

The document is worked out on the basis of the model EPC document on Construction sector prepared by erstwhile Planning Commission which was deliberate upon by a High Powered Working Group (HPWG) constituted by Construction Industry Development Council (CIDC) during the year 2017. As an outcome of the deliberation, a draft model document for construction sector has been recommended by the HPWG for using as a nationwide model bidding document for construction sector.

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**Engineering, Procurement and Construction**

**of**

**Civil Works**

**MODEL AGREEMENT**

**NITI Aayog  
Government of India**

Vol. 1

**GENERAL  
CONDITIONS  
OF  
CONTRACT**

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# Overview of the framework

Large investments, public as well as the private, will be needed in various infrastructure sectors to meet the growing needs of the Indian economy. The public sector would continue to play an important role in building infrastructure and would need to ensure efficient and timely construction of projects within the agreed costs. Towards this end, it would be necessary to adopt a modern contractual framework in the form of a standardised Engineering, Procurement and Construction (EPC) contract based on international best practices.

**A modern EPC framework is a pre-requisite for efficient delivery**

## Need for EPC contracts

The various departments and undertakings of the Central Government as well as the State Governments have hitherto been undertaking construction projects through the conventional item rate contracts where the Government provides the detailed design as well as the estimates of quantities for different items of work (Bill of Quantities). Payments to the Contractor are made on the basis of measurements of the work done in respect of each item. Experience shows that item rate contracts are prone to excessive time and cost overruns, besides recurrent disputes involving large claims. The reasons for their poor performance include inadequate project preparation and estimation coupled with allocation of several construction risks to the Government. For these reasons, the item rate mode of contracting has long been discarded in the developed countries as well by the private sector in India. The structure currently in vogue is in the nature of turnkey contracts where the responsibility for design, procurement and construction is assigned to the Contractor. Such contracts are typically known as EPC contracts.

**Item rate contracts are outdated**

## Model EPC Agreement

The aforesaid drawbacks of item rate contracting are addressed by the EPC approach that relies on assigning the responsibility

for investigations, design and construction to the Contractor for a lump sum price determined through competitive bidding. The objective is to ensure implementation of the project to specified standards with a fair degree of certainty relating to costs and time while transferring the construction risks to a private sector Contractor.

**The Model EPC Agreement incorporates best practices**

With a view to enabling a transparent, fair and competitive roll out of projects, a model EPC Agreement has been evolved. This Model EPC Agreement incorporates international best practices and provides a sound contractual framework that specifies the allocation of risks and rewards, equity of obligations between the Authority and the Contractor, precision and predictability of costs, force majeure, termination and dispute resolution, apart from transparent and fair procedures.

The Model EPC Agreement specifies the required design and performance standards and allows the Contractor to design and construct the project using best practices and innovation to optimise on efficiency and economy as compared to the rigidity of the item rate contract that relies on a rigid design provided by the project authorities. The Contractor also has full freedom to plan the construction schedule for efficient use of its manpower, equipment and other resources while payments are linked to specified stages of construction as compared to payment for individual items or units specified in the item rate contracts. Awarding contract for a lump sum price ensures predictability and financial discipline, both for the Contractor and the Authority. Moreover, clearly stated obligations and risks of the respective parties help in achieving timely completion of the project while minimising disputes.

### **Technical parameters**

**Technical parameters based on output specifications**

Unlike the normal practice of focussing on construction specifications, the technical parameters proposed in the Agreement are based mainly on output specifications. Only the core requirements of design, construction and operation that have

a bearing on the quality and safety of the project are to be specified and enough room is left for the Contractor to innovate and add value.

In sum, the framework focuses on the ‘what’ rather than the ‘how’ in relation to the works to be delivered by the Contractor. This would provide the requisite flexibility to the Contractor in evolving and adopting innovative designs without compromising on quality of the works.

### **Contract Price**

The Contract Price is a fixed lump sum amount for construction of the project. The Contract Price is subject to adjustment on account of changes in the relevant price index as well as changes in law or changes in the scope of the project since the Contractor cannot be expected to bear or manage the risks arising out of such changes.

**Contract price  
to be lump sum**

### **Contract period**

The contract period is normally determined on a project-specific basis depending on the nature and volume of construction work involved. The Contractor shall be liable to damages for any delay beyond the specified date of completion, subject to the damages not exceeding 10 per cent of the contract price. However, the Contractor shall be entitled to time extension arising out of delays on account of change of scope and force majeure or delays caused by or attributable to the Authority.

**Time extension  
only for  
specified event  
or circumstance**

### **Selection of Contractor**

Selection of the Contractor will be based on open competitive bidding. All project parameters such as the contract period, price adjustments and technical parameters are to be clearly stated upfront, and short-listed bidders will be required to specify only the lump sum price for the project. The bidder who seeks the lowest payment should win the contract.

**Competitive  
bidding on single  
parameter will  
be the norm**

**Risk alleviation and mitigation are critical to engagement with private sector****Risk allocation**

As an underlying principle, risks have been allocated to the parties that are best suited to manage them. Project risks have, therefore, been assigned to the private sector to the extent it is capable of managing them. The transfer of such risks and responsibilities to the private sector would increase the scope of innovation leading to efficiencies in costs and services. Accordingly, project risks such as commercial and technical risks relating to design and construction have been assigned to the Contractor. The Authority would, however, be liable to damages for any delays in handing over land, securing environment clearances or shifting of utilities.

**Incentives and penalties to ensure timely completion****Design and Construction**

The EPC agreement specifies the dates on which different sections of the project land will be handed over to the Contractor. It defines the scope of the project with precision and predictability to enable the Contractor to determine its costs and obligations. It also lays down a ceiling of 10 percent of contract price to cater for any changes in the scope of the project, the cost of which the Authority shall bear.

The Contractor shall carry out survey and investigations and also develop designs and drawings in conformity with the specifications and standards laid down in the Agreement. It will get these checked by a proof consultant and a safety consultant who are to be appointed with the approval of the Authority. The design and drawings would be reviewed by the Authority's engineer to ensure that they conform to the scope of the project as well as the prescribed standards and specifications. The EPC agreement also stipulates provisions for quality control and assurance.

A provision has been made for damages which the Contractor shall pay to the Authority for not achieving the prescribed milestones. The Authority will pay bonus to the Contractor for completion of the project before the scheduled completion date.



## Force majeure

The EPC agreement contains the requisite provisions for dealing with force majeure events. In particular, it provides protection to the Contractor against political actions that may have adverse effect on the timely completion of the project.

**Contractor will be protected against arbitrary actions**

## Termination

Termination payments have been quantified precisely. Political force majeure and defaults by the Authority would qualify for adequate compensatory payments to the Contractor and thus guard against any discriminatory or arbitrary action by the Authority. In the event the Authority terminates the agreement on account of any of the specified defaults of the Contractor, the Agreement allows the Authority to forfeit the performance security and retention money of the Contractor.

**Pre-determined termination payments should provide predictability**

## Monitoring and supervision

Day-to-day interaction between the Authority and the Contractor has been kept to the bare minimum following a 'hands-off' approach. Checks and balances have, however, been provided for ensuring full accountability of the Contractor.

**A credible and fair arrangement for supervision is essential**

Monitoring and supervision of construction is proposed to be undertaken through an Engineer (a qualified firm) that will be selected by the Authority through a transparent process. Its independence would provide added comfort to all stakeholders.

## Milestone based payments

A simple and rational method for estimating interim payments to the Contractor has been provided in the Agreement. It would ensure that payments are made for all works conforming to the Agreement and commensurate with the stages of completion of works. Each item of the project has been further sub-divided into stages, and payment will be made for each completed stage of work.

### **Defects liability period**

Though normally a defects liability period of one year is specified in most contracts, a defects liability period of two years has been specified in the Agreement in order to provide additional comfort to the Authority.

### **Miscellaneous**

The Agreement also addresses issues relating to dispute resolution, suspension of rights, change in law, insurance and indemnity.

**An effective  
dispute resolution  
mechanism is  
critical**

### **Multi-sector template**

The framework contained in this model Agreement can be used across sectors, such as railways, ports, airports, irrigation and real estate, by making sector-specific substitution of the relevant provisions since the model contract has been formulated mainly by way of a template. With some effort, this template can be used for a variety of construction contracts.

### **Conclusion**

Together with the Schedules, the proposed framework of the Model EPC Agreement incorporates international best practices and embodies an enabling contractual framework for construction of projects in an efficient, economical and competitive environment. It will minimise, if not eliminate, the time and cost over-runs characteristic of the extant item rate contracts. Further, this will enable a faster roll-out of projects with least costs and greater efficiency while minimising the potential for excessive discretion.

# **Engineering, Procurement and Construction Agreement**



Part I

# **Preliminary**



# ENGINEERING, PROCUREMENT AND CONSTRUCTION AGREEMENT<sup>§</sup>

THIS AGREEMENT<sup>1</sup> is entered into on this the ..... day of ....., 20.....

## BETWEEN

1 **THE GOVERNOR OF \*\*\*** represented by [Secretary, Public Works Department] and having its principal offices at \*\*\*\*\* (hereinafter referred to as the “**Authority**” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of One Part;

## AND

2 ....., means the selected bidder having its registered office at ....., (hereinafter referred to as the “**Contractor**” which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns) of the Other Part.

## WHEREAS:

(A) The Authority had resolved to [rehabilitate and augment the existing road from km \*\* to km \*\* (approximately \*\*\* km) on the \*\*\* section of State Highway No.\*\* (hereinafter called the “**SH -\*\***”) in \*\*\*\*\* by Two-Laning] on Engineering, Procurement, Construction (“**EPC**”) basis in accordance with the terms and conditions to be set forth in an agreement to be entered into.

### <sup>§</sup> Instructions for Bidders

The draft EPC Agreement issued to the Bidders may be customised for bid-specific purposes in accordance with the instructions below:

**Note 1:** The provisions in curly brackets are to be retained in the draft EPC Agreement forming part of Bidding Documents and shall be suitably modified by the Bidder after the issue of Letter of Award (LOA) in order to reflect the bid specific particulars in the EPC Agreement. (See Appendix-I)

**Note 2:** Blank spaces are to be retained in the draft EPC Agreement and shall be suitably filled by the Bidder after the issue of LOA in order to reflect bid specific particulars in the EPC Agreement. However, blank spaces shall be retained in all Schedules which contain formats that are to be used after the EPC Agreement is executed. (See Appendix-I)

**Note 3:** Footnotes marked “£” are to be retained in the draft EPC Agreement. These footnotes are for guidance of the selected Bidders and shall be omitted before executing the EPC Agreement. However, footnotes marked “\$” or “\$\$” shall be retained in the EPC Agreement as a part thereof. (See Appendix-I)

### <sup>1</sup> Instructions for project-specific customisation of this document

This EPC Agreement (the “EPCA”) may be customised for project-specific use in accordance with the instructions below:

**Note I:** Serially numbered footnotes in this EPCA are for guidance of the Authority and should be omitted from the draft EPC Agreement forming part of Bidding Documents. (See Appendix-II)

**Note II:** All project-specific provisions in this EPCA have been enclosed in square parenthesis and may be modified, as necessary, before issuing the draft EPC Agreement to Bidders. (See Appendix-II)

**Note III:** The asterisks in this EPCA should be substituted by project-specific particulars before issuing the draft EPC Agreement to Bidders. (See Appendix-II)

**Note IV:** Notes I, II, III and IV shall be omitted prior to issuing of the draft EPC Agreement.

- (B) The Authority had accordingly invited proposals by its [Request for Qualification No. \*\*\* dated \*\*\*] (the “**Request for Qualification**” or “**RFQ**”) for short listing of bidders for EPC of the above referred section of [NH -\*\*] and had shortlisted certain bidders including, inter alia, the selected bidder.
- (C) The Authority had prescribed the technical and commercial terms and conditions, and invited bids (the “**Request for Proposals**” or “**RFP**”) from the bidders shortlisted pursuant to the RFQ for undertaking the Project.
- (D) After evaluation of the bids received, the Authority had accepted the bid of the selected bidder and issued its Letter of Acceptance No. .... dated ..... (hereinafter called the “**LOA**”) to the selected bidder for rehabilitation and augmentation of the above section of [NH \*\*] at the contract price specified hereinafter, requiring the selected bidder to inter alia:
- (i) deliver to the Authority a legal opinion from the legal counsel of the selected bidder with respect to the authority of the selected bidder to enter into this Agreement and the enforceability of the provisions thereof, within 10 (ten) days of the date of issue of LOA; and
  - (ii) execute this Agreement within 15 (fifteen) days of the date of issue of LOA.
- (E) The Contractor has fulfilled the requirements specified in Recital (D) above;

NOW THEREFORE in consideration of the foregoing and the respective covenants and agreements set forth in this Agreement, the sufficiency and adequacy of which is hereby acknowledged, the Authority hereby covenants to pay the Contractor, in consideration of the obligations specified herein, the Contract Price or such other sum as may become payable under the provisions of the Agreement at the times and in the manner specified by the Agreement and intending to be legally bound hereby, the Parties agree as follows:



## ARTICLE 1

### DEFINITIONS AND INTERPRETATION

#### 1.1 Definitions

The words and expressions beginning with capital letters and defined in this Agreement (including those in Article 26) shall, unless the context otherwise requires, have the meaning ascribed thereto herein, and the words and expressions defined in the Schedules and used therein shall have the meaning ascribed thereto in the Schedules.

#### 1.2 Interpretation

1.2.1 In this Agreement, unless the context otherwise requires,

- (a) references to any legislation or any provision thereof shall include amendment or re-enactment or consolidation of such legislation or any provision thereof so far as such amendment or re-enactment or consolidation applies or is capable of applying to any transaction entered into hereunder;
- (b) references to laws of India or Indian law or regulation having the force of law shall include the laws, acts, ordinances, rules, regulations, bye laws or notifications which have the force of law in the territory of India and as from time to time may be amended, modified, supplemented, extended or re-enacted;
- (c) references to a “**person**” and words denoting a natural person shall be construed as a reference to any individual, firm, company, corporation, society, trust, government, state or agency of a state or any association or partnership (whether or not having separate legal personality) of two or more of the above and shall include successors and assigns;
- (d) the table of contents, headings or sub-headings in this Agreement are for convenience of reference only and shall not be used in, and shall not affect, the construction or interpretation of this Agreement;
- (e) the words “**include**” and “**including**” are to be construed without limitation and shall be deemed to be followed by “without limitation” or “but not limited to” whether or not they are followed by such phrases;

- (f) references to “**construction**” or “**building**” include, unless the context otherwise requires, survey and investigation, design, developing, engineering, procurement, supply of plant, materials, equipment, labour, delivery, transportation, installation, processing, fabrication, testing, and commissioning of the Project, including maintenance during the Construction Period, removing of defects, if any, and other activities incidental to the construction and “**construct**” or “**build**” shall be construed accordingly;
- (g) references to “**development**” include, unless the context otherwise requires, construction, renovation, refurbishing, augmentation, up-gradation and other activities incidental thereto during the Construction Period, and “develop” shall be construed accordingly;
- (h) any reference to any period of time shall mean a reference to that according to Indian standard time;
- (i) any reference to day shall mean a reference to a calendar day;
- (j) reference to a “**business day**” shall be construed as reference to a day (other than a Sunday) on which banks in the State are generally open for business;
- (k) any reference to month shall mean a reference to a calendar month as per the Gregorian calendar;
- (l) references to any date, period or Project Milestone shall mean and include such date, period or Project Milestone as may be extended pursuant to this Agreement;
- (m) any reference to any period commencing “from” a specified day or date and “**till**” or “**until**” a specified day or date shall include both such days or dates; provided that if the last day of any period computed under this Agreement is not a business day, then the period shall run until the end of the next business day;
- (n) the words importing singular shall include plural and vice versa;
- (o) references to any gender shall include the other and the neutral gender;
- (p) “**lakh**” means a hundred thousand (100,000) and “**crore**” means ten million (10,000,000);

- (q) **“indebtedness”** shall be construed so as to include any obligation (whether incurred as principal or surety) for the payment or repayment of money, whether present or future, actual or contingent;
- (r) references to the **“winding-up”**, **“dissolution”**, **“insolvency”**, or **“reorganisation”** of a company or corporation shall be construed so as to include any equivalent or analogous proceedings under the law of the jurisdiction in which such company or corporation is incorporated or any jurisdiction in which such company or corporation carries on business including the seeking of liquidation, winding-up, reorganisation, dissolution, arrangement, protection or relief of debtors;
- (s) save and except as otherwise provided in this Agreement, any reference, at any time, to any agreement, deed, instrument, licence or document of any description shall be construed as reference to that agreement, deed, instrument, licence or other document as amended, varied, supplemented, modified or suspended at the time of such reference; provided that this Sub-clause (s) shall not operate so as to increase liabilities or obligations of the Authority hereunder or pursuant hereto in any manner whatsoever;
- (t) any agreement, consent, approval, authorisation, notice, communication, information or report required under or pursuant to this Agreement from or by any Party or the Authority’s Engineer shall be valid and effective only if it is in writing under the hand of a duly authorised representative of such Party or the Authority’s Engineer, as the case may be, in this behalf and not otherwise;
- (u) the Schedules and Recitals to this Agreement form an integral part of this Agreement and will be in full force and effect as though they were expressly set out in the body of this Agreement;
- (v) references to Recitals, Articles, Clauses, Sub-clauses, Provisos or Schedules in this Agreement shall, except where the context otherwise requires, mean references to Recitals, Articles, Clauses, Sub-clauses, Provisos and Schedules of or to this Agreement; reference to an Annex shall, subject to anything to the contrary specified therein, be construed as a reference to an Annex to the Schedule in which such reference occurs; and reference to a Paragraph shall, subject to anything to the contrary specified therein, be construed as a reference to a Paragraph of the Schedule or Annex, as the case may be, in which such reference appear;

- (w) the damages payable by either Party to the other of them, as set forth in this Agreement, whether on per diem basis or otherwise, are mutually agreed genuine pre-estimated loss and damage likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty (the “**Damages**”); and
- (x) time shall be of the essence in the performance of the Parties’ respective obligations. If any time period specified herein is extended for the reasons specified in the Agreement, such extended time shall also be of the essence.

1.2.2 Unless expressly provided otherwise in this Agreement, any Documentation required to be provided or furnished by the Contractor to the Authority shall be provided free of cost and in three copies, and if the Authority is required to return any such Documentation with its comments and/or approval, it shall be entitled to retain two copies thereof.

1.2.3 The rule of construction, if any, that a contract should be interpreted against the parties responsible for the drafting and preparation thereof, shall not apply.

1.2.4 Any word or expression used in this Agreement shall, unless otherwise defined or construed in this Agreement, bear its ordinary English meaning and, for these purposes, the General Clauses Act, 1897 shall not apply.

### **1.3 Measurements and arithmetic conventions**

All measurements and calculations shall be in the metric system and calculations done to 2 (two) decimal places, with the third digit of 5 (five) or above being rounded up and below 5 (five) being rounded down.

### **1.4 Priority of agreements and errors/discrepancies**

1.4.1 This Agreement, and all other agreements and documents forming part of or referred to in this Agreement are to be taken as mutually explanatory and, unless otherwise expressly provided elsewhere in this Agreement, the priority of this Agreement and other documents and agreements forming part hereof or referred to herein shall, in the event of any conflict between them, be in the following order:

- (a) this Agreement; and

- (b) all other agreements and documents forming part hereof or referred to herein;

i.e. this Agreement at (a) above shall prevail over the agreements and documents at (b).

1.4.2 Subject to the provisions of Clause 1.4.1, in case of ambiguities or discrepancies within this Agreement, the following shall apply:

- (a) between two or more Clauses of this Agreement, the provisions of a specific Clause relevant to the issue under consideration shall prevail over those in other Clauses;
- (b) between the Clauses of this Agreement and the Schedules, the Clauses shall prevail and between Schedules and Annexes, the Schedules shall prevail;
- (c) between any two Schedules, the Schedule relevant to the issue shall prevail;
- (d) between the written description on the Drawings and the Specifications and Standards, the latter shall prevail;
- (e) between the dimension scaled from the Drawing and its specific written dimension, the latter shall prevail; and
- (f) between any value written in numerals and that in words, the latter shall prevail.

## **{1.5 Joint and several liability**

1.5.1 If the Contractor has formed a Consortium of two or more persons for implementing the Project:

- (a) these persons shall, without prejudice to the provisions of this Agreement, be deemed to be jointly and severally liable to the Authority for the performance of the Agreement; and
- (b) the Contractor shall ensure that no change in the composition of the Consortium is effected without the prior consent of the Authority.

1.5.2 Without prejudice to the joint and several liability of all the members of the Consortium, the Lead Member shall represent all the members of the Consortium

and shall at all times be liable and responsible for discharging the functions and obligations of the Contractor. The Contractor shall ensure that each member of the Consortium shall be bound by any decision, communication, notice, action or inaction of the Lead Member on any matter related to this Agreement and the Authority shall be entitled to rely upon any such action, decision or communication of the Lead Member. The Authority shall have the right to release payments solely to the Lead Member and shall not in any manner be responsible or liable for the *inter se* allocation of payments among members of the Consortium.}\$

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\$ This Clause 1.5 may be omitted if the Contractor is not a Consortium.

## Part II

# Scope of the Project





## ARTICLE 2

### SCOPE OF THE PROJECT

#### 2.1 Scope of the Project

Under this Agreement, the scope of the Project (the “**Scope of the Project**”) shall mean and include:

- (a) construction of the Project on the Site set forth in Schedule-A and as specified in Schedule-B together with provision of Project Facilities as specified in Schedule-C, and in conformity with the Specifications and Standards set forth in Schedule-D;and
- (b) performance and fulfillment of all other obligations of the Contractor in accordance with the provisions of this Agreement and matters incidental thereto or necessary for the performance of any or all of the obligations of the Contractor under this Agreement.

ARTICLE 3

**OBLIGATIONS OF THE CONTRACTOR**

**3.1 Obligations of the Contractor**

- 3.1.1 Subject to and on the terms and conditions of this Agreement, the Contractor shall undertake the survey, investigation, design, engineering, procurement, and construction of the Project and observe, fulfil, comply with and perform all its obligations set out in this Agreement or arising hereunder.
- 3.1.2 The Contractor shall comply with all Applicable Laws and Applicable Permits (including renewals as required) in the performance of its obligations under this Agreement.
- 3.1.3 Save and except as otherwise provided in this Agreement or Applicable Laws, as the case may be, the Contractor shall, in discharge of all its obligations under this Agreement, conform with and adhere to Good Industry Practice at all times.
- 3.1.4 The Contractor shall remedy any and all loss or damage to the Project, occurring on or after the Appointed Date and until the date of Provisional Certificate, with respect to the Works completed prior to the issuance of the Provisional Certificate and/or Completion Certificate, with respect to the Works referred to in the Punch List, at its own cost, save and except to the extent that any such loss or damage shall have arisen from any default of the Authority or on account of a Force Majeure Event in which case the provisions of Clause 19 shall apply.
- 3.1.5 The Contractor shall remedy any and all loss or damage to the Project during the Defects Liability Period at its own cost, to the extent that such loss or damage shall have arisen out of the reasons specified in Clause 15.3.
- 3.1.6 The Contractor shall, at its own cost and expense, in addition to and not in derogation of its obligations elsewhere set out in this Agreement:
- (a) make, or cause to be made, necessary applications to the relevant Government Instrumentalities with such particulars and details as may be required for obtaining Applicable Permits set forth in Schedule-E and obtain and keep in force and effect such Applicable Permits in conformity with Applicable Laws;
  - (b) procure, as required, the appropriate proprietary rights, licences, agreements and permissions for Materials, methods, processes, know-how and systems used or incorporated into the Project;

- (c) make reasonable efforts to maintain harmony and good industrial relations among the personnel employed by it or its Sub-contractors in connection with the performance of its obligations under this Agreement;
- (d) ensure and procure that its Sub-contractors comply with all Applicable Permits and Applicable Laws in the performance by them of any of the Contractor's obligations under this Agreement;
- (e) always act in a manner consistent with the provisions of this Agreement and not cause or fail to do any act, deed or thing, whether intentionally or otherwise, which may in any manner be violative of any of the provisions of this Agreement;
- (f) support, cooperate with and facilitate the Authority in the implementation and operation of the Project in accordance with the provisions of this Agreement;
- (g) ensure that the Contractor and its Sub-contractors comply with the safety and welfare measures for labour in accordance with Applicable Laws and Good Industry Practice;
- (h) keep, on the Site, a copy of this Agreement, publications named in this Agreement, the Drawings, Documents relating to the Project, and Change of Scope Orders and other communications sent under this Agreement, and provide access to all these documents at all reasonable times to the Authority's Engineer and its authorised personnel;
- (i) cooperate with other contractors employed by the Authority and personnel of any other public authority; and
- (j) not interfere unnecessarily or improperly with the convenience of the public, or the access to and use and occupation of all the existing facilities within the Right of Way , irrespective of whether they are public or in the possession of the Authority or of others.

