty lakh);</p> <p>The similarity of the contracts shall be based on the following:</p> | requirement | | | | |

| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) where permitted | | | Submission Requirements |
|-----|---------|---|---------------|--|-------------|---------------------|-------------------------|
| | | | | All members Combined | Each Member | At least one Member | |
| | | Construction of Steel Bridge with major works including Earthwork, RCC, Structural Steel Fabrication and Erection. <i>Note: (i) Bidder to provide authentic and working credentials (latest phone Number, latest e-mail address, Physical Address, Contact person etc.) of the employer/certificate issuer. (ii) In case if the certificate issuer is a private entity, TDS certificate should be furnished by the bidder in support of work executed</i> | | | | | |

| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) where permitted | | | Submission Requirements |
|-----|--|-------------|---------------|--|-------------|---------------------|-------------------------|
| | | | | All members Combined | Each Member | At least one Member | |
| (c) | Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity for construction work is equal to or more than the total bid value of the work. The available bid capacity will be calculated as under: | | | | | | |
| | Assessed Available bid capacity = $(A * N * 1.15 - B)$ | | | | | | |
| | 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 2022-2023 at the rate of 5% per year), taking into account the completed as well as works in progress). | | | | | | |
| | N = Number of years prescribed for completion of the works for which bids are invited (period upto 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 on 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.

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

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

Key Personnel

| Item No. | Position/ specialization | Relevant academic qualifications | Minimum years of relevant work experience |
|--|--|---|--|
| 1 | Contractor's Representative | | |
| Suitable experts in the following specializations | | | |
| 2 | Site Manager | Graduate in Civil Engineering | 05 years in similar work environments |
| 3 | Site Supervisors | Diploma Holder in Civil Engineering | 01 years in similar work environments |
| 4 | ME/QC Engineer (For field testing laboratory) | Degree Holder in Civil Engineering | 01 years in similar work environments |
| 5 | Environment Expert | Post Graduate in environmental sciences or Environmental Planning or Environmental Engineering | 02 years in similar work environments |
| 6 | Social Expert/Labour Specialist | MA Sociology/ Masters in Social Work/labour welfare laws | 02 years in similar work environments |
| 7 | Occupational Health and Safety Officer | Degree or Post Graduate diploma in Occupational Health and Safety, with specialization in construction safety from a recognized | 03 years of relevant experience as Safety Officer in similar work environments |

| | | University/Institution | |
|---|-----------|----------------------------------|--|
| 8 | IT expert | Degree in Information Technology | 3 years of experience in data management |

The Bidder must not have in his employment:

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

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

The managerial and technical competence of a contractor is largely related to the key personnel on site. The extent to which the Bidder should demonstrate having staff with extensive experience should be limited to those requiring critical operational or technical skills. The criteria should therefore refer to a limited number of such key personnel, for instance, the project or contract manager and others working under the project manager who will be responsible for major components (e.g. specialized in dredging, piling, earthworks, ES obligations, as required for each particular project). Criteria of acceptability should be based on:

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

4. Equipment

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

| No. | Equipment Type and Characteristics | Minimum Number required |
|-----|--|-------------------------|
| 1 | Tippers (5.50 cum / 10 MT capacity) | 2 Nos. |
| 2 | Smooth Wheeled Road Rollers. (80-100 KN) | 2 Nos. |

| | | |
|----|--|--------|
| 3 | Water Tanker (6 KL) | 2 Nos. |
| 4 | Tractor with Trolley | 1 No. |
| 5 | Excavator (1.00 cum bucket capacity) | 1 No. |
| 6 | JCB/End Loader (1.00 cum bucket capacity) | 1 No. |
| 7 | Air Compressor (210 Cfm) | 1 No. |
| 8 | Concrete Mixers (0.40 cum) | 1 No. |
| 9 | Mechanical Broom | 1 No. |
| 10 | Hydraulic Crane (100T capacity) | 1 No. |
| 11 | Crane (40T capacity) | 1 No. |
| 12 | Generator 5KVA | 1No. |
| 13 | Vibrators (Plate, PU) | 1No. |
| 14 | Electrically operated Winch machine | 1No. |
| 15 | Mobile Mist Spray Equipment for Dust Control | 2 no. |
| 16 | Utility Detector | 1 no. |

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

5. Multiple Contracts- *Not Applicable*

2. Financial Part

2.1 Margin of Preference - Not Applicable

2.2 Multiple Contracts '*Not Applicable*'

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

2.4 Alternative Completion Times (ITB 13.2)- Not Applicable

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

2.6 Other criteria: Nil

Section IV - Bidding Forms

Letter of Bid – Technical Part

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

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

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

Date of this Bid submission:/...../2023

RFB No.: 01/BR/RFB/UGRIDP/2023

To: Program Director

Uttarakhand Green, Resilient & Inclusive Development Project (UGRIDP)

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

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

In submitting our Bid, we make the following declarations:

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including Addenda issued in accordance with ITB 8;
- (b) **Eligibility:** We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) **Bid-Securing Declaration:** We have not been suspended nor declared ineligible by the Employer based on execution of a Bid-Securing Declaration or Proposal-Securing Declaration in the Employer's Country in accordance with ITB 4.7
- (d) **Conformity:** We offer to execute in conformity with the bidding document the following Works: ***Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri.***
- (e) **Bid Validity Period:** Our Bid shall be valid for a period specified in BDS ITB 18.1 (or as amended if applicable) from the date fixed for the Bid submission deadline specified in BDS 22.1 (or as amended if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) **Performance Security:** If our Bid is accepted, we commit to obtain a performance security and an Environmental and Social (ES) Performance Security, in accordance with the bidding document;

-
- (g) **One Bid Per Bidder:** We are not submitting any other Bid(s) as an individual Bidder or as a subcontractor, and we are not participating in any other Bid(s) as a Joint Venture member, and meet the requirements of ITB 4.3, other than alternative Bids submitted in accordance with ITB 13;
 - (h) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Employer's Country laws or official regulations or pursuant to a decision of the United Nations Security Council;
 - (i) **State-owned enterprise or institution:** We are not a state-owned enterprise or institution/ We are a state-owned enterprise or institution but meet the requirements of ITB 4.6¹;
 - (j) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
 - (k) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Bid, the Most Advantageous Bid or any other Bid that you may receive; and
 - (l) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption; and
 - (m) We also undertake that, in competing for (and, if the award is made to us, in executing) the above Bid, we will strictly observe the laws against fraud and corruption in force in India on date namely "Prevention of Corruption Act 1988"; and
 - (n) **Adjudicator:** We accept the appointment of as the Adjudicator.

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

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

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

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

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

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

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

Important: To be completed and submitted /uploaded on the e-portal (www.uktenders.gov.in) in PDF form in the Financial Envelope along with the BOQ. This Form shall be the part of Commercial Bid and if the bidder fails to submit this Form, the bid shall be deemed non-responsive.

Technical Proposal

Technical Proposal Forms

- Key Personnel Schedule**
- Equipment**
- Site Organization**
- Method Statement**
- Mobilization Schedule**
- Construction Schedule**
- ES Management Strategies and Implementation Plans**
- Code of Conduct for Contractor's Personnel (ES)**
- Sub-contracting elements or works which in aggregate adds to more than 10% of Bid price (*for each the qualifications and experiences on the identified subcontractor in the relevant field should be given*)**
- Others**
- Bidder's Qualification**
- Form of Bid-Securing Declaration**

Appendix to Technical Part: Personnel Forms for Personnel

Form PER – 1: Key Personnel Schedule

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

Key Personnel

| | | |
|----|---|--|
| 1. | Title of position: Name of candidate: Duration of appointment: [insert the whole period (start and end dates) for which this position will be engaged] Time commitment: for this position: [insert the number of days/week/months/ that has been scheduled for this position] Expected time schedule for this position: [insert the expected time schedule for this position (e.g. attach high level Gantt chart)] | |
| 2. | Title of position: Name of candidate: Duration of appointment: [insert the whole period (start and end dates) for which this position will be engaged] Time commitment: for this position: [insert the number of days/week/months/ that has been scheduled for this position] Expected time schedule for this position: [insert the expected time schedule for this position (e.g. attach high level Gantt chart)] | |
| 3. | Title of position: Name of candidate: Duration of appointment: [insert the whole period (start and end dates) for which this position will be engaged] Time commitment: for this position: [insert the number of days/week/months/ that has been scheduled for this position] Expected time schedule for this position: [insert the expected time schedule for this position (e.g. attach high level Gantt chart)] | |
| 4. | Title of position: Name of candidate: | |

| | | |
|----|--|--|
| | Duration of appointment: | [insert the whole period (start and end dates) for which this position will be engaged] |
| | Time commitment: for this position: | [insert the number of days/week/months/ that has been scheduled for this position] |
| | Expected time schedule for this position: | [insert the expected time schedule for this position (e.g. attach high level Gantt chart)] |
| 5. | Title of position: | |
| | Name of candidate: | |
| | Duration of appointment: | [insert the whole period (start and end dates) for which this position will be engaged] |
| | Time commitment: for this position: | [insert the number of days/week/months/ that has been scheduled for this position] |
| | Expected time schedule for this position: | [insert the expected time schedule for this position (e.g. attach high level Gantt chart)] |
| 6. | Title of position: | |
| | Name of candidate | |
| | Duration of appointment: | [insert the whole period (start and end dates) for which this position will be engaged] |
| | Time commitment: for this position: | [insert the number of days/week/months/ that has been scheduled for this position] |
| | Expected time schedule for this position: | [insert the expected time schedule for this position (e.g. attach high level Gantt chart)] |

Appendix to Technical Part

Form PER-2:

Resume and Declaration

Key Personnel

| | | |
|---|--|---|
| Name of Bidder | | |
| Position [#1]: [title of position from Form PER-I] | | |
| 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 [From - To] | Relevant experience |
|----------------|-------------|--|----------------------------|
|----------------|-------------|--|----------------------------|

| | | | |
|-------------------------------|---|-----------------------|--|
| <i>[main project details]</i> | <i>[role and responsibilities on the project]</i> | <i>[time in role]</i> | <i>[describe the experience relevant to this position]</i> |
| | | | |
| | | | |
| | | | |
| | | | |

Declaration

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

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

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

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

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

Name of Key Personnel: *[insert name]*

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Bidder:

Signature: _____

Date: (day month year): _____

Appendix to Technical Part: Equipment

Forms for Equipment

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

| Type of Equipment* | | |
|------------------------------|---|-------------------------------|
| Equipment Information | Name of manufacturer, | Model and power rating |
| | Capacity* | Year of manufacture* |
| Current Status | Current location | |
| | Details of current commitments | |
| Source | Indicate source of the equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured | |

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

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

Appendix to Technical Part

Site Organization

[insert Site Organization information]

Appendix to Technical Part

Method Statement

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

Appendix to Technical Part

Mobilization Schedule

[insert Mobilization Schedule]

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

Appendix to Technical Part

Construction Schedule

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

Appendix to Technical Part

Environmental and Social, Health Management Strategies and Implementation Plans

(ES-MSIP)

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

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

Appendix to Technical Part

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

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

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

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

Note to the Bidder:

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

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

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

This Code of Conduct identifies the behavior that we require from all 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 Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
 7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
 8. not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
 9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
 10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation, and Abuse (SEA)and Sexual Harassment (SH);
 11. report violations of this Code of Conduct; and
 12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism.

RAISING CONCERNS

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

1. Contact [enter name of the Contractor's Social Expert with relevant experience in handling gender-based violence, or if such person is not required under the Contract, another individual designated by the Contractor to handle these matters] in writing at this address [] or by telephone at [] or in person at []; or

2. Call [] to reach the Contractor's hotline (*if any*) and leave a message.

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

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

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

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

FOR CONTRACTOR'S PERSONNEL:

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

Name of Contractor's Personnel: [insert name]

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Contractor:

Signature: _____

Date: (day month year): _____

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

ATTACHMENT 1 TO THE CODE OF CONDUCT FORM

**BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND
BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)**

The following non-exhaustive list is intended to illustrate types of prohibited behaviors as per The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act. 2013 and set up the Internal Compliant Committee in accordance with the Act.

- (1) **Examples of sexual exploitation and abuse** include, but are not limited to:
- A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g., cooking and cleaning) in exchange for sex.
 - A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
 - A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
 - A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favor.
 - A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.
- (2) **Examples of sexual harassment in a work context**
- Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
 - When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
 - Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor's Personnel.
 - A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

Others

Appendix to Technical Part

Sub-Contracting

SCHEDULE OF SUB-CONTRACTORS

| Item | Element of work | % of bid price | Name and address of sub-contractor | Qualification and experience of sub-contractor on similar works of the elements executed |
|-------------|------------------------|-----------------------|---|---|
| | | | | |

The Bidder shall enter in this schedule a list of the major sections and appropriate value of the work for which he proposed to use subcontractors [*for those costing more than 10% of the bid price for each element*], together with the names, addresses and experiences of the proposed subcontractors.

The capability of the sub-contractor will also be assessed (on the same lines as for the main Contractor) before according approval to him.

(Work should not be split into small parts and sub-contracted; but sub-contracting specialized elements of works is acceptable).

Appendix to Technical Part

Others

Appendix to Technical Part

Bidder's Qualification

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

Appendix to Technical Part

Form ELI -1.1: Bidder Information Form

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

| | |
|---|--|
| Bidder's legal name | |
| In case of Joint Venture (JV), legal name of each member: | |
| Bidder's actual or intended country of registration: <i>[indicate country of Constitution]</i> | |
| Bidder's actual or intended year of incorporation: | |
| Bidder's legal address [in country of registration]: | |
| Bidder's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____ | |
| 1. Attached are copies of original documents of <ul style="list-style-type: none"> <input type="checkbox"/> 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. <input type="checkbox"/> Authorization to represent the firm or JV named in above, in accordance with ITB 20. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing: <ul style="list-style-type: none"> • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not under the supervision of the Employer 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. | |

Appendix to Technical Part
Form ELI -1.2: Information Form for JV Bidders
(Where permitted as per BDS ITB 4.1)
(to be completed for each member of Joint Venture)

DELETED

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.

Appendix to Technical Part

DETAILS OF PARTICIPATION IN THE JOINT VENTURE

| PARTICIPATION DETAILS | FIRM 'A' (Lead Member) | FIRM 'B' | FIRM 'C' |
|---|-----------------------------------|-----------------|-----------------|
| Financial | | | |
| Name of the Banker(s) | | | |
| Planning | | | |
| Construction Equipment | | | |
| Key Personnel | | | |
| Execution of Work (Give details on proposed contribution of each) | | | |

The Joint Venture should indicate the details of participation as above.

Appendix to Technical Part

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

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

Bidder's Name: _____

Date: _____

Joint Venture Member's Name _____

RFB No. and title: _____

Page _____ of _____ pages

| Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria | | | | |
|---|---------------------------------------|---|-----------------------------|--|
| Year | Non-performed portion of contract | Contract Identification | Total Contract Amount (Rs.) | |
| <i>[insert year]</i> | <i>[insert amount and percentage]</i> | Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for non-performance: <i>[indicate main reason(s)]</i> | <i>[insert amount]</i> | |
| Pending Litigation, in accordance with Section III, Evaluation and Qualification Criteria | | | | |
| <input type="checkbox"/> No pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3. | | | | |
| <input type="checkbox"/> Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3 as indicated below. | | | | |

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

| <p>Qualification Criteria, Sub-Factor 2.4.</p> <p><input type="checkbox"/> Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4 as indicated below.</p> | | | |
|---|------------------------------------|--|-----------------------------|
| 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] |

Appendix to Technical Part

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

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

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

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

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

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

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

| Environmental and Social Performance Declaration in accordance with Section III, Qualification Criteria, and Requirements | | | |
|---|--|--|------------------------------------|
| Year | Suspended or terminated portion of contract | Contract Identification | Total Contract Amount (Rs.) |
| <i>[insert year]</i> | <i>[insert amount and percentage]</i> | Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s) e.g. for gender-based violence; sexual exploitation or sexual abuse breaches]</i> | <i>[insert amount]</i> |
| <i>[insert year]</i> | <i>[insert amount and percentage]</i> | Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> | <i>[insert amount]</i> |

| | | Reason(s) for suspension or termination: <i>[indicate main reason(s)]</i> | |
|--|--|---|-----------------------------|
| ... | ... | <i>[list all applicable contracts]</i> | ... |
| Performance Security called by an employer(s) for reasons related to ES performance | | | |
| Year | Contract Identification | | Total Contract Amount (Rs.) |
| <i>[insert year]</i> | Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for calling of performance security: <i>[indicate main reason(s) e.g. for non-compliance to regulatory requirements/conditions related to environment protection; non-adherence to work site safety requirements, including Occupational Health and Safety; gender-based violence; sexual exploitation or sexual abuse breaches and non compliance of Labour Laws including non payment of compensation in any accident that takes place at work site]</i> | | |
| | | | |

Appendix to Technical Part

Form CCC: Current Contract Commitments / Works in Progress

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

(A) Existing commitments and on-going works:

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

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

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

Appendix to Technical Part

Form FIN - 3.2: Average Annual Construction Turnover

[To be completed by the Bidder]

Bidder's Legal Name: _____
 Date: _____
 RFB No. and title: _____
 Page _____ of _____ pages

| Annual turnover data (construction only) | |
|---|------------------------|
| Year | Amount in Rs. |
| <i>[indicate year]</i> | <i>[insert amount]</i> |
| | |
| | |
| | |
| | |
| | |
| Average Annual Construction Turnover * | |

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

Appendix to Technical Part

Form FIN – 3.1: Financial Situation and Performance

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

Bidder's Legal Name: _____

Date: _____

Joint Venture Member's Legal Name _____

RFB No. and title: _____

Page _____ of _____ pages

1. Financial data

| Type of Financial information in (Rs.) | Historic information for previous _____ years, (amount in Rs.) | | | | |
|---|---|---------------|---------------|---------------|---------------|
| | Year 1 | Year 2 | Year 3 | Year 4 | 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 | | | | | |
| This information should be extracted from the Annual Financial Statements/ Balance sheets, which should be enclosed. Year 1 will be the latest year for which audited financial statements are available. Year 2 shall be the year immediately preceding year 1 and year 3 shall be the year immediately preceding Year 2. | | | | | |

2. Sources of Finance

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

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

3. Financial documents

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

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

- Attached are copies of financial statements ¹(balance sheets, including all related notes, and income statements) for the _____ years required above; and complying with the requirements

Appendix to Technical Part

Form FIN - 3.2: Average Annual Construction Turnover

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

Bidder's Legal Name: _____
 Date: _____
 Joint Venture Member's Legal Name _____
 RFB No. and title: _____
 Page _____ of _____ pages

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

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

¹ If the most recent set of financial statements is for a period earlier than 12 months from the date of bid, the reason for this should be justified.

Appendix to Technical Part JOINT VENTURE

N/A

Appendix to Technical Part

Form FIN - 3.3: Financial Resources

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

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

FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CASH FLOW

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

Clause 3.1(ii) of Section III – Qualification Criteria

(1) AVAILABILITY OF CASH FLOW (WORKING CAPITAL)

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

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

-- Sd. --

Name of Bank Manager

Senior Bank Manager

Note- This certificate must be as per the above format only and any conditional certificate shall not be accepted.

Address of the Bank

* **Change the text as follows for Joint venture:**

N/A

Appendix to Technical Part

Form EXP - 4.1: General Construction Experience

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

Bidder's Legal Name: _____
 Date: _____
 Joint Venture Member's Legal Name _____
 RFB No. and title: _____
 Page _____ of _____ pages

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

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

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

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

Bidder's Legal Name: _____
 Date: _____
 Joint Venture Member's Legal Name _____
 RFB No. and title: _____
 Page _____ of _____ pages

Work performed as prime Contractor or JV Member or Sub-Contractor or Management Contractor (in the same name and style) on construction works of a similar nature and volume over the last five years². [Attach certificate from the Engineer-in-charge.]

| Similar Contract No. | Information | | | |
|--|--|--|--|--|
| Contract Identification | | | | |
| Award date | | | | |
| Completion date | | | | |
| Role in Contract | Prime Contractor <input type="checkbox"/> | Member in JV <input type="checkbox"/> | Management Contractor <input type="checkbox"/> | Sub- contractor <input type="checkbox"/> |
| Total Contract Amount | Rs. * | | | |
| If member in a JV or subcontractor, specify participation in total Contract amount | | | * | |
| Employer's Name: | | | | |
| Address: | | | | |
| Telephone/fax number | | | | |

²Immediately preceding the financial year in which bids are received.

| | |
|---------|--|
| E-mail: | |
|---------|--|

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

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

Appendix to Technical Part

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

Bidder's Legal Name: _____
Date: _____

Joint Venture Member's Legal Name _____
Subcontractor's Legal Name³ (as per ITB 33.2 and 33.3): _____

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

Subcontractor's Name (as per ITB 33.2 and 33.3): _____
All subcontractors for key activities must complete the information in this form as per ITB 33.2 and 33.3 and Section III, Qualification Criteria and Requirements, Sub-Factor 4.2.

1. Key Activity No One: _____

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

³ If applicable.

| | Information |
|--------------------------------|--------------------|
| Employer's Name ⁴ : | |
| Address: | |
| Telephone/fax number | |
| E-mail: | |

2. Activity No. Two

3.

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

⁴Attach certificate from the Engineer-in-charge

Appendix to Technical Part

Form EXP - 4.2(c)

Specific Experience in Managing ES aspects

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

Bidder's Name: _____
 Date: _____
 Bidder's JV Member Name: _____
 RFB No. and title: _____
 Page _____ of _____ pages

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

| | | | | |
|--------------------------------|--|--|---|---|
| Contract Identification | | | | |
| Award date | | | | |
| Completion date | | | | |
| Role in Contract | Prime Contractor <input type="checkbox"/> | Member in JV <input type="checkbox"/> | Management Contractor <input type="checkbox"/> | Subcontractor <input type="checkbox"/> |
| Total Contract Amount | | | | |
| Details of relevant experience | | | | |

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

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

...

Appendix to Technical Part: Bid Security

Form of Bid Security - Bank Guarantee

[Guarantor letterhead or SWIFT identifier code]

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

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

WHEREAS, _____ [name of Bidder]⁵ (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 _____⁶ 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, or any extended date provided by the Applicant("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

⁶The 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.

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

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

This Guarantee will remain in force up to and including the date _____⁷ 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.

⁷45 days after the end of the validity period of the Bid.

Letter of Bid - Financial Part

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

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

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

Date of this Bid submission:/...../2023

Request for Bid No.: 01/BR/RFB/UGRIDP/2023

To: Program Director

Uttarakhand Green, Resilient & Inclusive Development Project (UGRIDP)

We, the undersigned, hereby submit the second part of our Bid, the Bid Price and Bill of Quantities. This accompanies the Letter of Bid - 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 18.1 (or as amended if applicable) from the date fixed for the Bid submission deadline specified in BDS 22.1 (or as amended if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (b) **Bid Price:** The total price of our Bid, excluding any discounts offered in item (c) below is:

| Price Schedule | Amount (in INR) |
|-----------------------------------|------------------------|
| | |
| Total Excluding GST | |
| Amount of GST | |
| Total Amount including GST | |

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

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

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

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

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

*:

**: 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

Appendix to Financial Part: Schedules Sub-contracting

SCHEDULE OF SUBCONTRACTORS

[Note: Entries in this Schedule shall be the same as included in the same Schedule in the technical part of the bid, except for the column on 'Approximate value of subcontract' added in the table below]

| Item | Element of work | Approximate value of subcontract | % of bid price | Name and address of sub-contractor | Qualification and experience of sub-contractor on similar works of the elements executed |
|------|-----------------|----------------------------------|----------------|------------------------------------|--|
| | | | | | |

The Bidder shall enter in this schedule a list of the major sections and appropriate value of the work for which he proposed to use subcontractors *[for those costing more than 10% of the bid price for each element], together with the names, addresses and experiences of the proposed subcontractors.*

The capability of the subcontractor will also be assessed (on the same lines as for the main Contractor) before according approval to him.

Appendix to Financial Part: Schedules

Bill of Quantities

The Price Schedule Form (in Excel Format) documented separately and can be downloaded from e-procurement portal <http://uktenders.gov.in> along with the bid document.

Important: The Financial Bid Submission Form must be completed and submitted /uploaded on the e-portal (www.uktenders.gov.in) in PDF form in the Financial Envelope along with the BOQ. The Financial Bid Submission Form shall be the part of Commercial Bid and if the bidder fails to submit Financial Bid Submission Form, the bid shall be deemed non-responsive.

Note:

1. *Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities (refer:ITB Clause 14.2 and GCC Clause 45.4).*
2. *Unit rates and prices shall be quoted by the bidder in Indian Rupees (refer: ITB Clause 14.1 and ITB Clause 15.1).*
3. *Where there is a discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern (refer: ITB Clause 36). [Note: delete this point if the e-procurement system automatically calculates the total from the unit rate and quantity]*
4. *Where there is a discrepancy between the rate in figures and words, the rates in words will govern (refer: ITB Clause 36). [Note: delete this point if the e-procurement system automatically populates the amount in words from the amount in figures]*

Section V - Eligible Countries

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

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

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

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

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

Section VI - Fraud and Corruption

(Section VI shall not be modified)

1. Purpose

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

2. Requirements

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

2.2 To this end, the Bank:

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

- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring 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;⁸ (ii) to be a nominated⁹ 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 inspect¹⁰ 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.

⁸ 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.

⁹ 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.

¹⁰ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

PART 2 – Works’ Requirements

Section VII-Works' Requirements

Technical Specifications

1.0 Preamble

- 1.1 The Technical Specifications contained herein as Volume II shall be read in conjunction with the other Documents.

1.1.1 General

The Technical specifications covering the materials and the workmanship aspects as well as method of measurements and payments are included in this section. These specifications cover the items of civil and non-civil works coming under scope of this document. All work shall be carried out in conformity with the same. These specifications are not intended to cover the minute details. The works shall be executed in accordance with good practices followed for achieving high standards of workmanship, thus ensuring safety and durability of the construction. All codes and standards referred to in these specifications shall be the latest thereof unless otherwise stated.

1.1.2 Inclusive Documents

The provisions of special conditions of contract, those specified elsewhere in the tender document, as well as execution drawings and notes, or other specifications issued in writing by the Engineer shall form part of the technical specifications of this project.

- 1.1.3 The attention of the contractor is drawn to those clauses of codes which require supporting specification either by the Engineer or by 'Mutual agreement between the supplier and purchaser'. In such cases, it is the responsibility of the tenderer /contractor to seek clarification on any uncertainty and obtain prior approval of the Engineer before taking up the supply/construction. In absence of such prior clarification, the Engineer's choice/design will be final and binding on the contractor without involving separately any additional payment.

1.1.4 Measurement and Payment

The methods of measurement and payment shall be as described under various items and in the Bill of Quantities. Where specific definitions are not given the methods described in MORD, MORTH, CPWD, IS and B.I.S. Code will be followed. Should there be any detail of

construction or materials which has not been referred to in the specification or in the Bill of Quantities and Drawings but the necessity for which may be implied or inferred there from, or which is usual or essential to the completion of the work in the trades, the cost of same shall be deemed included in the rate and prices entered by the contractor in the Bill of Quantities.

1.1.5 Defective Works

All defective works are liable to be demolished, rebuilt and defective materials replaced by the contractor at his own cost. In the event of such works being accepted by carrying out repairs etc., as specified by the Engineer the cost of repairs will be borne by the contractor.

1.2 Site Information

- 1.2.1 The information given hereunder and provided elsewhere in these documents is given in good faith by the Employer but the Contractor shall satisfy himself regarding all aspects of site conditions and no claim will be entertained on the plea that the information supplied by the Employer is erroneous or insufficient.

Climatic Conditions

Uttarakhand mainly has two different climatic regions, namely, the hilly terrain and the smaller plain region. So, the weather is also quite varied, depending on the particular place.

Summer: Summer, in most of the Uttarakhand is mostly pleasant, but some places do have hot climate. The temperatures, in places like Hardwar, Rishikesh, etc. can reach the 40 degrees Celsius mark. Coupled with humidity, this can be pretty uncomfortable. The summer season of Uttarakhand extends from April to June.

Winter: Winters in Uttarakhand are very cold, with many places receiving regular snowfalls. Temperature during the winter season ranges from subzero to about 15 degrees Celsius. The winter season in Uttarakhand generally extends from October to February.

Monsoon: During the period of July to September, lies the monsoon season of Uttarakhand. The temperature ranges from 15 to 25 degrees Celsius at most of the places, during this time. The state receives approximately 90% of its annual rainfall in the season. It is also one of the most pleasant seasons of Uttarakhand.

2.0 Technical Specifications

The technical specifications for relevant items under the contract are to confirm with relevant clauses of specifications for rural roads, Ministry of Rural Development (MORD), specification for road and bridge works (fifth revision), Ministry of Road Transportation & Highways (MoRT&H) including the variation/extra items if any. Some of the clauses are mentioned below and the clauses under the particular section will be deemed as part of the specification of the works.

LIST OF IRC PUBLICATIONS REFERRED TO IN THE SPECIFICATIONS INDIAN ROADS CONGRESS

| Number Designation | Title |
|--------------------|---|
| IRC:5-2015 | Standard Specifications and Code of Practice for Road Bridges, Section I – General Features of Design (Eighth Revision) |
| IRC:6-2017 | Standard Specifications and Code of Practice for Road Bridges, Section-II Loads and Load Combinations (Seventh Revision) |
| IRC:15-2017 | Code of Practice for Construction of Jointed Plain Concrete Pavements (Fifth) |
| IRC:16-2008 | Standard Specifications and Code of Practice for Prime and Tack Coat (Second) |
| IRC:19-2005 | Standard Specification and Code of Practice for Water Bound Macadam (Third) |
| IRC:22-2015 | Standard Specifications and Code of Practice for Road Bridges, Section VI – Composite Construction (Limit States Design) (Third Revision) |
| IRC:24-2010 | Standard Specifications and Code of Practice for Road Bridges, Steel Road Bridges (Limit State Method) Third Revision) |
| IRC:25-1967 | Type Designs for Boundary Stones |
| IRC:27-2009 | Specifications for Bituminous Macadam (First Revision) |
| IRC:35-2015 | Code of Practice for Road Markings (Second Revision) |
| IRC:38-1988 | Guidelines for Design of Horizontal Curves for Highways and Design Tables (First) |
| IRC:40-2002 | Standard Specifications and Code of Practice for Road Bridges, Section IV – Brick, Stone and Block Masonry (Second Revision) |
| IRC:44-2017 | Guidelines for Cement Concrete Mix Design for Pavements (Third Revision) |
| IRC:45-1972 | Recommendations for Estimating the Resistance of Soil Below the Maximum Scour Level in the Design of Well Foundations of Bridges |
| IRC:57-2006 | Recommended Practice for Sealing of Joints in Concrete Pavements (First Revision) |

| | |
|---------------------------|--|
| IRC:67-2012 | Code of Practice for Road Signs (Third Revision) |
| IRC:75-2015 | Guidelines for the Design of High Embankments (First Revision) |
| IRC:76-1979 | Tentative Guidelines for Structural Strength Evaluation of Rigid Airfield Pavements |
| IRC:78-2014 | Standard Specifications and Code of Practice for Road Bridges, Section VII- Foundations and Substructures (Revised Edition) |
| IRC:79-1981 | Recommended practice for Road Delineators |
| IRC:81-1997 | Guidelines for Strengthening of Flexible Road Pavements Using Benkelman Beam Deflection Technique (First Revision) |
| IRC:82-2015 | Code of Practice for Maintenance of Bituminous Surface of Roads" (First Revision) |
| IRC:83-20015 (Part-I) | Standard Specifications and Code of Practice for Road Bridges, Section IX Bearings, Part I : Roller & Rocker Bearings (Second Revision) |
| IRC:83-2018 (Part II) | Standard Specifications and Code of Practice for Road Bridges, Section IX – Bearings (Elastomeric Bearings), Part II (Second Revision) |
| IRC:83-2018 (Part III) | Standard Specifications and Code of Practice for Road Bridges, Section IX – Bearings, Part III: POT, PIN, Metallic Guide and Plane Sliding Bearings (First Revision) |
| IRC:83-2014 (Part IV) | Standard Specifications and Code of Practice for Road Bridges, Section IX – Bearings (Spherical and Cylindrical) |
| IRC:87-2011 | Guidelines for Formwork, Falsework and Temporary Structures (First Revision) |
| IRC:89-1997 | Guidelines for Design and Construction of River Training & Control Works for Road Bridges (First Revision) |
| IRC:93-1985 | Guidelines on Design and Installation of Road Traffic Signals |
| IRC:103-2012 | Guidelines for Pedestrian Facilities (First Revision) |
| IRC:109-2015 | Guidelines for WetMixMacadam (First Revision) |
| IRC:112-2011 | Code of Practice for Concrete RoadBridges |
| IRC:SP:16-2004 | Guidelines for Surface Evenness of Highway Pavements (First Revision) |
| IRC:SP:20-2002 | Rural Roads Manual |
| IRC:SP:34-1989 | General Guidelines About the Equipment for Bituminous Surface Dressing |
| IRC:SP:35-1990 | Guidelines for Inspection and Maintenance of Bridges |
| IRC:SP:48-1998 | Hill Road Manual |
| IRC:SP:49-2014 | Guidelines for the Use of Dry Lean Concrete as Sub-base for Rigid Pavement |
| IRC:SP:50-2013 | Guidelines on Urban Drainage |
| IRC:SP:51-2015 | Guidelines for Load Testing of Bridges (First Revision) |
| IRC:SP:52-1999 | Bridge Inspector's Reference Manual |
| IRC:SP:53-2010 | Guidelines on Use of Modified Bitumen in Road Construction (Second |

| | |
|-----------------|--|
| | Revision) |
| IRC:SP:55-2014 | Guidelines on Traffic Management in Work Zones(<i>First Revision</i>) |
| IRC:SP:56-2011 | Guidelines for Steel Pedestrian Bridges (First Revision) |
| IRC:SP:74-2007 | Guidelines for Repair and Rehabilitation of Steel Bridges |
| IRC:SP:76-2015 | Guidelines for Conventional and Thin Whitetopping" (First Revision) |
| IRC:SP:79-2008 | Tentative Specifications for Stone Matrix Asphalt |
| IRC:SP:80-2008 | Guidelines for Corrosion Prevention, Monitoring and Remedial Measures for Concrete |
| IRC:SP:81-2008 | Tentative Specification for Slurry Seal and Micro-surfacing |
| IRC:SP:83-2008 | Guidelines for Maintenance, Repairs & Rehabilitation of Cement Concrete Pavements |
| IRC:SP-104-2015 | Guidelines for Fabrication and Erection of Steel Bridges |
| IRC:SP-105-2015 | Explanatory Handbook to IRC:112-2011: Code Practice for Concrete Roads Bridges |
| IRC:SP:112-2017 | Manual for Quality Control in Road and Bridge works |
| IRC:SP:114-2018 | Guidelines for Seismic Design of Road Bridges |
| IRC:SP:115-2018 | Guidelines for Design of Integral Bridges |
| IRC:SP:116-2018 | Guidelines for Design and Installation of Gabion Structures |

LIST OF INDIAN STANDARDS REFERRED TO IN THE SPECIFICATIONS

INDIAN STANDARDS

| Number Designation | Title |
|-----------------------|--|
| IS:73-1992 | Paving bitumen specification (second revision) |
| IS:77-1976 | Specification for linseed oil;, Boiled, for paints(second revision) |
| IS:102-1962 | Ready Mixed Paint, Brushing, Red Lead , Non Setting, priming |
| IS:104-1979 | Ready Mixed Paint, Brushing, Zinc Chrome, Primming (second Revision) |
| IS:123-1962 | Specification for Ready Mixed Paint, Brushing, Finishing Semi-Gloss. For General Purposes, to Indian Standard Colours(Revised Revision) |
| IS:164-1981 | Specification For Ready Mixed Paints for road making (First revision) |
| IS:217-1988 | Specification for cutback bitumen (second revision) |
| IS:226-1975 | Structural steel (standard quality)(fifth revision) |
| IS:269-1989 | Specification for 33 grade Ordinary Portland Cement (fourth revision) |
| IS:278-2009 | Galvanized Steel Barbed Wire for fencing –specification |
| IS:280-2006 | Mild steel wire for general Engineering purposes (fourth revision) |
| IS:345-1952 | Wood Filter Transparent Liquid |
| IS:356-1991 | Easter gum (second revision) |
| IS:383-1970 | Specification for test Sieves : Part III Methods of examination of Apertures of Test Sieves (Third revision) |
| IS:503-1963 | Alloy Austenitic Manganese steel castings |
| IS:516-1959 | Methods of test for strength of concrete |
| IS:712-1984 | Specifications for building limes (third revision) |
| IS:736-1986 | Wrought Aluminum and Aluminum Alloys, Plates for general Engineering |

| | |
|--------------------------------------|---|
| | purposes(Fourth revision) |
| IS:783-1985 | Code of practice for laying of concrete pipes (first revision) |
| IS:784-2001 | Prestressed concrete pipes (including Fittings)-Specifications (second revision) |
| IS:814-2004 | Covered Electrodes for Manual Metal Arc welding of carbon and carbon manganese steel (fifth revision) |
| IS:816-1969 | Code of practice for use of Metal Arc welding for general construction in mild steel (first revision) |
| IS:817-1966 | Code of practice for Training and Testing of Metal Arc welders(revised revision) |
| IS:822-1970 | Code of procedure for Inspection of welds |
| IS:877-1989 | Method of Sampling and Test for Activated Carbons, Powered and Granular (second revision) |
| IS:919-1993(part-1) | ISO System of limits and fits part 1 Bases of Tolerance, Deviation and fits (second revision) |
| IS:919-1993(part-2) | ISO System of limits and fits part 2 Tables of standard Tolerance Grades and limit Deviations for Holes and shafts (first revision) |
| IS:961-1975 | Structural steel (High tensile) (second revision) |
| IS:1077-1992 | Common Burnt clay building Bricks (fifth revision) |
| IS: 1079-1994 | Hot Rolled Carbon Steel sheets and strips –specifications (sixth revision) |
| IS: 1124-1974 | Method of test for water Absorption, Apparent Specific Gravity and Porosity of Natural Building Stones(first revision) |
| IS:1129-1972 | Recommendations for Dressing of natural building stones (first revision) |
| IS:1148-1982 | Hot Rolled Rivet Bars (upto 40mm dia) for structural purposes (third revision) |
| IS:1149-1982 | Hot Tensile steel Rivet Bars for structural Purposes (third revision) |
| IS:1182-1983 | Recommended practice for Radiographic Examination of fusion welded Butt joints in steel plates (second revision) |
| IS:1199-1959 | Method of sampling and analysis of concrete |
| IS:1203-1978 | Determination of penetration |
| IS:1205-1978 | Determination of Softening Point |
| IS:1212-1978 | Determination of Loss of Heating |
| IS: 1216-1978 | Determination of Solubility in carbon DisulphideTrichlorothylene |
| IS:1217-1978 | Determination of Mineral Matter |
| IS:1239:1990(part 1) | Steel Tubes Tabulars and other Wrought steel fittings specification: part 1 steel tubes |
| IS:1363-2002 (part 1,2&3) | Hexagonal Head Bolts , Screw and nuts of product Grade 'c' |
| IS:1364-2002 (part 1,2&3) | Hexagonal Head Bolts , Screw and nuts of product Grade 'A'&'B' |
| IS:1365-2005 | Slotted Countersunk, Flat Head Screw (common Head Style)-Product Grade A(fourth revision) |
| IS:1367-1997 | Technical supply condition for threaded steel fasteners |
| IS:1393-1961 | Code of practice for Training and Testing of Oxy Acetylene Welders |
| IS:1477-1971 (part 1&2) | Code of practice for Painting of ferrous Metals in Buildings |
| IS:1489-1991 (Part 1) (Part 2) | Specification for Portland pozzolana Cement (third revision) Flyash Based (third revision) Calcined Clay Based (third revision) |

| | |
|--------------------------|---|
| IS:1498-1970 | Classification and identification of soils for General Engineering purposes(First revision) |
| IS:1514-1990 | Methods of sampling and test for quick lime and hydrated lime (first revision) |
| IS:1597-1992 (Part 1) | Construction of stone masonry –code of practice –part 1-Rubble stone masonry (first revision) |
| IS:1732-1989 | Dimensions for round and square steel bars for structural and general engineering purposes (second revision) |
| IS:1745-1978 | Specification for petroleum Hydrocarbon Solvent (second revision) |
| IS:1785-1983(part 1) | Specification for plain, Hard Drawn steel wire for prestressed concrete :part 1 cold Drawn Stress Relieved Wire (second revision) |
| IS:1785-1983(part-II) | Specification for Plain, hard drawn steel wire for Prestressed concrete:part2 As Drawn Wire (first revision) |
| IS:1786-1985 | High Strength Deformed Steel Bars and Wires For Concrete Reinforcement (Third Revision) |
| IS:1834-1984 | Specification for Hot applied sealing compounds for joints in Concrete pavement and structures (Non-Extruding and Resilient Type):part1 Bitumen Impregnated Fibre (first revision) |
| IS:1838-1983(part1) | Specification for performed filler for expansion joint in concrete pavement and structures (Non-Extruding and Resilient type):Part 1 Bitumen impregnated fibre (First Revision) |
| IS:1838-1984(part2) | Specification for performed filler for expansion joint in concrete pavement and structures (Non-Extruding and Resilient type):Part 2 CNSL Aldehyde resin and coconut pith |
| IS:1852-1985 | Rolling and cutting Tolerance for hot Rolled steel products (fourth revision) |
| IS:1875-1992 | Carbon steel Billets , blooms , slabs and bars for forgings (fifth revision) |
| IS:1888-1992 | Method of Load Test on soils (second Revision) |
| IS:1892-1979 | Code of practice for sub surface investigation for foundations(first revision) |
| IS:1966-2003 | Laboratory Glassware –straight bore glass stopcocks for general purposes |
| IS:1977-1996 | Low Tensile Structural steels-Specifications(third revision) |
| IS:1995-1984 | Overall internal height for lathe tools posts (first revision) |
| IS:2004-1991 | Carbon steel forgings for general engineering purposes (third revision) |
| IS:2016-1967 | Specification for plain Washers (first revision) |
| IS:2062-2006 | Hot rolled low, Medium and high tensile structural steel (sixth revision) |
| IS:2090-1983 | Specification For High tensile steel bar used in prestressed concrete (first revision) |
| IS:2116-1980 | Specification for sand for Masonary mortars (first revision) |
| IS: 2131-1981 | Method for standard penetration test for soils (first revision) |
| IS:2132-1986 | Code of practice for thin walled Tube sampling of soils (second revision) |
| IS:2185-2005(part1) | Concrete masonry units –specification: part 1 Hallow and Solid Concrete Blocks |
| IS:2250-1981 | Code of practice for preparation and use of masonry motors (first revision) |
| IS:2269-2006 | Hexagon socket head cap screws (fifth revision) |
| IS:2339-1963 | Aluminium paint for General Purposes in Dual Container |

| | |
|--|---|
| IS:2386-1963 (Part 1) (Part 2) (Part 3) (Part 4) (Part 5) (Part 6) (Part 7) (Part 8) | Methods of test for Aggregates for Concrete Particle size and shape Estimation of deleterious materials and organic impurities Specific gravity, Density, voids, Absorption and Bulking Mechanical properties Soundness Measuring mortar making properties of fine Aggregates Alkali Aggregate Reactivity Test Petrographic examination |
| IS:2502-1963 | Code of practice for Bending and fixing of bars for concrete Reinforcement |
| IS:2506-1985 | General requirement for screed board concretevibrator (first revision) |
| IS:2514-1963 | Specification for concrete vibrating tables |
| IS:2720 (Part 1)-1983 (Part 2)-1973 (Part 4)-1985 (Part 5)-1985 (Part 8)-1983 (Part 16)-1987 (Part 27)-1977 (Part 28)-1974 (Part 37)-1976 (Part 40)-1977 | Methods of test for soils Preparation of Dry soil samples for various tests (Second Revision) Determination of Water Content (Second Revision) Grain Size Analysis (Second Revision) Determination of Liquid and Plastic limits (Second Revision) Determination of Water Content Dry Density Relation using heavy compaction (Second Revision) Laboratory Determination of CBR Determination of total Soluble Sulphates (First Revision) Determination of Dry Density of Soils in-place by the sand Replacement Method (First Revision) Determination of sand Equivalent Values of Soils and Fine Aggregates Determination of Free Swell Index of Soils |
| IS:2751-1979 | Code of Practice for Welding of Mild Steel Plain and Deformed Bars for Reinforced Concrete Construction (First Revision) |
| IS:2911 (Part-1) (Sec-3)-1979 | Code of Practice for Design and Construction of Pile and Deformed Bars for Reinforced Concrete Construction (First Revision) Concrete Piles, Section 3 Driven Precast Concrete |
| IS: 2925-1984 | Specification for Industrial Safety Helmets (Second Revision) |
| IS:3025: (Part 17)-1984 | Methods of Sampling and Test (Physical and Chemical) for water and Waste water: part 17 Non-Filterable Residue (Total Suspected Solids) (First Revision) |
| IS:3025 (Part 18)-1984 | Methods of Sampling and Test (Physical and Chemical) for water and waste Water-Part 18 Volatile and Fixed Residue (Total Filterable and Non-Filterable) (First Revision) |
| IS: IS:3025 (Part 22)-1986 | Methods of Sampling and Test (Physical and Chemical) for water and Waste Water-Part 22: Acidity (First Revision) |
| IS: IS:3025 (Part 23)-1986 | Methods of Sampling and Test (Physical and Chemical) for water and Waste Water-Part 23: Alkalinity (First Revision) |
| IS: IS:3025 (Part 28)-1984 | Methods of Sampling and Test (Physical and Chemical) for water and Waste Water-Part 28: Sulphite (First Revision) |
| IS: IS:3025 (Part 32)-1988 | Methods of Sampling and Test (Physical and Chemical) for water and Waste Water-Part 32: Chloride (First Revision) |
| IS:3073-1967 | Assessment of Surface Roughness |
| IS: 3138-1966 | Specifications for Hexagonal Bolts and Nuts |
| IS: 3400 (Part 3)- | Methods of Test for Vulcanized Rubbers: Part 3 Abrasion Resistance using a |

| | |
|--------------------------------|--|
| 2004 | Rotating Cylindrical Drum Device (First Revision) |
| IS: 3400 (Part 2)-2004 | Methods of Test for Vulcanized Rubbers: Part 2 Rubber Vulcanized or Thermoplastic Determination of Hardness (Hardness between 10 IRHD and 100 IRHD) (Third Revision) |
| IS: 3400 (Part 4)-2004 | Methods of Test for Vulcanized Rubbers: Part 4 Accelerated Ageing (Second Revision) |
| IS: 3400 (Part 10)-2004 | Methods of Test for Vulcanized Rubbers: Part 10 Compression Set at Constant Strain (First Revision) |
| IS: 3400 (Part 14)-1984 | Methods of Test for Vulcanized Rubbers: Part 14 adhesion of Rubber to Metal (First Revision) |
| IS: 3400 (Part 20)-2004 | Methods of Test for Vulcanized Rubbers: Part 20 Resistance to Ozone Cracking-Static Strain (First Revision) |
| IS:3589-2001 | Steel Pipes for Water and Sewage (168.3 to 2540 mm Outside Diameter)-Specification (Third Revision) |
| IS: 3613-1974 | Acceptance Tests for Wire Flux Combination for Submerged Arc Welding (First Revision) |
| IS: 3658-1999 | Code of Practice for Liquid Penetrant Flaw Detection (Second Revision) |
| IS: 3764-1992 | Code of Safety for Excavation Work (First Revision) |
| IS: 3784-1994 | Textiles- Cloth, Cotton Khadi Bleached for General Purposes-Specification (First Revision) |
| IS: 3812:1981 | Specification for Fly Ash for Use as Pozzolana and Admixture (First Revision) |
| IS:4031: (Part 5)-1988 | Methods of Physical Tests for Hydraulic Cement: Part 5 Determination of Initial and Final Setting Times (First Revision) |
| IS: 4078-1980 | Code of Practice for Indexing and Storage of Drill Cores (First Revision) |
| IS: 4081-1986 | Safety Code for Blasting and Related Drilling Operations (First Revision) |
| IS: 4138-1977 | Safety code for Working in Compressed Air (First Revision) |
| IS: 4260-1986 | Recommended Practice for Ultrasonic Testing of Butt Welds in Ferritic Steel (Second Revision) |
| IS: 4434-1978 | Code of Practice for In-Situ Vane Shear Test for Soils (First Revision) |
| IS: 4453-2009 | Subsurface Exploration by Pits, Trenches, Drifts and Shafts-Code of Practice (Second Revision) |
| IS: 4656-1968 | Specification for Form Vibrators for Concrete |
| IS: 4826-1979 | Hot Dipped Galvanised Coating on Round Steel Wires (First Revision) |
| IS: 4853-1982 | Recommended Practice for Radiographic Inspection of Fusion Welded Butt Joints in Steel Pipes (First Revision) |
| IS: 4923-1997 | Hollow Steel Sections for Structural Use (Second Revision) |
| IS: 4925-2004 | Concrete Batching and Mixing Plant-Specification (First Revision) |
| IS: 4926-2003 | Ready Mixed Concrete- Code of Practice (Second Revision) |
| IS: 4968-1976 (Part- 1, 2 & 3) | Method for Subsurface Sounding for Soils |
| IS: 4984-1995 | Specification for High Density Polyethylene Pipes for Potable Water Supplies (Fourth Revision) |
| IS: 5334-2003 | Magnetic Particle Flaw Detection of Welds-Code of Practice (Second Revision) |
| IS: 5435-1987 | General Requirements For Cold Bituminous Macadam Mixing Plants Specification (First Revision) |
| IS: 5640-1970 | Method for Determining the Aggregate Impact Value of Soft Coarse Aggregate |
| IS: 6003-1983 | Specification for indented wire for Prestressed Concrete (First Revision) |

| | |
|----------------------|---|
| IS: 6006-1983 | Specification for Uncoated Stress Relieved Strand for Prestressed Concrete (First Revision) |
| IS:6241-1971 | Method of test for determination of stripping value of road aggregates |
| IS:6603-2001 | Stainless steel bars and flats – Specification(first revision) |
| IS:6610-1972 | Specification for heavy washers for steel structures |
| IS:6639-1972 | Specification for hexagonal bolts for steel structures |
| IS:6761-1994 | Fasteners-Countersunk head screw with Hexagonal socket Specification (first revision) |
| IS:6909-1990 | Specification for super sulphated cement |
| IS:6911-1992 | Stainless steel plate, sheet and strip(first revision) |
| IS:6925-1973 | Methods of test for determination of water in concrete admixtures |
| IS:7205-1974 | Safety codes for Erection of structural steel work |
| IS:7269-1974 | Numbering of Aircraft engines, Engine cylinder, combustion chambers and direction of rotation of engines and propellers |
| IS:7273-1974 | Method of testing fusion welded joints in Aluminium and Aluminium Alloys |
| IS:7292-1974 | Codes of practice for In-Situ Determination of rock properties by flat jack |
| IS:7293-1974 | Safety code for working with Construction Machinery |
| IS: 7307(part1)-1974 | Approval test for welding with procedures part-1 fusion welding of steel |
| IS:7308-1999 | Non-Coniferous logos-Specification (first revision) |
| IS:7310(part1)-1974 | Approval test for welding working to approved welding procedures part1:fusionwelding of steel |
| IS:7317-1993 | Codes of practice for Uniaxial jacking test for deformation modulus of frock (first revision) |
| IS:7573-1975 | Hockey shoes |
| IS:7746-1991 | Code of practice for In-Situ Shear test on rock (first revision) |
| IS:7966-1976 | Specification for dental modelling wax |
| IS:8500-1991 | Structural steel-Microalloyed specification |
| IS:8812-1978(part1) | Method for chemical Analysis of hard solders for jointing Aluminium and Aluminium Alloys Part 1 Determination of silver, copper, zinc, Antimony, iron and Bismuth |
| IS:8812-1978(part1) | Method for chemical Analysis of hard solders for jointing Aluminium and Aluminium Alloys Part 2 Determination of Aluminium |
| IS:9000-2005 | Quality Management systems-Fundamentals vocabulary(third revision) |
| IS:9012-1978 | Recommended practice for shotcreting |
| IS:9437-2008 | Specification for fixed precision resistors |
| IS:9565-1995 | Acceptance standards for ultrasonic inspection of steel casting |
| IS:9595-1996 | Metal Arc welding of carbon and carbon manganese steels recommendations (first revision) |
| IS:9862-1981 | Ready mixed paint, brushing, Bituminous, black, Lead free, Acid, Alkali, Water and Chlorine resisting |
| IS:10433(part1)-1983 | Specification for male stud tee body (stud run)for oil-Hydraulic coupling –part-1:Made from Forging |
| IS:11587-1986 | Structural weather resistant steels |
| IS:12063-1987 | Classification of Degrees of protection provided by Enclosers of Electrical Equipment |

| | |
|--------------------------|---|
| IS:12089-1987 | Specification for Granulated slag for manufacture of Portland slag cement |
| IS:12119-1987 | General Requirements for pan Mixers for concrete |
| IS:12269-1987 | Specification for 53 grade ordinary Portland cement |
| IS:12330-1988 | Specification for sulphate resisting Portland cement |
| IS:12594-1988 | Hot Dip Zinc coating on structural steel bars for concrete reinforcement-specification |
| IS:13162-1992 (part4) | Geotextiles – method of test-part 4:determination of puncture resistance by falling cone method |
| IS: 13162(part5)-1992 | Geotextiles – method of test-part 5: determination of tensile properties using a wide width strip |
| IS:13360-1992 | Plastics methods of testing |
| IS:13620-1993 | Fusion boned epoxy coated reinforced bars – specification |
| IS:13757-1993 | Burnt clay Ash building bricks specification |
| IS:13759-1993 | Polyurethane primer zinc phosphate |
| IS:14293-1995 | Geotextiles –method of test Trapezoid tearing strength |
| IS:14294-1995 | Geotextiles –method for determination of apparent opening size by dry sieving technique |
| IS:14324-1995 | Geotextiles –method of test for determination of water permeability – permimittivity |
| IS:14589-1999 | Zinc Priming paint, Epoxy Based Two Pack –Specification |
| IS:14700(part6 sec 3) | Electromagnetic compatibility (EMC)- Part 6 Generic Standard –Sec3: Emission standard for Residential, Commercial and Light Industrial Environments |
| IS:14925-2001 | Epoxy Resin for paints-Specification |
| IS:15284 (part1)-2003 | Design and Construction for Ground Improvement –Guidelines Part 1 stone columns |
| (part2)-2004 | Design and Construction for Ground Improvement–Guidelines :Part 2 Preconsolidation using Vertical Drains |
| IS:15388-2003 | Silica Fume –Specification |
| IS:15462-2004 | Polymer and Rubber Modified Bitumen –Specification |
| IS:15809-2008 | High Visibility Warning Clothes- Specification |
| IS:SP:23-1982 | Handbook on Concrete Mixes (Based on Indian Standards) |

2.1 Earthwork in Cutting (Cl. 300)

2.1.1 Scope (Cl. 302.1)

The work shall consist of excavation, removal and satisfactory disposal of all materials necessary for the construction of protection wall, side drains and waterways in accordance with the requirements of these specifications and the line, grades and cross section shown in the drawing or as indicated by Engineer.