3.1.7 The Contractor shall undertake all necessary superintendence to plan, arrange, direct, manage, inspect and test the Works.

### **3.2 Obligations relating to sub-contracts and any other agreements**

3.2.1 The Contractor shall not sub-contract Works comprising more than 70% (seventy per cent) of the Contract Price and shall carry out Works for at least 30% (thirty

per cent) of the total Contract Price directly under its own supervision and through its own personnel. The Parties expressly agree that for the purposes of computing the value of sub-contracts under this Clause 3.2.1, the Contract Price shall exclude any sub-contract for the procurement of goods and equipment such as [bitumen, cement, steel and equipment]. {The Parties agree that the obligation of the Contractor to carry out Works corresponding to at least 30% (thirty per cent) the Contract Price shall be discharged solely by the Lead Member.}§

- 3.2.2 In the event any sub-contract for Works, or the aggregate of such sub-contracts with any Sub-contractor, exceeds 5% (five percent) of the Contract Price, the Contractor shall communicate the name and particulars, including the relevant experience of the sub-contractor, to the Authority prior to entering into any such sub-contract. The Authority shall examine the particulars of the sub-contractor from the national security and public interest perspective and may require the Contractor, no later than 15 (fifteen) business days from the date of receiving the communication from the Contractor, not to proceed with the sub-contract, and the Contractor shall comply therewith.
- 3.2.3 Without prejudice to the provisions of Clause 3.2.2, in the event any sub-contract referred to in Clause 3.2.2 relates to a sub-contractor who has, over the preceding 3 (three) years, not undertaken at least one work of a similar nature with a contract value exceeding 40% (forty per cent) of the value of the sub-contract to be awarded hereunder and received payments in respect thereof for an amount equal to at least 80% (eighty per cent) of such contract, the Authority may, no later than 15 (fifteen) business days from the date of receiving the communication from the Contractor, require the Contractor not to proceed with such sub-contract, and the Contractor shall comply therewith.
- 3.2.4 It is expressly agreed that the Contractor shall, at all times, be responsible and liable for all its obligations under this Agreement notwithstanding anything contained in the agreements with its Sub-contractors or any other agreement that may be entered into by the Contractor, and no default under any such agreement shall excuse the Contractor from its obligations or liability hereunder.

### **3.3 Obligations relating to employment of foreign nationals**

The Contractor acknowledges, agrees and undertakes that employment of foreign personnel by the Contractor and/or its Sub-contractors and their sub-

§ May be deleted if the Contractor is not a Consortium.

contractors shall be subject to grant of requisite regulatory permits and approvals including employment/residential visas and work permits, if any required, and the obligation to apply for and obtain the same shall and will always be of the Contractor. Notwithstanding anything to the contrary contained in this Agreement, refusal of or inability to obtain any such permits and approvals by the Contractor or any of its Sub-contractors or their sub-contractors shall not constitute Force Majeure Event, and shall not in any manner excuse the Contractor from the performance and discharge of its obligations and liabilities under this Agreement.

### **3.4 Obligations relating to Contractor's personnel**

- 3.4.1 The Contractor shall ensure and procure that the personnel engaged by it or by its Sub-contractors for performance of its obligations under this Agreement are at all times appropriately qualified, skilled and experienced in their respective functions in conformity with Applicable Laws and Good Industry Practice.
- 3.4.2 The Authority's Engineer may, for reasons to be specified in writing, direct the Contractor to remove any member of the Contractor's or Sub-contractor's personnel from the Project. Provided that any such direction issued by the Authority's Engineer shall specify the reasons for the removal of such person.
- 3.4.3 The Contractor shall, on receiving a direction from the Authority's Engineer under the provisions of Clause 3.4.2, ensure and procure the removal of such person or persons from the Project with immediate effect. The Contractor shall further ensure that such persons have no further connection with the Project.

### **3.5 Obligations relating to advertisement on Project**

The Contractor shall not use the Project or any part thereof in any manner for branding or advertising purposes including for advertising any commercial product or services or companies.

### **3.6 Obligations relating to Contractor's care of the Works**

The Contractor shall bear full risk in and take full responsibility for the care of Works, and of Materials, goods and equipment for incorporation therein, on and from the Appointed Date and until the date of Provisional Certificate, with respect to the Works completed prior to the issuance of the Provisional Certificate, and/or Completion Certificate, with respect to the Works referred to

in the Punch List, save and except to the extent that any such loss or damage shall have arisen from any default or neglect of the Authority.

**3.7 Obligations relating to electricity, water and other services**

The Contractor shall be responsible for procuring of all power, water and other services that it may require for the Project.

**3.8 Unforeseeable difficulties**

Except as otherwise specified in the Agreement:

- (a) the Contractor accepts complete responsibility for having foreseen all difficulties and costs of successfully completing the Works;
- (b) the Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs; and
- (c) the Scheduled Completion Date shall not be adjusted to take account of any unforeseen difficulties or costs.

For the purposes of this Clause, unforeseeable difficulties include physical conditions like man-made or natural physical conditions including sub-surface and hydrological conditions which the Contractor encounters at the Site during execution of the Works.

## ARTICLE 4

### OBLIGATIONS OF THE AUTHORITY

#### 4.1 Obligations of the Authority

- 4.1.1 The Authority shall, at its own cost and expense, undertake, comply with and perform all its obligations set out in this Agreement or arising hereunder.
- 4.1.2 The Authority shall be responsible for the correctness of the Scope of the Project, Project Facilities, Specifications and Standards and the criteria for Testing of the completed Works.
- 4.1.3 The Authority shall, upon receiving the Performance Security under Clause 7.1.1, provide to the Contractor:
- (a) the Right of Way in accordance with the provisions of Clauses 8.2 and 8.3, within a period of 15 (fifteen) days from the date of this Agreement, on no less than 90% (ninety per cent) of the total land required for the Project;
  - (b) approval of the general arrangement drawings (the “**GAD**”) from railway authorities to enable the Contractor to construct road over-bridges and under-bridges at level crossings on the Project in accordance with the Specifications and Standards, and subject to the terms and conditions specified in such approval, within a period of 60 (sixty) days from the Appointed Date;<sup>2</sup> and
  - (c) all environmental and forest clearances as required under Clause 4.3.<sup>3</sup>
- 4.1.4 Delay in providing the Right of Way[or approval of GAD by railway authorities, as the case may be,] in accordance with the provisions of Clause 4.1.3 shall entitle the Contractor to Damages in a sum calculated in accordance with the provisions of Clause 8.3 of this Agreement and Time Extension in accordance with the provisions of Clause 10.5 of this Agreement.[For the avoidance of doubt, the Parties agree that the Damages for delay in approval of GAD by the railway authorities for a particular road over-bridge/under-bridge shall be deemed to be equal to the Damages payable under the provisions of Clause 8.3

<sup>2</sup> Clause (b) may be omitted or suitably modified to meet project-specific requirements.

<sup>3</sup> Clause 4.1.3 (c) may be suitably modified in the event that all the environmental and forest clearances for the Project have been received or are not required. It should be clearly stated that all the environmental and forest clearances for the Project have been received; or such environmental and forest clearances for the Project are not required.

for delay in providing Right of Way for a length of 3 (three) kilometre for each such road over-bridge/under-bridge.]

- 4.1.5 Notwithstanding anything to the contrary contained in this Agreement, the Parties expressly agree that the aggregate Damages payable under Clauses 4.1.4, 8.3 and 9.2 shall not exceed 3% (three per cent) of the Contract Price. For the avoidance of doubt, the Damages payable by the Authority under the aforesaid Clauses shall not be additive if they arise concurrently from more than one cause but relate to the same part of the Project.
- 4.1.6 The Authority agrees to provide support to the Contractor and undertakes to observe, comply with and perform, subject to and in accordance with the provisions of this Agreement and Applicable Laws, the following:
- (a) upon written request from the Contractor, and subject to the Contractor complying with Applicable Laws, provide reasonable support to the Contractor in procuring Applicable Permits required from any Government Instrumentality for implementation of the Project;
  - (b) upon written request from the Contractor, provide reasonable assistance to the Contractor in obtaining access to all necessary infrastructure facilities and utilities, including water and electricity at rates and on terms no less favourable than those generally available to commercial customers receiving substantially equivalent services;
  - (c) procure that no barriers that would have a material adverse effect on Works are erected or placed on or about the Project by any Government Instrumentality or persons claiming through or under it, except for reasons of Emergency, national security or law and order;
  - (d) not do or omit to do any act, deed or thing which may in any manner be violative of any of the provisions of this Agreement;
  - (e) support, cooperate with and facilitate the Contractor in the implementation of the Project in accordance with the provisions of this Agreement; and
  - (f) upon written request from the Contractor and subject to the provisions of Clause 3.3, provide reasonable assistance to the Contractor and any expatriate personnel of the Contractor or its Sub-contractors to obtain applicable visas and work permits for the purposes of discharge by the Contractor or its Sub-contractors of their obligations under this Agreement and the agreements with the Sub-contractors.



## 4.2 Obligations relating to Operation & Maintenance

The Authority shall undertake the operation and maintenance of the facilities existing prior to the Appointed Date [including bridges, structures and signalling works] within the Right of Way.

## 4.3 Obligations relating to Environmental and Forest Clearances

The Authority represents and warrants that the environmental and forest clearances required for construction of the Project have been procured by the Authority prior to the Bid Due Date, save and except for Sections of the Project which do not exceed 10% (ten per cent) of the total land required for the Project. The Authority agrees and undertakes that the environmental and forest clearances for such Sections, if any, shall be procured by the Authority no later than 60 (sixty) days from the Appointed Date. In the event of any delay beyond such 60 (sixty) days, the Contractor shall be entitled to Time Extension for the period of such delay in accordance with the provisions of Clause 10.4 of this Agreement and shall also be entitled to Damages calculated as if the Right of Way for and in respect of such Sections of the Project has not been provided in accordance with the provisions of Clause 8.2 and as a consequence thereof, the Contractor shall be entitled to Damages under and in accordance with the provisions of Clause 8.3. For the avoidance of doubt, the present status of environmental and forest clearances is specified in Schedule-A.<sup>4</sup>

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<sup>4</sup> Clause 4.3 may be suitably modified in the event that all the environmental and forest clearances for the Project have been received or are not required. It should be clearly stated that all the environmental and forest clearances for the Project have been received; or such environmental and forest clearances for the Project are not required.

ARTICLE 5

**REPRESENTATIONS AND WARRANTIES**

**3.2 Representations and warranties of the Contractor**

The Contractor represents and warrants to the Authority that:

- (a) it is duly organised and validly existing under the laws of India, and has full power and authority to execute and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;
- (b) it has taken all necessary corporate and other actions under Applicable Laws to authorise the execution and delivery of this Agreement and to validly exercise its rights and perform its obligations under this Agreement;
- (c) this Agreement constitutes its legal, valid and binding obligation, enforceable against it in accordance with the terms hereof, and its obligations under this Agreement will be legally valid, binding and enforceable obligations against it in accordance with the terms hereof;
- (d) it is subject to the laws of India, and hereby expressly and irrevocably waives any immunity in any jurisdiction in respect of this Agreement or matters arising thereunder including any obligation, liability or responsibility hereunder;
- (e) the information furnished in the Bid and as updated on or before the date of this Agreement is true and accurate in all respects as on the date of this Agreement;
- (f) the execution, delivery and performance of this Agreement will not conflict with, result in the breach of, constitute a default under, or accelerate performance required by any of the terms of its memorandum and articles of association or any Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;
- (g) there are no actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi-judicial or other authority, the outcome of

which may result in the breach of this Agreement or which individually or in the aggregate may result in any material impairment of its ability to perform any of its obligations under this Agreement;

- (h) it has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any Government Instrumentality which may result in any material adverse effect on its ability to perform its obligations under this Agreement and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Agreement;
- (i) it has complied with Applicable Laws in all material respects and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have a material adverse effect on its ability to perform its obligations under this Agreement;
- (j) no representation or warranty by it contained herein or in any other document furnished by it to the Authority or to any Government Instrumentality in relation to Applicable Permits contains or will contain any untrue or misleading statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading;
- (k) no sums, in cash or kind, have been paid or will be paid, by it or on its behalf, to any person by way of fees, commission or otherwise for securing the contract or entering into this Agreement or for influencing or attempting to influence any officer or employee of the Authority in connection therewith;
- (l) all information provided by the {selected bidder/ members of the Consortium} in response to the Request for Qualification and Request for Proposals or otherwise, is to the best of its knowledge and belief, true and accurate in all material respects;
- (m) all undertakings and obligations of the Contractor arising from the Request for Qualification and Request for Proposals or otherwise shall be binding on the Contractor as if they form part of this Agreement; and
- (n) nothing contained in this Agreement shall create any contractual relationship or obligation between the Authority and any Sub-contractors, designers, consultants or agents of the Contractor.

## 5.2 Representations and warranties of the Authority

The Authority represents and warrants to the Contractor that:

- (a) it has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated herein and that it has taken all actions necessary to execute this Agreement, exercise its rights and perform its obligations, under this Agreement;
- (b) it has taken all necessary actions under Applicable Laws to authorise the execution, delivery and performance of this Agreement;
- (c) it has the financial standing and capacity to perform its obligations under this Agreement;
- (d) this Agreement constitutes a legal, valid and binding obligation enforceable against it in accordance with the terms hereof;
- (e) it has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Government Instrumentality which may result in any material adverse effect on the Authority's ability to perform its obligations under this Agreement;
- (f) it has complied with Applicable Laws in all material respects;
- (g) it has good and valid right to the Site and has the power and authority to grant the Right of Way in respect thereof to the Contractor; and
- (h) it shall have procured, as on the Appointed Date, Right of Way and environment clearances such that the Contractor can commence construction forthwith on 90% (ninety per cent) of the total land of the Project.

## 5.3 Disclosure

In the event that any occurrence or circumstance comes to the attention of either Party that renders any of its aforesaid representations or warranties untrue or incorrect, such Party shall immediately notify the other Party of the same. Such notification shall not have the effect of remedying any breach of the representation or warranty that has been found to be untrue or incorrect nor shall it adversely affect or waive any obligation of either Party under this Agreement.

## ARTICLE 6

### **DISCLAIMER**

#### **6.1 Disclaimer**

- 6.1.1 The Contractor acknowledges that prior to the execution of this Agreement, the Contractor has, after a complete and careful examination, made an independent evaluation of the Request for Qualification, Request for Proposals, Scope of the Project, Specifications and Standards, Site, local conditions, physical qualities of ground, subsoil and geology, traffic volumes, suitability and availability of access routes to the Site and all information provided by the Authority or obtained, procured or gathered otherwise, and has determined to its satisfaction the accuracy or otherwise thereof and the nature and extent of difficulties, risks and hazards as are likely to arise or may be faced by it in the course of performance of its obligations hereunder. Save as provided in Clause 4.1.2 and Clause 5.2, the Authority makes no representation whatsoever, express, implicit or otherwise, regarding the accuracy, adequacy, correctness, reliability and/or completeness of any assessment, assumptions, statement or information provided by it and the Contractor confirms that it shall have no claim whatsoever against the Authority in this regard.
- 6.1.2 The Contractor acknowledges and hereby accepts to have satisfied itself as to the correctness and sufficiency of the Contract Price.
- 6.1.3 The Contractor acknowledges and hereby accepts the risk of inadequacy, mistake or error in or relating to any of the matters set forth in Clause 6.1.1 above and hereby acknowledges and agrees that the Authority shall not be liable for the same in any manner whatsoever to the Contractor, or any person claiming through or under any of them, and shall not lead to any adjustment of Contract Price or Scheduled Completion Date.
- 6.1.4 The Parties agree that any mistake or error in or relating to any of the matters set forth in Clause 6.1.1 above shall not vitiate this Agreement, or render it voidable.
- 6.1.5 In the event that either Party becomes aware of any mistake or error relating to any of the matters set forth in Clause 6.1.1 above, that Party shall immediately notify the other Party, specifying the mistake or error.

6.1.6 Except as otherwise provided in this Agreement, all risks relating to the Project shall be borne by the Contractor; and the Authority shall not be liable in any manner for such risks or the consequences thereof.

Part III

# Construction





## ARTICLE 7

### PERFORMANCE SECURITY

#### 7.1 Performance Security

- 7.1.1 The Contractor shall, for the performance of its obligations hereunder, provide to the Authority, within 15 (fifteen) days of the date of this Agreement, an irrevocable and unconditional guarantee, for an amount equal to 5% (five per cent) of the Contract Price, from a Bank in the form set forth in Annex-I of Schedule-F (the “**Performance Security**”). The Performance Security shall be valid until 60 (sixty) days of the expiry of the Defects Liability Period specified in Clause 15.1.1. Until such time the Performance Security is provided by the Contractor pursuant hereto and the same comes into effect, the Bid Security shall remain in force and effect, and upon such provision of the Performance Security, the Authority shall release the Bid Security to the Contractor. For the avoidance of doubt, the Parties expressly agree that the Contractor shall provide, no later than 30 (thirty) days prior to the expiry of the Performance Security for the Defects Liability Period specified in Clause 15.1.1, a Performance Security in respect of the extended Defects Liability Period, as specified in Clause 15.1.2, for an amount equal to 5% (five per cent) of the estimated cost of the Structures and Major Bridges, if any, as specified therein.
- 7.1.2 Notwithstanding anything to the contrary contained in this Agreement, the Parties agree that in the event of failure of the Contractor to provide the Performance Security in accordance with the provisions of Clause 7.1.1 and within the time specified therein or such extended period as may be provided by the Authority, in accordance with the provisions of Clause 7.1.3, the Authority may encash the Bid Security and appropriate the proceeds thereof as Damages, and thereupon all rights, privileges, claims and entitlements of the Contractor under or arising out of this Agreement shall be deemed to have been waived by, and to have ceased with the concurrence of the Contractor, and this Agreement shall be deemed to have been terminated by mutual agreement of the Parties.
- 7.1.3 In the event the Contractor fails to provide the Performance Security within 15 (fifteen) days of the date of this Agreement, it may seek extension of time for a period not exceeding a further 15 (fifteen) days on payment of Damages for such extended period in a sum calculated at the rate of 0.05% (zero point zero

five per cent) of the Contract Price for each day until the Performance Security is provided.

## **7.2 Extension of Performance Security**

The Contractor may initially provide the Performance Security for a period of 2 (two) years; provided that it shall procure the extension of the validity of the Performance Security, as necessary, at least 2 (two) months prior to the date of expiry thereof. Upon the Contractor providing an extended Performance Security, the previous Performance Security shall be deemed to be released and the Authority shall return the same to the Contractor within a period of 7 (seven) business days from the date of submission of the extended Performance Security.

## **7.3 Appropriation of Performance Security**

7.3.1 Upon occurrence of a Contractor Default, the Authority shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to encash and appropriate from the Performance Security the amounts due to it as Damages for the Contractor's Default.

7.3.2 Upon such encashment and appropriation from the Performance Security, the Contractor shall, within 30 (thirty) days thereof, replenish, in case of partial appropriation, to its original level the Performance Security, and in case of appropriation of the entire Performance Security provide a fresh Performance Security, as the case may be, and the Contractor shall, within the time so granted, replenish or furnish fresh Performance Security as aforesaid failing which the Authority shall be entitled to terminate the Agreement in accordance with Article 21. Upon such replenishment or furnishing of a fresh Performance Security, as the case may be, the Contractor shall be entitled to an additional Cure Period of 30 (thirty) days for remedying the Contractor Default, and in the event of the Contractor not curing its default within such Cure Period, the Authority shall be entitled to encash and appropriate such Performance Security as Damages, and to terminate this Agreement in accordance with Article 21.

## **7.4 Release of Performance Security**

The Authority shall release the Performance Security within 60 (sixty) days of the expiry of the Defects Liability Period or the extended Defects Liability

Period, as the case may be, under this Agreement. Notwithstanding the aforesaid, the Parties agree that the Authority shall not be obliged to release the Performance Security until all Defects identified during the Defects Liability Period or the extended Defects Liability Period, as the case may be, have been rectified.

## 7.5 Retention Money<sup>5</sup>

- 7.5.1 From every payment for Works due to the Contractor in accordance with the provisions of Clause 17.5, the Authority shall deduct 6% (six per cent) thereof as guarantee money for performance of the obligations of the Contractor during the Construction Period (the “**Retention Money**”) subject to the condition that the maximum amount of Retention Money shall not exceed 5% (five per cent) of the Contract Price.
- 7.5.2 Upon occurrence of a Contractor’s Default, the Authority shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to appropriate the relevant amounts from the Retention Money as Damages for such Contractor’s Default.
- 7.5.3 The Contractor may, upon furnishing an irrevocable and unconditional bank guarantee substantially in the form provided at Annex-II of Schedule-F, require the Authority to refund the Retention Money deducted by the Authority under the provisions of Clause 7.5.1. Provided that the refund hereunder shall be made in tranches of not less than 1% (one per cent) of the Contract Price.
- 7.5.4 Within 15 (fifteen) days of the date of issue of the Completion Certificate, the Authority shall discharge the bank guarantees, if any, furnished by the Contractor under the provisions of Clause 7.5.3 and refund the balance of Retention Money remaining with the Authority after adjusting the amounts appropriated under the provisions of Clause 7.5.2 and the amounts refunded under the provisions of Clause 7.5.3.
- 7.5.5 The Parties agree that in the event of Termination of this Agreement, the Retention Money and the bank guarantees specified in this Clause 7.5 shall be treated as if they are Performance Security and shall be reckoned as such for the purposes of Termination Payment under Clause 21.6.

<sup>5</sup> The Authority may, in its discretion, omit Clause 7.5 and in lieu thereof increase the Performance Security under Clause 7.1 from 5% (five per cent) to 7.5% (seven point five per cent).