It shall include earthwork in excavation in ordinary soil, soft rock, hard rock or soil mixed with boulders to achieve designed formation width

including hauling and staking of materials useful for construction at suitable sites and safe disposal of unsuitable cut materials in specified manner.

2.1.2 Classification of excavated materials (Cl. 302.2):

2.1.2.1 Classification (Cl. 302.2.1): All materials involved in excavation shall be classified by the Engineer as under:

- **Soil**—This shall comprise sand, silt, clay, mud, peat, black cotton soil, soft shale, mixture of these or similar materials. The dimension in any direction not exceeding 75mm occurring in such strata shall be deemed to be covered under this category.
- **Ordinary rock (not requiring blasting)** – It contain rock type such as laterites, shale, varieties of sandstone and limestone. It can be Macadam surfaces such as water bound bitumen and tar bound or for boulders which do not require blasting having maximum dimension in any direction more than 300 mm, found lying loose on the surface.
- **Hard Rock (requiring blasting)**– Blasting would be required for any rock or cement concrete for the excavation or for removing the boulders.
- **Hard Rock (blasting prohibited)** – In case blasting is prohibited the excavation has to be carried out by chiseling, wedging or any other agreed method.
- **Marshy soil**— This shall include soils like soft clays and peats excavated below the original ground level of marshes and swaps and soil excavated from other areas requiring continuous pumping or bailing out of the water.

2.1.2.2 Stripping and storing Top soil (Cl. 302.3.2)

The top soil existing over the sites of excavation shall be stripped to specified depths and stockpiled at designated locations for reuse in covering cut slopes and other disturbed areas where re-vegetation is desired. Prior to stripping the top soil, all trees, shrubs, etc. shall be removed along with their roots, with approval of engineer.

2.1.2.3 Excavation (Cl. 302.3.3)

The excavation shall be done manually or mechanically using angle dozers. If done by mechanical means, the work is commenced generally using dozers started at trace level sideways into hillside. Two-stage construction i.e. first making 2.5m track and then widening shall be done if light vehicle communication is to be established as an urgent requirement.

All debris and loose material on the slopes of cutting shall be removed. After excavation the sides of excavated area shall be trimmed and the area contoured to minimize erosion and ponding, allowing natural drainage to take place. Compensatory afforestation cost for damage to trees shall be paid to Forest department as per relevant act.

All excavated material shall be disposed of to pre-designated prior approved safe places by the contractor, in accordance with EMP, as directed by the Engineer.

2.1.2.4 Slides/slips/subsidence (Cl. 302.3.9)

If slides, slips or subsidence occur during the process of construction, they shall be removed at the cost of the contractor as ordered by the engineer. Adequate precautions shall be taken to ensure that during construction, the slopes are not rendered unstable or give rise to recurrent slides after construction. All such material shall be disposed of to the pre-designated prior approved safe places by the contractor, in accordance with ESMP, as directed by the Engineer.

2.1.2.5 Drainage in excavated portion (Cl. 302.3.10)

If water is met within the excavation due to spring, seepage from ponded water or any other reasons, it shall be removed by suitable diversions. Care should be taken to discharge the drain water into suitable outlets as not to cause any damage to works, crops or any other property.

2.1.3 Excavation for Structures (Cl. 305)

2.1.3.1 Scope (Cl. 305.1):

This work consists of excavating for the construction of foundations for cross drainage structures, retaining walls, headwalls and other similar structures, in accordance with the requirements. The work shall include construction of bracing, shoring, drainage and pumping, removal of all logs, stumps and other deleterious matter and obstructions necessary for

placing the foundations, trimming bottoms of excavations, backfilling and cleaning up the site.

2.1.3.2 Width of excavation (Cl. 305.3.2)

It shall be the width of lowest step of the footing and where the nature of soil permits, the sides shall be left vertical. However, if nature of soil or depth of trench and season do not permit the vertical sides, the contractor at his own expense shall put necessary shoring, strutting, and planking or cut slope to a safer angle or both with due regard of safety of personnel and works and to the satisfaction of the Engineer.

2.1.3.3 Depth of excavation (Cl. 305.3.3)

It shall be as per the drawings unless the type of material encountered is such as to require changes in which case of depth shall be as ordered by the engineer.

2.1.3.4 Dewatering (Cl. 305.3.5)

If water is met within the excavation due to stream flow, seepage, rain or other reasons, the contractor shall take adequate measures such as pumping, constructing diversion channels, bunds, and other necessary works to keep the foundation trenches dry when so required and to protect the green concrete/masonry against the damage to erosion or sudden rising of water table. Pumping from the interior of any foundation enclosure shall be done in such a manner as to preclude the possibility of the movement of water through any fresh concrete. No pumping shall be permitted during the placing of concrete or for any period of at least 24 hours thereafter unless it is done from a suitable sump separated from the concrete work by a watertight wall or other similar means.

2.1.3.5 Foundation preparation (Cl. 305.3.6)

The bottom of the foundation shall be levelled both longitudinally and transversally. Before footing is laid, the surface shall be slightly watered and rammed. In case excavation has been made deeper than that shown in drawings or as otherwise ordered by the Engineer, the extra depth shall be made up with concrete or masonry of the foundation at the cost of contractor, ordinary filling shall not be used for the purpose.

When rock or other hard rock stratum is encountered, it shall be freed of all soft and loose material, cleaned and cut to a firm surface either level or stepped as directed by the Engineer.

2.1.3.6 Public safety (Cl. 305.3.8)

Near towns, villages and all frequented places, trenches and foundations pits shall be securely fenced, provided with proper caution signs and marked with red lights at night to avoid accidents. For safety precautions, guidance may be taken from IS 3764 and IRC-SP-55.

2.1.3.7 Backfilling (Cl. 305.3.9)

It shall be done with approved material after concrete and masonry is fully set and carried out in such a way as not to cause undue thrust on any part on the structure. All space between foundation masonry or concrete and the sides of excavation shall be refilled to the original surface not exceeding 150 mm compacted thickness. The compaction shall be done with the help of suitable equipment such as mechanical tamper, rammer, plate vibrator, etc.

2.1.3.8 Measurements for Payment (Cl. 305.4)

Excavation for structures shall be measured in cubic metres for each class of material encountered, limited to the dimensions shown on the drawings or as directed by Engineer. Excavation over increased width, cutting of slopes, shoring, shuttering and planking shall be deemed as convenience for the Contractor in executing the work and shall not be measured and paid for separately.

Preparation of rock foundation shall be measured in square metres. Foundation sealing, dewatering, including pumping shall be deemed to be incidental to the work unless separate provision is made for in the contract. In the latter case, payment shall be on lump sum basis as provided in the Bill of Quantities.

2.1.4 Rate (Cl. 305.5)

2.1.4.1 The contract unit rate for the items of excavation for structures shall be payment in full for carrying out the required operation including full compensation for (Cl. 305.5.1):

- i) Setting out;
- ii) Construction of necessary sheeting, shoring and bracing and their subsequent removal;
- iii) Removal of all logs, stumps, grubs and other deleterious matter and obstructions, for placing the foundation including trimming of bottoms of excavations;

-
- iv) Foundation sealing, dewatering including pumping, when no separate provision for it is made in the contract;
 - v) Backfilling, clearing up the site and disposal of surplus material within all lifts and leads upto 1000 m or as otherwise specified; and
 - vi) All labour materials, tools, equipments, safety measures, diversion of traffic and incidentals, necessary to complete the work to specifications.

2.1.4.2 The contract unit rate for preparation of rock foundation shall be full compensation for cutting, trimming, and cleaning the foundation surface and filling /sealing of all seams with cement grout or mortar including all materials, labour and incidentals required for completing the work (Cl. 305.5.2).

2.1.4.3 The contract unit rate for transporting materials from the excavation for structures shall be full labour, equipment, tools and incidentals necessary on account of the additional haul or transportation involved beyond the initial lead of 1000m (Cl. 305.5.3).

2.2 STONE MASONRY/RRM Wall (Cl. 700)

2.2.1 Scope (Cl. 701)

The work shall consist of construction of structures with stone jointed together by cement mortar or cement lime mortar in specified proportions in accordance with the provisions laid down in this section IRC:40 and details shown on drawings or as approved by the Engineer.

General – Stone samples required for approvals must be supplied in advance, at least 48 hours or minimum time required for carrying out the relevant tests and according approvals.

2.2.2 Stone (Cl. 702.4)

- Stone shall be hard, sound, free from cracks, decay, weathering, defects like cavities, flaws, sand holes, and patches of loose or soft materials or together similar defects that may adversely affect its strength or appearance and shall be from approved quarry.
- Stones with round surface shall not be used. Stone used shall conform to the requirements of IS: 1597 (Part 1).

- Stones when immersed in water for 24 hours shall not absorb water more than 5 % of their weight when tested in accordance with IS: 1124 and shall not soften when rubbed by hand.
- No stones shall be less in width than its height and width on base shall not be greater than three-fourth of the wall thickness nor less than 150mm.
- For coursed rubble masonry, the length of any stone shall not exceed three times its height nor shall less than twice its height. The size of the stone shall be such that it can be lifted and placed by hand.

2.2.3 Water (Cl. 702.6)

It should be clean and percentage of deleterious materials in it shall not be more than the permissible limit.

2.2.4 Construction operations (Cl. 704)

2.2.4.1 Laying (Cl. 704.2)

Stones shall be sufficiently wetted before laying to prevent absorption of water from mortar. Stratified stones shall be laid on their beds. Outer layer of masonry shall be laid first. Location of headers (bond stones) shall then be fixed and headers laid.

Based on locally available size of stones of any dimension less than 150mm, the height of course of masonry shall be predetermined by the engineer. They shall be of same height. The height of course shall not be less than 160mm. When there is a variation in height of courses, the larger courses shall be placed at lower levels with height of course decreasing gradually towards top of the wall. No dry and hollow space must be left anywhere in the masonry and each stone shall have all the embedded faces completely covered with mortar.

Bed of masonry which is to receive the stone shall be cleaned, wetted and covered with layer of fresh mortar. All stones shall be laid full in mortar both in bed and vertical joints and settled carefully in place with a wooden mallet immediately on placement and solidly embedded in mortar before it has set. The quantity of mortar consumed shall be 0.25 to 0.30 cum per cubic meter of stone masonry. The face stones shall be first fixed in position and then the stones in the hearting shall be placed and fixed in the mortar.

Concrete levelling course of minimum average thickness of 150mm and of M10 grade shall be provided on the rock before laying the first course of stone masonry.

In case any stone already set in mortar is disturbed or the joint broken, it shall be taken out without disturbing the adjoining joints, the stone shall be reset in fresh mortar after removing dry mortar and thoroughly cleaning the stones and joints. Sliding of stones on top of another freshly laid stones shall not be permitted. No dressing and hammering, which will loosen the masonry, shall be allowed after it is once placed.

Sufficient transverse bonds shall be provided by the use of bond stones extending from the front to the back of the wall from the outside to the interior and vice versa, overlapping each other by 150mm. Only rectangular shaped bond stones and headers shall be used. In case natural bond stones are not available, precast concrete M15 bond block of size as given in Table: 3 shall be used. Cast in situ headers shall not be permitted.

At junctions of walls, stones at each alternate course shall be carried out into each of the respective walls to unite the work thoroughly. All the vertical joints shall be truly vertical and staggered as far as possible. Distance between the vertical joints of upper layer and lower layer shall not be less than half the height of course.

The face stones shall be hammer dressed on all beds and joints to give them approximately regular shape. The face stones shall tail into the work for not less than its height and at least one third of the stones shall tail in the work for a length not less than twice of its height. The size of face stones for different preferred height of courses shall be as given in Table: 1

Table 1: Size of face stones for different preferred height of course

| Size | Height of course (mm) | Minimum acceptable size of face stones (mm) | Preferable size of face stones (mm) | Size of longer stones 1/3 rd of total face stones (mm) | Size of precast concrete bond blocks (mm) |
|------|-----------------------|---|-------------------------------------|---|---|
| A | 160 | 150x150x200 | 150x180x225 | 150x180x300 | 150x180x450 |
| B | 180 | 170x170x210 | 170x210x225 | 170x210x340 | 170x210x500 |
| C | 220 | 190x190x225 | 190x225x280 | 190x225x280 | 190x225x600 |

2.2.4.2 Random Rubble Masonry (Cl. 704.5)

2.2.4.3 Dressing (Cl. 704.5.1)

Stone shall be hammer dressed on the face, the sides and beds to enable it to come in proximity with neighbouring stone. The bushing on the exposed face shall not be more than 40mm.

2.2.4.4 Hearting stones (Cl. 704.5.3)

The interior filling of the wall face shall consist of rubble stones not less than 150 mm in any direction, carefully laid, hammered down with a wooden mallet into position and solidly bedded in mortar.

2.2.4.5 Bond stones (Cl. 704.5.4)

Bond stones are selected long stones, used to hold a wall together transversely. Though bond stones shall be provided in masonry up to 600 mm thickness and in case of masonry above 600mm thickness, a set of two or more bond stones overlapping each other at least, by 150mm shall be provided in a line from face to back. In case of highly absorbent types of stones (porous limestone and sandstones, etc) the bond stone shall extend only about two-third into the wall, as through stones in such cases may give rise to penetration of dampness and therefore, for all thickness of such masonry, a set of two or more bound stones overlapping each other by at least 150 mm shall be provided. Minimum one bond stone or a set of bond stones shall be provided for every 0.5 sqm of the masonry surface.

Joints: The face joints shall not be more than 20mm thick, but shall be sufficiently thick to prevent stone-to-stone contact and shall be completely filled with mortar.

2.2.5 Measurement for Payment (Cl. 712)

All stone work shall be measured in cubic metres. Any extra work done by the contractor over the specified dimension shall be ignored.

In arches, the length of arch shall be measured as the mean length between the extrados and intrados.

The work of pointing shall be measured in sq. m of the surface treated. Architectural coping shall be measured in linear metres.

2.2.6 Rate (Cl. 713)

The contract unit rate for stone masonry work shall include the cost of all labour, materials, tools and plants, scaffolding including centering if required, sampling testing, supervision, and other expenses incidental to the satisfactory completion of the work as described in these specifications.

The contract unit rate for work shall also include full compensation for using dressed stones faces of walls with batter.

The contract unit rate for pointing shall include cost of all labour, materials, tools and plants for erecting and removal of scaffolding including centering if required and all incidental expenses to complete the pointing, i.e. raking out joints, cleaning, wetting, filling with mortar, trowelling, pointing and watering. sampling and testing and supervision as described in these Specifications.

The contract unit rate for architectural coping shall include cost of all labour, materials, tools and plants, sampling and testing and supervision as described in these Specifications

2.3 Concrete for structures (Cl. 800)

2.3.1 Scope (Cl. 801)

These specifications cover the requirements of cement concrete for use in various components of structures. The work shall consist of supplying and placing of concrete using all materials in accordance with these Specifications and in conformity with the lines, grades and dimensions, as shown in drawings or as directed by the Engineer.

2.3.2 General (Cl. 802.1)

All materials to be used in the work shall be in conformity with the requirements laid down in this section.

The Contractor shall notify the Engineer of his proposed source of materials prior to delivery. It is found that proposed sources of supply do not produce uniform and satisfactory products at any time of execution, the Contractor shall provide acceptable materials conforming to the specifications from other sources at his own cost.

2.3.3 Cement (Cl. 802.2)

Cements to be used in the works shall be any of the following types with the prior approval of the Engineer (Cl. 802.2.1):

- i. Ordinary Portland Cement,33 Grade conforming to IS:269
- ii. Ordinary Portland Cement,43 Grade conforming to IS:8112
- iii. Rapid hardening Portland Cement conforming to IS: 8041
- iv. Portland Pozzolana Cement conforming to IS:1489(Part-1)
- v. Portland blast Furnace Slag Cement conforming to IS:455
- vi. Sulphate resistance Portland Cement conforming to IS:12330

Mixing of blast furnace slag with ordinary Portland cement at site shall not be permitted.

Mixing of different types of cement in one lot of concrete shall not be permitted.

Notwithstanding BIS marking or test certificates, the cement shall be got tested for the following main properties as ascertain that these properties meet the requirements as BIS before incorporation in the work. At least one set of three tests shall be conducted for each consignment.

- i. Fineness IS: 4031(Parts 1,2& 15)
- ii. Setting Time IS: 4031(Part 5)
- iii. Soundness IS: 4031(Part 3)
- iv. Compressive Strength IS: 4031(Part 6)

For any type of cement, initial setting time shall not be less than 30 minutes and final not be more than 600 minutes.

Cement brought to work site shall not be more than 6 weeks old from the date of its production. Cement more than 3 months old shall invariably be tested to ascertain that it satisfy acceptability requirements and its suitability for the works.

For any type of cement, the cement content required to achieve the minimum specified strength not be more than 450kg per cum of concrete.

Use of Portland Pozzolana Cement, IS: 1489(Part 1) shall be permitted only in plain concrete members and fly-ash or any other pozzolanic material shall not be used to replace part of cement or fine aggregates.

2.3.1.1 Storage of cement (Cl. 802.2.2)

Cement in bag shall be stored on wooden platform minimum 200 mm above the floor level and minimum 600 mm above the ground level

whichever is higher, in perfectly dry and watertight sheds. The cement shall be stacked not more than eight bags high and in a manner to facilitate their removal and use in the order in which they were received. Cement bags shall be stacked at least 450 mm clear off the walls and space between the consecutive two rows shall not be less than 600mm.

Different types of cement/each consignment shall be stacked and stored separately and cement shall be used in the sequence in which it is received.

Storage of cement at the work site shall be at the contractor's cost and risk. Any damage occurring to the cement due faulty storage or negligence on his part shall not be used in the work and removed from site by the Contractors without charge to the Employer.

The Contractor shall keep proper records on the site in respect of type of cement, lot no., date of manufacture, manufacturers' certificate regarding quality with respect to the requirement of BIS, test results confirming the main properties like fineness, setting time, soundness, compressive strength of cement used for various components of structure.

2.3.4 Coarse Aggregate (Cl. 802.3)

Coarse aggregates shall be clean, free from adherent coating, hard, strong, dense, non-porous and durable pieces of crushed stone, crushed gravel, natural gravel or a suitable combination thereof or other inert material. They shall not consist of pieces of disintegrated stones, soft, flaky, elongated particles, salt, alkali, vegetable matter or other deleterious materials such as coal, lignite, mica, pyrite, shale, and clay, organic impurities in such quantities as to reduce the strength and durability of the concrete, or attack the steel reinforcement. Coarse aggregate having positive alkali-silica reaction shall not be used. All coarse aggregates shall conform to IS: 383 and tests for conformity carried out as per IS: 2386(Part 1 to 8).

Before commencement of the works, at least three samples in accordance with the procedure laid down in IS: 2430 shall be taken for each quarry source to ascertain the quality, suitability and fitness of the available materials for use in the works.

The Contractor shall furnish the information specified in Appendix -A of IS: 383

The nominal sizes of graded coarse aggregate shall be 40, 20, or 12.5 mm as specified in the drawings.

The preferred size of aggregate is 20 mm for reinforced concrete. Larger sizes upto 40 mm may be permitted in special cases when there is no restriction to flow of concrete in a section. If smaller sizes are required to be used for any member 10 mm and 12.5 mm may be used.

For plain concrete, the preferred nominal size of aggregate shall be between 20 and 40 mm.

The maximum value for flakiness index for coarse aggregate shall not exceed 35 per cent.

Coarse aggregate shall be either graded or single sized (ungraded) of different sizes to be blended at site to obtain the required grading as specified. Coarse aggregates, unless otherwise agreed by the Engineer in writing, shall be supplied in different sizes (2 sizes when nominal size is 25 mm or less and 3 sizes when nominal size is 32 mm or more). The graded coarse aggregate shall satisfy the requirements given in the table 2.

Table 2: Percentage weight passing the sieve for nominal size of course aggregates

| IS Sieve Size | Per cent Weight Passing the Sieve for nominal Size of | | |
|---------------|---|--------|---------|
| | 40 mm | 20 mm | 12.5 mm |
| 63 mm | 100 | - | - |
| 40 mm | 95-100 | 100 | - |
| 20 mm | 30-70 | 95-100 | 100 |
| 12.5 mm | - | - | 90-100 |
| 10 mm | 10-35 | 25-55 | 40-85 |
| 4.75 mm | 0-5 | 0-10 | 0-10 |

2.3.5 Sand /Fine aggregates (Cl. 802.4)

Sand/fine aggregates of sizes 0.15 to 4.75 mm shall consist of sand or hard pieces of crushed stone or crushed gravel or combination thereof. They shall be clean and shall not contain lumps, soft or flaky materials, mica or other deleterious materials in such quantities as to reduce the strength and durability of concrete or to attack the embedded steel. All fine aggregates shall conform to IS: 383 and test for conformity carried out as per IS: 2386(Parts 1 to 8). The Fineness modulus of fine aggregates shall be between 2.0 to 3.5.

Grading of aggregates shall be such as to produce a dense and workable concrete of specified strength without segregation and use of excessive water content. Sand/fine aggregate shall conform to grading requirements given in table 3.

Table 3: Percentage weight passing the sieve for nominal size of fine aggregates

| IS Sieve size | Per cent by weight Passing the Sieve | | |
|----------------------|---|----------------|-----------------|
| | Zone I | Zone II | Zone III |
| 10 mm | 100 | 100 | 100 |
| 4.75 mm | 90-100 | 90-100 | 90-100 |
| 2.36 mm | 60-95 | 75-100 | 85-100 |
| 1.18 mm | 30-70 | 55-90 | 75-100 |
| 600 micron | 15-34 | 35-59 | 60-79 |
| 300 micron | 5-20 | 8-30 | 12-40 |
| 150 micron | 0-10 | 0-10 | 0-10 |

2.3.6 Requirement of Nominal Mix Concrete (Cl. 804.4)

2.3.6.1 General (Cl. 804.4.1)

Nominal mix concrete shall generally be specified by grades of concrete. Proportion of ingredients of concrete shall be by mass. Water shall either be measured by volume in calibrated tanks or weighed.

Where weight of cement is determined by accepting the maker's weight per bag, a reasonable number of bags shall be weighed separately to check the net weight. The cement shall be measured by in terms of number of full bags to avoid error in proportioning.

Volume batching shall be permitted only after the accurate determination of bulk densities of coarse and fine aggregates proposed to be used in the works. Allowance for bulking shall be made in accordance with IS: 2386(Part 3). The mass volume relationship shall be checked frequently as necessary, the frequency being determined by the Engineer to ensure the required grading is maintained.

2.3.7 Mixing of Concrete (Cl. 806)

For all works, concrete shall be mixed in a mechanical mixer complying with IS: 1791 and IS: 12119 fitted with water measuring device. The mixer and other accessories shall be kept in first class working condition

and so maintained throughout the construction. Mixing shall be continued till materials are uniformly distributed and a uniform color and consistency of the entire mass is obtained. Further each individual particle of the coarse aggregate shall show complete coating of mortar containing it proportionate amount of cement. If there is segregation after unloading from the mixer, the concrete shall be remixed. In no case shall the mixing be done for less than 2 minutes after all ingredients have been put into the mixer.

2.3.8 Concreting Under Water (Cl. 808)

When it is necessary to deposit concrete under water, the concrete shall not be permitted to fall freely through water. The method equipment, materials and proportions of the mix to be used shall be got approved from the Engineer before any work is started.

Concrete shall not be placed in water having temperature below 50C. The temperature of the concrete, when deposited shall not be less than 160C and not more than 400C.

2.3.9 Protection and Curing (Cl. 810)

Concreting operations shall be started until adequate arrangements for proper curing of concrete have been made by the contractor.

Curing is the process for preventing the loss of moisture from the concrete. The prevention of moisture loss from the concrete is particularly important if the water -cement ratio is low. Curing and operations shall start immediately after the compaction of the concrete to protect it from:

- Premature drying out due to Sun heat and wind.
- High internal thermal gradients.
- Leaching out by rain and flowing water.
- Rapid cooling during the first few days after placing.
- Low temperature or frost.
- Vibrations and impact which may disrupt the concrete and interface with its bond to the reinforcement.

2.3.9.1 Water curing (Cl. 810.1)

Water used for mixing and curing shall be clean and free from injurious amounts of oils, acids, salts, sugar, organic material and other substances that may be harmful to concrete and steel. Potable water (with pH value between 6 and 8) is generally considered satisfactory for mixing and curing of concrete. Sea water shall not be used. After one or

two hours of concreting, the concrete shall be protected from quick drying by covering with moist gunny bags, canvas, hessian or similar material as approved by Engineer. After 24 hours, all exposed surfaces of concrete shall be kept continuously in a damp or wet condition by ponding or by covering with a layer of sacks, canvas, hessian or similar materials and shall be kept constantly wet for a period of not less than 14 days from the date of placing of concrete.

2.3.9.2 Curing Compounds (Cl. 810.2)

Curing compounds shall not be used on any surface which requires further finishing to be applied. All construction shall be moist, cured and no curing compound shall be permitted in locations where concrete surfaces are required to be bonded together.

Curing compound shall only be permitted in special circumstances and with specific approval of the Engineer. Curing compounds shall be continuously agitated during use. All concrete cured by this method shall receive two applications of the curing compound. First coat shall be applied immediately after acceptance of concrete finish. If the surface is dry, the concrete shall be saturated with water and curing compound applied as soon as the surface film of water disappears. The second application shall be made after the first application has set. Placement in more than 2 coats may be required to prevent streaking.

Masonry work over the foundation concrete shall not be started earlier than 48 hours of its laying but the curing or concrete shall be continued for minimum of 14 days.

2.3.10 Construction joints (Cl. 812)

The location and details of construction joints not indicated on the drawings must be approved by Engineer-in-Charge before concrete is poured. Construction joint in foundation shall not be provided without specific concurrence of Engineer.

When work has to resumed on a surface which has hardened, such surface shall be roughened. It shall be then swept clean with wire brushes etc. thoroughly wetted, and covered with a 10 mm layer of neat cement slurry. This 10 mm layer of mortar shall be freshly mixed and placed immediately before the placing of concrete.

Where concrete has not fully hardened, all laitance shall be removed by scrubbing the wet surface with wire or bristle brushes, care being taken to avoid dislodgement of particle of aggregate. The surface shall be

thoroughly wetted for 24 hours before hand and all free water removed. The surface shall then be coated with neat cement grout. The first layer of concrete to be placed on this surface shall not exceed 150 mm thickness and shall be well rammed against old work, particular attention being paid to corners and close spots.

2.3.11 Rate (Cl. 817)

The contract unit rate for concrete shall include the cost of all materials, labour, tools and plants and equipment required for mixing, transporting, placing in position, vibrating and compacting, finishing and curing as per this Section or as directed by the Engineer, including all other incidental expenses, sampling, testing, quality assurance, supervision for producing concrete of specified strength to complete the structure or its components as shown on the drawings and these Specifications. The contract unit rate shall also include the cost of making, providing, fixing and removing of all form work required for completion of concrete work as per section 900 of these Specifications.

The contractor shall pay a discount over the contract unit rate as determined by the Engineer in case concrete is acceptable as substandard work.

For deficiency in compressive strength of concrete when accepted by the Engineer, the reduction in rate shall be applied as under:

$$\text{Per cent reduction} = \frac{\text{Specified strength} - \text{Observed Strength}}{\text{Specified Strength}} \times 100$$

2.4 Foundations (Cl. 1203)

2.4.1 Scope (Cl. 1203.1)

The work shall cover furnishing and providing plain cement concrete foundations placed in open excavation in accordance with the drawings and specifications or as directed by the engineer.

2.4.2 Depth of Foundation (Cl. 1203.2)

In Soils: The minimum depth of foundation shall be up to stratum having the specified bearing capacity shown on the drawing but shall not be less than 2m below scour level where no bed protection is provided or 1.5 m below the protected bed level unless otherwise specified in the drawings.

In rocks: The minimum embedment of foundation into the rock below shall be as follows

- a) Hard rocks with ultimate crushing strength of 10 MPa 500 mm
- b) All other types like soft rocks/erodible rocks etc. 1200 mm

In case of sloping rock profile, the surface on which the foundation shall rest be made levelled by properly benching the rock face/profile. Where the levels of foundations of returns can be kept higher than those of abutment, stepping of foundations may be resorted to with difference in level not more than 1.5 m and length not less than 3 m . A vertical joint shall be kept at each change of foundation level.

51.1.a.i.1.1

Environmental and Social Requirements

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

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

Specifications.

The Contractor, in connection with the provision of the Facilities/ Works under this Contract, shall at a minimum be compliant with:

- i. provisions of Environmental Impact Assessment Notification 2006 and Biodiversity Act 2002 (and subsequent amendments thereof) and take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation, and shall preserve and protect all existing vegetation such as trees on or adjacent to the site which do not unreasonably interfere with the execution of the Works; and the Contractor shall be held responsible for all unauthorized cutting of and damage to trees, by careless operation of his plant, equipment and machinery and stockpiling of materials etc. and the Employer shall have no responsibility on this account;
- ii. all applicable laws, including safety requirements/codes/rules, labour laws (Refer Annex 1); and
- iii. the Contract Terms and Conditions.
- b. The Contractor shall be fully responsible for compliance and monitoring and reporting with all relevant environmental protection and social safeguards regulations and standards and health and safety of host population and prepare mitigation plan (Refer Annex 2 for site specific plans) with respect to provision of the Works and with respect to the Contractor's personnel, subcontractors and sub-suppliers pursuant to the Contract.
- c. The Contractor shall
 - i. Ensure implementation of appropriate social safeguards standards in accordance with the national and state laws and policies and international standards and practices for all personnel involved in provision of the Works, including use of digital systems (ICT Tools for tracking compliance of labor laws) for monitoring and reporting

ii. Comply with and ensure implementation of appropriate environment, health and safety standards in accordance with the national and state laws and policies and international standards and practices for all personnel involved in provision of the Works, including use of digital systems (e-Tools for tracking compliance of environment, health and safety requirements) for monitoring and reporting

iii. Comply with all applicable national, provincial, and local environmental and social laws and regulations and all reasonable requests of the national and local authorities responsible for enforcing environmental and social controls; iv. Prepare and implement site specific Labour influx management plan for health and safety of host population (Refer Annex 2 and ESS-4)

v. within 28 days of the Effective Date, shall submit a detailed site specific Environmental and Social Management Plan, along with Occupational Health and Safety Plan (refer Annex 2) submitted in the technical proposal, for the Project Manager's no objection showing how the Contractor intends to comply with environmental and social laws and regulations and other specific requirements prescribed in the Contract, addressing all the monitoring and mitigation measures including those, if any, mentioned in Sections on Employer's Requirements;

Note: Before providing No-objection, SPMU, and PIUs shall also check and ensure if required safeguards documents, including on preventive plans on Sexual Exploitation and Abuse -Sexual Harassment, Labour influx management plans and ICT system for tracking compliance of labour welfare laws/ / obligations have been complied with for all categories of contracts.

vi. shall (a) establish an operational system for managing environmental impacts, (b) comply with the approved site specific Environmental and social Management Plan (ESMP) and any corrective or preventative actions set out in safeguards monitoring reports that the Employer will prepare from time to time to monitor the implementation of the ESMP, (c) allocate the budget required to ensure that such measures, requirements and actions are carried out, (d) submit monthly, quarterly and semi-annual reports on the compliance of such measures to the Employer; an

vii. shall, where unanticipated environmental and social risks or impacts become apparent during the Contract, be required to update the site specific ESMP to outline the potential impacts to site works and associated mitigation measures for the Project Manager's approval.

d. Respectful Work Environment

The Contractor shall ensure that its employees and Subcontractors observe the highest ethical standards and refrain from any form of bullying, discrimination, misconduct, and harassment, including sexual harassment and shall, at all times, behave in a manner that creates an environment free of unethical behavior, bullying, misconduct, and harassment, including sexual harassment as per The Sexual Harassment of Women at Workplace (prohibition, Prevention, Redressal) Act 2013 and set up the Internal Complaint Committee in accordance with the ActThe Contractor shall take appropriate action against any

employees or Subcontractors, including suspension or termination of employment or subcontract, if any form of unethical or inappropriate behavior is identified.

The Contractor shall conduct training programs for its employees and Subcontractors to raise awareness on and prevent any form of bullying, discrimination, misconduct, and harassment including sexual harassment, and to promote a respectful work environment and establish Grievance Redress Mechanism. The Contractor shall keep an up-to-date record of its employees and subcontractors who have attended and completed such training programs and provide such records to the Employer or the Engineer at their first written request.

(a) The Contractor shall build storages for storing his Plant and materials including Contractor's Equipment etc. and also build site offices, labor sheds, staff accommodation etc. for self. The Contract Price is deemed to include for providing these and other required facilities as per the instructions of the Project Manager.

(b) In case of floods resulting in flooding of the work Site/ areas, the Contractor shall make his own arrangements, at his own cost, to shift Plant and material, equipment and machinery, Contractor's Equipment, including Employer Supplied Material, if any, and labour to safe place. The work shall be resumed after receding of floods and dewatering the area. Except otherwise provided in the Contract, the Employer shall not be liable for any loss of or damage or injury in this regard or on this account, and no compensation, whatsoever, in this regard shall be paid to the Contractor by the Employer.

(c) During the course of execution of the Works, the Contractor shall submit, 6 (six) weeks in advance of the start of activity, to the Project Manager, in duplicate, for his information the updated method statements for execution of all-important items of work, during excavation phase, concreting phase, grouting phase, as well as erection/ installation phase. These method statements shall on one hand be consistent with the construction drawings and Technical Specifications and on the other hand consider all the applicable Site conditions. These method statements shall include the need of specialized inputs required for successful execution of the particular structure.

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

| Sub- Clause/Clause | No. | Sub-Clause/Clause | Remarks |
|-------------------------------|------------|--------------------------|---|
| 8.2 | | <i>Other Contractors</i> | <i>Indicate specific aspects (Environment social standards-ESS 1-10) sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life-cycle. (if any) that require contractor's cooperation such as to conduct environmental and social</i> |

| Sub- Clause/Clause | Sub-Clause/Clause | Remarks |
|-------------------------------|---|--|
| No. | | |
| 9.4.1, 9.4.2, 9.4.7, 9.4.8 | <i>Labor</i> | <p>assessment as per the guideline of Environment social management framework(ESMF) describes the environmental ,social review and monitoring protocols</p> |
| 9.4.6 | <i>Facilities for Staff and Labor</i> | <p>State applicable legal requirements (refer annex 1 and ESS 2)and in accordance with the labor management procedure.</p> |
| 9.4.20 | <i>Training of Contractor's Personnel</i> | <p>-Indicate if access to or provision of services that accommodate physical, social and cultural needs of Contractor's Personnel is required. As set out in the Environment and Social Commitment Plan (ESCP) for the project it includes material measures and actions, to be carried out or caused to be carried out by the Recipients, including the timeframes of the actions and measures, institutional, staffing, training, monitoring and reporting arrangements, grievance management, specify, details of any training to relevant Contractor's Personnel to be provided by the Employer's Personnel on environmental and social aspects. (whom, what, when, where, how long etc.)</p> |
| 15.2 | <i>Contractor to Construct the Works</i> | <p>If the Contract specifies that the Contractor shall design any part of the Permanent Works, state anyapplicable technical standards and requirements including to address:</p> |
| | | <ul style="list-style-type: none"> • Climate change considerations • Seismic risks • Landslides/slips; erosion etc. • Safety of asset/s and users • Universal access |

| Sub- Clause/Clause | No. | Sub-Clause/Clause | Remarks |
|-------------------------------|--|---|--|
| 18.2 | <i>Health and Safety Obligations</i> | <ul style="list-style-type: none"> • <i>risks of the public's potential exposure to operational accidents or natural hazards, including extreme weather events, applicable certification or approval requirements</i> • <i>risk of community health and safety due to labour influx</i> | <p>[Refer to ESS4 on requirements for design]</p> |
| 18.3 | <i>Protection of the Environment</i> | | <p><i>Requirements as per ESMP, Occupational Health and Safety Plan, Labour Welfare Laws and ESS 2.</i></p> <p><i>Emissions, surface discharges, effluent and any other pollutants as per limits prescribed in the Country's Environmental Regulations and as defined in the ESMP.</i></p> |
| 19.1 | <i>Archeological and Geological Findings</i> | | <p><i>In accordance with the EMP and ESS8</i></p> |
| 29.1 | <i>Security of the Site</i> | | <p><i>State any additional requirements for the security arrangements (ESS4 of the ESF states the principles of proportionality, GIIP and applicable laws. Include any other requirement set out in the ESCP.</i></p> |

- ***Resource efficiency***

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

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

- **Raw material:** When the Works have been assessed to involve a potentially significant use of raw materials, specify any applicable measures to support efficient use of raw materials.
- **Pollution prevention and management**
 - **Management of air pollution:** specify any measure to avoid or minimize Works related air pollution. See also GCC Sub-Clause 18.3 and the table aboveon Conditions of Contract that make reference to ES matters in the Specification.
 - **Management of hazardous and nonhazardous wastes:** specify any applicable measures to minimize the generation of waste, and reuse, recycle and recover waste in a manner that is safe for human health and the environment including storage, transportation and disposal of hazardous wastes. See also GCC Sub-Clauses 18.2 and 18.3 and the table aboveon Conditions of Contract that make reference to ES matters in the Specification.
 - **Management of chemicals and hazardous materials:** specify any applicable measures to minimize and control the release and use of hazardous materials for Works activities including the production, transportation, handling, and storage of the materials. See also GCC Sub-Clauses 18.2 and 18.3 and the table aboveon Conditions of Contract that make reference to ES matters in the Specification.
- **Biodiversity Conservation and Sustainable Management of Living Natural Resources**
 - :
 - *invasive alien species:* managing the risk of invasive alien species during the execution of the Works;
 - *sustainable management of living natural resources;* and
 - *certification and verification requirements for the supply of natural resource materials where there is a risk of significant conversion or significant degradation of natural or critical habitats.*
- **Road Safety**
 - *State any specific traffic and road safety requirement, as applicable. See also Sub-Clause 9.3 of the General Conditions of Contract. For details, refer to the Guidance Note on Road safety.*

PAYMENT FOR ES REQUIREMENTS

The Employer's ES and procurement specialists should consider how the Contractor will cost the delivery of the ES requirements. In the majority of cases, the payment for the delivery of ES requirements shall be a subsidiary obligation of the Contractor covered under the prices quoted for other Bill of Quantity items or activities. For example, normally the cost of implementing workplace safe systems of work, including the measures necessary for ensuring traffic and road safety, shall be covered by the Bidder's rates for the relevant works.

Alternatively, provisional sums could be set aside for discrete activities for example for HIV counselling service, and, GBV/SEA awareness and sensitization or to encourage the contractor to deliver additional ES outcomes beyond the requirement of the Contract.

Annex 1.

1. The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996 and Centra; Rules 1998.
2. The Building and Other Construction Workers' Welfare Cess Act 1996 and Welfare Cess Rules 1998
3. The Minimum Wages Act 1948
4. The Industrial Employment (standing Orders) Central Rules 1946
5. The Payment and Wages Act 1936
6. The Employees Compensation Act, 1923
7. The Employees State Insurance Act 1948
8. The Contract Labour Act 1986
9. The Inter-state Migration Workmen Act 1979
10. The Equal Remuneration Act 1976
11. The Maternity benefit Act 1961
12. The Sexual Harassment of Women at Workplace (prohibition, Prevention, Redressal) Act 2013
13. The Child and Adolescent Labour (Prohibition and Regulation) act 1986

Annex 2.

Tools for Avoidance, Minimising and Mitigation

Where the mapping indicates that there is a likelihood of a negative impact of labor influx in any project, a mitigation plan has to be put in place involving the key stakeholders. The contractor has contractual accountability to the client/borrower as well as a contractual and legal relationship with the sub-contractor. The contractor also stands in a position of “Principal Employer” to the workers and is therefore ultimately responsible for the labor welfare measures which would influence the impact of labor on the local community. In order to mitigate the negative effects of influx of migrant labors on the host community, the contractor needs to:

1. Assess the conditions of the host community prior to starting the work and hire labor accordingly
2. Manage influx and hire sub-contractors who have the capacity to manage effects of impacts
3. Conduct orientation meetings with the workers and where workers are engaged through a sub-contractor, with the sub-contractor, to apprise them of the social, political, cultural environment and instruct them to conduct themselves accordingly
4. Lay down a “Code of Conduct” for the workers to avoid adverse impacts on the community
5. Conduct periodic meetings with representatives of the community to track issues likely to impact it negatively

-
6. Ensure a monitoring system to track possible negative impacts and ensure timebound mitigation measures

Depending on the results of studying the nature and extent of impact, all or any of the following mitigating measures may be taken:

Workers Camps and Management of Worker - Community Interface

Camp Location Respond with Yes or No

1. Where the conditions are conducive, i.e. some indications of positive impacts are found, camps can be located in a place which helps workers to interact with the host community. This could facilitate easier acceptance, and co-existence. All cautionary measures are to be adopted at such camps as well
2. In the best interest of the workers, the camp should be located at a place where there is mobile phone connectivity so that the workers can be in touch with their family
3. Where the connectivity of the camp with the project site is a crucial factor, keeping in mind the time and costs of the project, and the camp necessarily has to be located close to the community, adopt all cautionary measures
4. Where the cost or time is not an issue and negative impacts are indicated, locate the camp at a location which is far away from the local residential area

Managing Worker - Community interface

Camp Location Respond with Yes or No

1. The camp should be kept self-sufficient so that workers do not need to visit the local community market for day to day purchases
2. The camp should have means of entertainment and amusement for workers including indoor games, televisions etc. so that workers do not feel the need to move out in search of entertainment
3. Locals should be employed for guarding the camp so that movement of workers and locals can be monitored and restricted
4. The scope for workers to meet locals more often than necessary should be reduced by fixing accountability on local elders/influentials to keep a watch on workers' movement inside the host community, especially after dark
5. Workers should be kept under constant monitoring of respective troop leaders/sardars/labor supplier and fix accountability on troop leaders for their actions
6. Watch should be kept on interactions of young and unmarried migrants with locals
7. Where favorable conditions allow, help the locals in accepting the migrant workers by allowing both to meet, interact and spend time

Engagement with the Host Community

1. Hire a local sub-contractor/labor-supplier to exercise influence on and engage with the host community
2. Engage local workers to satisfy "son-of-the-soil" demand
3. Extend some reasonable favors to keep the locals happy
4. Involve some local influential person or persons in some capacity and give him/them some decision-making power
5. Form joint committee/s with local influential persons which would monitor the effect of influx of outsiders and liaison between them and the host community
6. Ensure that project staff behave responsibly to environment in particular, not dumping waste, creating water-logging, etc.

7. Provide certain amenities or services, such as use of water supply to some extent, small repairs to public/community buildings, occasional recreation and entertainment such as sports events or film screening, etc.

8. Engage with and manage groups who are in majority or capable of creating problems

Engagement with the Host Community

9. Engage the local unemployed educated youth in responsible jobs like site supervisor, junior engineer, etc.

10. Understand and manage the caste or ethnicity politics

11. Balance the requirement of outside workers with the tendency of the host community to be hostile to certain cultural, ethnic or religious groups

12. Alternately, ensure reduction of conflict by keeping the workers away from the community, ensure short duration stay or phased engagement to ensure the barriers are removed

13. Ensure that welfare measures are implemented in full so that labor is satisfied and confined to camp and worksites and therefore minimise the incidents of drawing on local resources or mingling with the host community

The following broad labor welfare measures will cumulatively affect the frequency and quality of interface with the host community and must be regularly monitored:

Camp Location Respond with Yes No

1. Access to the labor camp/site by road, avoiding passages through local habitations

2. Access to basic facilities including doctor/physician/para medical professionals, chemist, shops, and market for workers staying at the camp

3. Provision of basic health and safety measures³¹ such as equipment like fire extinguishers at the camp and ensuring that at least a few workers staying in the camp permanently have the required knowledge of using the safety devices

4. Provision of safety exits for evacuation during emergency

5. Adequate ventilation in rooms or containers with bunk-beds

6. Provision of personal safe/locker/storage space for the labors for storing valuables if not clothes & household goods

7. Labor camps set at a place with no issue related to connectivity for mobile service operators

8. Provision of basic facilities in camp including drinking water filter, sanitation facility, adequate number of toilets and covered space for bathing and washing

9. Provision of kitchen, canteen/space for workers to eat their meals under hygienic conditions

10. Camp is self-sufficient and equipped where workers need not go out to buy commodities including vegetables, etc. for sustenance, at least for a week

11. Provision of bed with mattress and pillow alongside materials like blankets in sufficient numbers, keeping climatic conditions in mind

12. Each worker should have his private space even if they share rooms, not only for sleeping, alone but also for spending time during off season/hours

13. Feedback or grievance redressal mechanism where workers without fear of getting laid off, can report their complaints related to quality of services and facilities at their camp

14. Camp is secured 24x7 by guards hired by contractors

15. Provision for entertainment and recreation like games, TV, etc. for workers in the camp during off season/hours

16. Camp should have a first aid box that is regularly maintained by professionals

Drawings

(Drawings are uploaded on the e-portal in a separate folder)

Supplementary Information

PART 3 – Conditions of Contract and Contract Forms

Section VIII - General Conditions of Contract

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

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

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

General Conditions of Contract

A. General

1. Definitions

Boldface type is used to identify defined terms.

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

Materials and Plant.

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

-
- (aa) The **Site** is the area defined as such in the PCC.
 - (bb) **Site Investigation Reports** are those that were included in the bidding document and are factual and interpretative reports about the surface and subsurface conditions at the Site.
 - (cc) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
 - (dd) The **Start Date** is **given in the PCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
 - (ee) A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
 - (ff) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
 - (gg) A **Variation** is an instruction given by the Project Manager which varies the Works.
 - (hh) The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the PCC.
 - (ii) “**Contractor’s Personnel**” refers to all personnel whom the Contractor utilizes on the Site or other places where the Works are carried out, including the staff, labor and other employees of each Subcontractor.
 - (jj) “**Key Personnel**” means the positions (if any) of the Contractor’s personnel that are stated in the Specification.
 - (kk) “**ES**” means Environmental and social (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH)).
 - (ll) “**Sexual Exploitation and Abuse**” “(SEA)”means the following:

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

Sexual Abuse is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or

under unequal or coercive conditions.

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

2. Interpretation

- 2.1 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
- 2.2 If sectional completion is **specified in the PCC**, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
 - (a) Agreement,
 - (b) Letter of Acceptance,
 - (c) Contractor’s Bid,
 - (d) Particular Conditions of Contract,
 - (e) General Conditions of Contract, including Appendices,
 - (f) Specifications,
 - (g) Drawings,
 - (h) Bill of Quantities,¹¹ and
 - (i) any other document **listed in the PCC** as forming part of the Contract.

3. Language and

- 3.1 The language of the Contract and the law governing the

¹¹ In lump-sum contracts, delete “Bill of Quantities” and replace with “Activity Schedule.”

| | |
|---------------------------------------|--|
| Law | Contract are stated in the PCC . |
| | 3.2 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Employer's country when <ul style="list-style-type: none"> (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's Country prohibits any import of goods from that country or any payments to any country, person, or entity in that country. |
| 4. Project Manager's Decisions | 4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer. |
| 5. Delegation | 5.1 Unless otherwise specified in the PCC , the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor. |
| 6. Communications | 6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered. |
| 7. Subcontracting | 7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations. The Contractor shall require that its Subcontractors execute the Works in accordance with the Contract, including complying with the relevant ES requirements and the obligations set out in Sub-Clause 28.1. |
| 8. Other Contractors | 8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as referred to in the PCC . The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors and shall notify the Contractor of any such modification. 8.2 The Contractor shall also, as be stated in the Specifications or as instructed by the Project Manager, cooperate with and allow appropriate opportunities for the Employer's or any other personnel, notified to the Contractor by the Employer or Project Manager, to conduct any environmental and social |

assessment.

- 9. Personnel and Equipment**
- 9.1 The Contractor shall employ the Key Personnel and use the Equipment identified in its Bid, to carry out the Works or other personnel and Equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and Equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 9.2 The Project Manager may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Key Personnel (if any), who:
- (a) persists in any misconduct or lack of care;
 - (b) carries out duties incompetently or negligently;
 - (c) fails to comply with any provision of the Contract;
 - (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment;
 - (e) based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution of the Works;
 - (f) has been recruited from the Employer's Personnel;
 - (g) undertakes behavior which breaches the Code of Conduct for Contractor's Personnel (ES).
- If appropriate, the Contractor shall then promptly appoint (or cause to be appointed) a suitable replacement with equivalent skills and experience.
- Notwithstanding any requirement from the Project Manager to remove or cause to remove any person, the Contractor shall take immediate action as appropriate in response to any violation of (a) through (g) above. Such immediate action shall include removing (or causing to be removed) from the Site or other places where the Works are being carried out, any Contractor's Personnel who engages in (a), (b), (c), (d), (e) or (g) above or has been recruited as stated in (f) above."
- 9.3 The Contractor shall take all necessary safety measures to avoid the occurrence of incidents and injuries to any third party associated with the use of, if any, Equipment on public roads or other public infrastructure. The Contractor shall monitor road safety incidents and accidents to identify negative safety issues, and establish and implement necessary measures to resolve them.
- 9.4 Labor
- 9.4.1 *Engagement of Staff and Labor.* The Contractor shall provide and employ on the Site for the execution of the Works such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within the Country.

- 10. Employer's and Contractor's Risks**
- 10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.
- 11. Employer's Risks**
- 11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks:
- (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
 - (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
 - (ii) negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.
 - (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.
- 11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to
- (a) a Defect which existed on the Completion Date,
 - (b) an event occurring before the Completion Date, which was not itself an Employer's risk, or
 - (c) the activities of the Contractor on the Site after the Completion Date.
- 12. Contractor's Risks**
- 12.1 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.
- 13. Insurance**
- 13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles **stated in the PCC** for the following events which are due to the Contractor's risks:
- (a) loss of or damage to the Works, Plant, and Materials;

-
- (b) loss of or damage to Equipment;
 - (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
 - (d) personal injury or death.
- 13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 13.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.
- 13.5 Both parties shall comply with any conditions of the insurance policies.
- 14. Site Data**
- 14.1 The Contractor shall be deemed to have examined any Site Data referred to in the PCC, supplemented by any information available to the Contractor.
- 15. Contractor to Construct the Works**
- 15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.
- 15.2 If the Contract specifies that the Contractor shall design any part of the permanent Works, the Contractor shall take into account the Employer's requirements which may include, if stated in the Specifications:
- (a) designing structural elements of the Works taking into account climate change considerations;
 - (b) applying the concept of universal access (the concept of universal access means unimpeded access for people of all ages and abilities in different situations and under various circumstances; and
 - (c) considering the incremental risks of the public's potential exposure to operational accidents or natural hazards, including extreme weather events.
- 16. The Works to Be Completed**
- 16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the

| | |
|---|---|
| by the Intended Completion Date | Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date. |
| | <p>16.2 The Contractor shall not carry out mobilization to the Site unless the Project Manager gives approval, an approval that shall not be unreasonably delayed, to the measures the Contractor proposes to address environmental and social risks and impacts, which at a minimum shall include applying the Management Strategies and Implementation Plans (MSIPs) and Code of Conduct for Contractor's Personnel submitted as part of the Bid and agreed as part of the Contract.</p> <p>The Contractor shall submit, to the Project Manager for its approval any additional MSIPs as are necessary to manage the ES risks and impacts of ongoing Works. These MSIPs collectively comprise the Contractor's Environmental and Social Management Plan (C-ESMP). The Contractor shall review the C-ESMP, periodically (but not less than every six (6) months), and update it as required to ensure that it contains measures appropriate to the Works. The updated C-ESMP shall be submitted to the Project Manager for its approval.</p> |
| 17. Approval by the Project Manager | <p>17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.</p> <p>17.2 The Contractor shall be responsible for design of Temporary Works.</p> <p>17.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.</p> <p>17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.</p> <p>17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.</p> |
| 18. Health, Safety and Protection of the Environment | <p>18.1 The Contractor shall be responsible for the safety of all activities on the Site.</p> <p>18.2 The Contractor shall:</p> <ul style="list-style-type: none"> (a) comply with all applicable health and safety regulations and Laws; (b) comply with all applicable health and safety obligations specified in the Contract; (c) take care for the health and safety of all persons entitled to be on the Site and other places, if any, where the |

-
- Works are being executed;
- (d) keep the Site and Works clear of unnecessary obstruction so as to avoid danger to workers and public;
 - (e) provide and maintain fencing, lighting, safe access, guarding and watching of the Works until the issue of the Contract Completion Certificate;
 - (f) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land;
 - (g) provide health and safety training of Contractor's Personnel as appropriate and maintain training records;
 - (h) actively engage the Contractor's Personnel in promoting understanding, and methods for, implementation of health and safety requirements, as well as in providing information to Contractor's Personnel, training on occupational safety and health, and provision of personal protective equipment without expense to the Contractor's Personnel;
 - (i) put in place workplace processes for Contractor's Personnel to report work situations that they believe are not safe or healthy, and to remove themselves from a work situation which they have reasonable justification to believe presents an imminent and serious danger to their life or health.
 - (j) Contractor's Personnel who remove themselves from such work situations shall not be required to return to work until necessary remedial action to correct the situation has been taken. Contractor's Personnel shall not be retaliated against or otherwise subject to reprisal or negative action for such reporting or removal;
 - (k) where the Employer's Personnel, any other contractors employed by the Employer, and/or personnel of any legally constituted public authorities and private utility companies are employed in carrying out, on or near the site, of any work not included in the Contract, collaborate in applying the health and safety requirements, without prejudice to the responsibility of the relevant entities for the health and safety of their own personnel; and
 - (l) establish and implement a system for regular (not less than six-monthly) review of health and safety performance and the working environment.