## ARTICLE 8

### RIGHT OF WAY

#### 8.1 The Site

The site of the Project (the “**Site**”) shall comprise the site described in Schedule-A in respect of which the Right of Way shall be provided by the Authority to the Contractor. The Authority shall be responsible for:

- (a) acquiring and providing Right of Way on the Site in accordance with the [alignment] finalised by the Authority, free from all encroachments and encumbrances, and free access thereto for the execution of this Agreement; and
- (b) obtaining licences and permits for environment clearance and forest clearance for the Project.

#### 8.2 Procurement of the Site

- 8.2.1 The Authority Representative and the Contractor shall, within 15 (fifteen) days of the date of this Agreement, inspect the Site and prepare a memorandum containing an inventory of the Site including the vacant and unencumbered land, buildings, structures, road works, trees and any other immovable property on or attached to the Site. Subject to the provisions of Clause 8.2.2, such memorandum shall have appended thereto an appendix (the “**Appendix**”) specifying in reasonable detail those parts of the Site to which vacant access and Right of Way has not been given to the Contractor. Signing of the memorandum, in 2 (two) counterparts (each of which shall constitute an original), by the authorised representatives of the Parties shall be deemed to constitute a valid evidence of giving the Right of Way to the Contractor for discharging its obligations under and in accordance with the provisions of this Agreement and for no other purpose whatsoever.

For the avoidance of doubt, the Parties agree that subject to the provisions of Clauses 8.2.2 and 8.2.3, whenever the Authority is ready to provide Right of Way for any part or parts of the Site included in the Appendix, it shall by notice inform the Contractor of the proposed date and time when the Authority Representative and the Contractor shall inspect the specified parts of the Site, and prepare a memorandum which shall be deemed to constitute a valid evidence of giving such Right of Way to the Contractor in accordance with the provision of this Clause 8.2.1.

8.2.2 Notwithstanding anything to the contrary contained in this Clause 8.2, the Authority shall specify the parts of the Site, if any, for which Right of Way shall be provided to the Contractor on the dates specified in Schedule-A. Such parts shall also be included in the Appendix prepared in pursuance of Clause 8.2.1. For the avoidance of doubt, the Parties expressly agree that the Appendix shall in no event contain Sections of the Project the cumulative area of which exceeds 10% (ten per cent) of the total land required for the Project.

8.2.3 The Authority shall provide the Right of Way to the Contractor, in respect of the land included in the Appendix, by the date specified in Schedule-A for each part of the Site referred to therein, but in no case later than 90 (ninety) days of the Appointed Date for those parts of the Site for which no time has been specified in Schedule-A, and in the event of delay for any reason other than Force Majeure or breach of this Agreement by the Contractor, it shall pay to the Contractor, Damages in a sum calculated in accordance with Clause 8.3.

### **8.3 Damages for delay in handing over the Site**

8.3.1 In the event the Right of Way to any part of the Site is not provided by the Authority on or before the date(s) specified in Clause 8.2 for any reason other than Force Majeure or breach of this Agreement by the Contractor, the Authority shall pay Damages to the Contractor in a sum calculated in accordance with the following formula for and in respect of those parts of the Site to which the Right of Way has not been provided:

Amount of Damages in Rs. per day per metre =  $0.10 \times C \times 1/L \times 1/N$

Where

C = the Contract Price; L = Land required for the Project in Sq. Metres]; and N =

Completion period in days (Appointed Date to Scheduled Completion Date)

In the event that any Damages are due and payable to the Contractor under the provisions of this Clause 8.3.1 for delay in providing the Right of Way, the Contractor shall, subject to the provisions of Clause 10.4, be entitled to Time Extension equal to the period for which the Damages have become due and payable under this Clause 8.3.1, save and except that:

- (a) if any delays involve time overlaps, the overlaps shall not be additive; and
- (b) such Time Extension shall be restricted only to the Works which are affected by the delay in providing the Right of Way.

For the avoidance of doubt, the Parties expressly agree that the Damages specified hereunder and the Time Extension specified in Clause 10.4 shall be restricted only to failure of the Authority to provide the Right of Way for and in respect of the Site required for Works in accordance with the Good Industry Practice.

8.3.2 Notwithstanding anything to the contrary contained in this Agreement, the Contractor expressly agrees that Works on all parts of the Site for which Right of Way is granted within 90 (ninety) days of the Appointed Date, or with respect to the parts of the Site provided in Schedule-A, no later than the date(s) specified therein, as the case may be, shall be completed before the Scheduled Completion Date and shall not qualify for any Time Extension under the provisions of Clause 8.3.1.

8.3.3 Notwithstanding anything to the contrary contained in this Agreement, the Authority may at any time withdraw any part of the Right of Way and the Works forming part of this Agreement, subject to such Works not exceeding an aggregate value, such value to be determined in accordance with Schedule-G, equal to 10% (ten per cent) of the Contract Price.

Provided that if Right of Way has not been provided within 240 (two hundred and forty) days of the Appointed Date, for commencing construction on any part of the Site included in the Appendix, the affected Works shall be deemed to be withdrawn under the provisions of this Clause 8.3.3 unless the Parties agree to the contrary, and such Works shall not be computed for the purposes of the aforesaid ceiling of 10% (ten per cent) of the Contract Price hereunder. For the avoidance of doubt, the Parties agree that such deemed withdrawal of Works hereunder shall be without prejudice to the Contractor's entitlement to Damages under Clauses 4.1.4, 8.3 and 9.2.

8.3.4 In the event of withdrawal of Works under Clause 8.3.3, including deemed withdrawal of Works, the Contract Price shall be reduced by an amount equal to 90% (ninety per cent) of the value of the Works withdrawn and the Contractor shall not be entitled to any other compensation or Damages for the withdrawal of Works, including their deemed withdrawal, save and except for Damages as provided under Clause 4.3.

Provided that if any Works are withdrawn after commencement of the Construction of such Works, the Authority shall pay to the Contractor 110% (one hundred and ten per cent) of the fair value of the work done, as assessed by the Authority's Engineer:

#### **8.4 Site to be free from Encumbrances**

Subject to the provisions of Clause 8.2, the Site shall be made available by the Authority to the Contractor pursuant hereto free from all Encumbrances and occupations and without the Contractor being required to make any payment to the Authority on account of any costs, compensation, expenses and charges for the acquisition and use of such Site for the duration of the Project Completion Schedule. For the avoidance of doubt, it is agreed that the existing rights of way, easements, privileges, liberties and appurtenances to the Site shall not be deemed to be Encumbrances. It is further agreed that, unless otherwise specified in this Agreement, the Contractor accepts and undertakes to bear any and all risks arising out of the inadequacy or physical condition of the Site.

#### **8.5 Protection of Site from encroachments**

On and after signing the memorandum and/or subsequent memorandum referred to in Clause 8.2.1, and until the issue of the Provisional Certificate, the Contractor shall maintain a round-the-clock vigil over the Site and shall ensure and procure that no encroachment thereon takes place. During the Construction Period, the Contractor shall protect the Site from any and all occupations, encroachments or Encumbrances, and shall not place or create nor permit any Sub-contractor or other person claiming through or under the Agreement to place or create any Encumbrance or security interest over all or any part of the Site or the Project Assets, or on any rights of the Contractor therein or under this Agreement, save and except as otherwise expressly set forth in this Agreement. In the event of any encroachment or occupation on any part of the Site, the Contractor shall report such encroachment or occupation forthwith to the Authority and undertake its removal at its own cost and expenses.

#### **8.6 Special/ temporary Right of Way**

The Contractor shall bear all costs and charges for any special or temporary right of way required by it in connection with access to the Site. The Contractor shall obtain at its cost such facilities on or outside the Site as may be required by it for the purposes of the Project and the performance of its obligations under this Agreement.

**8.7 Access to the Authority and the Authority's Engineer**

- 8.7.1 The Right of Way given to the Contractor hereunder shall always be subject to the right of access of the Authority and the Authority's Engineer and their employees and agents for inspection, viewing and exercise of their rights and performance of their obligations under this Agreement.
- 8.7.2 The Contractor shall ensure, subject to all relevant safety procedures, that the Authority has unrestricted access to the Site during any Emergency.

**8.8 Geological and archaeological finds**

It is expressly agreed that mining, geological or archaeological rights do not form part of this Agreement with the Contractor for the Works, and the Contractor hereby acknowledges that it shall not have any mining rights or interest in the underlying minerals, fossils, antiquities, structures or other remnants or things either of particular geological or archaeological interest and that such rights, interest and property on or under the Site shall vest in and belong to the Authority or the concerned Government Instrumentality. The Contractor shall take all reasonable precautions to prevent its workmen or any other person from removing or damaging such interest or property and shall inform the Authority forthwith of the discovery thereof and comply with such instructions as the Authority or the concerned Government Instrumentality may reasonably give for the removal of such property. For the avoidance of doubt, it is agreed that any reasonable expenses incurred by the Contractor hereunder shall be reimbursed by the Authority. It is also agreed that the Authority shall procure that the instructions hereunder are issued by the concerned Government Instrumentality within a reasonable period so as to enable the Contractor to continue its Works with such modifications as may be deemed necessary.



## ARTICLE 9

### UTILITIES AND TREES

#### 9.1 Existing utilities and roads

Notwithstanding anything to the contrary contained herein, the Contractor shall ensure that the respective entities owning the existing roads, right of way, level crossings, structures, or utilities on, under or above the Site are enabled by it to keep them in continuous satisfactory use, if necessary, by providing suitable temporary diversions with the authority of the controlling body of that road, right of way or utility.

#### 9.2 Shifting of obstructing utilities

The Contractor shall, in accordance with Applicable Laws and with assistance of the Authority, cause shifting of any utility (including electric lines, water pipes and telephone cables) to an appropriate location or alignment, if such utility or obstruction adversely affects the execution of Works in accordance with this Agreement. The actual cost of such shifting, as approved and communicated by the entity owning the utility, shall be paid by the Contractor and reimbursed by the Authority to the Contractor. In the event of any delay in such shifting by the entity owning the utility beyond a period of 180 (one hundred and eighty) days from the date of notice by the Contractor to the entity owning the utility and to the Authority, the Contractor shall be entitled to Damages in a sum calculated in accordance with the formula specified in Clause 8.3.1 for the period of delay, and to Time Extension in accordance with Clause 10.4 for and in respect of the part(s) of the Works affected by such delay; provided that if the delays involve any time overlaps, the overlaps shall not be additive.

#### 9.3 New utilities

- 9.3.1 The Contractor shall allow, subject to such conditions as the Authority may specify, access to, and use of the Site for laying telephone lines, water pipes, electric cables or other public utilities. Where such access or use causes any financial loss to the Contractor, it may require the user of the Site to pay compensation or damages as per Applicable Laws. For the avoidance of doubt, it is agreed that use of the Site under this Clause 9.3 shall not in any manner

relieve the Contractor of its obligation to construct the Project in accordance with this Agreement and any damage caused by such use shall be restored forthwith at the cost of the Authority.

9.3.2 In the event the construction of any Works is affected by a new utility or works undertaken in accordance with this Clause 9.3, the Contractor shall be entitled to a reasonable Time Extension as determined by the Authority's Engineer in accordance with the provisions of Clause 10.4.

[9.3.3 The Authority may, by notice, require the Contractor to connect any adjoining road to the Project, and the connecting portion thereof falling within the Site shall be constructed by the Contractor at the Authority's cost in accordance with Article 10.

9.3.4 The Authority may by notice require the Contractor to connect, through a paved road, any adjoining service station, hotel, motel or any other public facility or amenity to the Project, whereupon the connecting portion thereof that falls within the Site shall be constructed by the Contractor on payment of the cost. The cost to be paid by the Authority to the Contractor shall be determined by the Authority's Engineer. For the avoidance of doubt, in the event such road is to be constructed for the benefit of any entity, the Authority may require such entity to make an advance deposit with the Contractor or the Authority, as the case may be, of an amount equal to the estimated cost as determined by the Authority's Engineer and such advance shall be adjusted against the cost of construction as determined by the Authority's Engineer hereunder.]

#### **9.4 Felling of trees**

The Authority shall assist the Contractor in obtaining the Applicable Permits for felling of trees to be identified by the Authority for this purpose if and only if such trees cause a Material Adverse Effect on the construction of the Project. The cost of such felling and of the compensatory plantation of trees, if any, shall be borne by the Authority. In the event of any delay in felling thereof for reasons beyond the control of the Contractor; it shall be excused for failure to perform any of its obligations hereunder if such failure is a direct consequence of delay in the felling of trees. The Parties hereto agree that the felled trees shall be deemed to be owned by the Authority and shall be disposed in such manner and subject to such conditions as the Authority may in its sole discretion deem appropriate. For the avoidance of doubt, the Parties agree that if any felling of

trees hereunder is in a forest area, the Applicable Permit thereof shall be procured by the Authority within the time specified in the Agreement; and for any period of delay in providing the Applicable Permits, the Contractor shall be entitled to Damages and Time Extension as provided under Clause 9.2.1.

ARTICLE 10

**DESIGN AND CONSTRUCTION OF THE PROJECT**

**10.1 Obligations prior to commencement of Works**

10.1.1 Within 20 (twenty) days of the Appointed Date, the Contractor shall:

- (a) appoint its representative, duly authorised to deal with the Authority in respect of all matters under or arising out of or relating to this Agreement;
- (b) appoint a design director (the “**Design Director**”) who will head the Contractor’s design unit and shall be responsible for surveys, investigations, collection of data, and preparation of preliminary and detailed designs;
- (c) undertake and perform all such acts, deeds and things as may be necessary or required before commencement of Works under and in accordance with this Agreement, Applicable Laws and Applicable Permits; and
- (d) make its own arrangements for quarrying of materials and procurement needed for the Project under and in accordance with Applicable Laws and Applicable Permits.

10.1.2 The Authority shall, within 15 (fifteen) days of the date of this Agreement, appoint an engineer (the “**Authority’s Engineer**”) to discharge the functions and duties specified in this Agreement, and shall notify to the Contractor the name, address and the date of appointment of the Authority’s Engineer forthwith.

10.1.3 Within 30 (thirty) days of the Appointed Date, the Contractor shall submit to the Authority and the Authority’s Engineer a programme (the “**Programme**”) for construction of the Works, developed using networking techniques and giving the following details:

*Part I* Contractor’s organisation for the Project, the general methods and arrangements for design and construction, environmental management plan, Quality Assurance Plan including design quality plan, traffic management and safety plan covering safety of users and workers during construction, Contractor’s key personnel, and equipment.

*Part II* Programme for completion of all stages of construction given in Schedule-G and Project Milestones of the Works as specified in Project Completion Schedule set forth in Schedule-I. The Programme shall include:

- (a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of design and stages of Works;
- (b) the periods for reviews under Clause 10.2; and
- (c) the sequence and timing of inspections and tests specified in this Agreement.

The Contractor shall submit a revised programme whenever the previous programme is inconsistent with the actual progress or with the Contractor's obligations.

*Part III* Monthly cash flow forecast for the Project.

For the avoidance of doubt, the Contractor acknowledges and agrees that the Authority may, within a period of 15 (fifteen) days of receipt of the Programme, convey its comments to the Contractor stating the modifications, if any, required for compliance with the provisions of this Agreement, and the Contractor shall carry out such modifications, to the extent required for conforming with the provisions of this Agreement.

10.1.4 The Contractor shall compute, on the basis of the Drawings prepared in accordance with Clause 10.2.7, and provide to the Authority's Engineer, the length, area and numbers, as the case may be, in respect of the various items of work specified in Schedule-G and comprising the Scope of the Project. The Parties expressly agree that these details shall form the basis for estimating the interim payments for the Works in accordance with the provisions of Clause 17.3. For the avoidance of doubt, the sum of payments to be computed in respect of all the items of work shall not exceed the Contract Price, as may be adjusted in accordance with the provisions of this Agreement.

10.1.5 The Contractor shall appoint a safety consultant (the "**Safety Consultant**") to carry out safety audit at the design stage of the Project in accordance with Applicable Laws and Good Industry Practice. The Safety Consultant shall be appointed after proposing to the Authority a panel of 3 (three) names of qualified and experienced firms from which the Authority may choose 1 (one) to be the Safety Consultant. Provided, however, that if the panel is not acceptable to the Authority and the reasons for the same are furnished to the Contractor, the Contractor shall propose to the Authority a revised panel of 3 (three) names for obtaining the consent of the Authority. The Authority shall, within 15 (fifteen) days of receiving a proposal from the Contractor hereunder,

convey its decision, with reasons, to the Contractor, and if no such decision is conveyed within the said period, the Contractor may proceed with engaging of the Safety Consultant. For the avoidance of doubt, the Parties agree that no firm or person having any conflict of interest shall be engaged hereunder. The Parties further agree that any assignments completed at least 3 (three) years prior to the appointment hereunder shall not be reckoned for the purposes of conflict of interest.

10.1.6 The safety audit pursuant to Clause 10.1.5 shall be carried out by the Safety Consultant in respect of all such design details that have a bearing on safety of Users as well as pedestrians and animals involved in or associated with accidents. The recommendations of the Safety Consultant shall be incorporated in the design of the Project and the Contractor shall forward to the Authority's Engineer a certificate to this effect together with the recommendations of the Safety Consultant. In the event that any works required by the Safety Consultant shall fall beyond the scope of Schedule-B, Schedule-C or Schedule-D, the Contractor shall make a report thereon and seek the instructions of the Authority for Change in Scope. For the avoidance of doubt, the Safety Consultant to be engaged by the Contractor shall be independent of the design and implementation team of the Contractor.

## 10.2 Design and Drawings

10.2.1 Design and Drawings shall be developed in conformity with the Specifications and Standards set forth in Schedule-D. In the event, the Contractor requires any relaxation in design standards due to restricted Right of Way in any Section, the alternative design criteria for such Section shall be provided for review of the Authority's Engineer.

10.2.2 The Contractor shall appoint a proof check consultant (the "**Proof Consultant**") after proposing to the Authority a panel of 3 (three) names of qualified and experienced firms from whom the Authority may choose 1 (one) to be the Proof Consultant. Provided, however, that if the panel is not acceptable to the Authority and the reasons for the same are furnished to the Contractor, the Contractor shall propose to the Authority a revised panel of 3 (three) names for obtaining the consent of the Authority. The Contractor shall also obtain the consent of the Authority for 2 (two) key personnel of the Proof Consultant who shall have adequate experience and qualifications with respect to the main

elements of the Project. The Authority shall, within 15 (fifteen) days of receiving a proposal from the Contractor hereunder, convey its decision, with reasons, to the Contractor, and if no such decision is conveyed within the said period, the Contractor may proceed with engaging of the Proof Consultant. For the avoidance of doubt, the Parties agree that no firm or person having any conflict of interest shall be engaged hereunder. The Parties further agree that any assignments completed at least three years prior to the appointment hereunder shall not be reckoned for the purposes of conflict of interest.

#### 10.2.3 The Proof Consultant shall:

- (a) evolve a systems approach with the Design Director so as to minimise the time required for final designs and construction drawings; and
- (b) proof check the detailed calculations, drawings and designs, which have been approved by the Design Director.

#### 10.2.4 In respect of the Contractor's obligations with respect to the design and Drawings of the Project as set forth in Schedule-H, the following shall apply:

- (a) The Contractor shall prepare and submit, with reasonable promptness and in such sequence as is consistent with the Project Completion Schedule, 3 (three) copies each of the design and Drawings, duly certified by the Proof Consultant, to the Authority's Engineer for review. Provided, however, that in respect of [Major Bridges and Structures], the Authority's Engineer may require additional drawings for its review in accordance with Good Industry Practice;
- (b) by submitting the Drawings for review to the Authority's Engineer, the Contractor shall be deemed to have represented that it has determined and verified that the design and engineering, including field construction criteria related thereto, are in conformity with the Scope of the Project, Specifications and Standards, Applicable Laws and Good Industry Practice;
- (c) within 15 (fifteen) days of the receipt of the Drawings, the Authority's Engineer shall review the same and convey its observations to the Contractor with particular reference to their conformity or otherwise with the Scope of the Project and the Specifications and Standards. The Contractor shall not be obliged to await the observations of the Authority's Engineer on the Drawings submitted pursuant hereto beyond the said period of 15 (fifteen)

days and may begin or continue Works at its own discretion and risk; Provided, however, that in case of a [Major Bridge or Structure], the aforesaid period of 15 (fifteen) days may be extended upto 30 (thirty) days;

- (d) if the aforesaid observations of the Authority's Engineer indicate that the Drawings are not in conformity with the Scope of the Project or the Specifications and Standards, such Drawings shall be revised by the Contractor in conformity with the provisions of this Agreement and resubmitted to the Authority's Engineer for review. The Authority's Engineer shall give its observations, if any, within 10 (ten) days of receipt of the revised Drawings. In the event the Contractor fails to revise and resubmit such Drawings to the Authority's Engineer for review as aforesaid, the Authority's Engineer may cause the payment for the affected works to be withheld under the provisions of Clause 17.5.4. If the Contractor disputes any decision, direction or determination of the Authority's Engineer hereunder, the Dispute shall be resolved in accordance with the Dispute Resolution Procedure;
- (e) no review and/or observation of the Authority's Engineer and/or its failure to review and/or convey its observations on any Drawings shall relieve the Contractor of its obligations and liabilities under this Agreement in any manner nor shall the Authority's Engineer or the Authority be liable for the same in any manner; and if errors, omissions, ambiguities, inconsistencies, inadequacies or other Defects are found in the Drawings, they shall be corrected, along with the affected Works, at the Contractor's cost, notwithstanding any review under this Article 10;
- (f) the Contractor shall be responsible for delays in submitting the Drawings, as set forth in Schedule-H, caused by reason of delays in surveys and field investigations, and shall not be entitled to seek any relief in respect thereof from the Authority; and
- (g) the Contractor warrants that its designers, including any third parties engaged by it, shall have the required experience and capability in accordance with Good Industry Practice and it shall indemnify the Authority against any damage, expense, liability, loss or claim, which the Authority might incur, sustain or be subject to arising from any breach of the Contractor's design responsibility and/or warranty as set out in this Clause.



- 10.2.5 Any cost or delay in construction arising from review by the Authority's Engineer shall be borne by the Contractor.
- 10.2.6 Works shall be executed in accordance with the Drawings provided by the Contractor in accordance with the provisions of this Clause 10.2 and the observations of the Authority's Engineer thereon as communicated pursuant to the provisions of Clause 10.2.4 (d). Such Drawings shall not be amended or altered without prior written notice to the Authority's Engineer. If a Party becomes aware of an error or defect of a technical nature in the design or Drawings, that Party shall promptly give notice to the other Party of such error or defect.
- 10.2.7 Within 90 (ninety) days of the Project Completion Date, the Contractor shall furnish to the Authority and the Authority's Engineer a complete set of as-built Drawings, in 2 (two) hard copies and in its editable digital format or in such other medium or manner as may be acceptable to the Authority, including an as-built survey illustrating the layout of the Project and setback lines, if any, of the buildings and structures forming part of Project Facilities, and shall hand them over to the Authority against receipt thereof.

### 10.3 Construction of the Project

- 10.3.1 The Contractor shall construct the Project as specified in Schedule-B and Schedule-C, and in conformity with the Specifications and Standards set forth in Schedule-D. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works. The [650<sup>th</sup> (six hundred and fiftieth) day] from the Appointed Date shall be the scheduled completion date (the "**Scheduled Completion Date**") and the Contractor agrees and undertakes that the construction shall be completed on or before the Scheduled Completion Date, including any extension thereof.
- 10.3.2 The Contractor shall construct the Project in accordance with the Project Completion Schedule set forth in Schedule-I. In the event that the Contractor fails to achieve any Project Milestone or the Scheduled Completion Date within a period of 30 (thirty) days from the date set forth in Schedule-I, unless such failure has occurred due to Force Majeure or for reasons attributable to the Authority, it shall pay Damages to the Authority in a sum calculated at the rate of 0.05% (zero point zero five per cent) of the Contract Price for delay of each

day reckoned from the date specified in Schedule - I and until such Project Milestone is achieved or the Works are completed; provided that if the period for any or all Project Milestones or the Scheduled Completion Date is extended in accordance with the provisions of this Agreement, the dates set forth in Schedule-I shall be deemed to be modified accordingly and the provisions of this Agreement shall apply as if Schedule-I has been amended as above; provided further that in the event the Works are completed within or before the Scheduled Completion Date including any Time Extension, the Damages paid under this Clause 10.3.2 shall be refunded by the Authority to the Contractor, but without any interest thereon. For the avoidance of doubt, it is agreed that recovery of Damages under this Clause 10.3.2 shall be without prejudice to the rights of the Authority under this Agreement including the right of Termination thereof. The Parties further agree that Time Extension hereunder shall only be reckoned for and in respect of the affected Works as specified in Clause 10.4.2.

10.3.3 The Authority shall notify the Contractor of its decision to impose Damages in pursuance of the provisions of this Clause 10.3. Provided, however, that no deduction on account of Damages shall be effected by the Authority without taking into consideration the representation, if any, made by the Contractor within 20 (twenty) days of such notice. The Parties expressly agree that the total amount of Damages under Clause 10.3.2 shall not exceed 10% (ten percent) of the Contract Price.

#### **10.4 Extension of time for completion**

10.4.1 Without prejudice to any other provision of this Agreement for and in respect of extension of time, the Contractor shall be entitled to extension of time in the Project Completion Schedule (the “**Time Extension**”) to the extent that completion of any Project Milestone is or will be delayed by any of the following, namely:

- (a) delay in providing Right of Way, environmental clearances [or approval of railway authorities], specified in Clause 4.1.4;
- (b) Change of Scope, unless an adjustment to the Scheduled Completion Date has been agreed under Article 13;
- (c) occurrence of a Force Majeure Event;

- (d) any delay, impediment or prevention caused by or attributable to the Authority, the Authority's personnel or the Authority's other contractors on the Site; and
- (e) any other cause or delay which entitles the Contractor to Time Extension in accordance with the provisions of this Agreement.

10.4.2 The Contractor shall, no later than 15 (fifteen) business days from the occurrence of an event or circumstance specified in Clause 10.4.1, inform the Authority's Engineer by notice in writing, with a copy to the Authority, stating in reasonable detail with supporting particulars, the event or circumstances giving rise to the claim for Time Extension in accordance with the provisions of this Agreement. Provided that the period of 15 (fifteen) business days shall be calculated from the date on which the Contractor became aware, or should have become aware, of the occurrence of such an event or circumstance.

Provided further that notwithstanding anything to the contrary contained in this Agreement, Time Extension shall be due and applicable only for the Works which are affected by the aforesaid events or circumstances and shall not in any manner affect the Project Completion Schedule for and in respect of the Works which are not affected thereby.

10.4.3 In the event of the failure of the Contractor to issue to the Authority's Engineer a notice in accordance with the provisions of Clause 10.4.2 within the time specified therein, the Contractor shall not be entitled to any Time Extension and shall forfeit its right to any such claims in future. For the avoidance of doubt, in the event of failure of the Contractor to issue notice as specified in this Clause 10.4.3, the Authority shall be discharged from all liability in connection therewith.

10.4.4 The Authority's Engineer shall, on receipt of a claim in accordance with the provisions of Clause 10.4.2, examine the claim expeditiously within the time frame specified herein. In the event the Authority's Engineer requires any clarifications to examine the claim, the Authority's Engineer shall seek the same within 15 (fifteen) days from the date of receiving the claim. The Contractor shall, on the receipt of the communication of the Authority's Engineer requesting for clarification, furnish the same to the Authority's Engineer within 10 (ten) days thereof. The Authority's Engineer shall, within a period of 30 (thirty) days from the date of receipt of such clarifications, forward in writing to the Contractor its determination of Time Extension. For the avoidance of doubt, the

Parties agree that the Authority's Engineer shall, in accordance with the provisions of this Agreement, notify the Contractor of the aforesaid Time Extension no later than 60 (sixty) days from the date of receipt of the Contractor's claim for Time Extension.

Provided that when determining each extension of time under this Clause 10.4, the Authority's Engineer shall review previous determinations and may increase, but shall not decrease, the total Time Extension.

10.4.5 If the event or circumstance giving rise to the notice has a continuing effect:

- (a) the detailed claim shall be considered as interim;
- (b) the Contractor shall, no later than 10 (ten) days after the close of each month, send further interim claims specifying the accumulated delay, the extension of time claimed, and such further particulars as the Authority's Engineer may reasonably require; and
- (c) the Contractor shall send a final claim within 30 (thirty) days after the effect of the event or the circumstance ceases.

Upon receipt of the claim hereunder, the Authority's Engineer shall examine and determine the same in accordance with the provisions of Clause 10.4.4 within a period of 60 (sixty) days of the receipt thereof.

## **10.5 Incomplete Works**

In the event the Contractor fails to complete the Works in accordance with the Project Completion Schedule, including any Time Extension granted under this Agreement, the Contractor shall endeavour to complete the balance work expeditiously and shall pay Damages to the Authority in accordance with the provisions of Clause 10.3.2 for delay of each day until the Works are completed in accordance with the provisions of this Agreement. Recovery of Damages under this Clause shall be without prejudice to the rights of the Authority under this Agreement including the right to termination under Clause 21.1.

## ARTICLE 11

### **QUALITY ASSURANCE, MONITORING AND SUPERVISION**

#### **11.1 Quality of Materials and workmanship**

11.1.1 The Contractor shall ensure that the Construction, Materials and workmanship are in accordance with the requirements specified in this Agreement, Specifications and Standards and Good Industry Practice.

11.1.2 The Contractor warrants that all Materials shall be new, unused, not reconditioned and in conformity with Specification and Standards, Applicable Laws and Good Industry Practice, and that the Contractor shall not use any materials which are generally recognised as being deleterious under Good Industry Practice.

#### **11.2 Quality control system**

11.2.1 The Contractor shall establish a quality control mechanism to ensure compliance with the provisions of this Agreement (the “**Quality Assurance Plan**” or “**QAP**”).

11.2.2 The Contractor shall, within 30 (thirty) days of the Appointed Date, submit to the Authority’s Engineer its Quality Assurance Plan which shall include the following:

- (a) organisation, duties and responsibilities, procedures, inspections and documentation;
- (b) quality control mechanism including sampling and testing of Materials, test frequencies, standards, acceptance criteria, testing facilities, reporting, recording and interpretation of test results, approvals, check list for site activities, and proforma for testing and calibration in accordance with the Specifications and Standards and Good Industry Practice; and
- (c) internal quality audit system.

The Authority’s Engineer shall convey its comments to the Contractor within a period of 21 (twenty-one) days of receipt of the QAP stating the modifications, if any, required, and the Contractor shall incorporate those in the QAP to the extent required for conforming with the provisions of this Clause 11.2.

11.2.3 The Contractor shall procure all documents, apparatus and instruments, fuel, consumables, water, electricity, labour, Materials, samples, and qualified personnel as are necessary for examining and testing the Project Assets, Materials and workmanship in accordance with the Quality Assurance Plan.

11.2.4 The cost of testing of Construction, Materials and workmanship under this Article 11 shall be borne by the Contractor.

### **11.3. Methodology**

The Contractor shall, at least 15 (fifteen) days prior to the commencement of construction, submit to the Authority's Engineer for review the methodology proposed to be adopted for executing the Works, giving details of equipment to be deployed, traffic management and measures for ensuring safety. The Authority's Engineer shall complete the review and convey its comments, if any, to the Contractor within a period of 10 (ten) days from the date of receipt of the proposed methodology from the Contractor.

### **11.4. Inspection and technical audit by the Authority**

The Authority or any representative authorised by the Authority in this behalf may inspect and review the progress and quality of the construction of Works and issue appropriate directions to the Authority's Engineer and the Contractor for taking remedial action in the event the Works are not in accordance with the provisions of this Agreement.

### **11.5 External technical audit**

At any time during construction, the Authority may appoint an external technical auditor to conduct an audit of the quality of the Works. The findings of the audit, to the extent accepted by the Authority, shall be notified to the Contractor and the Authority's Engineer for taking remedial action in accordance with this Agreement. The Contractor shall provide all assistance as may be required by the auditor in the conduct of its audit hereunder. Notwithstanding anything contained in this Clause 11.5, the external technical audit shall not affect any obligations of the Contractor or the Authority's Engineer under this Agreement.

## 11.6 Inspection of construction records

The Authority shall have the right to inspect the records of the Contractor relating to the Works.

## 11.7 Monthly progress reports

During the Construction Period, the Contractor shall, no later than 10 (ten) days after the close of each month, furnish to the Authority and the Authority's Engineer a monthly report on the progress of Works and shall promptly give such other relevant information as may be required by the Authority's Engineer.

## 11.8 Inspection

11.8.1 The Authority's Engineer and its authorised representative shall at all times:

- (a) have full access to all parts of the Site and to all places from which natural Materials are being obtained for use in the Works; and
- (b) during production, manufacture and construction at the Site and at the place of production, be entitled to examine, inspect, measure and test the Materials and workmanship, and to check the progress of manufacture of Materials.

11.8.2 The Contractor shall give the Authority's Engineer and its authorised agents access, facilities and safety equipment for carrying out their obligations under this Agreement.

11.8.3 The Authority's Engineer shall submit a monthly inspection report (the "**Inspection Report**") to the Authority and the Contractor bringing out the results of inspections and the remedial action taken by the Contractor in respect of Defects or deficiencies. For the avoidance of doubt, such inspection or submission of Inspection Report by the Authority's Engineer shall not relieve or absolve the Contractor of its obligations and liabilities under this Agreement in any manner whatsoever.

## 11.9 Samples

The Contractor shall submit the following samples of Materials and relevant information to the Authority's Engineer for review:

- (a) manufacturer's test reports and standard samples of manufactured Materials; and
- (b) samples of such other Materials as the Authority's Engineer may require.

### **11.10 Tests**

11.10.1 For determining that the Works conform to the Specifications and Standards, the Authority's Engineer shall require the Contractor to carry out or cause to be carried out tests, at such time and frequency and in such manner as specified in this Agreement, and in accordance with Good Industry Practice for quality assurance. The Contractor shall, with due diligence, carry out all the tests in accordance with the Agreement and furnish the results thereof to the Authority's Engineer. Of the total tests for each category or type to be undertaken by the Contractor under the provisions of this Agreement and Good Industry Practice, the Authority's Engineer shall (a) carry out or cause to be carried out, test checks equal to about 10% (ten per cent) of the number of the tests required to be undertaken by the Contractor; and (b) witness or participate in at least 10% (ten per cent) of the number of such tests conducted or caused to be conducted by the Contractor.

11.10.2 In the event that results of any tests conducted under this Clause 11.10 establish any Defects or deficiencies in the Works, the Contractor shall carry out remedial measures and furnish a report to the Authority's Engineer in this behalf. The Authority's Engineer shall require the Contractor to carry out or cause to be carried out tests to determine that such remedial measures have brought the Works into compliance with the Specifications and Standards, and the procedure shall be repeated until such Works conform to the Specifications and Standards. For the avoidance of doubt, the cost of such tests and the remedial measures in pursuance thereof shall be solely borne by the Contractor.

### **11.11 Examination of work before covering up**

In respect of the work which the Authority's Engineer is entitled to examine, inspect, measure or test before it is covered up or put out of view or any part of the work is placed thereon, the Contractor shall give notice to the Authority's Engineer whenever any such work is ready and before it is covered up. The Authority's Engineer shall then either carry out the examination, inspection or testing without unreasonable delay, or promptly give notice to the Contractor that



the Authority's Engineer does not require to do so. Provided, however, that if any work is of a continuous nature where it is not possible or prudent to keep it uncovered or incomplete, the Contractor shall notify the schedule of carrying out such work to give sufficient opportunity, not being less than 3 (three) business days' notice, to the Authority's Engineer to conduct its inspection, measurement or test while the work is continuing. Provided further that in the event the Contractor receives no response from the Authority's Engineer within a period of 3 (three) business days from the date on which the Contractor's notice hereunder is delivered to the Authority's Engineer, the Contractor shall be entitled to assume that the Authority's Engineer would not undertake the said inspection.

### **11.12 Rejection**

11.12.1 If, as a result of an examination, inspection, measurement or testing, any Plant, Material, design or workmanship is found to be defective or otherwise not in accordance with the provisions of this Agreement, the Authority's Engineer may reject such Plant, Material, design or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the Defect and ensure that the rejected item complies with the requirements of this Agreement.

11.12.2 If the Authority's Engineer requires the Plant, Material, design or workmanship to be retested, the tests shall be repeated on the same terms and conditions, as applicable in each case. If the rejection and retesting cause the Authority to incur any additional costs, such costs shall be recoverable by the Authority from the Contractor and may be deducted by the Authority from any monies due to be paid to the Contractor.

11.12.3 The Contractor shall not be entitled to any extension of time on account of rectifying any Defect or retesting as specified in this Clause 11.12.

11.12.4 No examination, inspection, measurement or testing of any Plant, Material, design or workmanship by the Authority's Engineer or its failure to convey its observations or to examine, inspect, measure or test shall relieve the Contractor of its obligations and liabilities under this Agreement in any manner nor shall the Authority be liable for the same in any manner.

### **11.13 Remedial work**

11.13.1 Notwithstanding any previous test or certification, the Authority's Engineer may instruct the Contractor to:

- (a) remove from the Site and replace any Plant or Materials which are not in accordance with the provisions of this Agreement;
- (b) remove and re-execute any work which is not in accordance with the provisions of this Agreement and the Specification and Standards; and
- (c) execute any work which is urgently required for the safety of the Project, whether because of an accident, unforeseeable event or otherwise; provided that in case of any work which is required on account of a Force Majeure Event, the provisions of Clause 19.6 shall apply.

11.13.2 If the Contractor fails to comply with the instructions issued by the Authority's Engineer under Clause 11.13.1, within the time specified in the Authority's Engineer's notice or as mutually agreed, the Authority's Engineer may advise the Authority to have the work executed by another agency. The cost so incurred by the Authority for undertaking such work shall, without prejudice to the rights of the Authority to recover Damages in accordance with the provisions of this Agreement, be recoverable from the Contractor and may be deducted by the Authority from any monies due to be paid to the Contractor.

#### **11.14 Delays during construction**

Without prejudice to the provisions of Clause 10.3.2, in the event the Contractor does not achieve any of the Project Milestones within the time period stipulated in Schedule I or the Authority's Engineer shall have reasonably determined that the rate of progress of Works is such that Completion of the Project is not likely to be achieved by the end of the Scheduled Completion Date, it may notify the same to the Contractor, and the Contractor shall, within 15 (fifteen) days of such notice, by a communication inform the Authority's Engineer in reasonable detail about the steps it proposes to take to expedite progress and the period within which it shall achieve the Project Completion Date.

#### **11.15 Quality control records and Documents**

The Contractor shall hand over to the Authority's Engineer a copy of all its quality control records and documents before the Completion Certificate is issued pursuant to Clause 12.2.

#### **11.16 Video recording**

During the Construction Period, the Contractor shall provide to the Authority for every calendar quarter, a video recording, which will be compiled into a 3

(three)hour digital video disc or any substitute thereof, covering the status and progress of Works in that quarter. The video recording shall be provided to the Authority no later than 15 (fifteen) days after the close of each quarter after the Appointed Date.

### 11.17 Suspension of unsafe Construction Works

11.17.1 Upon recommendation of the Authority's Engineer to this effect, or on its own volition in cases of emergency or urgency, the Authority may by notice require the Contractor to suspend forthwith the whole or any part of the Works if, in the reasonable opinion of the Authority's Engineer or the Authority, as the case may be, such work threatens the safety of the Users and or other persons on or about the Project. Provided, however, that in case of an emergency, the Authority may *suo moto* issue the notice referred to hereinabove.

11.17.2 The Contractor shall, pursuant to the notice under Clause 11.17.1, suspend the Works or any part thereof for such time and in such manner as may be specified by the Authority and thereupon carry out remedial measures to secure the safety of suspended works, the Users, other persons and vehicles on or about the Project including pedestrians. The Contractor may by notice require the Authority's Engineer to inspect such remedial measures forthwith and make a report to the Authority recommending whether or not the suspension hereunder may be revoked. Upon receiving the recommendations of the Authority's Engineer, the Authority shall either revoke such suspension or instruct the Contractor to carry out such other and further remedial measures as may be necessary in the reasonable opinion of the Authority, and the procedure set forth in this Clause 11.17 shall be repeated until the suspension hereunder is revoked.

11.17.3 Subject to the provisions of Clause 19.6, all reasonable costs incurred for maintaining and protecting the Works or part thereof during the period of suspension (the "**Preservation Costs**"), shall be borne by the Contractor; provided that if the suspension has occurred as a result of any breach of this Agreement by the Authority, the Preservation Costs shall be borne by the Authority.

11.17.4 If suspension of Works is for reasons not attributable to the Contractor, the Authority's Engineer shall determine any Time Extension to which the Contractor is reasonably entitled in accordance with the provisions of Clause 10.4.



ARTICLE 12

**COMPLETION CERTIFICATE**

**12.1 Tests on completion**

12.1.1 No later than 30 (thirty) days prior to the likely completion of the Project, or a Section thereof, the Contractor shall notify the Authority's Engineer of its intent to subject the Project or a Section thereof, to Tests. The date and time of each of the Tests shall be determined by the Authority's Engineer in consultation with the Contractor, and notified to the Authority who may designate its representative to witness the Tests. The Contractor shall either conduct the Tests as directed by the Authority's Engineer or provide such assistance as the Authority's Engineer may reasonably require for conducting the Tests. For the avoidance of doubt, the Parties agree that in the event of the Contractor and the Authority's Engineer failing to mutually agree on the dates for conducting the Tests, the Contractor shall fix the dates by giving not less than 10 (ten) days' notice to the Authority's Engineer, and in the event the Authority's Engineer delays the Tests hereunder, the Authority shall impose exemplary penalties on the Authority's Engineer and shall ensure that Tests are completed in time either by the Authority's Engineer or any substitute thereof.

12.1.2 All Tests shall be conducted in accordance with Schedule-J at the cost and expense of the Contractor. The Authority's Engineer shall observe, monitor and review the results of the Tests to determine compliance of the Project or a Section thereof, with Specifications and Standards and if it is reasonably anticipated or determined by the Authority's Engineer during the course of any Test that the performance of the Project or Section or any part thereof, does not meet the Specifications and Standards, it shall have the right to suspend or delay such Test and require the Contractor to remedy and rectify any Defect or deficiency. Upon completion of each Test, the Authority's Engineer shall provide to the Contractor and the Authority copies of all Test data including detailed Test results. For the avoidance of doubt, the Parties expressly agree that the Authority's Engineer may require the Contractor to carry out or cause to be carried out additional Tests, in accordance with Good Industry Practice, for determining the compliance of the Project or Section thereof with the Specifications and Standards.

## 12.2 Provisional Certificate

12.2.1 Subject to the provisions of Clause 12.2.5, upon completion of all Works forming part of the Project, save and except the Works for which Time Extension has been granted under Clause 10.5, the Authority's Engineer shall, at the request of the Contractor, issue a provisional certificate of completion substantially in the form set forth in Schedule-K (the "**Provisional Certificate**") if the Tests for and in respect of the completed Works are successful. The Provisional Certificate shall have appended thereto a list of outstanding items of work (the "**Punch List**") that need to be completed in accordance with the provisions of this Agreement. The Contractor undertakes to complete the minor outstanding items of works in respect of those Sections of the Project for which the Provisional Certificate has been issued, within a period of 30 (thirty) days of the date of Provisional Certificate, and those parts of the Works in respect of which Time Extension has been granted, within the extended period thereof. For the avoidance of doubt, the Parties agree that the Punch List shall include all Works for which Time Extension has been granted and shall also include any minor outstanding items of work forming part of the completed Sections if such works do not materially affect the use of the completed Sections for their intended purpose. The Parties further agree that Provisional Certificate shall not be issued if the completed Works cannot be safely and reliably placed in service of the Users thereof.

12.2.2 Upon issue of Provisional Certificate, the provisions of Article 15 shall apply to the completed parts of the Project and the property and ownership of all such completed Works shall vest in the Authority.

12.2.3 If the Authority's Engineer determines that the Project or any completed part thereof does not conform to the provisions of this Agreement and cannot be safely and reliably placed in operation, it shall forthwith make a report in this behalf and send copies thereof to the Authority and the Contractor and withhold issuance of the Provisional Certificate until the Defects or deficiencies are rectified by the Contractor and Tests are successful in accordance with this Article 12.

12.2.4 Notwithstanding anything to the contrary contained in Clause 12.2.3, the Authority may, at any time after receiving a report from the Authority's Engineer under that Clause, direct the Authority's Engineer to issue a Provisional Certificate under Clause 12.2.1 and such direction shall be complied forthwith.

12.2.5 No Provisional Certificate shall be issued under the provisions of this Clause 12.2 until the Contractor has submitted valid claims for payment of at least 80% (eighty per cent) of the amount arrived at after reducing the lump sum price specified in Clause 17.1.1 by the amount attributable to works which have been withdrawn under the provisions of Clause 8.3.3. For the avoidance of doubt and by way of illustration, the Parties agree that if the Contract Price specified in Clause 17.1.1 is Rs.105 cr. (Rs. one hundred and five crore) and the works withdrawn under Clause 8.3.3 have a value of Rs.5 cr. (Rs. five crore), a Provisional Certificate shall not be issued until valid claims for payment of an amount of Rs.80 cr. (Rs. eighty crore) have been submitted by the Contractor in accordance with the provisions of this Agreement. It is further agreed that all price adjustments made in pursuance of Clause 17.10 shall not be reckoned for computation of the claims for payments referred to in this Clause 12.2.5. It is also agreed that any Change of Scope effected within 30 (thirty) days of the Appointed Date shall be reckoned for the purposes of determining the Contract Price hereunder.

### 12.3 Completion of remaining Works

All items in the Punch List shall be completed by the Contractor in accordance with the provisions of this Agreement. For any delay in their completion other than for the reasons attributable to the Authority or due to Force Majeure, the Authority shall be entitled to recover Damages from the Contractor in accordance with the provisions of Clause 10.3.2 of this Agreement.

### 12.4 Completion Certificate

12.4.1 Upon completion of all Works, including the items specified in the Punch List, and the Authority's Engineer determining the Tests to be successful, it shall forthwith issue to the Contractor and the Authority a certificate substantially in the form set forth in Schedule-K (the "**Completion Certificate**").

12.4.2 Upon receiving the Completion Certificate, the Contractor shall remove its equipment, materials, debris and temporary works from the Site within a period of 30 (thirty) days thereof, failing which the Authority may remove or cause to be removed, such equipment, materials, debris and temporary works and recover from the Contractor an amount equal to 120% (one hundred and twenty per cent) of the actual cost of removal incurred by the Authority.

12.4.3 Without prejudice to the obligations of the Contractor specified in Article 15, the property and ownership of all the completed Works forming part of the Project shall vest in the Authority.