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

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

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

(a) which shall include at a minimum:

- (i) the procedures to establish and maintain a safe working environment without risk to health at all workplaces, machinery, equipment, and processes under the control of the Contractor, including control measures for chemical, physical and biological substances and agents;
- (ii) details of the training to be provided, records to be kept;
- (iii) the procedures for prevention, preparedness and response activities to be implemented in the case of an emergency event (i.e., an unanticipated incident, arising from both natural and man-made hazards, typically in the form of fire, explosions, leaks or spills, which may occur for a variety of different reasons including failure to implement operating procedures that are designed to prevent their occurrence, extreme weather or lack of early warning);
- (iv) remedies for adverse impacts such as occupational injuries, deaths, disability and disease;
- (v) the measures to be taken to avoid or minimize the potential for community exposure to water-borne, water-based, water-related, and vector-borne diseases,
- (vi) the measures to be implemented to avoid or minimize the spread of communicable diseases (including transfer of Sexually Transmitted Diseases or Infections (STDs), such as HIV virus) and non-communicable diseases associated with the execution of the Works, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups. This includes taking measures to avoid or minimize the transmission of

communicable diseases that may be associated with the influx of temporary or permanent Contract-related labor;

- (vii) the policies and procedures on the management and quality of accommodation and welfare facilities if such accommodation and welfare facilities are provided by the Contractor in accordance with GCC Sub-Clause 9.4.6; and
- (b) any other requirements stated in the Specification

18.3 Protection of the environment

The Contractor shall take all necessary measures to:

- 18.3.1 protect the environment (both on and off the Site); and
- 18.3.2 limit damage and nuisance to people and property resulting from pollution, noise, and other results of the Contractor's operations and/ or activities.

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

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

19. Archaeological and Geological Findings

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

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

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

-
- dealing with them.
- 20. Possession of the Site**
- 20.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date **stated in the PCC**, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.
- 21. Access to the Site**
- 21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager (including the Bank staff or consultants acting on the Bank's behalf, stakeholders and third parties, such as independent experts, local communities, or non-governmental organizations), including to carry out environmental and social inspection and/or audit, as appropriate, access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.
- 22. Instructions, Inspections and Audits**
- 22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
- 22.2 The Contractor shall keep and shall make all reasonable efforts to cause its Subcontractors and subconsultants to keep, accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.
- 22.3 Inspections & Audit by the Bank
- Pursuant to paragraph 2.2 e. of Appendix A to the GCC- Fraud and Corruption, the Contractor shall permit and shall cause its agents (where declared or not), subcontractors, subconsultants, 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 subconsultants' attention is drawn to GCC Sub-Clause 25.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).
- 23. Appointment of the Adjudicator**
- 23.1 The Adjudicator shall be appointed jointly by the Employer and the Contractor, at the time of the Employer's issuance of

the Letter of Acceptance. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority **designated in the PCC**, to appoint the Adjudicator within 14 days of receipt of such request.

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

24. Procedure for Disputes

- 24.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Project Manager's decision.
- 24.2 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
- 24.3 The Adjudicator shall be paid by the hour at the **rate specified in the PCC**, together with reimbursable expenses of the types **specified in the PCC**, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision shall be final and binding.
- 24.4 The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and, in the place, **specified in the PCC**.

25. Fraud and Corruption

- 25.1 The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Appendix A to the GCC.
- 25.2 The Employer requires the Contractor to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other

party, the amount and currency, and the purpose of the commission, gratuity or fee.

26. Stakeholder Engagement

- 26.1 The Contractor shall provide relevant contract-related information, as the Employer and/or Project Manager may reasonably request to conduct Stakeholder engagements. “Stakeholder” refers to individuals or groups who:
- (i) are affected or likely to be affected by the Contract; and
 - (ii) may have an interest in the Contract.

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

27. Suppliers (other than Subcontractors)

- 27.1 *Forced Labor:* The Contractor shall take measures to require its suppliers (other than Subcontractors) not to employ or engage forced labor including trafficked persons as described in GCC Sub-Clause 9.4.14. If forced labor/trafficking cases are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.
- 27.2 *Child Labor:* The Contractor shall take measures to require its suppliers (other than Subcontractors) not to employ or engage child labor as described in GCC Sub-Clause 9.4.15. If child labor cases are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.
- 27.3 *Serious Safety Issues:* The Contractor, including its Subcontractors, shall comply with all applicable safety obligations, including as stated in GCC Sub-Clause 18.2. The Contractor shall also take measures to require its suppliers (other than Subcontractors) to adopt procedures and mitigation measures adequate to address safety issues related to their personnel. If serious safety issues are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.
- 27.4 *Obtaining natural resource materials in relation to supplier:* The Contractor shall obtain natural resource materials from

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

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

28. Code of Conduct

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

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

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

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

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

29. Security of the Site

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

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

Contractor.

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

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

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

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

B. Time Control

30. Program and Progress Reports

- 30.1 Within the time **stated in the PCC**, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump-sum contract, the activities in the Program shall be consistent with those in the Activity Schedule. The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.
- 30.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- 30.3 The Contractor shall monitor progress of the Works and submit to the Project manager progress report and any updated Program showing the actual progress achieved and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities, at intervals no longer than the period **stated in the PCC**. If the Contractor does not submit an updated Program within this

period, the Project Manager may withhold the amount **stated in the PCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of lump-sum Contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.

- 30.4 Unless otherwise stated in the Specifications, each progress report shall include the Environmental and Social (ES) metrics set out in Appendix B.
- 30.5 In addition to the progress reports, the Contractor shall inform the Project Manager immediately of any allegation, incident, or accident in the Site, which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Employer's Personnel, Project Manager's personnel or Contractor's Personnel. This includes, but is not limited to, any incident or accident-causing fatality or serious injury; significant adverse effects or damage to private property; or any allegation of SEA and/or SH. In case of SEA and/or SH, while maintaining confidentiality as appropriate, the type of allegation (sexual exploitation, sexual abuse or sexual harassment), gender and age of the person who experienced the alleged incident should be included in the information.

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

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

31. Extension of the Intended Completion Date

- 31.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.
- 31.2 The Project Manager shall decide whether and by how much to

extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

- | | |
|--|---|
| 32. Acceleration | <p>32.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.</p> <p>32.2 If the Contractor's priced proposals for acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.</p> |
| 33. Delays Ordered by the Project Manager | <p>33.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.</p> |
| 34. Management Meetings | <p>34.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.</p> <p>34.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.</p> |
| 35. Early Warning | <p>35.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.</p> <p>35.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone</p> |

involved in the work and in carrying out any resulting instruction of the Project Manager.

C. Quality Control

- | | |
|----------------------------------|--|
| 36. Identifying Defects | 36.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect. |
| 37. Tests | 37.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specifications to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event. |
| 38. Correction of Defects | <p>38.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the PCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.</p> <p>38.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.</p> |
| 39. Uncorrected Defects | 39.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount. |

D. Cost Control

- | | |
|---|--|
| 40. Contract Price¹² | 40.1 The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item. |
| 41. Changes in the Contract Price¹³ | 41.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to |
-

allow for the change. The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.

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

42. Variations

42.1 All Variations shall be included in updated Programs¹⁴ produced by the Contractor.

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

42.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.

42.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given, and the Variation shall be treated as a Compensation Event.

42.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

42.6 If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in GCC Sub-Clause 41.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.
¹⁵

42.7 Value Engineering: The Contractor may prepare, at its own

cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following;

- (a) the proposed change(s), and a description of the difference to the existing contract requirements;
- (b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle cost) the Employer may incur in implementing the value engineering proposal;
- (c) a description of any effect(s) of the change on performance/functionality; and
- (d) a description of the proposed work to be performed, a program for its execution and sufficient E&S information to enable an evaluation of E&S risks and impacts.

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

- (a) accelerates the contract completion period; or
- (b) reduces the Contract Price or the life cycle costs to the Employer; or
- (c) improves the quality, efficiency, safety, or sustainability of the Facilities; or
- (d) yields any other benefits to the Employer, without compromising the functionality of the Works.

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

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

43. Cash Flow Forecasts

- 43.1 When the Program,¹⁶ is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

44. Payment

- 44.1 The Contractor shall submit to the Project Manager monthly

Certificates

statements of the estimated value of the work executed less the cumulative amount certified previously.

- 44.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- 44.3 The value of work executed shall be determined by the Project Manager.
- 44.4 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed.¹⁷
- 44.5 The value of work executed shall include the valuation of Variations and Compensation Events.
- 44.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- 44.7 If the Contractor was, or is, failing to perform any E&S obligations or work under the Contract, the value of this work or obligation, as determined by the Project Manager, may be withheld until the work or obligation has been performed, and/or the cost of rectification or replacement, as determined by the Project Manager, may be withheld until rectification or replacement has been completed. Failure to perform includes, but is not limited to the following:
 - (a) failure to comply with any E&S obligations or work described in the Works' Requirements which may include: working outside site boundaries, excessive dust, failure to keep public roads in a safe usable condition, damage to offsite vegetation, pollution of water courses from oils or sedimentation, contamination of land e.g. from oils, human waste, plastic damage to archeology or cultural heritage features, air pollution as a result of unauthorized and/or inefficient combustion;
 - (b) failure to comply with any worksite safety/occupational health and safety obligations, including deployment of personnel, training and sensitization of staff/workers, putting in place safety measures (barricading, advance warning, lighting, night time safety measures, signage, electrical safety, fire safety, mechanical safety, first aid and emergency response arrangements) before initiating works, cleaning/maintaining/replacing damaged safety devices during execution of works, safety checks/audits,

-
- maintaining records and sharing real time/evidence based reports;
- (c) failure to regularly review C-ESMP and/or update it in a timely manner to address emerging ES issues, or anticipated risks or impacts;
 - (d) failure to implement the C-ESMP e.g. failure to provide required training or sensitization;
 - (e) failing to have appropriate consents/permits prior to undertaking Works or related activities;
 - (f) failure to submit E&S report/s (as described in Appendix B), or failure to submit such reports in a timely manner;
 - (g) failure to implement remediation as instructed by the Project Manager within the specified timeframe (e.g. remediation addressing non-compliance/s).
- 45. Payments**
- 45.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.
 - 45.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
 - 45.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
 - 45.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.
- 46. Compensation Events**
- 46.1 The following shall be Compensation Events:
 - (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
 - (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the

Contractor under the Contract.

- (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
- (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
- (e) The Project Manager unreasonably does not approve a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
 - (i) The advance payment is delayed.
 - (j) The effects on the Contractor of any of the Employer's Risks.
 - (k) The Project Manager unreasonably delays issuing a Certificate of Completion.

46.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

46.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

- 46.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.
- 47. Tax**
- 47.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 28 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 49.
- 48. Currencies**
- 48.1 Where payments are made in currencies other than the currency of the Employer's country **specified in the PCC**, the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.
- 49. Price Adjustment**
- 49.1 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the PCC**. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type specified below applies to each Contract currency:
- $$P_c = A_c + B_c Imc/Ioc$$
- where:
- P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c."
- A_c and B_c are coefficients¹⁸ **specified in the PCC**, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c;" and
- Imc is the index prevailing at the end of the month being invoiced and Ioc is the index prevailing 28 days before Bid opening for inputs payable; both in the specific currency "c."
- 49.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

- 50. Retention**
- 50.1 The Employer shall retain from each payment due to the Contractor the proportion **stated in the PCC** until Completion of the whole of the Works.
 - 50.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC Sub-Clause 57.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an “on demand” Bank guarantee.
- 51. Liquidated Damages**
- 51.1 The Contractor shall pay liquidated damages to the Employer at the rate per day **stated in the PCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount **defined in the PCC**. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor’s liabilities.
 - 51.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 45.1.
- 52. Bonus**
- 52.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day **stated in the PCC** for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.
- 53. Advance Payment**
- 53.1 The Employer shall make advance payment to the Contractor of the amounts **stated in the PCC** by the date **stated in the PCC**, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.

- 53.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.
- 53.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.
- 54. Securities**
- 54.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount **specified in the PCC**, by a bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Certificate of Completion in the case of a Performance Bond.
- 55. Dayworks**
- 55.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 55.2 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.
- 55.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.
- 56. Cost of Repairs**
- 56.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.
- E. Finishing the Contract**
- 57. Completion**
- 57.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the

| | |
|--|---|
| | Works is completed including site restoration. |
| 58. Taking Over | 58.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion. |
| 59. Final Account | 59.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate. |
| 60. Operating and Maintenance Manuals | <p>60.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the PCC.</p> <p>60.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the PCC pursuant to GCC Sub-Clause 60.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount stated in the PCC from payments due to the Contractor.</p> |
| 61. Termination | <p>61.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.</p> <p>61.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:</p> <ul style="list-style-type: none"> (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager; (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 28 days; (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation; |

- (d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 84 days of the date of the Project Manager's certificate;
- (e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
- (f) the Contractor does not maintain a Security, which is required;
- (g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the PCC**; or
- (h) if the Contractor, in the judgment of the Employer has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix A to the GCC, in competing for or in executing the Contract, then the Employer may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.

- 61.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 61.4 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.
- 61.5 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 61.2 above, the Project Manager shall decide whether the breach is fundamental or not.

62. Payment upon Termination

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

value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

63. Property

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

64. Release from Performance

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

65. Suspension of Bank Loan or Credit

- 65.1 In the event that the Bank suspends the Loan or Credit to the Employer, from which part of the payments to the Contractor are being made:
- (a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the Bank's suspension notice.
 - (b) If the Contractor has not received sums due to it within the 28 days for payment provided for in GCC Sub-Clause 45.1, the Contractor may immediately issue a 14-day termination notice.

APPENDIX A TO GENERAL CONDITIONS

Fraud and Corruption

(Text in this Appendix shall not be modified)

1. Purpose

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

2. Requirements

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

2.2 To this end, the Bank:

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

- (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹⁹ (ii) to be a nominated²⁰ 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 inspect²¹ 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.

¹⁹ 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.

²⁰ 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.

²¹ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

APPENDIX B

Environmental and Social(E&S)Metrics for Progress Reports

I

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. as per Labour Welfare Laws refer Annex 1 included in E&S Requirements), worker violations observed (by type of violation, PPE or otherwise), warnings given, repeat warnings given, follow-up actions taken (if any);
- iii. Community health and safety as per the site-specific Labour influx Management Plan (refer Annex 2 included in E&S Requirements)
- iv. Occupational Health and Safety practices as per site/contract specific OHS plan
- f. *worker accommodations:*
 - i. number of expats housed in accommodations, number of locals;
 - 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 (as per training calendar);
 - 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. Environment expert: 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. Safety officer/expert: days worked, areas inspected and numbers of inspections of each (road section, work camp, accommodations, quarries, borrow areas, spoil areas, etc.), highlights of activities/findings (including violations of OHS/worksites safety practices, actions taken), reports to construction/site management;
 - iii. Social expert: 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
 - iv. 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 bowlers, 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.) as per the Labour welfare Laws (Refer Annex 1 included in E&S Requirements): 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

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.

Section IX -Particular Conditions of Contract

The following specific data for the Works to be procured shall complement, supplement, or amend the provisions in the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in GCC.

| A. General | |
|---------------------|--|
| GCC 1.1 (d) | The financing institution is: The World Bank |
| GCC 1.1 (r) | The Employer is: Program Director, Project Management Unit, UGRIDP (World Bank), DDPM Tower, 4 th Floor, Ajabpur Khurd, Haridwar Bypass Road, Dehradun – 248171, Uttarakhand |
| GCC 1.1 (v) | The Intended Completion Date for the whole of the Works shall be:/...../..... |
| GCC 1.1 (y) | The Site Manager is |
| GCC 1.1 (aa) | The Site is located at Uttarkashi-Lambdaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block- Bhilangana Block-Bhilangna, District Tehri Coordinates – E 274979.1270 N 3368768.9268 |
| GCC 1.1 (dd) | The Start Date shall be :..... |
| GCC 1.1 (hh) | The Works consist of Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi- Lambdaon- Ghansali- Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri. Identification number of Contract is..... |
| GCC 1.1 (jj) | GCC 1.1 (jj) is replaced with the following: “Key Personnel are the Contractor’s personnel named in GCC 9.1 of the Particular Conditions of Contract.” |
| GCC 2.2 | Not Applicable |
| GCC 2.3(i) | The documents forming the Contract shall be interpreted in the following order of priority: (a) Agreement, (b) Letter of Acceptance, (c) Particular Conditions of Contract, |

| | <p>(d) General Conditions of Contract, including Appendices, (e) Specifications, (f) Drawings (g) Priced Bill of Quantities (BOQ), (h) Contractor's Bid. (i) Any other document as per GCC 2.3(i)</p> <p>The following documents also form part of the Contract:</p> <table border="1"> <thead> <tr> <th>S. No.</th><th>Description of the document</th></tr> </thead> <tbody> <tr> <td>1.</td><td>Construction methodology given in bid amended as per comments of employer given in letter of acceptance.</td></tr> <tr> <td>2.</td><td>Quality control procedures and assurance plans given in the bid and amended as per comments of Employer given in letter of acceptance.</td></tr> <tr> <td>3.</td><td>Appendix A – Fraud and Corruption</td></tr> <tr> <td>4.</td><td>Appendix B - Environmental and Social (ES) Metrics for Progress Reports.</td></tr> <tr> <td>5.</td><td>N/A</td></tr> </tbody> </table> | S. No. | Description of the document | 1. | Construction methodology given in bid amended as per comments of employer given in letter of acceptance. | 2. | Quality control procedures and assurance plans given in the bid and amended as per comments of Employer given in letter of acceptance. | 3. | Appendix A – Fraud and Corruption | 4. | Appendix B - Environmental and Social (ES) Metrics for Progress Reports. | 5. | N/A |
|----------------|--|--------|-----------------------------|----|--|----|--|----|-----------------------------------|----|--|----|-----|
| S. No. | Description of the document | | | | | | | | | | | | |
| 1. | Construction methodology given in bid amended as per comments of employer given in letter of acceptance. | | | | | | | | | | | | |
| 2. | Quality control procedures and assurance plans given in the bid and amended as per comments of Employer given in letter of acceptance. | | | | | | | | | | | | |
| 3. | Appendix A – Fraud and Corruption | | | | | | | | | | | | |
| 4. | Appendix B - Environmental and Social (ES) Metrics for Progress Reports. | | | | | | | | | | | | |
| 5. | N/A | | | | | | | | | | | | |
| GCC 3.1 | <p>The following is inserted as a sub-clause at the end of GCC 3.1:</p> <p>“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.”</p> <p>The language of the contract is <i>English</i>.</p> <p>The law that applies to the Contract are the laws of Union of India.</p> | | | | | | | | | | | | |
| GCC 4.1 | <p>The following is inserted as a sub-paragraph at the end of GCC 4.1:</p> <p>“However, if the Project Manager is required, under the rules and regulations and orders of the Employer, to obtain approval of some other authorities for specific actions, he will so obtain the approval. Provided further that any requisite approval shall be deemed to have been given by the Employer for any such authority exercised by the Project Manager.”</p> <p>Except where otherwise specifically stated, the Project Manager will decide contractual matters between the Employer and the Contractor in the role representing the Employer. However, if the Project Manager is required under the rules and regulations and orders of the Employer to obtain prior approval of some other authorities for specific actions, he will so obtain the approval, before</p> | | | | | | | | | | | | |

| | |
|----------------|---|
| | <p>communicating his decision to the Contractor.</p> <p>Actions requiring Specific Approval of the Client /Employer</p> <p>The Engineer (Project Manager) will be required to obtain the specific approval of the Employer before taking any of the following actions specified in the General Conditions and Particular Conditions of Construction Contract Documents:</p> <ul style="list-style-type: none"> (i) Approving sub-contracting of any parts of the works; (ii) Certifying additional cost; (iii) Determining time extensions; (iv) Issuing variation orders (v) Ordering suspension of work; (vi) Issuing variations in work quantities, fixing rates or prices; (vii) Recommending new rates either for existing items of work which arises from the variation quantities beyond the limit, defined in the contract or fixing rates of non-priced works involving any extra item and certifying any additional cost determined under the provisions of contract; (viii) Issuing order for special tests not provided for in the contract and determining the costs of such tests which shall be added to the contract price. (ix) Issuing/approving Technical Specifications if not provided for an item of works in the construction contract document and similarly, for any change in Technical Specification of any item of work; (x) Instructing acceleration measures to reduce delays; (xi) Revise the design if required based on site requirement as directed by the Employer. <p>However, the Engineer (Project Manager) shall have no authority to relieve the Contractor of any of their duties or obligations under the contract or to impose additional obligations not included in the contract without sanction by the client.</p> |
| GCC 5.1 | The Site manager from employer may delegate any or part of his duties and responsibilities. |
| GCC 6.1 | <p>The following is inserted at the end of GCC 6.1:</p> <p>“All oral instructions must be confirmed in writing in seven working days.”</p> |
| GCC 7 | <p>The first sentence of GCC 7. 1 is modified as:</p> <p>“The Contractor may subcontract with the approval of the Project Manager upto a ceiling of 25% but may not assign the Contract without the approval of the</p> |

| | |
|----------------|---|
| | <p>Employer in writing.”</p> <p>The following sub-clauses are inserted at the end of GCC 7.1:</p> <p>“7.2 The Project Manager should satisfy himself before recommending to the Employer whether:</p> <ul style="list-style-type: none"> a) the circumstances warrant such sub-contracting; and, b) the sub-Contractor so proposed for the Work possesses the experience, qualifications and equipment necessary for the job proposed to be entrusted to him in proportion to the quantum of Works to be sub-contracted. <p>7.3 If payments are proposed to be made directly to that sub-contractor, this should be subject to specific authorization by the prime contractor so that his arrangement does not alter the contractor’s liability or obligations under the contract.</p> <p>7.4 The Contractor shall not be required to obtain any consent from the Employer for:</p> <ul style="list-style-type: none"> (a) the sub-contracting of any part of the Works for which the Sub-Contractor is already named in the contract; (b) the provision for labour, or labour component, and, (c) the purchase of materials which are in accordance with the standards specified in the contract. <p>Note: 1. All bidders are expected to indicate clearly in the bid, if they proposed sub-contracting elements of the works amounting to more than 10 percent of the Bid Price. For each such proposal the qualification and the experience of the identified sub-contractor in the relevant field should be furnished along with the bid to enable the employer to satisfy himself about their qualifications before agreeing for such sub-contracting and include it in the contract. In view of the above, normally no additional sub-contracting should arise during execution of the contract.</p> <p>2. However, [a] sub-contracting for certain specialized elements of the work is not unusual and acceptable for carrying out the works more effectively; but vertical splitting of the works for sub-contracting is not acceptable. [b] In any case, proposal for sub-contracting in addition to what was specified in bid and stated in contract agreement will not be acceptable if the value of such additional sub-contracting exceeds 25% of value of work which was to be executed by Contractor without sub-contracting.</p> <p>3. Assignment of the contract may be acceptable only under exceptional circumstances such as insolvencies/liquidation or merger of companies etc.”</p> |
| GCC 7.1 | <p>The ceiling for sub-contractor is 25%</p> <p>The Project Manager shall approve any proposed replacement of subcontractor(s) having qualifications and experiences as per section 3, evaluation and qualification criteria of bid document and GCC 7.2(b).</p> |

| | |
|----------------|---|
| | Hiding information about any sub-contracting not authorized by the Employer shall be treated as violation of Appendix A to General Conditions (Fraud and Corruption). |
| GCC 8.1 | Not Applicable |
| GCC 9 | <p>The following is inserted as a sub-clause at the end of GCC 9.2:</p> <p>“In all the above cases, the contractor shall ensure that the person leaves the site within seven days and has no further connection with the work in the contract. The Contractor shall appoint a suitable replacement within 28 days or earlier as may be agreed to between the Project Manager and the Contractor.”</p> <p>The following sentence is deleted from first paragraph of GCC 9.4.1:</p> <p>“The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within the Country.”</p> <p>GCC 9.4.3 and GCC 9.4.4 are deleted.</p> <p>The following sub-clauses are inserted at the end of GCC 9.4:</p> <p>“9.5 The Contractor shall not employ any retired Gazetted officer who has either not completed two years after the date of retirement or has not obtained permission from the Government authorities for employment with the Contractor²².</p> <p>9.6 During continuance of the Contract, the Contractor and his Sub-Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour laws (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law prevailing on the Base Date either by the State or the Central Government or the local authority. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contraventions including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Project Manager/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security and if applicable, the Environmental and Social (ES) Performance Security. The Employer/Project Manager shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage</p> |

²²Based on Government Directives.

| | <p>suffered by the Employer.</p> <p>9.7 The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.</p> <p>9.8 The Contractor shall duly comply with the provisions of the Apprentices Act 1961 (III of 1961) and the rules made there under, and comply, failure or neglect to shall be subject to all liabilities and penalties provided in the said Act and Rules.”</p> | | | | | | | | |
|-----------------|--|--|--|-----------------------------|----------------------------------|-----|---|--|--|
| GCC 9.1 | <p>Key Personnel and equipment:</p> <p>9.1 Key Personnel are the Contractor's personnel named his bid. The Contractor shall employ the Key Personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed In the Bid.</p> <p>Tools, plants and machinery shall be as per list submitted by the bidder during bid submission. Any other equipment/ machinery as per specifications and site requirements</p> <p>The contractor shall take permission from project manager to grant any leave to any key personnel.</p> <p>If any key personnel ask for more than 3 days leave the contractor shall provide replacement of key personnel as per replacement policy of contract agreement.</p> <p>In case of exceptional circumstances (such as death and/or extreme nature of ailments for which medical certificate shall be produced form Hospital/ Nursing Home) the replacement will be done with the person having same or higher qualification and experience</p> | | | | | | | | |
| GCC 13.1 | <p>The minimum insurance amounts and deductibles shall be:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Description</th> <th>Minimum cover for Insurance</th> <th>Maximum deductible for Insurance</th> </tr> </thead> <tbody> <tr> <td>(i)</td> <td>Works and Materials which are incorporated in works</td> <td>Equal to contract amount. Whenever the project cost will vary, the contractor shall submit revised insurance for revised cost.</td> <td>As per actual premium amount required for acquiring insurance in each occasion</td> </tr> </tbody> </table> | S. No. | Description | Minimum cover for Insurance | Maximum deductible for Insurance | (i) | Works and Materials which are incorporated in works | Equal to contract amount. Whenever the project cost will vary, the contractor shall submit revised insurance for revised cost. | As per actual premium amount required for acquiring insurance in each occasion |
| S. No. | Description | Minimum cover for Insurance | Maximum deductible for Insurance | | | | | | |
| (i) | Works and Materials which are incorporated in works | Equal to contract amount. Whenever the project cost will vary, the contractor shall submit revised insurance for revised cost. | As per actual premium amount required for acquiring insurance in each occasion | | | | | | |

| | | | | | |
|--|-------|--|---|--|--|
| | (ii) | Loss or damage to Plant, Machinery, Equipment's | All T&P and machinery (equipment's) whichever deployed at site shall be insured under the contractor's plant and machinery (CPM) insurance before deployment, except motor vehicles to be used only for construction purpose. The motor vehicle used for construction purpose shall be insured under motor vehicle insurance. | In case of any damage/compensation occurred at site due to non-compliance of insurance, the damage/compensation shall be borne by the contractor and client shall not be responsible for any claim. However, for not submission of insurance for particular plant, machinery and equipment the penalty of two times of insurance premium shall be deducted from the contractor's bill in each occasion as per market rate of newparticular plant, machinery and equipment. | |
| | (iii) | Other Property | 5% of the contract amount | As per actual premium amount required for acquiring insurance in each occasion | |
| | (iv) | Personal Injury or death Insurance: a) for other people | 5% of the contract amount (The per claim limit shall be as per the actual assessment up to the sum insured) | As per actual premium amount required for acquiring insurance in each occasion | |
| | | b) for Contractor's Employees/ Workmen | <ul style="list-style-type: none"> • In accordance with the statutory requirements applicable In India (As per workmen compensation act 1923) • The contractor shall insure maximum no. of workmen deployed on any single day during the | As per actual premium amount required for acquiring insurance in each occasion | |

| | | | | |
|--------------------------------|---|--|--|--|
| | | | <p>entire construction period.</p> <ul style="list-style-type: none"> • The contractor shall insure all his workmen (supervision staff and labour) as per their actual wages | |
| | | | <p>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 INR2,00,000/- 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.</p> <p>The insurance cover like fire, theft, STFI, earthquake, etc. shall be covered under the policy. The contractor may submit the insurance for construction period and for DLP separately if desired so.</p> | |
| GCC 14.1 | <p>Site is located at Uttarkashi-Lambda-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri Uttarakhand</p> <p>Coordinates:</p> <p>E 274979.1270</p> <p>N 3368768.9268</p> | | | |
| GCC 15.1 | <p>GCC 15.1 is replaced with the following:</p> <p>“The Contractor shall construct and install the Works in accordance with the Specifications and Drawings and as per instructions of Project Manager.”</p> | | | |
| GCC 18 (add new 18.3.3) | <p>The following is inserted as a new sub-clause 18.3.3:</p> <p>“18.3.3 During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing enactments on environmental</p> | | | |

| GCC18.4 | <p>protection and rules made there under, regulations, notifications and by-laws of the State or Central Government, or local authorities and other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority. Salient features of the major laws are given in Appendix 1 to the General Conditions of Contract.”</p> <p>18.4.1. The employer shall deduct the amount from the payments of Contractor for non-compliance/ no compliance of safeguards as per the provisions mentioned below. The Engineer shall monitor the site periodically and recommend such deductions to the employer as per the table below:</p> <p>Deductions due to non /no compliance of safeguards</p> <table border="1" data-bbox="404 629 1449 1911"> <thead> <tr> <th>S.No</th><th>Particulars</th><th>Unit</th><th>Unit rate for deduction (In INR)</th></tr> </thead> <tbody> <tr> <td colspan="4">A Personal Protective Equipment's</td></tr> <tr> <td>i.</td><td>Safety Helmet</td><td>Worker/staff per day</td><td>150</td></tr> <tr> <td>ii.</td><td>Reflective Jacket</td><td>Worker/staff per day</td><td>150</td></tr> <tr> <td>iii.</td><td>Safety Shoes (as per work requirement)</td><td>Worker/staff per day</td><td>150</td></tr> <tr> <td>iv.</td><td>Safety Harness</td><td>Worker/staff per day</td><td>300</td></tr> <tr> <td>v.</td><td>Safety Goggles (as per work requirement)</td><td>Worker/staff per day</td><td>150</td></tr> <tr> <td>vi.</td><td>Gloves (as per work requirement)</td><td>Worker/staff per day</td><td>150</td></tr> <tr> <td colspan="4">B Construction Camp</td></tr> <tr> <td>i.</td><td>Absence of cot/raised floor</td><td>Per person</td><td>500</td></tr> <tr> <td>ii.</td><td>Lack of proper/ no ventilation in worker's accommodation</td><td>Per hutment /month</td><td>5,000</td></tr> <tr> <td>iii.</td><td>Lack of potable water</td><td>Per week</td><td>1.000</td></tr> <tr> <td>iv.</td><td>Lack of Toilet & Bathroom for male (1 unit per 10 workers)</td><td>Per toilet/ month</td><td>5,000</td></tr> <tr> <td>v.</td><td>Lack of Toilet & Bathroom for female (1 unit per 10 workers)</td><td>Per toilet/ month</td><td>5,000</td></tr> <tr> <td>vi.</td><td>Cleanliness of toilets and bathrooms</td><td>Per toilet/ month</td><td>5,000</td></tr> <tr> <td>vii.</td><td>Lack of Fire extinguisher</td><td>Per hutment/ month</td><td>5,000</td></tr> <tr> <td>viii.</td><td>Absence of first aid kit having minimum required medicines</td><td>Per box for 25 workers/ month</td><td>2,500</td></tr> <tr> <td>ix.</td><td>Unauthorized land acquisition and associated facilities</td><td>Per camp/ month</td><td>1,50,000</td></tr> </tbody> </table> | S.No | Particulars | Unit | Unit rate for deduction (In INR) | A Personal Protective Equipment's | | | | i. | Safety Helmet | Worker/staff per day | 150 | ii. | Reflective Jacket | Worker/staff per day | 150 | iii. | Safety Shoes (as per work requirement) | Worker/staff per day | 150 | iv. | Safety Harness | Worker/staff per day | 300 | v. | Safety Goggles (as per work requirement) | Worker/staff per day | 150 | vi. | Gloves (as per work requirement) | Worker/staff per day | 150 | B Construction Camp | | | | i. | Absence of cot/raised floor | Per person | 500 | ii. | Lack of proper/ no ventilation in worker's accommodation | Per hutment /month | 5,000 | iii. | Lack of potable water | Per week | 1.000 | iv. | Lack of Toilet & Bathroom for male (1 unit per 10 workers) | Per toilet/ month | 5,000 | v. | Lack of Toilet & Bathroom for female (1 unit per 10 workers) | Per toilet/ month | 5,000 | vi. | Cleanliness of toilets and bathrooms | Per toilet/ month | 5,000 | vii. | Lack of Fire extinguisher | Per hutment/ month | 5,000 | viii. | Absence of first aid kit having minimum required medicines | Per box for 25 workers/ month | 2,500 | ix. | Unauthorized land acquisition and associated facilities | Per camp/ month | 1,50,000 |
|--|---|-------------------------------|----------------------------------|------|----------------------------------|--|--|--|--|----|---------------|----------------------|-----|-----|-------------------|----------------------|-----|------|--|----------------------|-----|-----|----------------|----------------------|-----|----|--|----------------------|-----|-----|----------------------------------|----------------------|-----|----------------------------|--|--|--|----|-----------------------------|------------|-----|-----|--|--------------------|-------|------|-----------------------|----------|-------|-----|--|-------------------|-------|----|--|-------------------|-------|-----|--------------------------------------|-------------------|-------|------|---------------------------|--------------------|-------|-------|--|-------------------------------|-------|-----|---|-----------------|----------|
| S.No | Particulars | Unit | Unit rate for deduction (In INR) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A Personal Protective Equipment's | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i. | Safety Helmet | Worker/staff per day | 150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ii. | Reflective Jacket | Worker/staff per day | 150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| iii. | Safety Shoes (as per work requirement) | Worker/staff per day | 150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| iv. | Safety Harness | Worker/staff per day | 300 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| v. | Safety Goggles (as per work requirement) | Worker/staff per day | 150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| vi. | Gloves (as per work requirement) | Worker/staff per day | 150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B Construction Camp | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i. | Absence of cot/raised floor | Per person | 500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ii. | Lack of proper/ no ventilation in worker's accommodation | Per hutment /month | 5,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| iii. | Lack of potable water | Per week | 1.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| iv. | Lack of Toilet & Bathroom for male (1 unit per 10 workers) | Per toilet/ month | 5,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| v. | Lack of Toilet & Bathroom for female (1 unit per 10 workers) | Per toilet/ month | 5,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| vi. | Cleanliness of toilets and bathrooms | Per toilet/ month | 5,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| vii. | Lack of Fire extinguisher | Per hutment/ month | 5,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| viii. | Absence of first aid kit having minimum required medicines | Per box for 25 workers/ month | 2,500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ix. | Unauthorized land acquisition and associated facilities | Per camp/ month | 1,50,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | C. Construction Site | | |
|----------|---|-----------------------------|--------|--|
| i. | Absence of barricading in open areas | RMT | 1,500 | |
| ii. | Lack of Toilet & Bathroom for male (1 unit per 10 workers) | Per toilet/month | 10,000 | |
| iii. | Lack of Toilet & Bathroom for female (1 unit per 10 workers) | Per toilet/month | 10,000 | |
| iv. | Absence of first aid kit with minimum required medicines | Per month | 1,500 | |
| v. | Absence of stretcher at site | Per week | 2,500 | |
| vi. | Absence of fire extinguisher at site office and store | Per month | 5,000 | |
| vii. | Absence of potable water | Per week | 2,000 | |
| viii. | Cleanliness of Toilets & Bathroom | Per Toilet/month | 2,500 | |
| ix. | Absence of Health and safety specialist at site | Staff Per day | 20,000 | |
| x. | Absence of Environmental Specialist at site | Staff Per day | 20,000 | |
| xi. | During work at night absence of light arrangement | Per day | 5,000 | |
| xii. | Unauthorized power connection | Per day | 10,000 | |
| xiii. | Non submission of Environmental and social Monthly progress reports | Per month | 25,000 | |
| xiv. | Non submission of royalty certificates for sand, aggregate etc from approved quarries, in that case an additional penalty will be imposed apart from the deduction of royalty at employer/client level | Each material/ bill | 40,000 | |
| GCC 20.1 | <p>The Site Possession Date(s) shall be: <i>[insert location(s) and date(s)]</i></p> <p>The Site Possession Date shall be:</p> <p>The site will be physically handed over by the authorised representative of the employer to the Contractor before date of start as per contract agreement and both the authorised representative of the employer as well as the Contractor will issue a jointly signed letter mentioning the handing over and taken over of the site.</p> | | | |
| GCC 23 | <p>The following is inserted as a new sub-clause 23.1.1:</p> <p>“23.1.1 The Adjudicator should be in position before “notice to proceed with work” is issued to the Contractor and an agreement should be signed with the</p> | | | |

| | |
|--------------------------------|--|
| | Adjudicator jointly by the Employer and the Contractor in the form attached – Appendix 3.” |
| GCC 23.1 & GCC 23.2 | Name of the agreed Adjudicator is <i>Er. Pramod Kumar, Retired Chief Engineer Level-1, PWD, Uttarakhand, R/O Flat No. A-132, Hansmukhi Apartments, Sahashradhara Road, Dehradun.</i> Appointing Authority for the Adjudicator: <i>Program Director UGRIDP</i> |
| GCC 24 | In the first sentence in GCC 24.3, the words “The Adjudicator shall be paid by the hour at the rate” are replaced by the words “The Adjudicator shall be paid daily at the rate” |
| GCC 24.3 | Daily rate and types of reimbursable expenses to be paid to the Adjudicator: Rs.10,000 per day, and reimbursable expenses – boarding/ lodging/ travel etc. |
| GCC 24.4 | <p>After the decision of the adjudicator, the first 28 days shall be reserved for amicable settlement between the both parties; for which any of the party can notify the amicable settlement notification before the Secretary, Disaster Management, Government of Uttarakhand. If the settlement is not done within next 28 days, then only either party may refer the dispute to arbitration (after the above 56 days), otherwise the Adjudicator’s decision shall be final and binding.</p> <p>The procedure for adhoc arbitration will be as follows:</p> <ul style="list-style-type: none"> (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 (As amended thereafter). The arbitral tribunal shall consist of 3 Arbitrators one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding Arbitrator. In case of failure of the two Arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the Arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the* Indian Council of Arbitration/ President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India). (b) If one of the parties fails to appoint its Arbitrator in pursuance of sub-clause (a) above within 30 days after receipt of the notice of the appointment of its Arbitrator by the other party, then the *Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India), both in cases of Foreign Contractor as well as Indian Contractor, shall appoint the Arbitrator. A certified copy of the order of the* Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India), making such an appointment shall be furnished to each of the parties. |

| | |
|--|--|
| | <p>(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.</p> <p>(d) Arbitration proceedings shall be held at Dehradun, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.</p> <p>(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 shall be borne by each party itself. Claimant has to bear all the expenses of his own as well as of the respondent towards the payments of arbitration as decided by the arbitral tribunal.</p> <p>(f) Where the value of the contract is Rs.50 million and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority, namely the * Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India).</p> <p>(g) The Arbitrator should give final award within 120 days of starting of the proceedings.</p> <p>(h) Performance under the contract shall continue during the arbitration proceedings and payments due to the contractor by the Employer shall not be withheld, unless they are the subject matter of the arbitration proceedings.</p> <p>"Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by arbitration in accordance with the Rules of Domestic Commercial Arbitration of the Indian Council of Arbitration and the award made in pursuance thereof shall be binding on the parties.</p> <p>The arbitral tribunal shall consist of 3 Arbitrators, arbitration proceedings shall be held at Dehradun, India and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English".</p> |
|--|--|

B. Time Control

| | |
|----------|--|
| GCC 30.1 | The Contractor shall submit for approval a Program for the Works within 14 |
|----------|--|

| | |
|-----------------|---|
| | <p>days of delivery of the Letter of Acceptance.</p> <p>Any revision in Program should only be agreed in writing.</p> <p>This program should be in adequate detail and generally conform to the program submitted along with bid. Deviations, if any from that should be clearly explained and should be satisfactory to the Project Manager.</p> |
| GCC 30.3 | <p>The period between Program updates is 60 days.</p> <p>The amount to be withheld for late submission of an updated Program is Rs. 500,000.</p> <p>The period for submission of progress reports is 30 days.</p> |
| GCC 31 | <p>GCC 31.1 is replaced with the following:</p> <p>“31.1 The Project Manager shall extend the Intended Completion Date including milestones if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date as per the agreed milestones without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.”</p> <p>In GCC 31.2, replace the words “Intended Completion Date” at the first occurrence by the words “Intended Completion Date/ Milestones”; and at the second occurrence by the words “Intended Completion Date/ Milestone”.</p> |
| GCC 34 | <p>GCC 34.1 is replaced with the following:</p> <p>“Either the Project Manager or the Contractor may require the other to attend a management meeting (which will be held at the place indicated in PCC. The periodicity shall be fixed by Project Manager/ Contractor jointly). The business of a management meeting shall be to review the progress of construction with reference to the construction program given in accordance with GCC 30.1, the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.”</p> |
| GCC 34.1 | <p>Venue of management meeting will be as decided by the employer</p> <p>The management meetings shall be held at intervals of 60 days</p> |

C. Quality Control

| | |
|---------------|---|
| GCC 36 | <p>The following sub-clause is inserted at the end of GCC 36.1:</p> <p>“36.2 The contractor shall permit the Employer’s Technical auditor to check the contractor’s work and notify the Project Manager and Contractor of any defects that are found. Such a check shall not affect the Contractor’s or the</p> |
|---------------|---|

| | |
|------------------------|--|
| | Project Manager's responsibility as defined in the Contract Agreement.” |
| GCC 37 | <p>The following sub-clauses are inserted before GCC 37.1, and GCC 37.1 is re-numbered as GCC 37.3:</p> <p>“GCC 37.1 The Contractor shall institute Quality Assurance (QA) and Quality Control (QC) systems in accordance with Quality Assurance Plan to demonstrate compliance with the requirements of the Contract as approved by the Project Manager. Compliance with the QA/QC systems shall not relieve the Contractor of any of his duties obligations or responsibilities under the Contract.</p> <p>GCC 37.2 The Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently.”</p> |
| GCC 38.1 | The Defects Liability Period is: 12 Months. |
| GCC 39.1 | <p>The following notes are added at the end of GCC 39.1:</p> <p><i>“Note: 1. Where in certain cases, the technical specifications provide for acceptance of works within specified tolerance limits at reduced rates, Project Manager will certify payments to Contractor accordingly.</i></p> <p><i>2. Where the failure to correct a particular defect within the specified time is considered as a fundamental breach of contract a notice should be given to the contractor as stated in GCC 61.2(e).”</i></p> |
| D. Cost Control | |
| GCC 41 | <p>GCC 41.1 is replaced with the following, and existing GCC 41.2 is re-numbered as GCC 41.3:</p> <p>“41.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change.</p> <p>(a) If the quantity of work executed exceeds the quantity of the item in BOQ beyond the higher specified limit the Project Manager shall fix the rate to be applied for the additional quantity of the work executed.</p> <p>(b) If the quantity of work executed is less than the quantity of the item in BOQ and is lesser than the lower specified limit, the Project Manager shall fix the rate to be applied for whole of the quantity of the work so executed</p> <p>41.2 The Project Manager shall not adjust rates from changes in quantities if</p> |

| | |
|-----------------|---|
| | thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.” |
| GCC 42 | <p>In GCC 42.2, the first sentence is modified as follows:</p> <p>“The Contractor shall provide the Project Manager with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Project Manager. The Contractor shall also provide 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.”</p> <p>In the first sentence in GCC 42.3, after the words ‘If the Contractor’s quotation is unreasonable’, the following is added:</p> <p><i>“[or if contractor fails to provide the Project Manager with a quotation within a reasonable time specified by Project Manager in accordance with GCC 42.2]”</i></p> |
| GCC 42.7 | Provisions related to Value Engineering do not apply. |
| GCC 43.1 | <p>The second sentence in GCC 43.1 is replaced with the following:</p> <p>“The cash flow forecast shall be in Indian Rupees.”</p> |
| GCC 44 | <p>At the end of GCC 44.1 after the word ‘previously’, the following words are added:</p> <p>“alongwith details of measurement of the quantity of works executed in a tabular form approved by the Project Manager”</p> <p>At the end of GCC 44.2 after the words ‘the Contractor’, the following words are added:</p> <p>“after taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amount and under conditions set forth in GCC Sub-Clause 53.1 (Secured Advance)”</p> |
| GCC 45 | <p>GCC 45.1 is replaced with the following:</p> <p>“Payments shall be adjusted for deductions for advance payments, retention, other recoveries in terms of contract & taxes to be deducted at source [TDS] as per applicable law. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the rate stated in the PCC.”</p> <p>A new sub-clause 45.5 is added after sub-clause 45.4:</p> <p>“45.5 The Contractor shall open an Escrow Account with his bank for the purpose of receiving all the payments as well as incurring expenditure under this Contract. The Account shall be open to verification and audit at any time by the</p> |

| | |
|-----------------|--|
| | Employer or designee of the Employer. This account will be controlled solely by the Contractor's Project Officers (Project Manager and/or Finance Manager or equivalent designate). No other Contractor employees or associates will have access to the Project Account or the funds therein. The Contractor shall report monthly on the status of this account including actual bank account statements. The Contractor shall provide all Account statements as requested by the Employer.” |
| GCC 45.1 | Interest rate for Delayed payment is 5% per annum. |
| GCC 45.3 | All payments (and deductions) shall be paid or charged in Indian Rupees. |
| GCC 45.5 | <p>GCC 45.5 is inserted as following:</p> <p>At any time during the contract execution, the employer may notify the contractor to open the Escrow Account in the interest of the work. The contractor will be bound to accept the decision of the employer.</p> |
| GCC 47 | GCC 47.1 The rates quoted by the Contractor shall be exclusive of GST which will be paid /adjusted by the Employer at the time of payment of the bills of the Contractor and shall be deemed to be Inclusive of all other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties In regard to the deduction of such taxes at source [TDS] as per applicable law. |
| GCC 48 | All payments shall be made in Indian Rupees. |
| GCC 49 | <p>GCC 49.1 is replaced with the following:</p> <p>“Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants and other inputs to the works in accordance with the principles and procedures outlined below. A table of adjustment data is included in this clause which indicates the coefficients of various inputs and the sources of indices for various schedules of BOQ. If the PCC does not include a table of adjustment data this sub clause shall not apply and there shall be no price adjustment.</p> <p>(a) The price adjustment according to sub para (d) below, shall apply for the work done from the start date given in the PCC up to the end of the Intended Completion Date. If there is delay in completion beyond such date for reasons attributable to the contractor, the Price Adjustment for the work carried out during such period, for reasons attributable to the Contractor, shall be regulated by sub-para (g) below.</p> <p>(b) The Contract Price shall be adjusted to take account of any increase or decrease in cost after the base date, which affect the Contractor in performance of obligations under the Contract.</p> <p>(c) The total value (R) of the work done during the specified period [GCC 44.1] shall be as under:</p> |

$$R = \text{SUM } (R_{S1} + R_{S2} + R_{S3} + \dots + R_{Sn}),$$

Where,

' R_{sn} ' is the value of work done during the specified period to which the price adjustment shall be applied for the relevant schedule of Bill of Quantities (BOQ) specified in P.C.C during the specified period, and represented as under:

$R_{sn} = (V_{sn} + S_{sn})$ minus (amount of secured advance recovered in the same period + value of works executed under variations for which price adjustments will be worked separately based on terms mutually agreed between the Project Manager and the Contractor)

where,

V_{sn} is the total value of work done during the specified period for the respective schedule of BOQ, and

S_{sn} is the secured advance paid during the specified period for the respective schedule of BOQ,

- (d) The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate schedule of BOQ and certified in Payment Certificates, shall be determined from formulae which shall be of the following general type:

$$P_n = a + b L_n/L_o + c E_n/E_o + d M_n/M_o + \dots$$

where,

" P_n " is the adjustment multiplier to be applied to the value of the work done during the period "n", this period being a month unless otherwise stated in the PCC.