## **12.5 Rescheduling of Tests**

If the Authority's Engineer certifies to the Authority and the Contractor that it is unable to issue the Completion Certificate or Provisional Certificate, as the case may be, because of events or circumstances on account of which the Tests could not be held or had to be suspended, the Contractor shall be entitled to re-schedule the Tests and hold the same as soon as reasonably practicable.



ARTICLE 13

**CHANGE OF SCOPE**

**13.1 Change of Scope**

13.1.1 The Authority may, notwithstanding anything to the contrary contained in this Agreement, require the Contractor to make modifications or alterations to the Works ("**Change of Scope**") before the issue of the Completion Certificate either by giving an instruction or by requesting the Contractor to submit a proposal for Change of Scope involving additional cost or reduction in cost. Any such Change of Scope shall be made and valued in accordance with the provisions of this Article 13.

13.1.2 Change of Scope shall mean:

- (a) change in specifications of any item of Works;
- (b) omission of any work from the Scope of the Project except under Clause 8.3.3; provided that, subject to Clause 13.5, the Authority shall not omit any work under this Clause in order to get it executed by any other entity; or
- (c) any additional work, Plant, Materials or services which are not included in the Scope of the Project, including any associated Tests on completion of construction.

13.1.3 If the Contractor determines at any time that a Change of Scope will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Authority of executing, maintaining or operating the Project, (iii) improve the efficiency or value to the Authority of the completed Project, or (iv) otherwise be of benefit to the Authority, it shall prepare a proposal with relevant details at its own cost. The Contractor shall submit such proposal, supported with the relevant details including the amount of reduction in the Contract Price, if any, to the Authority to consider such Change of Scope. The Authority shall, within 15 (fifteen) days of receipt of such proposal, either accept such Change of Scope with modifications, if any, and initiate proceedings therefor in accordance with this Article 13 or reject the proposal and inform the Contractor of its decision. For the avoidance of doubt, the Parties agree that the Contractor shall not undertake any Change of Scope without a Change of Scope Order being issued by the Authority, save and except any Works necessary for meeting any Emergency.

## 13.2 Procedure for Change of Scope

13.2.1 In the event of the Authority determining that a Change of Scope is necessary, it may direct the Authority's Engineer to issue to the Contractor a notice specifying in reasonable detail the works and services contemplated thereunder (the "**Change of Scope Notice**").

13.2.2 Upon receipt of a Change of Scope Notice, the Contractor shall, with due diligence, provide to the Authority and the Authority's Engineer such information as is necessary, together with preliminary documentation in support of:

- (a) the impact, if any, which the Change of Scope is likely to have on the Project Completion Schedule if the works or services are required to be carried out during the Construction Period; and
- (b) the options for implementing the proposed Change of Scope and the effect, if any, each such option would have on the costs and time thereof, including the following details:
  - (i) break down of the quantities, unit rates and cost for different items of work;
  - (ii) proposed design for the Change of Scope; and
  - (iii) proposed modifications, if any, to the Project Completion Schedule of the Project.

For the avoidance of doubt, the Parties expressly agree that, subject to the provisions of Clause 13.4.2, the Contract Price shall be increased or decreased, as the case may be, on account of Change of Scope.

13.2.3 The Contractor's quotation of costs for the Change of Scope shall be determined on the following principles:

- (a) For works of similar nature compared to the Works being executed, the quotation shall be based on the rate for the work inclusive of all labour, Materials, equipment, incidentals, overheads and profit derived in accordance with the provisions of Clause 17.3; and the price adjustment in accordance with Clause 17.8 shall apply to the rates so worked out.
- (b) For works not similar in nature to the Works being executed, the cost of work shall be derived on the basis of [MORTH Standard Data Book and]

the applicable schedule of rates for the relevant circle, as published by the respective State Government, and such rates shall be indexed with reference to the WPI once every year at the commencement of the financial year, with the base being the month and year of the publication of the said schedule of rates; provided, however, that for any item not included in the schedule of rates, the prevailing market rates as determined by the Authority's Engineer shall apply, and for any item in respect of which [MORTH Standard Data Book] does not provide the requisite details, the Authority's Engineer shall determine the rate in accordance with Good Industry Practice.

13.2.4 Upon reaching an agreement, the Authority shall issue an order (the "**Change of Scope Order**") requiring the Contractor to proceed with the performance thereof. In the event that the Parties are unable to agree, the Authority may:

- (a) issue a Change of Scope Order requiring the Contractor to proceed with the performance thereof at the rates and conditions approved by the Authority till the matter is resolved in accordance with Article 24; or
- (b) proceed in accordance with Clause 13.5.

13.2.5 The provisions of this Agreement, insofar as they relate to Works and Tests, shall apply *mutatis mutandis* to the works undertaken by the Contractor under this Article 13.

### **13.3 Payment for Change of Scope**

Payment for Change of Scope shall be made in accordance with the payment schedule specified in the Change of Scope Order.

### **13.4 Restrictions on Change of Scope**

13.4.1 No Change of Scope shall be executed unless the Authority has issued the Change of Scope Order save and except any Works necessary for meeting any Emergency.

13.4.2 Unless the Parties mutually agree to the contrary, the total value of all Change of Scope Orders shall not exceed 10% (ten per cent) of the Contract Price.

13.4.3 Notwithstanding anything to the contrary in this Article 13, no change arising from any default of the Contractor in the performance of its obligations under this Agreement shall be deemed to be Change of Scope, and shall not result in any adjustment of the Contract Price or the Project Completion Schedule.

### 13.5 Power of the Authority to undertake works

13.5.1 In the event the Parties are unable to agree to the proposed Change of Scope Orders in accordance with Clause 13.2, the Authority may, after giving notice to the Contractor and considering its reply thereto, award such works or services to any person on the basis of open competitive bidding from amongst bidders who are pre-qualified for undertaking the additional work; provided that the Contractor shall have the option of matching the first ranked bid in terms of the selection criteria, subject to payment of 2% (two per cent) of the bid

amount to the Authority<sup>\$</sup>, and thereupon securing the award of such works or services. For the avoidance of doubt, it is agreed that the Contractor shall be entitled to exercise such option only if it has participated in the bidding process and its bid does not exceed the first ranked bid by more than 10% (ten per cent) thereof. It is also agreed that the Contractor shall provide assistance and cooperation to the person who undertakes the works or services hereunder, but shall not be responsible for rectification of any Defects in works carried out by other agencies. For the avoidance of doubt, the Authority acknowledges and agrees that it shall not undertake any works or services under this Clause 13.5.1 if such works or services cause a Material Adverse Effect on the Contractor.

13.5.2 The works undertaken in accordance with this Clause 13.5 shall conform to the Specifications and Standards and shall be carried out in a manner that minimises disruption to the Project. The provisions of this Agreement, insofar as they relate to Works and Tests, shall apply *mutatis mutandis* to the works carried out under this Clause 13.5.

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<sup>\$</sup> The Authority shall transfer 75% (seventy five per cent) of the amount so received to the first ranked bidder whose bid shall have been matched by the Contractor.

ARTICLE 14

**TRAFFIC REGULATION<sup>6</sup>**

**14.1 Traffic regulation by the Contractor**

14.1.1 The Contractor shall take all the required measures and make arrangements for the safety of Users during the construction of the Project or a Section thereof in accordance with Good Industry Practice. It shall provide, erect and maintain all such barricades, signs, markings, flags, and lights as may be required for the safety of the traffic passing through the Section under construction.

14.1.2 All works shall be carried out in a manner creating least interference to the traffic passing through the Project or a Section thereof. In Sections where construction works on the carriageway are taken up, the Contractor shall ensure that safe passage is provided for the traffic. Where it is not possible or safe to allow traffic on part width of the carriageway, a temporary diversion of reasonable specifications shall be constructed by the Contractor at its own cost. The Contractor shall take prior approval of the Authority's Engineer for any proposed arrangement for traffic regulation during the Construction Period, which approval shall not be unreasonably withheld.

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<sup>6</sup> This template is applicable to highway projects. It may be suitably revised in case of other projects.

## ARTICLE 15

### **DEFECTS LIABILITY**

#### **15.1 Defects Liability Period**

15.1.1 The Contractor shall be responsible for all the Defects and deficiencies, except usual wear and tear in the Project or any Section thereof, till the expiry of a period of 2 (two) years commencing from the date of Provisional Certificate or expiry of a period of 18 (eighteen) months from the date of Completion Certificate, whichever is later (the “**Defects Liability Period**”).

15.1.2 Without prejudice to the provisions of Clause 15.1.1, the Defects Liability Period for and in respect of any Structure or Major Bridge having a construction cost exceeding Rs.50 crore (Rupees fifty crore) each, as estimated in accordance with the provisions of Schedule-G, shall be deemed to be extended by a further period of 3 (three) years after the expiry of the Defects Liability Period specified in Clause 17.1.1.

#### **15.2 Remedy and rectification of Defects and deficiencies**

Without prejudice to the provisions of Clause 15.2.2, the Contractor shall repair or rectify all Defects and deficiencies observed by the Authority’s Engineer during the Defects Liability Period within a period of 15 (fifteen) days from the date of notice issued by the Authority’s Engineer in this behalf, or within such reasonable period as may be determined by the Authority’s Engineer at the request of the Contractor, in accordance with Good Industry Practice.

#### **15.3 Cost of remedying Defects**

For the avoidance of doubt, any repair or rectification undertaken in accordance with the provisions of Clause 15.2, including any additional tests, shall be carried out by the Contractor at its own risk and cost, to the extent that such rectification or repair is attributable to:

- (a) the design of the Project;
- (b) Works, Plant, Materials or workmanship not being in accordance with this Agreement and the Specifications and Standards;

- (c) improper maintenance during construction of the Project by the Contractor; or
- (d) failure by the Contractor to comply with any other obligation under this Agreement.

#### **15.4 Contractor's failure to rectify Defects**

In the event that the Contractor fails to repair or rectify such Defect or deficiency within the period specified in Clause 15.2, the Authority shall be entitled to get the same repaired, rectified or remedied at the Contractor's cost so as to make the Project conform to the Specifications and Standards and the provisions of this Agreement. All costs consequent thereon shall, after due consultation with the Authority and the Contractor, be determined by the Authority's Engineer. The cost so determined, and an amount equal to 20% (twenty per cent) of such cost as Damages, shall be recoverable by the Authority from the Contractor and may be deducted by the Authority from any monies due to the Contractor.

#### **15.5 Contractor to search cause**

15.5.1 The Authority's Engineer may instruct the Contractor to examine the cause of any Defect in the Works or part thereof before the expiry of the Defects Liability Period.

15.5.2 In the event any Defect identified under Clause 15.5.1 is attributable to the Contractor, the Contractor shall rectify such Defect within the period specified by the Authority's Engineer, and shall bear the cost of the examination and rectification of such Defect.

15.5.3 In the event such Defect is not attributable to the Contractor, the Authority's Engineer shall, after due consultation with the Authority and the Contractor, determine the costs incurred by the Contractor on such examination and notify the same to the Contractor, with a copy to the Authority, and the Contractor shall be entitled to payment of such costs by the Authority.

#### **15.6 Extension of Defects Liability Period**

15.6.1 The Defects Liability Period shall be deemed to be extended till the identified Defects under Clause 15.2 have been remedied.

- 15.6.2 Any Materials or Works with Defects identified under Clause 15.2 and replaced or repaired during the Defects Liability Period or the extended Defects Liability Period, as the case may be, would be further warranted for a period of twelve (12) months from the date of completion of such repair or replacement.
- 15.6.3 The Contractor shall upon termination or expiry of this Agreement, or upon expiry of the Defects Liability Period, assign any outstanding benefit in respect of any subcontract or any warranty from any subcontractor, to the Authority or to such other person as the Authority may direct.



ARTICLE 16

**AUTHORITY'S ENGINEER**

**16.1 Appointment of the Authority's Engineer**

16.1.1 The Authority shall appoint a consulting engineering firm substantially in accordance with the selection criteria set forth in Schedule-L, to be the engineer under this Agreement (the "**Authority's Engineer**").

16.1.2 The appointment of the Authority's Engineer shall be made no later than 15 (fifteen) days from the date of this Agreement. The Authority shall notify the appointment or replacement of the Authority's Engineer to the Contractor forthwith.

16.1.3 The staff of the Authority's Engineer shall include suitably qualified engineers and other professionals who are competent to assist the Authority's Engineer to carry out its duties.

**16.2 Duties and functions of the Authority's Engineer**

16.2.1 The Authority's Engineer shall perform its duties and discharge its functions in accordance with the provisions of this Agreement, and substantially in accordance with the terms of reference ("**Terms of Reference**" or "**TOR**") set forth in Annex 1 of Schedule L, but subject to obtaining prior written approval of the Authority before determining:

- (a) any Time Extension;
- (b) any additional cost to be paid by the Authority to the Contractor;
- (c) the Termination Payment; or
- (d) any other matter which is not specified in (a), (b) or (c) above and which creates an obligation or liability on either Party for a sum exceeding Rs. 5,000,000 (Rs. fifty lakh).

16.2.2 No decision or communication of the Authority's Engineer shall be effective or valid unless it is accompanied by an attested true copy of the approval of the Authority for and in respect of any matter specified in Clause 16.2.1.

16.2.3 The Authority's Engineer shall submit regular periodic reports, at least once every month, to the Authority in respect of its duties and functions under this

Agreement. Such reports shall be submitted by the Authority's Engineer within 10 (ten) days of the beginning of every month. For the avoidance of doubt, the Authority's Engineer shall include in its report compliance of the recommendations of the Safety Consultant.

16.2.4 A true copy of all communications sent by the Authority to the Authority's Engineer and by the Authority's Engineer to the Authority shall be sent forthwith by the Authority's Engineer to the Contractor.

16.2.5 A true copy of all communications sent by the Authority's Engineer to the Contractor and by the Contractor to the Authority's Engineer shall be sent forthwith by the Authority's Engineer to the Authority.

### **16.3 Authorised signatories**

The Authority shall require the Authority's Engineer to designate and notify to the Authority and the Contractor up to 2 (two) persons employed in its firm to sign for and on behalf of the Authority's Engineer, and any communication or document required to be signed by the Authority's Engineer shall be valid and effective only if signed by any of the designated persons; provided that the Authority's Engineer may, by notice in writing, substitute any of the designated persons by any of its employees.

### **16.4 Instructions of the Authority's Engineer**

16.4.1 The Authority's Engineer may issue to the Contractor instructions for remedying any Defect. The Contractor shall take such instructions from the Authority's Engineer only.

16.4.2 The instructions issued by the Authority's Engineer shall be in writing. However, if the Authority's Engineer issues any oral instructions to the Contractor, it shall confirm in writing the oral instructions within 2 (two) working days of issuing such oral instructions.

16.4.3 In case the Contractor does not receive the confirmation of the oral instructions within the time specified in Clause 16.4.2, the Contractor shall seek the written confirmation of the oral instructions from the Authority's Engineer and shall obtain acknowledgement from the Authority's Engineer of the communication seeking written confirmation. In case of failure of the Authority's Engineer to reply to the Contractor within 2 (two) days of the receipt of the communication from the Contractor, the Contractor may not carry out the instruction.

## **16.5 Determination by the Authority's Engineer**

16.5.1 The Authority's Engineer shall consult with each Party in an endeavour to reach agreement wherever this Agreement provides for the determination of any matter by the Authority's Engineer. If such agreement is not achieved, the Authority's Engineer shall make a fair determination in accordance with this Agreement having due regard to all relevant circumstances. The Authority's Engineer shall give notice to both the Parties of each such agreement or determination, with supporting particulars.

16.5.2 Each Party shall give effect to each agreement or determination made by the Authority's Engineer in accordance with the provisions of this Agreement. Provided, however, that if any Party disputes any instruction, decision, direction or determination of the Authority's Engineer, the Dispute shall be resolved in accordance with the Dispute Resolution Procedure.

## **16.6 Remuneration of the Authority's Engineer**

The remuneration, cost and expenses of the Authority's Engineer shall be paid by the Authority.

## **16.7 Termination of appointment of the Authority's Engineer**

16.7.1 The Authority may, in its discretion, replace the Authority's Engineer at any time, but only upon appointment of another Authority's Engineer in accordance with Clause 16.1.

16.7.2 If the Contractor has reasons to believe that the Authority's Engineer is not discharging its duties and functions in accordance with the provisions of this Agreement, it may make a written representation to the Authority and seek termination of the appointment of the Authority's Engineer. Upon receipt of such representation, the Authority shall hold a tripartite meeting with the Contractor and Authority's Engineer and make best efforts for an amicable resolution of the Dispute. In the event that the appointment of the Authority's Engineer is terminated hereunder, the Authority shall appoint forthwith another Authority's Engineer in accordance with Clause 16.1.

## **16.8 Interim Arrangement**

In the event that the Authority has not appointed an Authority's Engineer, or the Authority's Engineer so appointed has relinquished its functions or defaulted in

discharge thereof, the Authority may, in the interim, designate and authorise any person to discharge the functions of the Authority's Engineer in accordance with the provisions of this Agreement, save and except that such person shall not exercise any functions relating to review, comment, approval or inspection as specified in this Agreement for and in respect of the Authority's Engineer, and such functions shall be discharged as and when an Authority's Engineer is appointed in accordance with the provisions of this Agreement. Provided, however, that nothing contained in this Clause 16.8 shall in any manner restrict the rights of the Authority to enforce compliance of the provisions of this Agreement.



Part IV

**Financial Covenants**



## ARTICLE 17

### PAYMENTS

#### 17.1 Contract Price

17.1.1 The Authority shall make payments to the Contractor for the Works on the basis of the lump sum price accepted by the Authority in consideration of the obligations specified in this Agreement for an amount of Rs. \*\*\*\*\* (Rs. \*\*\*\*\*) (the “**Contract Price**”), which shall be subject to adjustments in accordance with the provisions of this Agreement. The Parties further agree that save and except as provided in this Agreement, the Contract Price shall be valid and effective until issue of Completion Certificate.

17.1.2 The Contract Price includes all duties, taxes, royalty, and fees that may be levied in accordance with the laws and regulations in force as on the Base Date on the Contractor’s equipment, Plant, Materials and supplies acquired for the purpose of this Agreement and on the Works undertaken under this Agreement. Nothing in this Agreement shall relieve the Contractor from its responsibility to pay any tax including any tax that may be levied in India on profits made by it in respect of this Agreement.

17.1.3 The Contract Price shall not be adjusted for any change in duties, taxes etc. specified in Clause 17.1.2 above, save and except as specified in Clauses 17.8 and 17.13.

17.1.4 The Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs, unless otherwise provided for in this Agreement.

17.1.5 Unless otherwise specified in this Agreement, the Contract Price covers all the Contractor’s obligations for the Works under this Agreement and all things necessary for the Construction thereof and for the rectification of any Defects in the Project.

17.1.6 All payments under this Agreement shall be made in Indian Rupees.

#### 17.2 Advance Payment

17.2.1 The Authority shall make an advance payment (the “**Advance Payment**”), equal to 10% (ten per cent)<sup>7</sup> of the Contract Price, for mobilisation expenses and

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<sup>7</sup> For large value and complex projects, the Advance Payment may be increased from 10% (ten per cent) to up to 15% (fifteen per cent) of the Contract Price.



for acquisition of equipment. The Advance Payment shall carry simple interest at the rate of 8% (eight per cent) per annum and shall be made in two equal instalments.

17.2.2 The Contractor may apply to the Authority for the 1<sup>st</sup> (first) instalment of the Advance Payment at any time after the Appointed Date, along with an irrevocable and unconditional guarantee from a Bank for an amount equivalent to 110% (one hundred and ten per cent) of such instalment, substantially in the form provided at Annex-III of Schedule-F, to remain effective till the complete and full repayment of such instalment and any interest thereon.

17.2.3 At any time, after 60 (sixty) days from the Appointed Date, the Contractor may apply to the Authority for the 2<sup>nd</sup> (second) instalment of the Advance Payment along with an irrevocable and unconditional guarantee from a Bank for an amount equivalent to 110% (one hundred and ten per cent) of such instalment, substantially in the form provided at Annex-III of Schedule-F, to remain effective till the complete and full repayment of such instalment and any interest thereon.

17.2.4 The instalments of Advance Payment shall be paid by the Authority to the Contractor within 15 (fifteen) days of the receipt of its respective requests in accordance with the provisions of this Clause 17.2.

17.2.5 The Advance Payment shall be recovered through proportionate deductions to be made in the Interim Payments Certificates issued in accordance with the provisions of Clause 17.5.2. Deductions of Advance Payment shall commence from the Interim Payment Certificate in which the cumulative interim payments certified shall have reached 50% (fifty per cent) of the Contract Price. The total amount recovered in each Interim Payment Certificate shall not exceed 30% (thirty per cent) of the amount due and payable under such Interim Payment Certificate, which shall include interest on the amount being recovered hereunder. For the avoidance of doubt, the Parties agree that in the event the total payment specified in any Interim Payment Certificate exceeds the limit of 50% (fifty per cent) of the Contract Price, the proportion of recovery hereunder shall be restricted to the amount exceeding 50% (fifty per cent) of the Contract Price. By way of illustration, the Parties agree that if the first recovery of say, Rupees

'x' is made after 20 (twenty) months from the date of 1<sup>st</sup> (first) instalment of the Advance Payment, interest on Rupees 'x' shall be due and payable for a period of 20 (twenty) months; and when the next recovery is made in the following month for say, Rupees 'y', interest on Rupees 'y' shall be due and payable for

a period of 21 (twenty one) months. The Parties further agree that no payments in excess of 90% (ninety per cent) of the Contract Price shall be released to the Contractor until the Advance Payment, including interest thereon, has been fully recovered.

17.2.6 If the Advance Payment has not been fully repaid prior to Termination under Clause 19.7 or Article 21, as the case may be, the whole of the balance then outstanding shall immediately become due and payable by the Contractor to the Authority. In the event of Termination for Contractor Default, the Advance Payment shall be deemed to carry interest at an annual rate of 3% (three per cent) above the Bank Rate from the date of Advance Payment to the date of recovery thereof. For the avoidance of doubt, the aforesaid interest shall be payable on each instalment of the Advance Payment, regardless of whether the instalment or any part thereof has been repaid to the Authority prior to Termination.

### **17.3 Procedure for estimating the payment for the Works**

17.3.1 The Authority shall make interim payments to the Contractor, as certified by the Authority's Engineer on completion of a stage, for a length, number or area as specified, and valued in accordance with the proportion of the Contract Price assigned to each item and its stage and payment procedure in Schedule-G.

17.3.2 The Contractor shall make its claim for interim payment for the stages completed till the end of the month for which the payment is claimed, valued in accordance with Clause 17.3.1, and supported with necessary particulars and documents in accordance with this Agreement.

17.3.3 Any reduction in the Contract Price arising out of Change of Scope or the Works withdrawn under Clause 8.3, as the case may be, shall not affect the amounts payable for the items or stage payments thereof which are not affected by such Change of Scope or withdrawal. For the avoidance of doubt and by way of illustration, the Parties agree that if the amount assigned to Major Bridges is reduced from Rs. 100 crore to Rs. 80 crore owing to Change of Scope or withdrawal of Works, as the case may be, the reduction in payment shall be restricted to the relevant payments for Major Bridges and the payment due in respect of all other stage payments under the item Major Bridges shall not be affected in any manner. The Parties further agree that the adjustments arising out of the aforesaid modifications shall be carried out in a manner that the

impact of such modifications is restricted to the said Change of Scope or withdrawal, as the case may be, and does not alter the payments due for and in respect of items or stage payments which do not form part of such Change of Scope or withdrawal.

#### **17.4 Stage Payment Statement for Works**

The Contractor shall submit a statement (the “**Stage Payment Statement**”), in 3 copies, by the 7<sup>th</sup> (seventh) day of a month to the Authority’s Engineer in the form set forth in Schedule-M, showing the amount calculated in accordance with Clause 17.3 to which the Contractor considers itself entitled for the completed stage(s) of Works. The Stage Payment Statement shall be accompanied with the progress reports and any other supporting documents. The Contractor shall not submit any claim for payment of incomplete stages of work. In the event that there is no claim for a month in accordance with the provisions of this Clause 17.4, the Contractor shall submit a ‘Nil’ claim to the Authority’s Engineer.

#### **17.5 Stage Payment for Works**

17.5.1 Within 10 (ten) days of receipt of the Stage Payment Statement from the Contractor pursuant to Clause 17.4, the Authority’s Engineer shall broadly determine the amount due to the Contractor and recommend the release of 90% (ninety per cent) of the amount so determined as part payment against the Stage Payment Statement, pending issue of the Interim Payment Certificate by the Authority’s Engineer. Within 10 (ten) days of the receipt of recommendation of the Authority’s Engineer, the Authority shall make an electronic payment thereof directly to the Contractor’s bank account.

17.5.2 Within 15 (fifteen) days of the receipt of the Stage Payment Statement referred to in Clause 17.4, the Authority’s Engineer shall determine and shall deliver to the Authority and the Contractor an IPC certifying the amount due and payable to the Contractor, after adjusting the payments already released to the Contractor against the said statement. For the avoidance of doubt, the Parties agree that the IPC shall specify all the amounts that have been deducted from the Stage Payment Statement and the reasons therefor.

17.5.3 In cases where there is a difference of opinion as to the value of any stage, the opinion of the Authority’s Engineer shall prevail and interim payments shall be

made to the Contractor on that basis; provided that the foregoing shall be without prejudice to the Contractor's right to raise a Dispute.

17.5.4 The Authority's Engineer may, for reasons to be recorded, withhold from payment:

- (a) the estimated value of work or obligation that the Contractor has failed to perform in accordance with this Agreement and in respect of which the Authority's Engineer had notified the Contractor; and
- (b) the estimated cost of rectification of any Works which have not been constructed in accordance with this Agreement.

17.5.5 Payment by the Authority hereunder shall be deemed to be provisional and shall not be construed as the Authority's acceptance, approval, consent or satisfaction with the work done.

17.5.6 In the event the amounts released by the Authority under Clause 17.5.1 exceed the amount finally determined by the Authority's Engineer pursuant to Clauses 17.5.2 to 17.5.4, the difference thereof shall be accounted for in the next IPC.

## **17.6 Payment of Damages**

17.6.1 The Contractor may claim Damages due and payable to it in accordance with the provisions of this Agreement.

17.6.2 The Authority's Engineer shall issue the IPC within 15 (fifteen) days of the receipt of the claim under Clause 17.6.1, after making adjustments in accordance with the provisions of this Agreement. The Authority shall pay to the Contractor the amount due under such IPC within a period of 30 (thirty) days from the date of the submission of the claim under this Clause 17.6.

## **17.7 Time of payment and interest**

17.7.1 The Authority shall pay to the Contractor any amount due under any payment certificate issued by the Authority's Engineer in accordance with the provisions of this Agreement as follows:

- (a) Payment shall be made no later than 30 (thirty) days from the date of submission of the Stage Payment Statement by the Contractor to the Authority's Engineer for certification in accordance with the provisions of

Clause 17.4 for an IPC; provided, however, that in the event the IPC is not issued by the Authority's Engineer within the aforesaid period of 30 (thirty) days, the Authority shall pay the amount shown in the Contractor's Stage Payment Statement and any discrepancy therein shall be adjusted in the next payment certificate; and

- (b) payment shall be made no later than 30 (thirty) days from the date of submission of the Final Payment Certificate for Works along with the discharge submitted to the Authority's Engineer for certification in accordance with the provisions of Clause 17.12.

17.7.2 In the event of failure of the Authority to make payment to the Contractor within the time period specified in this Clause 17.7, the Authority shall be liable to pay to the Contractor interest at rate equal to the Bank Rate plus 3% (three per cent), calculated at quarterly rests, on all sums remaining unpaid from the date by which the same should have been paid and till the date of actual payment.

## **17.8 Price adjustment for Works**

17.8.1 The amounts payable to the Contractor for Works shall be adjusted in accordance with the provisions of this Clause 17.8.

17.8.2 Subject to the provisions of Clause 17.8.3, the amounts payable to the Contractor for and in respect of Works shall be adjusted for any increase or decrease in the index cost of inputs, by the addition or subtraction of the amounts determined in accordance with the formulae specified in Clause 17.8.4.

17.8.3 To the extent that any compensation or reimbursement for increase or decrease in costs is not covered by the provisions of this Agreement, the costs and prices payable under this Agreement shall be deemed to include the contingency of such increase or decrease in costs.

17.8.4 The Contract Price shall be adjusted for increase or decrease in rates and prices of labour, cement, steel, Plant, machinery and spares, bitumen, fuel and lubricants, and other Materials or inputs in accordance with the principles, procedures and formulae specified below<sup>8</sup>:

<sup>8</sup> This Clause is a template for 2-lane highway project and may be substituted by project-specific provisions relevant to the Project.

- (a) Price adjustment shall be applied on completion of the specified stage of the respective item of work in accordance with Schedule-G;
- (b) Adjustment for each item of work/stage shall be made separately.
- (c) The following expressions and meanings are assigned to the value of the work done:

RW= Value of work done for the completion of a stage under the following items of Schedule-G:

- (i) Road works; and
- (ii) Other works

BR = Value of work done for the completion of a stage under the items Major Bridges and Structures in accordance with Schedule-G.

- (d) Price adjustment for change in costs shall be paid in accordance with the following formulae:
  - (i)  $VRW = 0.85 RW \times [PL \times (LI - LO)/LO + PA \times (AI - AO)/AO + PF \times (FI - FO)/FO + PB \times (BI - BO)/BO + PM \times (MI - MO)/MO + PC \times (CI - CO)/CO + PS \times (SI - SO)/SO]$ ; and
  - (ii)  $VBR = 0.85 BR \times [PL \times (LI - LO)/LO + PA \times (AI - AO)/AO + PF \times (FI - FO)/FO + PM \times (MI - MO)/MO + PC \times (CI - CO)/CO + PS \times (SI - SO)/SO]$ ;

Where

VRW = Increase or decrease in the cost of road works and other works during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (e);

VBR = Increase or decrease in the cost of Major Bridges and Structures during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (e);

PB, PC, PL, PM, and PS are the percentages of bitumen, cement, labour, other materials, and steel/components (including strands and cables) respectively for the relevant item as specified in sub-paragraph (e);

PA is the percentage of Plant, machinery and spares component for the relevant item as specified in sub-paragraph (e);

PF is the percentage of fuel and lubricants for the relevant items as specified in sub-paragraph (e);

AO = The wholesale price index as published by the Ministry of Commerce & Industry, Government of India (hereinafter called “**WPI**”) for construction machinery for the month of the Base Date;

AI = The WPI for construction machinery for the month which is three months prior to the month to which the IPC relates;

BO = The official retail price of bitumen at the nearest refinery at [Panipat] on the Base Date;

BI = The official retail price of bitumen at nearest refinery at [Panipat], on the first day of the month which is three months prior to the month to which the IPC relates;

CO = The WPI for cement for the month of the Base Date;

CI = The WPI for cement for the month which is three months prior to the month to which the IPC relates;

FO = The official retail price of high speed diesel (HSD) oil at the existing consumer pumps of Indian Oil Corporation (“**IOC**”) in the State of [Haryana] on the Base Date;

FI = The official retail price of HSD at the existing consumer pumps of IOC in the State of [Haryana] on the first day of the month which is three months prior to the month to which the IPC relates;

LO = The consumer price index for industrial workers for the [circle \*\*\*\* in the State of Haryana], published by Labour Bureau, Ministry of Labour, Government of India, (hereinafter called “**CPI**”) for the month of the Base Date;

LI = The CPI for the month which is three months prior to the month to which the IPC relates;

MO = The WPI for all commodities for the month of the Base Date;

MI = The WPI for all commodities for the month which is three months prior to the month to which the IPC relates;

SO = The WPI for steel (rods) for the month of the Base Date; and

SI = The WPI for steel (rods) for the month which is three months prior to the month to which the IPC relates.

- (e) The following percentages shall govern the price adjustment of the Contract Price:

| Component                        | Item                                      |                 |                          |  |                              |
|----------------------------------|---|-----------------|--------------------------|--|------------------------------|
|                                  | Road Works                                |                 |                          |  | Major Bridges and Structures |
|                                  | Earthwork, Granular work, and Other works | Bituminous work | Cement Concrete Pavement | Culverts, minor bridges and other structures |                              |
| Labour (PL)                      | [20%]                                     | [20%]           | [20%]                    | [15%]  | [15%]                        |
| Cement (PC)                      | [5%]                                      | Nil             | [20%]                    | [15%]  | [15%]                        |
| Steel (PS)                       | Nil                                       | Nil             | Nil                      | [15%]  | [20%]                        |
| Bitumen (PB)                     | Nil                                       | [15%]           | Nil                      | Nil  | Nil                          |
| Fuel and lubricants (PF)         | [10%]                                     | [10%]           | [10%]                    | [10%]  | [10%]                        |
| Other Materials (PM)             | [50%]                                     | [40%]           | [35%]                    | [30%]  | [25%]                        |
| Plant, machinery and spares (PA) | [15%]                                     | [15%]           | [15%]                    | [15%]  | [15%]                        |
| Total                            | 100%                                      | 100%            | 100%                     | 100%   | 100%                         |

- (f) In case an IPC relates to a month which is within 3 (three) months from the Base Date, no price adjustment shall be applicable.

### 17.9 Restrictions on price adjustment

Price adjustment shall be due and payable only in respect of the stages of Works for which the Stage Payment Statement has been submitted by the Contractor no later than 30 (thirty) days from the date of the applicable Project Milestone or the Scheduled Completion Date, as the case may be, including any Time Extension granted therefor in accordance with the provisions of this Agreement. For the avoidance of doubt, in the event of submission of any Stage Payment Statement after the period specified herein, price adjustment shall be applicable only until the date of the respective Project Milestone or the Scheduled Completion Date, as the case may be.



## 17.10 Final Payment Statement

17.10.1 Within 60 (sixty) days of receiving the Completion Certificate under Clause 12.4, the Contractor shall submit to the Authority's Engineer six copies of a final payment statement (the "**Final Payment Statement**"), with supporting documents, in the form prescribed by the Authority's Engineer in respect of:

- (a) the summary of Contractor's Stage Payment Statements for Works as submitted in accordance with Clause 17.4;
- (b) the amounts received from the Authority against each claim; and
- (c) any further sums which the Contractor considers due to it from the Authority.

17.10.2 If the Authority's Engineer disagrees with or cannot verify any part of the Final Payment Statement, the Contractor shall submit such further information as the Authority's Engineer may reasonably require.

17.10.3 The Authority's Engineer shall deliver to the Authority:

- (i) an IPC for those parts of the Final Payment Statement which are not in dispute, along with a list of disputed items which shall then be settled in accordance with the provisions of Article 24; or
- (ii) a Final Payment Certificate in accordance with Clause 17.15, if there are no disputed items.

17.10.4 The Authority's Engineer does not prescribe the form referred to in Clause 17.10.1 within 15 (fifteen) days of the date of issue of the Completion Certificate, the Contractor shall submit the statement in such form as it deems fit.

## 17.11 Discharge

Upon submission of the Final Payment Statement under Clause 17.10, the Contractor shall give to the Authority, with a copy to the Authority's Engineer, a written discharge confirming that the total of the Final Payment Statement represents full and final settlement of all monies due to the Contractor in respect of this Agreement for all the Works arising out of this Agreement, except for any monies due to either Party on account of any Defect. Provided that such discharge shall become effective only after the payment due has been made in accordance with the Final Payment Certificate issued pursuant to Clause 17.12.

## 17.12 Final Payment Certificate

17.12.1 Within 30 (thirty) days after receipt of the Final Payment Statement under Clause 17.10, and the written discharge under Clause 17.11, and there being no disputed items of claim, the Authority's Engineer shall deliver to the Authority, with a copy to the Contractor, a final payment certificate (the "**Final Payment Certificate**") stating the amount which, in the opinion of the Authority's Engineer, is finally due under this Agreement or otherwise. For the avoidance of doubt, before issuing the Final Payment Certificate, the Authority's Engineer shall ascertain from the Authority all amounts previously paid by the Authority, all sums due to the Authority, and the balance, if any, due from the Authority to the Contractor or from the Contractor to the Authority, as the case may be.

17.12.2 The Authority shall, in accordance with the provisions of Clause 17.7, pay to the Contractor the amount which is specified as being finally due in the Final Payment Certificate.

## 17.13 Change in law

17.13.1 If as a result of Change in Law, the Contractor suffers any additional costs in the execution of the Works or in relation to the performance of its other obligations under this Agreement, the Contractor shall, within 15 (fifteen) days from the date it becomes reasonably aware of such addition in costs, notify the Authority with a copy to the Authority's Engineer of such additional costs due to Change in Law.

17.13.2 If as a result of Change in Law, the Contractor benefits from any reduction in costs for the execution of this Agreement or in accordance with the provisions of this Agreement, either Party shall, within 15 (fifteen) days from the date it becomes reasonably aware of such reduction in costs, notify the other Party with a copy to the Authority's Engineer of such reduction in costs due to Change in Law.

17.13.3 The Authority's Engineer shall, within 15 (fifteen) days from the date of receipt of notice from the Contractor or the Authority, as the case may be, determine any addition or reduction to the Contract Price, as the case may be, due to the Change in Law.

#### **17.14 Correction of Interim Payment Certificates**

The Authority's Engineer may by an Interim Payment Certificate make any correction or modification in any previous Interim Payment Certificate issued by the Authority's Engineer.

#### **17.15 Authority's claims**

If the Authority considers itself to be entitled to any payment from the Contractor under any Clause of this Agreement, it shall give notice and particulars to the Contractor 20 (twenty) days before making the recovery from any amount due to the Contractor, and shall take into consideration the representation, if any, made by the Contractor in this behalf, before making such recovery.

#### **17.16 Bonus for early completion**

In the event that the Project Completion Date occurs prior to the Scheduled Completion Date, the Contractor shall be entitled to receive a payment of bonus equivalent to 0.03% (zero point zero three per cent) of the Contract Price for each day by which the Project Completion Date precedes the Scheduled Completion Date, but subject to a maximum of 3% (three per cent) of the Contract Price. Provided, however, that the payment of bonus, if any, shall be made only after the issue of the Completion Certificate. For the avoidance of doubt, the Parties agree that for the purpose of determining the bonus payable hereunder, the Contract Price shall always be deemed to be the amount specified in Clause 17.1.1, and shall exclude any revision thereof for any reason.

## ARTICLE 18

### INSURANCE

#### 18.1 Insurance for Works

18.1.1 The Contractor shall effect and maintain at its own cost the insurances specified in Schedule-N and as per the requirements under Applicable Laws.

18.1.2 Subject to the provisions of Clause 19.6, the Contractor shall, in accordance with the provisions of this Agreement, be liable to bear the cost of any loss or damage that does not fall within the scope of this Article 18 or cannot be recovered from the insurers.

18.1.3 Save and except as provided in Clause 18.1.4, the Contractor shall fully indemnify, hold harmless and defend the Authority from and against any and all losses, damages, costs, charges and/or claims with respect to:

- (a) the death of or injury to any person; or
- (b) the loss of or damage to any property,

that may arise out of or in consequence of any breach by the Contractor of this Agreement during the execution of the Works or the remedying of any Defects therein.

18.1.4 Notwithstanding anything in Clause 18.1.3, the Authority shall fully indemnify the Contractor from and against any and all losses, damages, costs, charges, proceedings and/or claims arising out of or with respect to

- (a) the use or occupation of land or any part thereof by the Authority;
- (b) the damage to property which is the unavoidable result of the execution and completion of the Works, or the remedying of any Defects therein, in accordance with this Agreement; and
- (c) the death of or injury to persons or loss of or damage to property resulting from any act or neglect of the Authority, its agents, servants or other contractors, not being employed by the Contractor.

Provided, however, that in the event of any injury or damage as a result of the contributory negligence of the Contractor, the Authority shall be liable to indemnify the Contractor from and against any and all losses, damages, costs,

charges, proceedings and/or claims to the extent as proportionate to the liability of the Authority, its servants or agents or other contractors not associated with the Contractor in such injury or damage.

18.1.5 Without prejudice to the provisions of Clauses 18.1.3 and 18.1.4, the Contractor shall maintain or effect such third party insurances as may be required under Applicable Laws.

18.1.6 The Contractor shall provide to the Authority, within 30 days of the Appointed Date, evidence of professional liability insurance maintained by its Design Director and/or consultants to cover the risk of professional negligence in the design of Works. The professional liability cover shall be for a sum of not less than [3% (three per cent)] of the Contract Price and shall be maintained until the end of the Defects Liability Period.

## **18.2 Notice to the Authority**

No later than 15 (fifteen) days after the date of this Agreement, the Contractor shall by notice furnish to the Authority, in reasonable detail, information in respect of the insurances that it proposes to effect and maintain in accordance with this Article 18. Within 15 (fifteen) days of receipt of such notice, the Authority may require the Contractor to effect and maintain such other insurances as may be necessary pursuant hereto, and in the event of any difference or disagreement relating to any such insurance, the Dispute Resolution Procedure shall apply.

## **18.3 Evidence of Insurance Cover**

18.3.1 All insurances obtained by the Contractor in accordance with this Article 18 shall be maintained with insurers on terms consistent with Good Industry Practice. Within 10 (ten) days from the Appointed Date, the Contractor shall furnish to the Authority notarised true copies of the certificate(s) of insurance, copies of insurance policies and premia payment receipts in respect of such insurance, and no such insurance shall be cancelled, modified, or allowed to expire or lapse until the expiration of at least 45 (forty-five) days after notice of such proposed cancellation, modification or non-renewal has been delivered by the Contractor to the Authority.

18.3.2 The Contractor shall procure and ensure the adequacy of the insurances at all times in accordance with the provisions of this Agreement.

**18.4 Remedy for failure to insure**

If the Contractor shall fail to effect and keep in force all insurances for which it is responsible pursuant hereto, the Authority shall have the option to either keep in force any such insurances, and pay such premia and recover the costs thereof from the Contractor, or in the event of computation of a Termination Payment, treat an amount equal to the Insurance Cover as deemed to have been received by the Contractor.

**18.5 Waiver of subrogation**

All insurance policies in respect of the insurance obtained by the Contractor pursuant to this Article 18 shall include a waiver of any and all rights of subrogation or recovery of the insurers thereunder against, inter alia, the Authority, and its assigns, successors, undertakings and their subsidiaries, Affiliates, employees, insurers and underwriters, and of any right of the insurers to any set-off or counterclaim or any other deduction, whether by attachment or otherwise, in respect of any liability of any such person insured under any such policy or in any way connected with any loss, liability or obligation covered by such policies of insurance.

**18.6 Contractor's waiver**

The Contractor hereby further releases, assigns and waives any and all rights of subrogation or recovery against, inter alia, the Authority and its assigns, undertakings and their subsidiaries, Affiliates, employees, successors, insurers and underwriters, which the Contractor may otherwise have or acquire in or from or in any way connected with any loss, liability or obligation covered by policies of insurance maintained or required to be maintained by the Contractor pursuant to this Agreement (other than third party liability insurance policies) or because of deductible clauses in or inadequacy of limits of any such policies of insurance.

**18.7 Cross liabilities**

Any such insurance maintained or effected in pursuance of this Article 18 shall include a cross liability clause such that the insurance shall apply to the Contractor and to the Authority as separately insured.

### **18.8 Accident or injury to workmen**

Notwithstanding anything contained in this Agreement, it is hereby expressly agreed between the Parties that the Authority shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or Sub-contractor, save and except as for death or injury resulting from any act, omission or default of the Authority, its agents or servants. The Contractor shall indemnify and keep indemnified the Authority from and against all such claims, proceedings, damages, costs, charges, and expenses whatsoever in respect of the above save and except for those acts, omissions or defaults for which the Authority shall be liable.

### **18.9 Insurance against accident to workmen**

The Contractor shall effect and maintain during the Agreement such insurances as may be required to insure the Contractor's personnel and any other persons employed by it on the Project from and against any liability incurred in pursuance of this Article 18 Provided that for the purposes of this Clause 18.9, the Contractor's personnel/any person employed by the Contractor shall include the Sub-contractor and its personnel. Provided further that in respect of any persons employed by any Sub-contractor, the Contractor's obligations to insure as aforesaid under this Clause 18.9 shall be discharged if the Sub-contractor shall have insured against any liability in respect of such persons in such manner that the Authority is indemnified under the policy. The Contractor shall require such Sub-contractor to produce before the Authority, when required, such policy of insurance and the receipt for payment of the current premium within 10 (ten) days of such demand being made by the Authority.

### **18.10 Application of insurance proceeds**

The proceeds from all insurance claims, except for life and injury, shall be applied for any necessary repair, reconstruction, reinstatement, replacement, improvement, delivery or installation of the Project and the provisions of this Agreement in respect of construction of Works shall apply *mutatis mutandis* to the Works undertaken out of the proceeds of insurance.

### **18.11 Compliance with policy conditions**

The Contractor hereby expressly agrees to fully indemnify the Authority from and against all losses and claims arising from the Contractor's failure to comply with conditions imposed by the insurance policies effected in accordance with this Agreement.





Part V

## **Force Majeure and Termination**



## ARTICLE 19

### FORCE MAJEURE

#### 19.1 Force Majeure

As used in this Agreement, the expression “**Force Majeure**” or “**Force Majeure Event**” shall mean occurrence in India of any or all of Non-Political Event, Indirect Political Event and Political Event, as defined in Clauses 19.2, 19.3 and 19.4 respectively, if it affects the performance by the Party claiming the benefit of Force Majeure (the “**Affected Party**”) of its obligations under this Agreement and which act or event (a) is beyond the reasonable control of the Affected Party, and (b) the Affected Party could not have prevented or overcome by exercise of due diligence and following Good Industry Practice, and (c) has Material Adverse Effect on the Affected Party.

#### 19.2 Non-Political Event

A Non-Political Event shall mean one or more of the following acts or events:

- (a) act of God, epidemic, extremely adverse weather conditions, lightning, earthquake, landslide, cyclone, flood, volcanic eruption, chemical or radioactive contamination or ionising radiation, fire or explosion (to the extent of contamination or radiation or fire or explosion originating from a source external to the Site);
- (b) strikes or boycotts (other than those involving the Contractor, Sub-contractors or their respective employees/representatives, or attributable to any act or omission of any of them) interrupting supplies and services to the Project for a continuous period of 24 (twenty-four) hours and an aggregate period exceeding 10 (ten) days in an Accounting Year, and not being an Indirect Political Event set forth in Clause 19.3;
- (c) any failure or delay of a Sub-contractor but only to the extent caused by another Non-Political Event;
- (d) any judgement or order of any court of competent jurisdiction or statutory authority made against the Contractor in any proceedings for reasons other than (i) failure of the Contractor to comply with any Applicable Law or Applicable Permit, or (ii) on account of breach of any Applicable Law or

- Applicable Permit or of any contract, or (iii) enforcement of this Agreement, or (iv) exercise of any of its rights under this Agreement by the Authority; or (v) breach of its obligations by the Contractor under its sub-contracts;
- (e) the discovery of geological conditions, toxic contamination or archaeological remains on the Site that could not reasonably have been expected to be discovered through a site inspection; or
  - (f) any event or circumstances of a nature analogous to any of the foregoing.