"a" is a fixed coefficient, stated in the relevant table of adjustment data, representing the non-adjustable portion in contractual payments;

"b", "c", "d",... are coefficients representing the estimated proportion of each cost element related to the execution of the Works, as stated in the relevant table of adjustment data; such tabulated cost elements may be indicative of resources such as labour, equipment and materials;

" L_n "[Labour], " E_n "[Equipment], " M_n "[Material], are the current cost indices or reference prices for period "n", each of which is applicable to the relevant tabulated cost element [Labour, Equipment, Steel, Cement, Fuel/Lubricants, Bitumen, others] on the date, specified in the Table-2 of Adjustment Data, prior to the last day of the period (to which the particular Payment Certificate relates); and

" L_o ", " E_o ", " M_o ", are the base cost indices or reference prices,

| | |
|-----------------|---|
| | <p>expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.</p> <p>(e) The cost indices or reference prices stated in the tables of adjustment data given in PCC shall be used. The base date shall be the deadline for submission of bids.</p> <p>(f) If the Contractor fails to complete the Works within the Intended Completion date, adjustment of prices thereafter shall be made using either:</p> <ul style="list-style-type: none"> (i) index or price applicable for each cost element tabulated in the tables of adjustment data on the specified date prior to the expiry of the Intended Completion Date, or (ii) the current index or price applicable for the period in question whichever is more favourable to the Employer. <p>(g) The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be varied by the Project Manager if they have been rendered unreasonable, unbalanced or inapplicable, as a result of Variations.</p> <p>(h) Unless otherwise stated in the P.C.C., the Price adjustment shall be done in each monthly Interim Payment Certificate [IPC]. The coefficients and indices are given in the Tables of Adjustment Data in Contract data.</p> <p>To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.”</p> |
| GCC 49.1 | Price Adjustment: Not Applicable |
| GCC 50.1 | The proportion of payments retained (Retention Money) shall be 6% from each bill subject to the maximum of 5% of Final contract price (Including GST) |
| GCC 50.2 | The last line of GCC 50.2 is replaced with the following: “On completion of the whole works the Contractor may substitute the balance retention money with an “on demand” Bank guarantee.” |
| GCC 51 | In the first sentence of GCC 51.1, the following words are inserted after the words ‘Intended Completion Date’: “(for the whole of the works or the milestones as stated in the PCC)” The following is inserted as a sub-paragraph at the end of GCC 51.1: |

| | <p>“Time is the essence of the contract and payment or deduction of liquidated damages shall not relieve the contractor from his obligation to complete the work as per agreed construction program and milestones, or from any of the Contractor’s other obligations and liabilities under the contract.”</p> <p>In the first sentence in GCC 51.2 the following words are inserted after the words ‘Intended Completion Date’:</p> <p>“including milestones”</p> | | | | | | | | | |
|--------------------------|---|--|---------------------|--|-------------|-----|--|-------------|------|------------------------|
| GCC 51.1 | <p>The liquidated damages for the whole of the Works are 0.05% of the Final contract price (including GST) per day. The maximum amount of liquidated damages for the whole of the Works is 10% of the Final Contract Price.</p> <p><u>Physical Progress Time Period</u></p> <table> <tbody> <tr> <td>Milestone 1</td> <td>20%</td> <td>1/3rd of Completion Period</td> </tr> <tr> <td>Milestone 2</td> <td>50%</td> <td>2/3rd of Completion Period</td> </tr> <tr> <td>Milestone 3</td> <td>100%</td> <td>Full Completion Period</td> </tr> </tbody> </table> <p>Physical progress shall be assessed as per the measured/weighted percentage of the item duly verified by PROJECT MANAGER.</p> <p>Completion period shall be the period between the Start Date and Completion Date.</p> <p>The liquidated damages as per the rates above mentioned shall be withheld if the contractor fails to achieve the milestone prescribed above. However, in case the contractor achieves next milestone, the amount of the liquidated damages already withheld shall be restored to the contractor by adjustment in the next payment certificate.</p> | Milestone 1 | 20% | 1/3 rd of Completion Period | Milestone 2 | 50% | 2/3 rd of Completion Period | Milestone 3 | 100% | Full Completion Period |
| Milestone 1 | 20% | 1/3 rd of Completion Period | | | | | | | | |
| Milestone 2 | 50% | 2/3 rd of Completion Period | | | | | | | | |
| Milestone 3 | 100% | Full Completion Period | | | | | | | | |
| GCC 52.1 | Deleted | | | | | | | | | |
| GCC 53 | <p>The following is inserted as a new sub-clause 53.4:</p> <p>“The Project Manager shall make advance payment in respect of materials intended for but not yet incorporated in the Works in accordance with conditions stipulated in the PCC.”</p> | | | | | | | | | |
| GCC 53.1 | <p>Advance Payments shall be made in Indian Rupees only. The amount of the Advance Payments are:</p> <table border="1"> <thead> <tr> <th><u>Nature of Advance</u></th> <th><u>Amount (INR)</u></th> <th><u>Conditions to be fulfilled</u></th> </tr> </thead> </table> | <u>Nature of Advance</u> | <u>Amount (INR)</u> | <u>Conditions to be fulfilled</u> | | | | | | |
| <u>Nature of Advance</u> | <u>Amount (INR)</u> | <u>Conditions to be fulfilled</u> | | | | | | | | |

| | | | |
|--|---|--|---|
| | 1. Mobilization | 10% of the initial Contract price excluding GST | On submission of unconditional Bank Guarantee and after verification from issuing bank. (to be drawn before end of 20% of Contract period) |
| | 2. (i) Secured advance for non-perishable materials brought to site | 75% of Invoice value or Market value – lower of the two. | <p>a) The materials are in-accordance with the specification for Works;</p> <p>b) Such materials have been delivered to site, and are properly stored and protected against damage or deterioration to the satisfaction of the Project Manager.</p> <p>c) the Contractor's records of the requirements, orders, receipt and use of materials are kept In a form approved by the Project Manager and such records shall be available for Inspection by the Project Manager;</p> <p>d) The contractor has submitted with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Project Manager for the Purpose of valuation for material and providing evidence of ownership and payment thereof;</p> <p>e) Ownership of such materials shall be deemed to vest In the Employer for which the Contractor has submitted an Indemnity</p> |

| | | | |
|--|--|--|---|
| | | | <p>Bond In an acceptable format; and</p> <p>f) The quantity of materials are not excessive and shall be used within a reasonable time as determined by the Project Manager.</p> |
| | <p>(ii) Secured advance for structural steel fabricated at contractor's fabrication workshop/ fabrication yard on producing the unconditional bank guarantee for equal amount from any Nationalized or Scheduled Bank in India and/or any other security acceptable to and duly pledged in the name of the employer (to recover/encash equal amount, of the secured advance in case the contractor does not complete the work as per the terms of the contract agreement).</p> | | |
| <p>(The advance payment will be paid to the Contractor no later than 15 days after fulfillment of the above conditions).</p> | | | |

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 In the next Interim Payment Certificate following that In which the total of all such payments to the contractor has reached not less than 15 percent of the Contract Price or three months from the date of payment of first Installment of advance, whichever period concludes earlier, and shall be made at the 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 prior to the expiry of 80 %the original time for completion.

| | |
|----------------------------------|--|
| | Repayment of secured advance: The advance shall be repaid from each succeeding monthly payments to the extent materials [for which advance was previously paid pursuant to Clause 49 of GCC and 49.1(3) of PCC.] have been Incorporated into the Works. |
| GCC 54 | GCC 54.1 is replaced with the following: “The Performance Security and an Environmental and Social (ES) Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in the amounts specified in the PCC , and shall be issued by a Nationalized or Scheduled bank in India. The Performance Security including additional security for unbalanced bids, and the ES Performance Security, shall be valid until a date 28 days from the date of issue of the Certificate of Completion.” |
| GCC 54.1 | The Performance Security amount is 05 percent of the Accepted Contract Amount (inclusive of GST) plus Rs. as additional security for unbalanced bids <i>in terms of ITB Clause 41.2</i> , and Environmental and Social (ES) Performance Security amount is 01 percent of the Accepted Contract Amount. The standard forms of Performance Security and if applicable ES Security acceptable to the Employer shall be <u>unconditional</u> Bank Guarantees from Scheduled or Nationalized banks in India of the types as presented in Section X of the Bidding Document. Throughout this bidding document the term ‘performance security’, unless the context clearly indicates otherwise, means and includes both ‘the performance security and the ES performance security’ to be submitted by the successful bidder in the amounts specified above. |
| E. Finishing the Contract | |
| GCC 59.1 | The following is added after the words ‘issue a payment certificate’ at the end of GCC 59.1: “within 56 days of receiving the contractor’s revised account” |
| GCC 60.1 | The date by which operating and maintenance manuals are required is within 28 days of issue of certificate of completion of whole of the work. The date by which “as built” drawings (In legible scale as directed by Project Manager) Including a compact disc containing digitized drawings in 2 sets are required is within 28 days of issue of certificate of completion of whole of the work. |
| GCC 60.2 | The amount to be withheld for failing to produce “as built” drawings and/or operating and maintenance manuals by the date required In GCC 60.1 is INR5,00,000/- . If the Contractor fails to submit as built drawings than the same shall be prepared by the CSC/Client at the risk and cost of the Contractor and the amount withheld for this purpose will be forfeited by the CSC/Client. |

| | |
|---------------------|---|
| GCC 61 | <p>The following sub-clauses are added after GCC 61.2 (h):</p> <p>“(i) The contractor has contravened Clauses 7 and 9 of GCC.</p> <p>(j) The contractor does not adhere to the agreed construction program, agreed ES-MSIP [Clause 30 of GCC], and also fails to take satisfactory remedial action as per agreements reached in the management meetings [Clause 30 of GCC] for a period of 60 days.</p> <p>(k) The contractor fails to carry out the instructions of the Project Manager within a reasonable time determined by the Project Manager in accordance with GCC Clause 15.1 and 22.</p> <p>(l) The contractor (in case of Joint Venture) has modified the composition of the joint venture and/or the responsibility of each member of the joint venture from what is stated in joint venture agreement without the prior approval of the Employer.”</p> |
| GCC 61.2 (g) | The maximum number of days is: 200 |
| GCC 61.2(l) | Hiding any information regarding changes in roles and responsibilities of JV members, which is not authorized by the Employer, shall also be treated as violation of Appendix A to General Conditions (Fraud and Corruption). |
| GCC 62 | <p>The following is added after the words ‘issue of the certificate’ in the first sentence of GCC 62.1;</p> <p>“less other recoveries due in terms of contract, less taxes to be deducted at source [TDS] as per applicable law,”</p> <p>The following is added after the words ‘date of the certificate’ at the end of GCC 62.2:</p> <p>“less other recoveries due in terms of contract, less taxes to be deducted at source [TDS] as per applicable law”</p> |
| GCC 62.1 | The percentage to apply to the value of the work not completed, representing the Employer’s additional cost for completing the Works, is 20%. |

Appendices

Appendix 1

Salient Features of Labour & Environment Protection Laws²³

LABOUR LAWS

APPLICABLE (Refer Annex 1 and Annex 2 included in ENVIRONMENT & SOCIAL Requirements)

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

²³This 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.

Rules, 1991 as amended: These provide for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

7. The Ancient Monuments and Archaeological Sites and Remains Act, 1958 and the Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act, 2010, the Ancient Monuments and Archaeological Sites and Remains Rules, 1959 amended 2011, the National Monuments Authority Rules, 2011 and the similar State Acts: These provide for conservation of cultural and historical remains found in India. Accordingly, area within the radii of 100m and 300m from the “protected property” are designated as “protected area” and “controlled area” respectively. No development activity (including building, mining, excavating, blasting) is permitted in the “protected area” and development activities likely to damage the protected property is not permitted in the “controlled area” without prior permission of the Archaeological Survey of India (ASI) or the State Departments of Art and Culture or Archaeology as applicable.
8. The Environmental Impact Assessment Notification, 2006 and as amended: This provides for prior environmental clearance for new, modernization and expansion projects listed in Schedule 1 of the Notification. Contractors will be required to ensure that no work starts until applicable clearances under the Notification is not available. Contractors will be responsible for implementation of any environmental management plan stipulated as per the permission under this Notification; and will be required to prepare and submit to the employer and compliance report stipulated in the permission under the Notification.
9. The Water (Prevention and Control of Pollution) Act, 1974 as amended, and the Water (Prevention and Control of Pollution) Rules, 1975 as amended: These provide for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. ‘Pollution’ means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms. Contractors will need to obtain consent for establishment and consent for operation of any item of work or installation of equipment that generates waste water, and observe the required standards of establishment and operation of these items of work or installations; as well as install and operate all required waste water treatment facilities.
10. The Water (Prevention and Control of Pollution) Cess Act, 1977 and The Water (Prevention and Control of Pollution) Cess Rules, 1978: These provide for the levy and collection of a cess on water consumed by persons carrying on certain industries and by local authorities, with a view to augment the resources of the Central Board and the State Boards for the prevention and control of water pollution under the Water (Prevention and Control of Pollution) Act, 1974.

11. The Air (Prevention and Control of Pollution) Act, 1981 as amended, and the Air (Prevention and Control of Pollution) Rules, 1982: These provides for prevention, control and abatement of air pollution. ‘Air Pollution’ means the presence in the atmosphere of any ‘air pollutant’, which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment. Contractors will need to obtain consent for establishment and consent for operation of any item of work or installation of equipment that generates air pollution such as batching plants, hot mix plants, power generators, backup power generation, material handling processes, and observe the required standards of establishment and operation of these items of work or installations.
12. Noise Pollution (Control and Regulation) Rules, 2000, and as amended: This provides for standards for noise for day and night for various land uses and specifies special standards in and around sensitive receptors of noise such as schools and hospitals. Contractors will need to ensure compliance to the applicable standards and install and operate all required noise control devices as may be required for all plants and work processes.
13. Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996: This provides for Requirement of preparation of on-site and off-site Disaster Management Plans for accident-prone areas.
14. The Explosives Act 1884 and the Explosives Rules, 2008: These provide for safe manufacture, possession, sale, use, transportation and import of explosive materials such as diesel, Oil and lubricants etc.; and also for regulating the use of any explosives used in blasting and/or demolition. All applicable provisions will need compliance by the contractors.
15. The Petroleum Rules, 2002: This provides for safe use and storage of petroleum products and will need to be complied by the contractors.
16. The Gas Cylinder Rules 2004 and amendments: This provides for regulations related to storage of gas, and possession of gas cylinder more than the exempted quantity. Contractors should comply with all the requirements of this Rule.
17. Manufacture, Storage and Import of Hazardous Chemical Rules of 1989 and as amended: These provide for use and storage of hazardous material such as highly inflammable liquids like HSD/LPG. Contractors will need to ensure compliance to the Rules; and in the event where the storage quantity exceeds the regulated threshold limit, the contractors will be responsible for regular safety audits and other reporting requirements as prescribed in the Rules.
18. Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016: These provide for protection of general public from improper handling storage and disposal of hazardous waste. The rules prescribe the management requirement of hazardous wastes from its generation to final disposal. Contractors will need to obtain permission from the State Pollution Control Boards and other designated authorities for storage and handling of any hazardous material; and will to ensure full compliance to these rules and any conditions imposed in the permit.

19. The Bio Medical Waste Management Rules, 2016: This provides for control, storage, transportation and disposal of bio-medical wastes. As and where the contractor has any first aid facility and dispensaries, established in either temporary or permanent manner, compliance to these Rules is 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 wastes 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 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 for 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) paints containing lead; (ii) permanent and temporary ventilations in workplace; (iii) safety, and hygiene at the workplace; (iv) prevention of fire; (v) prevention of accidents from faulty electrical gadgets, equipment and accessories; and all other such codes incidental to the Contract.

Appendix 2

Tables of Adjustment Data

(Cl. 49 of GCC)

Table 1: Coefficients governing the adjustment for changes in cost

| S. No. | Coefficients Name | Symbol | Schedules (Reference Number) <i>[Description of each schedule is given below]</i> | | | | | | | | |
|-----------|---|--------|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | | S ₁ | S ₂ | S ₃ | S ₄ | S ₅ | S ₆ | S ₇ | S ₈ | S ₉ |
| 1. | Fixed | a | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| 2. | Labour [L] | b | | | | | | | | | |
| 3. | Steel [S] | c | | | | | | | | | |
| 4. | Cement [C] | d | | | | | | | | | |
| 5. | Plant & Equipment spares [E] | e | | | | | | | | | |
| 6. | Diesel and Petroleum products [D] | f | | | | | | | | | |
| 7. | Bitumen [B] | g | | | | | | | | | |
| 8. | Others[O] | 0 | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | Total | | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % |

Note: (a) Fixed element is normally 15%; (b) Employer to fill-up above Table.

Table 2: Cost Indices and Reference Prices (applicable for specific items) for adjustment in contract prices [as per GCC 49].

WPI with base 2004-2005 = 100 on the Base Date

Base Date = Deadline for submission of bids

| S. No. | Cost Element | Sym bol | Indices or Cost on the Base Date | Index for adjustment | Sources of Index |
|-----------|--------------------------|------------|---|---|---|
| [1] | [2] | [3] | [4] | [5] | [6] |
| 1. | Fixed | a | | | |
| 2. | Labour | b | L _o - all India average Consumer Price Index(CPI) Number for Industrial Workers for centre ²⁴ (Base 2001 = 100) on the base date. | L _n -CPI for the month for which the IPC is related | Labour Bureau, Ministry of Labour and Employment, Government of India. |
| 3. | Steel | c | S _o – Whole-sale Price Index (WPI) for Steel [Steel Long] | S _n -WPI for the month which is two months prior to the month to which IPC is related | Economic Advisor, Ministry of Commerce and Industry, Government of India. |
| 4. | Cement | d | C _o -WPI for Grey Cement | C _n -WPI for the month which the cement is brought to site or one month prior to the month to which IPC is related, whichever is less | Economic Advisor, Ministry of Commerce and Industry, Government of India |
| 5. | Plant & Equipment spares | e | E _o -WPI for “Construction machinery ” | E _n – WPI for the month to which IPC is related | Economic Advisor, Ministry of Commerce and Industry, Government of India |
| 6. | Diesel ²⁵ | f | Do-Unit Cost from the identified depot on the base date | Dn-Unit Cost for on the first day of the month to which the IPC relates | From the Depot |
| 7. | Bitumen ²⁶ | g | Bo-Unit Cost from the identified refinery on the base date | Bn- Cost per unit quantity on the first day of the month in which the material is brought to site or two months prior to the date to which IPC is related | From Refinery |
| 8. | Others | H | On- All India Wholesale Price Index(WPI) for all commodities | On- All India WPI for all commodities for the month to which IPC is related | Economic Advisor, Ministry of Commerce and Industry, Government of India |

IPC – Interim Payment Certificate

Appendix -3²⁷

Appointment of Adjudicator

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

Sub: (Name of the Contract)

To

Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri
Name and address of the Adjudicator

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

For administrative purpose _____ (*name of the officer representing the Employer*) has been assigned to administer the assignment and to provide the Adjudicator with all relevant information needed to carry out the assignment on behalf of both the employer and the contractor. The services will be required during the period of contract for the work of Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri.

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 liability period with prior intimation to the Employer and the contractor. The duration of each visit shall ordinarily be for one day only. These durations are approximate and (*Name of the employer and Name of the Contractor*) may find it necessary to postpone or cancel the assignment and/or shorten or extend the duration.

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

The Adjudicator will be paid a fee of Rs._____ (Rupees _____ only) per each day of visit at the worksite. The actual expenses for boarding and traveling in connection with the assignment will be reimbursed to the Adjudicator. The Adjudicator will submit a pre-receipted bill in triplicate to the employer indicating the date of the visit, fees for the visit and

²⁷ If ITB 51makes provision of an Adjudicator from list provided by an institution, kindly modify Appendix 3 to state that the fee and reimbursable payable to the adjudicator shall be as per the rules of the Institution.

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.

Procedures for resolution of disputes by the Adjudicator is described in the contract of Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri between the employer and the contractor vide Clause No.24 of the General Conditions of Contract. Your recommendation should be given in the format attached, within 28 days of receipt of a notification of dispute.

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

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

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

Read and Agreed

Name of Adjudicator

Signature

Place:

Date:

Name of Employer

Signature of authorized representative of Employer

Name of the Contractor

Signature of authorized representative of Contractor

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

SUMMARY OF AJUDICATOR'S RESPONSIBILITIES

The Adjudicator has the following principal responsibilities:

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

Sample Format of Adjudicator's Recommendation

[Project Name] Recommendation of Adjudicator

Dispute No. XX [NAME OF DISPUTE]

Hearing Date: _____

Dispute

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

Contractor's Position

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

Employer's Position

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

Recommendation

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

Explanation

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

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

Respectfully submitted,

Date : _____

Date : _____

Date : _____

Appendix IV: Environmental Management and Mitigation Plan

| S. No | Anticipated Impact | Mitigation Measures | Location | | | |
|-------------------------------|--|---|------------------------|--------------|---------------------------------------|--------------------------------------|
| Pre-construction Stage | | | | | | |
| 1 | Utility Shifting | All utilities and services impacted due to the proposed component will be shifted/ relocated, with prior approval of the concerned agencies. | Project Corridor | Project Cost | PIU / DSC | PIU |
| 2 | Locations for disposal of spoil | (i) A utilization plan for the disposal of earth resulting from the excavation will be prepared by the contractor as part of the spoil management plan. (ii) It is envisaged that nearly 90% of the excavated earth will be utilized for the construction of the access approach road | Project Corridor | Project Cost | Contractor / Environmental Expert DSC | PIU |
| 3 | Location, selection, design and layout -Construction camps and/ or mix plants, storage areas, stockpiles, and disposal areas | (i)The construction camps, mix plants, storage areas, stockpiles, and disposal areas will be located as per the following sitting criteria (ii) at least 200 m away from habitations and 1Km away from areas notified as ecologically critical areas (ECA), and (iii) At least 100 m away from water bodies. (iv) At these locations, the contractor will work out layouts adhering to the air and water standards prescribed by CPCB. (v) Selected sites should not result in destruction of property, vegetation, irrigation, and/or drinking water supply systems. | Construction Site/camp | Project | Contractor / Environmental Expert DSC | PIU |
| Construction Stage | | | | | | |
| 1 | Damages to utilities and services during construction | The contractor will be required to: (i) plan for immediate attendance by the service providers to any damages to utilities during construction; (ii) replace (or compensate for) public and private physical structures damaged due to construction or vibration; (iii) Provide prior public information about the likely | Project Corridor | Project Cost | Contractor | Environmental Expert DSC & Field PIU |

| S. No | Anticipated Impact | Mitigation Measures | Location | | | |
|-------|--|---|-------------------|--------------|------------|--------------------------------------|
| | | <p>disruption of services.</p> <p>(iv) In consultation and with support from FPIU, the contractor will provide alternate arrangements for water supply in the event of disruption beyond reasonable time, for instance, through tankers.</p> | | | | |
| 2 | Stockpiling of construction materials, excavated earth / spoil from trenches | <p>Due consideration will be given for material storage and construction sites such that it doesn't cause any hindrance to daily traffic movement. The contractor will</p> <p>(i) consult with the engineer on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>(ii) avoid stockpiling of earth fill, especially during the rainy season, unless covered by tarpaulins or plastic sheets;</p> <p>(iii) prioritize reuse of excess spoils and materials in the construction works; and</p> <p>(iv) protect surface water bodies from any source of contamination, such as oily wastes, debris, and spoils that will degrade its quality</p> | Construction Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |
| 3 | Soil erosion | <p>(i) The measures to address soil erosion at the proposed facilities will consist of measures as per design, or as directed by the DSC to control soil erosion, sedimentation, and water pollution.</p> <p>(ii) All temporary sedimentation, pollution control works, and maintenance thereof will be deemed incidental to the earthwork or other items of work.</p> | Construction Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |
| 4 | Contamination of water from fuel and lubricants | <p>To avoid contamination from fuel and lubricants, the vehicle and equipment's shall be properly maintained and refuelling/ maintenance of vehicles shall not be done near the bridge sites.</p> <p>Diesel Generator set shall be placed on a cement concrete platform with oil and grease trap to control the oil ingress into soil/water bodies.</p> | Construction Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |

| S. No | Anticipated Impact | Mitigation Measures | Location | | | |
|-------|---|--|-------------------|--------------|------------|--------------------------------------|
| 5 | Dust Pollution | <p>The Contractor shall follow good engineering practices during Construction and rehabilitation of bridges.</p> <p>The Contractor shall reduce dust nuisance from construction sites by sprinkling of water, encapsulation of dust source and by erection of screen/barriers.</p> <p>Vehicle delivering material shall be covered. End boards inloaders shall be provided to prevent spillage. Water shall also be sprayed on temporary access roads and diversions. The air pollution monitoring shall be carried out as per monitor in g and reporting program</p> | Project corridor | Project Cost | Contractor | Environmental Expert DSC & Field PIU |
| 6 | Emission from construction vehicles, equipment, and machinery | All vehicles, equipment, and machinery used for construction will be regularly maintained to ensure that pollution emission levels comply with the relevant requirements of CPCB. Copies of conformance or PUCs will be submitted regularly to the DSC. | Construction Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |
| 7 | Noise from construction equipment | <p>The contractor will ensure</p> <ul style="list-style-type: none"> (i) regular maintenance of vehicles, equipment, and machinery to keep noise from these at a minimum; and (ii) All vehicles and equipment used for construction will be fitted with exhaust silencers. <p>The construction of bridges shall be done using good engineering practices so that noise levels are kept at acceptable levels. Work hour's needs to be adjusted accordingly near sensitive receptors such as schools, hospitals, temples etc in consultation with the community and authorities.</p> | Construction Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |
| 8 | Disposal of construction waste/debris/cut material | <ul style="list-style-type: none"> (i) For project component the contractor will prepare and implement a waste management plan. (ii) Safe disposal of the extraneous material will be ensured in the pre-identified disposal locations. | Construction Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |

| S. No | Anticipated Impact | Mitigation Measures | Location | | | |
|-------|---|--|----------------------------|--------------|------------|--------------------------------------|
| | | (iii) Manage solid waste according to the following preference hierarchy: reuse, recycle, and dispose of in designated areas; (iv) Cut material generated because of construction will be utilized as filling material. Remaining material if any will be disposed off safely at the disposal sites; (vi) Remove all wreckage, rubbish, or temporary structures that are no longer required; and | | | | |
| 9 | Water training and disruption to other users of water | Contractor shall not obstruct the flow of water while constructing/rehabilitating bridges. Contractor shall ensure that velocity in the constructed portion does not increase more than twice the lean season velocity. This shall help turbidity control in downstream and minimum disruption off lora and fauna. Contractor shall carry out the excavation for foundation and construction of substructures during lean season to reduce turbidity levels and soil erosion, which may cause disruption to flora and fauna. Construction over and close to the non-perennial streams should be undertaken in the dry season. | Construction Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |
| 10 | Aquatic Fauna | Any impacts to the aquatic fauna shall be avoided. | Construction Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 11 | Hygiene in the construction camps and sites | (i) All temporary accommodations will be constructed and maintained to make uncontaminated water available for drinking, cooking, and washing. Potable drinking water in | Construction Site and camp | Project Cost | Contractor | Environmental Expert DSC & |

| S. No | Anticipated Impact | Mitigation Measures | Location | | | |
|-------|---|---|----------------------------|--------------|------------|--------------------------------------|
| | | sufficient quantity for the work force will be provided at the construction site and camp. All the garbage should be disposed off in a hygienic manner. | | | | Field PIU |
| 12 | Clearing of construction of camps and restoration | (i) Contractor will prepare site restoration plans for approval by the DSC. The plan will be implemented by the contractor prior to demobilization. (ii) On completion of the works, all temporary structures will be cleared away, all rubbish burned, excreta or other disposal pits or trenches filled in and effectively sealed off, and the site left clean and tidy, at the contractor's expense. (iii) The site will be restored to pre-project conditions through removal of all extraneous material on site (iv) Completion certificate shall be issued by the consultant only after when the site has been restored. | Construction camp and Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |
| | | | | | | |
| 13 | Water Pollution from Construction Wastes | The Contractor should not discharge wastewater, generated during construction, into streams, water bodies. Wastes must be collected, stored and reused in the construction/ disposed on approved sites. The Environment Expert shall certify that all wastes generated on bridge site have been disposed off as per norms or in environment friendly manner. | Construction camp and Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |
| | | | | | | |
| 14 | Pollution Monitoring | The contractor shall monitor water quality both upstream and downstream of bridges thrice a year at the site of new bridges. | Construction Site | Project Cost | Contractor | Environmental Expert DSC & Field PIU |

Appendix V: Health, Safety, Mitigation Plan

| S.no | Field | Anticipated Impact | Mitigation Measures | Location | Project Cost | PIU / DSC | PIU |
|------|--------------------------------|--|--|--------------|--------------|---|--------------------------------------|
| 1 | Occupational Health and Safety | Occupational hazards which can arise during work | <p>Develop and implement site-specific health and safety plan which will include measures such as:</p> <ul style="list-style-type: none"> (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment like helmet, gumboot, safety belt, gloves, nose musk and ear plugs; (c) health and safety training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; <p>(iii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iv) Provide medical insurance coverage for workers;</p> <p>(v) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(vi) Provide supplies of potable drinking water;</p> <p>(vii) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(viii) Provide health and safety orientation</p> | Project site | Project Cost | Contractor / Health safety and environment Expert DSC | Environment Specialist and Field PIU |

| | | | | | |
|--|--|---|--|--|--|
| | | <p>training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(ix) Provide visitor orientation, if visitors to the site can gain access to areas where hazardous conditions or sub-stances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(x) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(xi) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xii) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with inter-national standards and be well known to, and easily un-derstood by workers, visitors, and the general public as appropriate; and</p> <p>(xiii) Disallow worker exposure to noise level greater than 85 dB (A) for duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> | | | |
|--|--|---|--|--|--|

| | | | | | | | |
|---|------------------------------|--|--|--|--|--|--|
| | | | | | | | |
| 2 | Community Health and Safety. | Traffic accidents and vehicle collision with pedestrians during material and waste transportation. | (i)-Plan routes to avoid times of peak-pedestrian activities; (ii) Liaise with IPIU/DSC in identifying high-risk areas on route cards/maps; (iii) Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure; and (iv) Provide signs and flag persons to warn. | | | | |

Environmental Monitoring Plan

| S,No | Parameter | Indicators | Method | Location /Schedule | Agencies to be Consulted |
|------|---|--|---|---|---|
| 1 | Air Quality | Dust around the proposed site/ project areas | Visual Observation | Construction site Weekly during construction | DSC/PIU |
| 2 | Noise Quality | Construction equipment's | Observation | Construction site Weekly during construction | DSC/PIU |
| 3 | Waste Management | Unpleasant odour and visual impact | Visual Observation | Labor camp/ construction sites Weekly during construction | DSC/PIU |
| 4 | Workers and community people accident, Health and Safety issues | Impacts on health of the workers; No. of accidents | Inspection of the construction place; Records of accidents | Project area Continuous during construction period | District hospital/ local health centers |
| 5 | Employment | No. of local people employed by project | Records kept by contractor and CSC | Project area Continuous during construction period | DSC/PIU |
| 6 | Air Quality | PM10, PM2.5, SO ₂ , NOx, CO, Pb, NH ₃ and O ₃ | High volume sampler Use method specified by CPCB for 24 hr sampling | Once in a Quarter where work is in progress and near sensitive receptors; and at the construction camp sites (except monsoon) for the entire construction | Contractor through NABL Accredited Laboratory |
| 7 | Water Quality (Drinking & River/stream) | Grab sample collected from source and analyze as per standard methods for examination | IS for Inland surface waters (IS:2296,1982) and for drinking water (IS: 10500-1991) | Once in a Quarter, except monsoon season Drinking water samples from the source of water supplied to labour camps. | Contractor through NABL Accredited Laboratory |
| 8 | Noise | Equivalent noise levels using and integrated noise level meter kept at a distance of 15m from edge of pavement Leq in db (A) of day time and nighttime | NAANQM 2000 | Once in a Quarter, except monsoon season Near the construction camps, working zones, sensitive receptors at major human settlements | Contractor through NABL Accredited Laboratory |

Appendix V: Facilities for Staff and Labour

Site.

1. Sites used for camps shall be adequately drained. They shall not be subject to periodic flooding, nor located within 200 feet of swamps, pools, sink holes, or other surface collections of water unless such quiescent water surfaces can be subjected to mosquito control measures.
2. The camp shall be located so the drainage from and through the camp will not endanger any domestic or public water supply.
3. All sites shall be graded, ditched, and rendered free from depressions in which water may become a nuisance.
4. All sites shall be adequate in size to prevent overcrowding of necessary structures.
5. The camp area in which food is prepared and served and where sleeping quarters are located shall be at least 500 feet from any area in which livestock is kept.
6. The grounds and open areas surrounding the shelters shall be maintained in a clean and sanitary condition free from rubbish, debris, waste paper, garbage, or other refuse.

Construction Camps

1. Each room used for sleeping purposes shall contain at least 50 square feet of floor space for each occupant. At least a 7-foot ceiling shall be provided.
2. Beds, cots, or bunks, and suitable storage facilities such as wall lockers for clothing and personal articles shall be provided in every room used for sleeping purposes. Such beds or similar facilities shall be spaced not closer than 36 inches both laterally and end to end, and shall be elevated at least 12 inches from the floor. If double-deck bunks are used, they shall be spaced not less than 48 inches both laterally and end to end. The minimum clear space between the lower and upper bunk shall be not less than 27 inches. Triple-deck bunks are prohibited.
3. The floors of each shelter shall be constructed of wood, asphalt, or concrete. Wooden floors shall be of smooth and tight construction. The floors shall be kept in good repair.
4. All living quarters shall be provided with windows the total of which shall be not less than one-tenth of the floor area. At least one-half of each window shall be so constructed that it can be opened for purposes of ventilation.
5. All exterior openings shall be effectively screened with 16-mesh material. All screen doors shall be equipped with self-closing devices.
6. In a room where workers cook, live, and sleep a minimum of 100 square feet per person shall be provided. Sanitary facilities shall be provided for storing and preparing food.

-
7. In camps where cooking facilities are used in common, stoves (in ratio of one stove to 10 persons or one stove to two families) shall be provided in an enclosed and screened shelter. Sanitary facilities shall be provided for storing and preparing food.

Toilet Facilities

1. Each toilet room shall be located so as to be accessible without any individual passing through any sleeping room.
2. Toilet rooms shall have a window not less than 3 square feet in area opening directly to the outside area or otherwise be satisfactorily ventilated. All outside openings shall be screened with 16-mesh material.
3. A toilet room shall be located within 200 feet of the door of each sleeping room. No toilet shall be closer than 50 feet to any sleeping room, dining room, lunch area, or kitchen.
4. Where the toilet rooms are shared, such as in multifamily shelters and in barracks type facilities, separate toilet rooms shall be provided for each sex. These rooms shall be distinctly marked "for men" and "for women" by signs printed in English and in the native language of the persons occupying the camp, or marked with easily understood pictures or symbols. If the facilities for each sex are in the same building, they shall be separated by solid walls or partitions extending from the floor to the roof or ceiling.
5. Where toilet facilities are shared, the number of water closets or toilet seats provided for each sex shall be based on the maximum number of persons of that sex which the camp is designed to house at any one time, in the ratio of one such unit to each 15 persons, with a minimum of two units for any shared facility.
6. Each toilet room shall be lighted naturally, or artificially by a safe type of lighting at all hours of the day and night.
7. All toilet rooms shall be kept in a sanitary condition and shall be cleaned at least daily.

Laundry, handwashing, and bathing facilities

Laundry, handwashing, and bathing facilities shall be provided in the following ratio

1. Handwash basin per family shelter or per six persons in shared facilities.
2. Shower head for every 10 persons.
3. Floors shall be of smooth finish but not slippery materials; they shall be impervious to moisture.
4. Floor drains shall be provided in all shower baths, shower rooms, or laundry rooms to remove waste water and facilitate cleaning.
5. All junctions of the curbing and the floor shall be coved.

Social Management Plan (SMP) for Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri to be implemented at the Sub Project by the Implementing Agency (contractor)

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|---|---|-----------------------------|-------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| P.1 | Assessment of Impacts | The DSC Social Specialist shall assess impacts and revise/modify the SMP and other required sections of the project document if any Risk occurs/any community related issue comes/ utility shifting / movement of machinery during construction. | Social Specialist DSC | SCDGS PIU/ PMU |
| P2 | Labour Laws compliances and its training | The Contractor shall comply with all relevant labor laws and regulations (as per the Act) applicable to the Contractor's personnel A documentation personnel should be there to ensure updation and reporting of Labor laws software (ICT Tool) on site to ensure proper compliances and monitoring of labor laws. | Contractors | Social Specialist DSC |
| P3 | Community Awareness Meetings | The project shall arrange project awareness meetings every month or whenever required, with the community and provide information on project implementation. Contractor ESHS must be present during this meeting. | Social Specialist of DSC | SCDGS PIU/ PMU |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|---|--|-----------------------------|--|
| | | | Planning and Implementation | Supervision/ Monitoring |
| P4 | Safety Awareness training | Contractor will organize Awareness training for the labours / workers about safety procedures and practices every month or at the time when ever new labours come. | Contractors | Social Specialists DSC |
| P5 | Impacts due to construction | The Contractor shall bear the cost of any impacts on structures or land during construction. All temporary use of lands outside ROW to be through written approval of Land owner. Location of construction camps to be set up in consultation with DSC/ FPIU/ PIU. Written agreements from land owners need to be obtained by contractor. | Contractor | Social Specialist DSC and SCDGS PIU/PMU |
| P6 | Labour camp | The contractors to set up the accommodation and arrangement for acceptable residential accommodation, potable water for labours at proposed construction site Ensure during implementation and usage of the facility, construction of labor camp, no discharge/ disposal of any debris/ drainage/ sewage/ solid waste into the neighboring communities causing inconvenience/ nuisance. | Contractor | DSC Social Specialist and Field PIU |
| P7 | Worker's accommodation, toilets and sanitation | Workers need to be provided accommodation with adequate sanitation facilities by the contractor so that they will not pollute the area. | Contractor | DSC Social Specialist/ FPIU/PIU |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|-------------------------|--|-----------------------------|-------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | | <p><u>Labor Accommodation</u> -</p> <ul style="list-style-type: none"> • Separate room to be provided for women employees. • Rooms to have ventilation and circulation of fresh air with sufficient natural or artificial lighting. • The rest-room should be of such dimensions so as to provide at least a floor area 1.1 sq. meter for each person making use of the rest room. • The rest-room should provide protection against heat, wind, rain and shall have smooth, hard and impervious floor surface. (Insulated sheets should be used to make labor accommodations and kitchen. Strictly no use of MS sheets will be there) • The rest-room should be at a convenient distance from the workplace and should have adequate supply of wholesome drinking water. <p><u>Kitchen</u> - There should be a completely separate cooking space for the cooking of food and tea for labor. Strictly no use of bedrooms for cooking will be there.</p> <ul style="list-style-type: none"> • The contractor needs to provide LPG for cooking, so that the worker does not use wood for fuel. | | |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|-------------------------|--|-----------------------------|-------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | | <p>Sanitation Block -contractor need to provide separate toilets facilities for male and female workers at site along with labor camps</p> <p>In every 10 labors one toilet should be provide to labors. Also, urinal facility will be provided to labors accordingly.</p> <p>Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.</p> <p>Where employees 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 employees “for men only” or “for women only” as the case may be. The notice should also bear the figure of a man or of a woman, as the case may be.</p> <p>The latrine and urinals should be conveniently situated and accessible to employees at all times at the establishment.</p> <p>The latrine and urinals should be adequately lighted and maintained in a clean and sanitary condition at all times.</p> <p>Latrines and urinals other than those connected with a flush sewage system will comply with the requirements of the public health authorities.</p> <p>Water is to be provided by the means of tap or otherwise so</p> | | |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|------------------------------------|---|-----------------------------|---|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | | as to be conveniently accessible in or near the latrine and urinals. | | |
| P8 | Safety Measures for workers | Provision of PPEs – Personal Protective Equipment for all workers (Women and Men) comprising of: 1. Hard Hats 2. Reflective Jackets 3. Boots 4. Gloves 5. Goggles 6. Nose Mask 7. Safety Harness Belt | Contractor | DSC Social Specialist and Field PIU/PIU |
| P9 | Public Information Boards | The Contractor shall provide, erect and maintain informative /safety signs, hoardings written in English and local language, wherever required at nearby sites. 1. Caution Boards-04 2. Safety awareness boards- 04 Display Emergency number (Police, Fire and Hospitals) 3. The contractor needs to erect 02 Public Information Boards giving project information at key places as directed by PIU Displaying GRM Number- 8272020703- | Contractor | DSC Social Specialist and Field PIU |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|---|---|-----------------------------|-------------------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| P10 | First-Aid facilities at Accommodation of labor and at worksite | <p><u>First-Aid facilities</u></p> <ul style="list-style-type: none"> a) There should be readily accessible first-aid boxes during all working hours at the rate of minimum one box for every 150 contract employees. b) The first-aid box is to be distinctively marked with a red cross on a white ground and should contain the mandated equipment and consumables at minimum c) For establishments in which the number of contract employees does not exceed fifty-each first-aid box shall contain the following equipment and consumables; <ul style="list-style-type: none"> i. 6 Small sterilized dressing. ii. 3 Medium size sterilized dressing. iii. 3 Large size sterilized dressing. iv. 3 Large sterilized burn dressing. v. 1 (30ml.) bottle containing a two per cent, alcohol solution of iodine. vi. 1 (30ml.) bottle containing Salvolatile having the dose and mode of administration indicated on the | Contractor | DSC Social Specialist and Field PIU |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|---------------|--------------------------------|--|------------------------------------|--------------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | | <p>label.</p> <p>vii. 1 snake-bite lancet.</p> <p>viii. 1 (30 gms.) bottle of potassium permanganate crystals.</p> <p>ix. 1 pair scissors.</p> <p>x. 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and employees institutes, Government of India.</p> <p>xi. A bottle containing 100 tablets (each of 5 grains) of aspirin.</p> <p>xii. Ointment for burns.</p> <p>xiii. A bottle of suitable surgical anti-septic solution.</p> <p>d) Adequate arrangement shall be made for immediate recoupment of the equipment or consumables when necessary.</p> <p>e) Nothing except the prescribed contents is to be kept in the Fist-Aid Box.</p> <p>f) The First-Aid Box shall be kept in charge of a</p> | | |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|---|--|-----------------------------|---|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | | responsible person who will always be readily available during the working hours of the establishment. The person in charge of the First-Aid Box should be trained in First-Aid treatment, in establishment where the number of contact employees employed is 150 or more. | | |
| P.11 | Health related issues of workers | <p>Contractor will provide First Aid Box at every proposed site inclusive of all the necessary medicines for first aid to labours. in labour camp to provide minimum medical attention to tackle first-aid requirements, also in collaboration with local health authorities; the contractor shall ensure availability of first aid facilities, medical staff, and sick bay ambulance service to Personnel; and welfare and hygiene requirements. (As per the Act)</p> <p>Also, linkage with health centers like PHC which has MCW (Mother and Child Welfare) units for treating mothers and children in the camp. Apart from this, the health center should provide with regular vaccinations required for children. Monthly at least one health check-up camp should be organized for labours.</p> | Contractor | DSC Social Specialist and Field PIU/PIU |
| P12 | Children care related issues | Contractor will provide crèche facilities for the infants and small children of women workers so that they can leave behind their children in crèche and work easily for the day. | Contractor | DSC Social Specialist and Field PIU |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|--|--|-----------------------------|-------------------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | | <p>The crèche should be provided with at least a trained worker, preferably women, who may take care of the children in a better way. In cases of emergency, a trained worker can tackle the health problems of the children much more efficiently and effectively and can organize treatment linking the nearest health center.</p> <p>Women, especially the mothers with infants, should be exempted from night shifts as far as possible. If unavoidable, crèche facilities in the construction camps must be extended to them in the night shifts too.</p> | | |
| P13 | Education related issues of children of labours | Wherever feasible, day crèche facilities may be extended with primary educational facilities or some kind of informal education facilities could be created at the construction camp as the construction workers are mainly mobile groups of people. Thus, there is a need for educating their children at the place of their work by educated personnel. | Contractor | DSC Social Specialist and Field PIU |
| P14 | Women employment at construction work | <p>The Contractor shall employ women in construction related works, as feasible.</p> <p>The Contractor shall provide equal wages and benefits to men and women for work of equal value or type as per Equal Remuneration Act 1979: The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making</p> | Contractor | DSC Social Specialist and Field PIU |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|---|--|-----------------------------|-------------------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | | discrimination against Female employees in the matters of transfers, training and promotions etc. | | |
| P15 | Gender Equality and empowerment | <p>DSC Social Specialist will Ensure that the women to take part in the consultation process. So that the actual information would be obtained of land and assets lost, being same for all the affected or displaced families if available.</p> <p>Conduct more consultations and open meetings to make other vulnerable to participate in the project activities and record the same.</p> | DSC Social Specialist | SCDGS PIU/ PMU |
| P16 | Risk of health and its treatment | <p>It is well expected that because of proposed project mobility of workers and truckers and other users will increase and hence there are increased chances of transmission of different disease. For the control, Prevention and treatment of any transmission disease is one of the important social responsibilities of the project. Contractor shall conduct awareness camps / health camps on quarterly basis and disseminate information at worksites on the risks of all the transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction;</p> <p>Link up with Sub centers, PHC/CHC/District Hospital/ UKSACS (Uttarakhand Aids Control Society) for awareness generation camps and IEC materials, and supply of condoms</p> | Contractor | DSC Social Specialist and Field PIU |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|---|---|-----------------------------|---|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | | at concessional rate (or free) to the male workers may help to a large extent in this respect. | | |
| P17 | Child Labour | The Contractor shall not employ any child labour to perform work, including work that is economically exploitative, or is likely to be hazardous to, 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. "Child" means a child below the statutory minimum age of 14 Years as per 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 Building and Construction Industry. | Contractor | DSC Social Specialist and Field PIU |
| P18 | Key Legal Provision Related to Women | Ensure Key Legal Provision Related to Women at all projects viz: ➤ Protection of Women from Domestic Violence Act, 2005 ➤ The Criminal Law (Amendment) Act, 2013 ➤ The Immoral Traffic (Prevention) Act, 1956 ➤ The Maternity Benefit Act 1961 ➤ Sexual harassment at the workplace Act 2013 | Contractor | DSC Social Specialist and Field PIU/PIU/PMU |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|---|--|---|-------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| P19 | Grievance Redress Mechanism | <p>Grievance Redress System is already set up for the project at following levels:</p> <ul style="list-style-type: none"> ➤ Grievance Register for Labours ➤ Grievance Redress Committee (GRC) at Gram Panchayat level. ➤ GRC at District Level ➤ GRC at state level <p>The grievances resolving period is from one week to one month at various levels depending on the Grievance.</p> <p>In case of R&R/Land acquisition it is up to 3 months.</p> <p>Contractor will ensure the grievance number is +918272020703 which will be displayed at all Project Information Boards.</p> <p>Contractor will place the following register at site office-</p> <ol style="list-style-type: none"> 1. Visitor Register 2. Labor Attendance register | Contractor/ DSC Social Specialist and Field PIU | SCDGS PIU/PMU |
| P20 | Continuous Community Participation | The Social Specialist of DSC shall have continuous interactions with local people around the project area to ensure that the construction activities are not causing undue inconvenience to the locals residing in the vicinity of project site under construction due to noise, dust or disposal of debris etc. and record the same in | DSC Social Specialist | SCDGS PIU |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|---|--|--|------------------------------------|-------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | | form of minutes with photographs. | | |
| Site Specific Actions – Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali- Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri | | | | |
| P21 | Strong precautions to be taken up for nearby school | There is a big school building where many children come to get education, so on the site before construction there will be a strong partition should be made up, to avoid any accident and any interference to school by construction workers. | Contractor / DSC Social Specialist | DSC/FPIU |
| P22 | Noice disturbances related issue | As the schools is open and classes are conducted daily so the heavy sound machineries should be avoided till school hours continues. | Contractor/ DSC Social Specialist | DSC/FPIUs |
| P23 | Communications with school authority | The Contractor and his employees will have to take care of the schools and time to time a meeting with school authority or staff should be conducted to know if there is any trouble to them due to construction site or not. | Contractor/ DSC Social Specialist | DSC/FPIUs |
| P24 | Path way to school to community | There is a sperate way for children to community to school , so there should not be any interference on site by children of school but still all the construction workers need to be careful for this. | Contractor/ DSC Social Specialist | DSC/FPIUs |
| P25 | Arrangement of Labor accommodation in | If accommodation for labor is provided in the nearby community or village. So, it is important to comply with all Dos and Don'ts for contractor so that any risk related to | | |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|--------|-------------------------------|--|--------------------------------------|-------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | nearby community | labor and community could be avoided. | | |
| P26 | Other important issues | <p>1. Increase the safety measures during rainy season for laborers and local people so, that there are no accidents.</p> <p>2. If there is any water pipeline to be shifted.</p> <p>3. Share the timelines for completion of project on time-to-time basis with local people and take their suggestions resulting in improved community participation and sense of ownership.</p> <p>4. Awareness creation activities on disaster management, sanitation, gender, education, etc. involving local schools and other community-based organizations.</p> <p>5. Procure NOC to use water and other common resources from Village Panchayat for labours.</p> <p>6. Procure rent agreement for keeping material at rented or tented place.</p> <p>7. Contractors will give preference to local youth and community offering them job.</p> <p>8. Barricading/ Safety Tapes should be used for the safety</p> <p>9. Proper dustbins should place on different places.</p> <p>10. Bed and bedding facility should be provided to labors.</p> <p>11. Awareness creation activities on disaster management, sanitation, gender sensitization, etc. involving local schools' teachers and children.</p> <p>12. Monthly progress report of every activity will be prepared by Social Expert DSC / EHS of contractor and</p> | Contractor and DSC Social Specialist | Field PIU and SCDGS PIU |

| S. No. | Social Issues / Impacts | Mitigation Measures | Responsibility | |
|---------------|--------------------------------|---|------------------------------------|--------------------------------|
| | | | Planning and Implementation | Supervision/ Monitoring |
| | | <p>will be submitted to PIU.</p> <p>13. Social expert DSC will visit the site in every two month and as per requirement and monitor the SMP</p> | | |

NOTE:

1. The contractor has to ensure workers camp/housing, safety measures, first aid, PPE, etc. as mentioned above before starting the work.
2. Ensures that the Contractor conducts all activities in a manner that minimizes disturbance to directly affected persons and the public in general, as advised by the Safeguards Staff of UDRP PMU /PIU/DSC.
3. May, on the recommendation of the Safeguards Staff of UDRP PMU & PIU, through the DSC order the Contractor to suspend any or all works on site if the Contractor or his subcontractors/ suppliers fail to comply with the said contractual stipulations with respect to SMP.
4. Appoints one full time suitably qualified and experienced Safeguard Officer for implementation and reporting of SMP including Health & Safety measures, community liaising, reporting and grievance redressal on day-to-day basis.
5. Contractor staff will provide different trainings to their labours and staff as per the training schedule provided to them by PMU and will properly maintained the records of the trainings.
6. The Social Specialist of the DSC will ensure monthly management meeting at each site with the staff of Field PIU, Contractor and labors on ensuring the compliance mentioned in the Social Management Plan including timely payment of wages and will maintain a monthly meeting register to ensure that all the grievances in the grievance register and on website and other social compliances are addressed within the stipulated time period and report the same to SCDGS PIU/PMU.

Annexure A

Salient Features of Labour Laws¹

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

¹This 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.

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.
- (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 INR 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 upto 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.

NOTE:

7. The contractor has to ensure workers camp/housing, safety measures, first aid, PPE, etc. as mentioned above before starting the work.
8. Ensures that the Contractor conducts all activities in a manner that minimizes disturbance to directly affected persons and the public in general, as advised by the Safeguards Staff of UDRP PMU /PIU/DSC.
9. May, on the recommendation of the Safeguards Staff of UDRP PMU & PIU, through the DSC order the Contractor to suspend any or all works on site if the Contractor or his subcontractors/ suppliers fail to comply with the said contractual stipulations with respect to SMP.
10. Appoints one full time suitably qualified and experienced Safeguard Officer for implementation and reporting of SMP including Health & Safety measures, community liaising, reporting and grievance redressal on day-to-day basis.
11. Contractor staff will provide different trainings to their labours and staff as per the training schedule provided to them by PMU and will properly maintained the records of the trainings.
12. The Social Specialist of the DSC will ensure monthly management meeting at each site with the staff of Field PIU, Contractor and labors on ensuring the compliance mentioned in the Social Management Plan including timely payment of wages and will maintain a monthly meeting register to ensure that all the grievances in the grievance register and on website and other social compliances are addressed within the stipulated time period and report the same to SCDGS PIU/PMU.

Annexure A

Salient Features of Labour Laws²

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

- (w) 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.
- (x) 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

²This 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.

completed year of service. The Act is applicable to all establishments employing 10 or more employees.

- (y) 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.
- (z) Maternity Benefit Act 1961: The Act provides for leave and some other benefits to women employees In case of confinement or miscarriage etc.
- (aa) 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
- (bb) 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.
- (cc) 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.
- (dd) 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.
- (ee) 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.

- (ff) 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 INR 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.
- (gg) 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.
- (hh) 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.
- (ii) 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.
- (jj) 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 upto the establishment and back, etc.
- (kk) 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.

- (ll) 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.
- (mm) Weekly Holidays Act -1942
- (nn) 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.
- (oo) 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.
- (pp) 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.
- (qq) 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.
- (rr) 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.

Section X - Contract Forms

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

NOTIFICATION OF AWARD

Letter of Acceptance *[on letterhead paper of the Employer]*

[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 Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambdaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri, *as given in the PCC]* for the Accepted Contract Amount of *.[insert amount in numbers and words]*, as corrected and modified¹ in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish the Performance Security, plus additional security for unbalanced bids in terms of ITB Clause 41, and ES Performance Security/**Delete ES Performance Security if it is not required under the contract**/in the form detailed in ITB Clause 50 for amounts² of Rs. , and Rs. specified therein, within 21 days of the receipt of this letter of acceptance, and visit this office to sign the contract, failing which action as stated in ITB Clause 50.2 will be taken in accordance with the Conditions of Contract. The securities shall be valid upto28 days from the date of completion i.e.upto 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 Adjudicator³.

[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 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 51.1 and GCC 23.1⁴.

We note that as per your bid, you do not intend to subcontract any component of work.

[OR]

We note that as per your bid, you propose to employ M/s. as sub-contractor for executing

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

Authorized Signature:

Name and Title of Signatory:

Name of Agency:

Issue of Notice to proceed with the work

(letterhead of the Employer)

_____ (date)

To

_____ (*name and address of the Contractor*)

Dear Sirs:

Pursuant to your furnishing the requisite securities as stipulated in ITB clause 50.1, insurance policy as per GCC 13, construction methodology as stated in letter of acceptance and signing of the contract agreement for the Construction of Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri a Bid Price of Rs. _____, you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

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

Attachment: Contract Agreement

Contract Agreement

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

WHEREAS the Employer desires that the Works known as Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri, should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

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

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

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

Signed by: _____
for and on behalf of the Employer

Signed by: _____
for and on behalf of the Contractor

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

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

Performance Security- Bank Guarantee
[including Additional Performance Security for unbalanced bids]
[Guarantor letterhead or SWIFT identifier code]

Performance Guarantee No..... *[insert guarantee reference number]*
 Date..... *[insert date of issue of the guarantee]*

To: _____ *[name of Employer]*
 _____ *[address of Employer]*

WHEREAS _____ *[name and address of Contractor⁵]* (hereinafter called "the Applicant") has undertaken, in pursuance of Contract No. _____ dated _____ to execute Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri. (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 guarantee⁶]* _____ *[in words]*, such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ *[amount of guarantee]* as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

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

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

This guarantee shall be valid until ⁷, 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.

Environmental and Social (ES) Performance Security
ES – Bank Guarantee
[Guarantor letterhead or SWIFT identifier code]

ES Performance Guarantee No.: *[Insert guarantee reference number]*

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

To: _____ *[name of Employer]*
_____ *[address of Employer]*

WHEREAS _____ *[name and address of Contractor⁸]* (hereinafter called "the Applicant") has undertaken, in pursuance of Contract No. _____ dated _____ to execute Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri(hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Applicant shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his Environmental and/or Social (ES) obligations in accordance with the Contract;

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

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Applicant, up to a total of _____ *[amount of guarantee⁹]* _____ *[in words]*, such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ *[amount of guarantee]* as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

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

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

This guarantee shall be valid until¹⁰, 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.

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]*

Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri

Gentlemen:

In accordance with the provisions of the Conditions of Contract, Subclause 53.1 ("Advance Payment") of the above-mentioned Contract, _____ *[name and address of Contractor¹¹]* (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 guarantee¹²]* _____ *[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 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*¹³] (hereinafter called "the Applicant") has entered into Contract No. _____ [*reference number of the contract*] dated _____ with you, for the execution Construction of 50 M Intermediate Lane Steel Truss Motor Bridge in Uttarkashi-Lambgaon-Ghansali-Tilwara Motor Road KM-98 near Hanuman Temple, Block-Bhilangna, District Tehri(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*¹⁴] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Applicant is in breach of its obligation under the Contract without cavil or argument.

It is a condition for any claim and payment under this guarantee to be made that the payment of the second half of the Retention Money referred to above must have been received by the Applicant on its account number _____ at _____ [*name and address of Bank*].

This guarantee shall expire, at the latest, 21 days after the date when the Employer has received a copy of the Defects Liability Certificate issued by the Project Manager. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

[Signature(s) and seal of the guarantor]

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

.....

.....

Notification of Intention to Award

N/A