### **19.3 Indirect Political Event**

An Indirect Political Event shall mean one or more of the following acts or events:

- (a) an act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, riot, insurrection, terrorist or military action, civil commotion or politically motivated sabotage;
- (b) industry-wide or State-wide strikes or industrial action for a continuous period of 24 (twenty-four) hours and exceeding an aggregate period of 10 (ten) days in an Accounting Year;
- (c) any civil commotion, boycott or political agitation which prevents construction of the Project by the Contractor for an aggregate period exceeding 10 (ten) days in an Accounting Year;
- (d) failure of the Authority to permit the Contractor to continue with its Construction Works, with or without modifications, in the event of stoppage of such work after discovery of any geological or archaeological finds;
- (e) any failure or delay of a Sub-contractor to the extent caused by any Indirect Political Event;
- (f) any Indirect Political Event that causes a Non-Political Event; or
- (g) any event or circumstances of a nature analogous to any of the foregoing.

### **19.4 Political Event**

A Political Event shall mean one or more of the following acts or events by or on account of any Government Instrumentality:

- (a) Change in Law, only if consequences thereof cannot be dealt with under and in accordance with the provisions of Clause 17.13;
- (b) compulsory acquisition in national interest or expropriation of any Project Assets or rights of the Contractor or of the Sub-contractors;
- (c) unlawful or unauthorised or without jurisdiction revocation of, or refusal to renew or grant without valid cause, any clearance, licence, permit, authorisation, no objection certificate, consent, approval or exemption required by the Contractor or any of the Sub-contractors to perform their respective obligations under this Agreement; provided that such delay, modification, denial, refusal or revocation did not result from the Contractor's or any Sub-contractor's inability or failure to comply with any condition relating to grant, maintenance or renewal of such clearance, licence, authorisation, no objection certificate, exemption, consent, approval or permit;
- (d) any failure or delay of a Sub-contractor but only to the extent caused by another Political Event; or
- (e) any event or circumstances of a nature analogous to any of the foregoing.

## **19.5 Duty to report Force Majeure Event**

19.5.1 Upon occurrence of a Force Majeure Event, the Affected Party shall by notice report such occurrence to the other Party forthwith. Any notice pursuant hereto shall include full particulars of:

- (a) the nature and extent of each Force Majeure Event which is the subject of any claim for relief under this Article 19 with evidence in support thereof;
- (b) the estimated duration and the effect or probable effect which such Force Majeure Event is having or will have on the Affected Party's performance of its obligations under this Agreement;
- (c) the measures which the Affected Party is taking or proposes to take for alleviating the impact of such Force Majeure Event; and
- (d) any other information relevant to the Affected Party's claim.

19.5.2 The Affected Party shall not be entitled to any relief for or in respect of a Force Majeure Event unless it shall have notified the other Party of the occurrence of

the Force Majeure Event as soon as reasonably practicable, and in any event no later than 10 (ten) days after the Affected Party knew, or ought reasonably to have known, of its occurrence, and shall have given particulars of the probable material effect that the Force Majeure Event is likely to have on the performance of its obligations under this Agreement.

19.5.3 For so long as the Affected Party continues to claim to be affected by such Force Majeure Event, it shall provide the other Party with regular (and not less than weekly) reports containing information as required by Clause 19.5.1, and such other information as the other Party may reasonably request the Affected Party to provide.

## 19.6 Effect of Force Majeure Event on the Agreement

### 19.6.1 Upon the occurrence of any Force Majeure

- (a) prior to the Appointed Date, both Parties shall bear their respective Force Majeure costs.
- (b) after the Appointed Date, the costs incurred and attributable to such event and directly relating to this Agreement (the “**Force Majeure costs**”) shall be allocated and paid as follows:
  - (i) upon occurrence of a Non-Political Event, the Parties shall bear their respective Force Majeure costs and neither Party shall be required to pay to the other Party any costs thereof;
  - (ii) upon occurrence of an Indirect Political Event, all Force Majeure costs attributable to such Indirect Political Event, and not exceeding the Insurance Cover for such Indirect Political Event, shall be borne by the Contractor, and to the extent Force Majeure costs exceed such Insurance Cover, one half of such excess amount shall be reimbursed by the Authority to the Contractor for the Force Majeure events; and
  - (iii) upon occurrence of a Political Event, all Force Majeure costs attributable to such Political Event shall be reimbursed by the Authority to the Contractor.

For the avoidance of doubt, Force Majeure costs may include costs directly attributable to the Force Majeure Event, but shall not include debt repayment obligations, if any, of the Contractor.

19.6.2 Save and except as expressly provided in this Article 19, neither Party shall be liable in any manner whatsoever to the other Party in respect of any loss, damage, cost, expense, claims, demands and proceedings relating to or arising out of occurrence or existence of any Force Majeure Event or exercise of any right pursuant hereto.

19.6.3 Upon the occurrence of any Force Majeure Event during the Construction Period, the Project Completion Schedule for and in respect of the affected Works shall be extended on a day for day basis for such period as performance of the Contractor's obligations is affected on account of the Force Majeure Event or its subsisting effects, as may be determined by the Authority's Engineer.

19.6.4 Force Majeure costs for any event which results in any offsetting compensation being payable to the Contractor by or on behalf of its Sub-contractors shall be reduced by such amounts that are payable to the Contractor by its Sub-contractors.

### **19.7 Termination Notice for Force Majeure Event**

If a Force Majeure Event subsists for a period of 60 (sixty) days or more within a continuous period of 120 (one hundred and twenty) days, either Party may in its discretion terminate this Agreement by issuing a Termination Notice to the other Party without being liable in any manner whatsoever, save as provided in this Article 19, and upon issue of such Termination Notice, this Agreement shall, notwithstanding anything to the contrary contained herein, stand terminated forthwith; provided that before issuing such Termination Notice, the Party intending to issue the Termination Notice shall inform the other Party of such intention and grant 15 (fifteen) days time to make a representation, and may after the expiry of such 15 (fifteen) days period, whether or not it is in receipt of such representation, in its sole discretion issue the Termination Notice.

### **19.8 Termination Payment for Force Majeure Event**

19.8.1 In the event of this Agreement being terminated on account of a Non-Political Event, the Termination Payment shall be an amount equal to the sum payable under Clause 21.5.

19.8.2 If Termination is on account of an Indirect Political Event, the Termination Payment shall include:



- (a) any sums due and payable under Clause 21.5; and
- (b) the reasonable cost, as determined by the Authority's Engineer, of the Plant and Materials procured by the Contractor and transferred to the Authority for use in Construction, only if such Plant and Materials are in conformity with the Specifications and Standards;

19.8.3 If Termination is on account of a Political Event, the Authority shall make a Termination Payment to the Contractor in an amount that would be payable under Clause 21.6.2 as if it were an Authority Default.

### **19.9 Dispute resolution**

In the event that the Parties are unable to agree in good faith about the occurrence or existence of a Force Majeure Event, such Dispute shall be finally settled in accordance with the Dispute Resolution Procedure; provided that the burden of proof as to the occurrence or existence of such Force Majeure Event shall be upon the Party claiming relief and/or excuse on account of such Force Majeure Event.

### **19.10 Excuse from performance of obligations**

If the Affected Party is rendered wholly or partially unable to perform its obligations under this Agreement because of a Force Majeure Event, it shall be excused from performance of such of its obligations to the extent it is unable to perform on account of such Force Majeure Event; provided that:

- (a) the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event;
- (b) the Affected Party shall make all reasonable efforts to mitigate or limit damage to the other Party arising out of or as a result of the existence or occurrence of such Force Majeure Event and to cure the same with due diligence; and
- (c) when the Affected Party is able to resume performance of its obligations under this Agreement, it shall give to the other Party notice to that effect and shall promptly resume performance of its obligations hereunder.

## ARTICLE 20

### **SUSPENSION OF CONTRACTOR'S RIGHTS**

#### **20.1 Suspension upon Contractor Default**

Upon occurrence of a Contractor Default, the Authority shall be entitled, without prejudice to its other rights and remedies under this Agreement including its rights of Termination hereunder, to (a) suspend carrying out of the Works or any part thereof, and (b) carry out such Works itself or authorise any other person to exercise or perform the same on its behalf during such suspension (the "**Suspension**"). Suspension hereunder shall be effective forthwith upon issue of notice by the Authority to the Contractor and may extend up to a period not exceeding 90 (ninety) days from the date of issue of such notice.

#### **20.2 Authority to act on behalf of Contractor**

During the period of Suspension hereunder, all rights and liabilities vested in the Contractor in accordance with the provisions of this Agreement shall continue to vest in the Contractor and all things done or actions taken, including expenditure incurred by the Authority for discharging the obligations of the Contractor under and in accordance with this Agreement shall be deemed to have been done or taken for and on behalf of the Contractor and the Contractor undertakes to indemnify the Authority for all costs incurred during such period. The Contractor hereby licences and sub-licences respectively, the Authority or any other person authorised by it under Clause 20.1 to use during Suspension, all Intellectual Property belonging to or licenced to the Contractor with respect to the Project and its design, engineering, construction, and which is used or created by the Contractor in performing its obligations under the Agreement.

#### **20.3 Revocation of Suspension**

20.3.1 In the event that the Authority shall have rectified or removed the cause of Suspension within a period not exceeding 60 (sixty) days from the date of Suspension, it shall revoke the Suspension forthwith and restore all rights of the Contractor under this Agreement. For the avoidance of doubt, the Parties expressly agree that the Authority may, in its discretion, revoke the Suspension at any time, whether or not the cause of Suspension has been rectified or removed hereunder.

20.3.2 Upon the Contractor having cured the Contractor Default within a period not exceeding 60 (sixty) days from the date of Suspension, the Authority shall revoke the Suspension forthwith and restore all rights of the Contractor under this Agreement.

## **20.4 Termination**

20.4.1 At any time during the period of Suspension under this Article 20, the Contractor may by notice require the Authority to revoke the Suspension and issue a Termination Notice. The Authority shall, within 15 (fifteen) days of receipt of such notice, terminate this Agreement under and in accordance with Article 21 as if it is a Contractor Default under Clause 21.1.

20.4.2 Notwithstanding anything to the contrary contained in this Agreement, in the event that Suspension is not revoked within 90 (ninety) days from the date of Suspension hereunder, the Agreement shall, upon expiry of the aforesaid period, be deemed to have been terminated by mutual agreement of the Parties and all the provisions of this Agreement shall apply, *mutatis mutandis*, to such Termination as if a Termination Notice had been issued by the Authority upon occurrence of a Contractor Default.

## ARTICLE 21

### TERMINATION

#### 21.1 Termination for Contractor Default

21.1.1 Save as otherwise provided in this Agreement, in the event that any of the defaults specified below shall have occurred, and the Contractor fails to cure the default within the Cure Period set forth below, or where no Cure Period is specified, then within a Cure Period of 60 (sixty) days, the Contractor shall be deemed to be in default of this Agreement (the “**Contractor Default**”), unless the default has occurred as a result of any breach of this Agreement by the Authority or due to Force Majeure. The defaults referred to herein shall include the following:

- (a) The Contractor fails to provide, extend or replenish, as the case may be, the Performance Security in accordance with this Agreement;
- (b) subsequent to the replenishment or furnishing of fresh Performance Security in accordance with Clause 7.3, the Contractor fails to cure, within a Cure Period of 30 (thirty) days, the Contractor Default for which the whole or part of the Performance Security was appropriated;
- (c) the Contractor does not achieve the latest outstanding Project Milestone due in accordance with the provisions of Schedule-I, subject to any Time Extension, and continues to be in default for 45 (forty five) days;
- (d) the Contractor abandons or manifests intention to abandon the construction of the Project without the prior written consent of the Authority;
- (e) the Contractor fails to proceed with the Works in accordance with the provisions of Clause 10.1 or stops Works for 30 (thirty) days without reflecting the same in the current programme and such stoppage has not been authorised by the Authority’s Engineer;
- (f) the Project Completion Date does not occur within the period specified in Schedule-I for the Scheduled Completion Date, or any extension thereof;
- (g) failure to complete the Punch List items within the periods stipulated therefor in Clause 12.3;

- (h) the Contractor fails to rectify any Defect, the non-rectification of which shall have a Material Adverse Effect on the Project, within the time specified in this Agreement or as directed by the Authority's Engineer;
- (i) the Contractor subcontracts the Works or any part thereof in violation of this Agreement or assigns any part of the Works without the prior approval of the Authority;
- (j) the Contractor creates any Encumbrance in breach of this Agreement;
- (k) an execution levied on any of the assets of the Contractor has caused a Material Adverse Effect;
- (l) the Contractor is adjudged bankrupt or insolvent, or if a trustee or receiver is appointed for the Contractor or for the whole or material part of its assets that has a material bearing on the Project;
- (m) the Contractor has been, or is in the process of being liquidated, dissolved, wound-up, amalgamated or reconstituted in a manner that would cause, in the reasonable opinion of the Authority, a Material Adverse Effect;
- (n) a resolution for winding up of the Contractor is passed, or any petition for winding up of the Contractor is admitted by a court of competent jurisdiction and a provisional liquidator or receiver is appointed and such order has not been set aside within 90 (ninety) days of the date thereof or the Contractor is ordered to be wound up by a court except for the purpose of amalgamation or reconstruction; provided that, as part of such amalgamation or reconstruction, the entire property, assets and undertaking of the Contractor are transferred to the amalgamated or reconstructed entity and that the amalgamated or reconstructed entity has unconditionally assumed the obligations of the Contractor under this Agreement; and provided that:
  - (i) the amalgamated or reconstructed entity has the capability and experience necessary for the performance of its obligations under this Agreement; and
  - (ii) the amalgamated or reconstructed entity has the financial standing to perform its obligations under this Agreement and has a credit worthiness at least as good as that of the Contractor as at the Appointed Date;

- (o) any representation or warranty of the Contractor herein contained which is, as of the date hereof, found to be materially false or the Contractor is at any time hereafter found to be in breach thereof;
- (p) the Contractor submits to the Authority any statement, notice or other document, in written or electronic form, which has a material effect on the Authority's rights, obligations or interests and which is false in material particulars;
- (q) the Contractor has failed to fulfil any obligation, for which failure Termination has been specified in this Agreement; or
- (r) the Contractor has failed to make any payment to the Authority within the period specified in this Agreement;
- (s) the Concessionaire issues a Termination Notice in violation of this Agreement; or
- (t) the Contractor commits a default in complying with any other provision of this Agreement if such a default causes a Material Adverse Effect on the Project or on the Authority.

21.1.2 Without prejudice to any other rights or remedies which the Authority may have under this Agreement, upon occurrence of a Contractor Default, the Authority shall be entitled to terminate this Agreement by issuing a Termination Notice to the Contractor; provided that before issuing the Termination Notice, the Authority shall by a notice inform the Contractor of its intention to issue such Termination Notice and grant 15 (fifteen) days to the Contractor to make a representation, and may after the expiry of such 15 (fifteen) days, whether or not it is in receipt of such representation, issue the Termination Notice.

21.1.3 After termination of this Agreement for Contractor Default, the Authority may complete the Works and/or procure its completion through any other entity. The Authority and such entity may, for this purpose, use any Materials, Plant and equipment, Contractor's documents and other design documents made by or on behalf of the Contractor.

## **21.2 Termination for Authority Default**

21.2.1 In the event that any of the defaults specified below shall have occurred, and the Authority fails to cure such default within a Cure Period of 90 (ninety) days

or such longer period as has been expressly provided in this Agreement, the Authority shall be deemed to be in default of this Agreement (the “**Authority Default**”) unless the default has occurred as a result of any breach of this Agreement by the Contractor or due to Force Majeure. The defaults referred to herein shall include the following:

- (a) The Authority commits a material default in complying with any of the provisions of this Agreement and such default has a Material Adverse Effect on the Contractor;
- (b) the Authority has failed to make payment of any amount due and payable to the Contractor within the period specified in this Agreement;
- (c) the Authority has failed to provide, within a period of 180 (one hundred and eighty) days from the Appointed Date, the environmental clearances and forest clearances required for construction of the Project;
- (d) the Authority repudiates this Agreement or otherwise takes any action that amounts to or manifests an irrevocable intention not to be bound by this Agreement; or
- (e) the Authority’s Engineer fails to issue the relevant Interim Payment Certificate within 60 (sixty) days after receiving a statement and supporting documents.

21.2.2 Without prejudice to any other right or remedy which the Contractor may have under this Agreement, upon occurrence of an Authority Default, the Contractor shall be entitled to terminate this Agreement by issuing a Termination Notice to the Authority; provided that before issuing the Termination Notice, the Contractor shall by a notice inform the Authority of its intention to issue the Termination Notice and grant 15 (fifteen) days to the Authority to make a representation, and may after the expiry of such 15 (fifteen) days, whether or not it is in receipt of such representation, issue the Termination Notice.

### **21.3 Termination for Authority’s convenience**

Notwithstanding anything hereinabove, the Authority may terminate this Agreement for its own convenience. The termination shall take effect 30 (thirty) days from the date of notice hereunder and shall be deemed to be termination on account of Authority Default.

## 21.4 Requirements after Termination

Upon Termination of this Agreement in accordance with the provisions of this Article 21, the Contractor shall comply with and conform to the following:

- (a) deliver to the Authority all Plant and Materials which shall have become the property of the Authority under this Article 21;
- (b) deliver all relevant records, reports, Intellectual Property and other licences pertaining to the Works, other design documents and in case of Termination occurring after the Provisional Certificate has been issued, the “**as built**” Drawings for the Works;
- (c) transfer and/or deliver all Applicable Permits to the Authority to the extent permissible under Applicable Laws; and
- (d) vacate the Site within 15 (fifteen) days.

## 21.5 Valuation of Unpaid Works

21.5.1 Within a period of 45 (forty-five) days after Termination under Clause 21.1, 21.2 or 21.3, as the case may be, has taken effect, the Authority’s Engineer shall proceed in accordance with Clause 16.5 to determine as follows the valuation of unpaid Works (the “**Valuation of Unpaid Works**”):

- (a) value of the completed stage of the Works, less payments already made; and
- (b) reasonable value of the partially completed stages of works as on the date of Termination, only if such works conform with the Specifications and Standards.

and shall adjust from the sum thereof (i) any other amounts payable or recoverable, as the case may be, in accordance with the provisions of this Agreement; and (ii) all taxes due to be deducted at source.

21.5.2 The Valuation of Unpaid Works shall be communicated to the Authority, with a copy to the Contractor, within a period of 45 (forty five) days from the date of Termination.

## 21.6 Termination Payment

21.6.1 Upon Termination on account of Contractor Default under Clause 21.1, the Authority shall:



- (a) encash and appropriate the Performance Security or Retention Money, whichever is more, and in the event the Contractor has failed to replenish or extend the Performance Security, claim the amount stipulated in Clause 7.1.1, as agreed pre-determined Damages, if any;
- (b) encash and appropriate the bank guarantee, if any, to the extent of the outstanding Advance Payment and interest thereon; and
- (c) pay to the Contractor, by way of Termination Payment, an amount equivalent to the Valuation of Unpaid Works after adjusting any other sums payable or recoverable, as the case may be, in accordance with the provisions of this Agreement,

and shall adjust from the sum thereof (i) any other amounts payable or recoverable, as the case may be, in accordance with the provisions of this Agreement, and (ii) all taxes due to be deducted at source.

21.6.2 Upon Termination on account of an Authority Default under Clause 21.2 or for Authority's convenience under Clause 21.3, the Authority shall:

- (a) return the Performance Security and Retention Money forthwith;
- (b) encash and appropriate the bank guarantee, if any, to the extent of the outstanding Advance Payment, including interest thereon; and
- (c) pay to the Contractor, by way of Termination Payment, an amount equal to:
  - (i) Valuation of Unpaid Works;
  - (ii) the reasonable cost, as determined by the Authority's Engineer, of the Plant and Materials procured by the Contractor and transferred to the Authority for its use, only if such Plant and Materials are in conformity with the Specifications and Standards;
  - (iii) the reasonable cost of temporary works, as determined by the Authority's Engineer; and
  - (iv) 10% (ten per cent) of the cost of the Works that are not commenced or not completed,

and shall adjust from the sum thereof (i) any other amounts payable or recoverable, as the case may be, in accordance with the provisions of this Agreement, and (ii) all taxes due to be deducted at source.

- 21.6.3 Termination Payment shall become due and payable to the Contractor within 30 (thirty) days of a demand being made by the Contractor to the Authority with the necessary particulars, after the Valuation of Unpaid Works has been communicated by the Authority's Engineer, and in the event of any delay, the Authority shall pay interest at the Bank Rate plus 3% (three percent), calculated at quarterly rests, on the amount of Termination Payment remaining unpaid; provided that such delay shall not exceed 90 (ninety) days. For the avoidance of doubt, it is expressly agreed that Termination Payment shall constitute full discharge by the Authority of its payment obligations in respect thereof hereunder.
- 21.6.4 The Contractor expressly agrees that Termination Payment under this Article 21 shall constitute a full and final settlement of all claims of the Contractor on account of Termination of this Agreement and that it shall not have any further right or claim under any law, treaty, convention, contract or otherwise.

#### **21.7 Other rights and obligations of the Parties**

Upon Termination for any reason whatsoever

- (a) the property and ownership in all Materials, Plant and Works and the Project shall, as between the Contractor and the Authority, vest in the Authority in whole, free from any and all Encumbrances; provided that the foregoing shall be without prejudice to Clause 21.6;
- (b) the risk of loss or damage to any Materials, Plant or Works and the care and custody thereof shall pass from the Contractor to the Authority; and
- (c) the Authority shall be entitled to restrain the Contractor and any person claiming through or under the Agreement from entering upon the Site or any part of the Project except for taking possession of materials, stores, implements, construction plants and equipment of the Contractor, which have not been vested in the Authority in accordance with the provisions of this Agreement.

#### **21.8 Survival of rights**

Notwithstanding anything to the contrary contained in this Agreement any Termination pursuant to the provisions of this Agreement shall be without prejudice to the accrued rights of either Party including its right to claim and recover money damages, insurance proceeds, security deposits, and other rights

and remedies, which it may have in law or Agreement. All rights and obligations of either Party under this Agreement, including Termination Payments, shall survive the Termination to the extent such survival is necessary for giving effect to such rights and obligations.

Part VI

**Other Provisions**



## ARTICLE 22

### **ASSIGNMENT AND CHARGES**

#### **22.1 Restrictions on assignment and charges**

This Agreement shall not be assigned by the Contractor to any person, save and except with the prior consent in writing of the Authority, which consent the Authority shall be entitled to decline without assigning any reason.

#### **22.2 Hypothecation of Materials or Plant**

Notwithstanding the provisions of Clause 22.1, the Contractor may pledge or hypothecate to its lenders, any Materials or Plant prior to their incorporation in the Works. Further, the Contractor may, by written notice to the Authority, assign its right to receive payments under this Agreement either absolutely or by way of charge, to any person providing financing to the Contractor in connection with the performance of the Contractor's obligations under this Agreement. The Contractor acknowledges that any such assignment by the Contractor shall not relieve the Contractor from any obligations, duty or responsibility under this Agreement. For the avoidance of doubt, all Materials and Plants shall, upon their incorporation into Works, be free from any and all Encumbrances without the Authority being required to make any payment to any person on account of any costs, compensation, expenses and charges for such Materials, Plants and Works.

ARTICLE 23

**LIABILITY AND INDEMNITY**

**23.1 General indemnity**

The Contractor shall indemnify, defend, save and hold harmless the Authority and its officers, servants, agents, Government Instrumentalities and Government owned and/or controlled entities/enterprises, (the “**Authority Indemnified Persons**”) against any and all suits, proceedings, actions, demands and third party claims for any loss, damage, cost and expense of whatever kind and nature, whether arising out of any breach by the Contractor of any of its obligations under this Agreement or from any negligence under the Agreement, including any errors or deficiencies in the design documents, or tort or on any other ground whatsoever, except to the extent that any such suits, proceedings, actions, demands and claims have arisen due to any negligent act or omission, or breach or default of this Agreement on the part of the Authority Indemnified Persons.

**23.2 Indemnity by the Contractor**

23.2.1 Without limiting the generality of Clause 23.1, the Contractor shall fully indemnify, hold harmless and defend the Authority and the Authority Indemnified Persons from and against any and all loss and/or damages arising out of or with respect to:

- (a) failure of the Contractor to comply with Applicable Laws and Applicable Permits;
- (b) payment of taxes required to be made by the Contractor in respect of the income or other taxes of the Sub-contractors, suppliers and representatives; or
- (c) non-payment of amounts due as a result of Materials or services furnished to the Contractor or any of its Sub-contractors which are payable by the Contractor or any of its Sub-contractors.

23.2.2 Without limiting the generality of the provisions of this Article 23, the Contractor shall fully indemnify, hold harmless and defend the Authority Indemnified Persons from and against any and all suits, proceedings, actions, claims,

demands, liabilities and damages which the Authority Indemnified Persons may hereafter suffer, or pay by reason of any demands, claims, suits or proceedings arising out of claims of infringement of any domestic or foreign patent rights, copyrights or other Intellectual Property, proprietary or confidentiality rights with respect to any materials, information, design or process used by the Contractor or by the Sub-contractors in performing the Contractor's obligations or in any way incorporated in or related to the Project. If in any such suit, action, claim or proceedings, a temporary restraint order or preliminary injunction is granted, the Contractor shall make every reasonable effort, by giving a satisfactory bond or otherwise, to secure the revocation or suspension of the injunction or restraint order. If, in any such suit, action, claim or proceedings, the Project, or any part thereof or comprised therein, is held to constitute an infringement and its use is permanently enjoined, the Contractor shall promptly make every reasonable effort to secure for the Authority a licence, at no cost to the Authority, authorising continued use of the infringing work. If the Contractor is unable to secure such licence within a reasonable time, the Contractor shall, at its own expense, and without impairing the Specifications and Standards, either replace the affected work, or part, or process thereof with non-infringing work or part or process, or modify the same so that it becomes non-infringing.

### **23.3 Notice and contest of claims**

In the event that either Party receives a claim or demand from a third party in respect of which it is entitled to the benefit of an indemnity under this Agreement (the "**Indemnified Party**") it shall notify the other Party (the "**Indemnifying Party**") within 15 (fifteen) days of receipt of the claim or demand and shall not settle or pay the claim without the prior approval of the Indemnifying Party, which approval shall not be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim or demand, it may conduct the proceedings in the name of the Indemnified Party, subject to the Indemnified Party being secured against any costs involved, to its reasonable satisfaction.

### **23.4 Defence of claims**

23.4.1 The Indemnified Party shall have the right, but not the obligation, to contest, defend and litigate any claim, action, suit or proceeding by any third party alleged or asserted against such Party in respect of, resulting from, related to or



arising out of any matter for which it is entitled to be indemnified hereunder, and reasonable costs and expenses thereof shall be indemnified by the Indemnifying Party. If the Indemnifying Party acknowledges in writing its obligation to indemnify the Indemnified Party in respect of loss to the full extent provided by this Agreement, the Indemnifying Party shall be entitled, at its option, to assume and control the defence of such claim, action, suit or proceeding, liabilities, payments and obligations at its expense and through the counsel of its choice; provided it gives prompt notice of its intention to do so to the Indemnified Party and reimburses the Indemnified Party for the reasonable cost and expenses incurred by the Indemnified Party prior to the assumption by the Indemnifying Party of such defence. The Indemnifying Party shall not be entitled to settle or compromise any claim, demand, action, suit or proceeding without the prior written consent of the Indemnified Party, unless the Indemnifying Party provides such security to the Indemnified Party as shall be reasonably required by the Indemnified Party to secure the loss to be indemnified hereunder to the extent so compromised or settled.

23.4.2 If the Indemnifying Party has exercised its rights under Clause 23.3, the Indemnified Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).

23.4.3 If the Indemnifying Party exercises its rights under Clause 23.3, the Indemnified Party shall nevertheless have the right to employ its own counsel, and such counsel may participate in such action, but the fees and expenses of such counsel shall be at the expense of the Indemnified Party, when and as incurred, unless:

- (a) the employment of counsel by such party has been authorised in writing by the Indemnifying Party;
- (b) the Indemnified Party shall have reasonably concluded that there may be a conflict of interest between the Indemnifying Party and the Indemnified Party in the conduct of the defence of such action;
- (c) the Indemnifying Party shall not, in fact, have employed independent counsel reasonably satisfactory to the Indemnified Party, to assume the defence of such action and shall have been so notified by the Indemnified Party; or

- (d) the Indemnified Party shall have reasonably concluded and specifically notified the Indemnifying Party either:
- (i) that there may be specific defences available to it which are different from or additional to those available to the Indemnifying Party; or
  - (ii) that such claim, action, suit or proceeding involves or could have a material adverse effect upon it beyond the scope of this Agreement:

Provided that if Sub-clauses (b), (c) or (d) of this Clause 23.4.3 shall be applicable, the counsel for the Indemnified Party shall have the right to direct the defence of such claim, demand, action, suit or proceeding on behalf of the Indemnified Party, and the reasonable fees and disbursements of such counsel shall constitute legal or other expenses hereunder.

### **23.5 No consequential claims**

Notwithstanding anything to the contrary contained in this Article 23, the indemnities herein provided shall not include any claim or recovery in respect of any cost, expense, loss or damage of an indirect, incidental or consequential nature, including loss of profit, except as expressly provided in this Agreement.

### **23.6 Survival on Termination**

The provisions of this Article 23 shall survive Termination.

ARTICLE 24

**DISPUTE RESOLUTION**

**24.1 Dispute resolution**

24.1.1 Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the “**Dispute**”) shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure set forth in Clause 24.2.

24.1.2 The Parties agree to use their best efforts for resolving all Disputes arising under or in respect of this Agreement promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all non-privileged records, information and data pertaining to any Dispute.

**24.2 Conciliation**

In the event of any Dispute between the Parties, either Party may call upon an officer of the Authority, not below the rank of Secretary to the Government or Chief Engineer, as the case may be, or such other person as the Parties may mutually agree upon (the “**Conciliator**”) to conciliate and assist the Parties in arriving at an amicable settlement thereof. Failing conciliation by the Conciliator or without the intervention of the Conciliator, either Party may require such Dispute to be referred to the Secretary or Chief Engineer of the Authority and the Chairman of the Board of Directors of the Contractor for amicable settlement, and upon such reference, the said persons shall meet no later than 7 (seven) business days from the date of reference to discuss and attempt to amicably resolve the Dispute. If such meeting does not take place within the 7 (seven) business day period or the Dispute is not amicably settled within 15 (fifteen) business days of the meeting or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 30 (thirty) business days of the notice in writing referred to in Clause 24.1.1 or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to arbitration in accordance with the provisions of Clause 24.3.

### 24.3 Arbitration

24.3.1 Any Dispute which is not resolved amicably by conciliation, as provided in Clause 24.2, shall be finally decided by reference to arbitration by an arbitral tribunal constituted in accordance with Clause 24.3.2. Such arbitration shall be held in accordance with the Rules of Arbitration of the International Centre for Alternative Dispute Resolution, New Delhi or Construction Industry Arbitration Council (CIAC), New Delhi (the “**Rules**”), or such other rules as may be mutually agreed by the Parties, and shall be subject to the provisions of the Arbitration and Conciliation Act, 1996. The place of such arbitration shall be the capital of the State, and the language of arbitration proceedings shall be English.

The Arbitration shall be in Institutional mode & would not be adhoc, in any case, and the online mode of dispute resolution may also be resorted to as per the latest notification of Ministry of Law & Justice, Government of India.

24.3.2 There shall be an arbitral tribunal comprising three arbitrators, of whom each Party shall select one, and the third arbitrator shall be appointed by the two arbitrators so selected and in the event of disagreement between the two arbitrators, the appointment shall be made in accordance with the Rules.

24.3.3 Wherever possible or required, On-line dispute resolution mechanism as prescribed by Ministry of Law vide their notification - [http://doj.gov.in/sites/default/files/List%20of%20firm%20with%20profile-17\\_1.pdf](http://doj.gov.in/sites/default/files/List%20of%20firm%20with%20profile-17_1.pdf), with subsequent amendments if any, is to be resorted to, in place of the traditional in-situ arbitration procedures. The decision on which system of procedures is to be followed (viz. traditional or on-line) would rest with the Contracting Parties at the time of signing the contract, who may if they so decide, permit the decision to be made by Third Arbitrator (appointed by the two nominated arbitrators).

24.3.4 The arbitral tribunal shall make a reasoned award (the “**Award**”). Any Award made in any arbitration held pursuant to this Article 24 shall be final and binding on the Parties as from the date it is made, and the Contractor and the Authority agree and undertake to carry out such Award without delay.

24.3.5 The Contractor and the Authority agree that an Award may be enforced against the Contractor and/or the Authority, as the case may be, and their respective assets wherever situated.

24.3.6 This Agreement and the rights and obligations of the Parties shall remain in full force and effect, pending the Award in any arbitration proceedings hereunder.

24.3.7 In the event the Party against whom the Award has been granted challenges the Award for any reason in a court of law, it shall make an interim payment to the other Party for an amount equal to 75% (seventy five per cent) of the Award,

pending final settlement of the Dispute. The aforesaid amount shall be paid forthwith upon furnishing an irrevocable Bank Guarantee for a sum equal to the aforesaid amount. Upon final settlement of the Dispute, the aforesaid interim payment shall be adjusted and any balance amount due to be paid or returned, as the case may be, shall be paid or returned with interest calculated at the rate of 10% (ten per cent) per annum from the date of interim payment to the date of final settlement of such balance.



## **1.1 Adjudication by a tribunal**

In the event of constitution of a statutory tribunal or other forum with powers to adjudicate upon disputes between the Contractor and the Authority, all Disputes arising after such constitution shall, instead of reference to arbitration under Clause 24.3, be adjudicated upon by such tribunal or other forum in accordance with Applicable Laws and all references to Dispute Resolution Procedure shall be construed accordingly.

## ARTICLE 25

### MISCELLANEOUS

#### 25.1 Governing law and jurisdiction

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India, and the courts in the State shall have exclusive jurisdiction over matters arising out of or relating to this Agreement.

#### 25.2 Waiver of immunity

Each Party unconditionally and irrevocably:

- (a) agrees that the execution, delivery and performance by it of this Agreement constitute commercial acts done and performed for commercial purpose;
- (b) agrees that, should any proceedings be brought against it or its assets, property or revenues in any jurisdiction in relation to this Agreement or any transaction contemplated by this Agreement, no immunity (whether by reason of sovereignty or otherwise) from such proceedings shall be claimed by or on behalf of the Party with respect to its assets;
- (c) waives any right of immunity which it or its assets, property or revenues now has, may acquire in the future or which may be attributed to it in any jurisdiction; and
- (d) consents generally in respect of the enforcement of any judgement or award against it in any such proceedings to the giving of any relief or the issue of any process in any jurisdiction in connection with such proceedings (including the making, enforcement or execution against it or in respect of any assets, property or revenues whatsoever irrespective of their use or intended use of any order or judgement that may be made or given in connection therewith).

#### 25.3 Delayed payments

The Parties hereto agree that payments due from one Party to the other Party under the provisions of this Agreement shall be made within the period set forth therein, and if no such period is specified, within 30 (thirty) days of receiving a demand along with the necessary particulars. In the event of delay beyond

such period, the defaulting Party shall pay interest for the period of delay calculated at a rate equal to Bank Rate plus 3% (three per cent), save and except as otherwise specified in this Agreement. All interest payment under this Agreement shall, save and except as otherwise specified, be calculated at quarterly rests, and recovery thereof shall be without prejudice to the rights of the Parties under this Agreement including Termination thereof.

## **25.4 Waiver**

25.4.1 Waiver, including partial or conditional waiver, by either Party of any default by the other Party in the observance and performance of any provision of or obligations under this Agreement:

- (a) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this Agreement;
- (b) shall not be effective unless it is in writing and executed by a duly authorised representative of the Party; and
- (c) shall not affect the validity or enforceability of this Agreement in any manner.

25.4.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement or any obligation thereunder nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver of such breach or acceptance of any variation or the relinquishment of any such right hereunder.

## **25.5 Liability for review of Documents and Drawings**

Except to the extent expressly provided in this Agreement:

- (a) no review, comment or approval by the Authority or the Authority's Engineer of any Document or Drawing submitted by the Contractor nor any observation or inspection of the construction of the Project nor the failure to review, approve, comment, observe or inspect hereunder shall relieve or absolve the Contractor from its obligations, duties and liabilities under this Agreement, Applicable Laws and Applicable Permits; and
- (b) the Authority shall not be liable to the Contractor by reason of any review, comment, approval, observation or inspection referred to in Sub-clause (a) above.



## **25.6 Exclusion of implied warranties etc.**

This Agreement expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement between the Parties or any representation by either Party not contained in a binding legal agreement executed by both Parties.

## **25.7 Survival**

### **25.7.1 Termination shall:**

- (a) not relieve the Contractor or the Authority, as the case may be, of any obligations hereunder which expressly or by implication survive Termination hereof; and
- (b) except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of, or caused by, acts or omissions of such Party prior to the effectiveness of such Termination or arising out of such Termination.

25.7.2 All obligations surviving Termination shall only survive for a period of 3 (three) years following the date of such Termination.

## **25.8 Entire Agreement**

This Agreement and the Schedules together constitute a complete and exclusive statement of the terms of the agreement between the Parties on the subject hereof, and no amendment or modification hereto shall be valid and effective unless such modification or amendment is agreed to in writing by the Parties and duly executed by persons especially empowered in this behalf by the respective Parties. All prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement are abrogated and withdrawn. For the avoidance of doubt, the Parties hereto agree that any obligations of the Contractor arising from the Request for Qualification or Request for Proposals and bid submissions, as the case may be, shall be deemed to form part of this Agreement and treated as such.

## **25.9 Severability**

If for any reason whatsoever, any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent

jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to the Dispute Resolution Procedure set forth under this Agreement or otherwise.

#### **25.10 No partnership**

This Agreement shall not be interpreted or construed to create an association, joint venture or partnership between the Parties, or to impose any partnership obligation or liability upon either Party, and neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### **25.11 Third parties**

This Agreement is intended solely for the benefit of the Parties, and their respective successors and permitted assigns, and nothing in this Agreement shall be construed to create any duty to, standard of care with reference to, or any liability to, any person not a Party to this Agreement.

#### **25.12 Successors and assigns**

This Agreement shall be binding upon, and inure to the benefit of the Parties and their respective successors and permitted assigns.

#### **25.13 Notices**

Any notice or other communication to be given by any Party to the other Party under or in connection with the matters contemplated by this Agreement shall be in writing and shall:

- (a) in the case of the Contractor, be given by facsimile or e-mail and by letter delivered by hand to the address given and marked for attention of the person set out below or to such other person as the Contractor may from

time to time designate by notice to the Authority; provided that notices or other communications to be given to an address outside the city specified in Sub-clause (b) below may, if they are subsequently confirmed by sending a copy thereof by registered acknowledgement due, air mail or by courier, be sent by facsimile or e-mail to the person as the Contractor may from time to time designate by notice to the Authority;

Attention:

{Designation:

Address:

Fax No:

Email:}

- (b) in the case of the Authority, be given by facsimile or e-mail and by letter delivered by hand and be addressed to the person named below with a copy delivered to the Authority Representative or such other person as the Authority may from time to time designate by notice to the Contractor; provided that if the Contractor does not have an office in the same city as the Authority, it may send such notice by facsimile or e-mail and by registered acknowledgement due, air mail or by courier;

{Designation:

Address: Fax

No: Email:};

and

- (c) any notice or communication by a Party to the other Party, given in accordance herewith, shall be deemed to have been delivered when in the normal course of post it ought to have been delivered and in all other cases, it shall be deemed to have been delivered on the actual date and time of delivery; provided that in the case of facsimile or e-mail, it shall be deemed to have been delivered on the working day following the date of its delivery.

## 25.14 Language

All notices required to be given by one Party to the other Party and all other communications, Documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in English language.

### **25.15 Counterparts**

This Agreement may be executed in two counterparts, each of which, when executed and delivered, shall constitute an original of this Agreement.

### **25.16 Confidentiality**

The Parties shall treat the details of this Agreement as private and confidential, except to the extent necessary to carry out obligations under it or to comply with Applicable Laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the Works in any trade or technical paper or elsewhere without the previous consent of the Authority.

### **25.17 Copyright and Intellectual Property rights**

25.17.1 As between the Parties, the Contractor shall retain the copyright and other Intellectual Property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor. The Contractor shall be deemed (by signing this Agreement) to give to the Authority a non-terminable transferable non-exclusive royalty-free licence to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This licence shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- (c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by this Agreement, including replacements of any computers supplied by the Contractor:

25.17.2 The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Authority for purposes other than those permitted under this Clause 25.17.

25.17.3 As between the Parties, the Authority shall retain the copyright and other Intellectual Property rights in this Agreement and other documents made by (or on behalf of) the Authority. The Contractor may, at its cost, copy, use, and obtain communication of these documents for the purposes of this Agreement. They shall not, without the Authority's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the contract.

### **25.18 Limitation of Liability**

25.18.1 Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with this Agreement.

25.18.2 The total liability of one Party to the other Party under and in accordance with the provisions of this Agreement, save and except as provided in Articles 21 and 23, shall not exceed the Contract Price. For the avoidance of doubt, this Clause shall not limit the liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

ARTICLE 26

**DEFINITIONS**

**26.1 Definitions**

In this Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

**“Accounting Year”** means the financial year commencing from the first day of April of any calendar year and ending on the thirty-first day of March of the next calendar year;

**“Advance Payment”** shall have the meaning as set forth in Clause 17.2.1;

**“Affected Party”** shall have the meaning as set forth in Clause 19.1;

**“Affiliate”** means, in relation to either Party {and/or Members}, a person who controls, is controlled by, or is under the common control with such Party {or Member} (as used in this definition, the expression “control” means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such person, and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person, whether by operation of law or by contract or otherwise);

**“Agreement”** means this Agreement, its Recitals, the Schedules hereto and any amendments thereto made in accordance with the provisions contained in this Agreement;

**“Applicable Laws”** means all laws, brought into force and effect by GOI or the State Government(s) including rules, regulations and notifications made thereunder, and judgements, decrees, injunctions, writs and orders of any court of record, applicable to this Agreement and the exercise, performance and discharge of the respective rights and obligations of the Parties hereunder, as may be in force and effect during the subsistence of this Agreement;

**“Applicable Permits”** means all clearances, licences, permits, authorisations, no objection certificates, consents, approvals and exemptions required to be obtained or maintained under Applicable Laws in connection with the construction of the Project during the subsistence of this Agreement;

**“Appointed Date”** means that date which is later of:

- (a) the 15<sup>th</sup> day of the date of this Agreement;
- (b) the date on which the Contractor has delivered the Performance Security in accordance with the provisions of Article 7;
- (c) the date on which the Authority has provided the Right of Way on at least 90% (ninety per cent) of the total land required for the Project in conformity with the provisions of Clause 8.2; and
- (d) the date on which the Authority has provided to the Contractor the environmental and forest clearances for at least 90% of the total land required for the Project;

**“Arbitration Act”** means the Arbitration and Conciliation Act, 1996 and shall include modifications to or any re-enactment thereof, as in force from time to time;

**“Authority”** shall have the meaning attributed thereto in the array of Parties hereinabove as set forth in the Recitals;

**“Authority Default”** shall have the meaning as set forth in Clause 21.2.1;

**“Authority’s Engineer”** shall have the meaning as set forth in Clause 16.1.1;

**“Authority Representative”** means such person or persons as may be authorised in writing by the Authority to act on its behalf under this Agreement and shall include any person or persons having authority to exercise any rights or perform and fulfil any obligations of the Authority under this Agreement;

**“Bank”** means a bank incorporated in India and having a minimum net worth of Rs. 1,000 crore (Rupees one thousand crore) or any other bank acceptable to the Authority;

**“Bank Rate”** means the rate of interest specified by the Reserve Bank of India from time to time in pursuance of section 49 of the Reserve Bank of India Act, 1934 or any replacement of such Bank Rate for the time being in effect;

**“Base Date”** means the last date of that calendar month, which date precedes the Bid Due Date by at least 28 (twenty eight) days;

**“Bid”** means the documents in their entirety comprised in the bid submitted by the [selected bidder/Consortium] in response to the Request for Proposals in

accordance with the provisions thereof and “**Bids**” shall mean the bids submitted by any and all pre-qualified bidders;

“**Bid Security**” means the bid security provided by the Contractor to the Authority in accordance with the Request for Proposals, and which is to remain in force until substituted by the Performance Security;

“**CPI (IW)**” means the Consumer Price Index for Industrial Workers as published by the Labour Bureau, Government of India and shall include any index which substitutes the CPI (IW), and any reference to CPI (IW) shall, unless the context otherwise requires, be construed as a reference to the CPI (IW) published for the period ending with the preceding month, save and except that for the purposes of annual revision of the Fixed Charge in accordance with the provisions of Clause 25.3, the revision due on April 1 of any year shall be computed with reference to CPI (IW) as on January 31 of that year;

“**Change in Law**” means the occurrence of any of the following after the Base Date:

- (a) the enactment of any new Indian law;
- (b) the repeal, modification or re-enactment of any existing Indian law;
- (c) the commencement of any Indian law which has not entered into effect until the Base Date;
- (d) a change in the interpretation or application of any Indian law by a judgement of a court of record which has become final, conclusive and binding, as compared to such interpretation or application by a court of record prior to the Base Date; or
- (e) any change in the rates of any of the Taxes or royalties that have a direct effect on the Project;

“**Change of Scope**” shall have the meaning as set forth in Article 13; “**Change of Scope Notice**” shall have the meaning as set forth in Clause 13.2.1;

“**Change of Scope Order**” shall have the meaning as set forth in Clause 13.2.4;

“**Completion Certificate**” shall have the meaning as set forth in Clause 12.4.1;

{“**Consortium**” means the consortium of entities which have formed a joint venture for implementation of this Project;}<sup>§</sup>

<sup>§</sup> This definition may be omitted if the Contractor is not a Consortium.  
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“**Construction**” shall have the meaning as set forth in Clause 1.2.1 (f);

“**Construction Period**” means the period commencing from the Appointed Date and ending on the date of the Completion Certificate;

“**Contract Price**” means the amount as specified in Clause 17.1.1;

“**Contractor**” shall have the meaning attributed thereto in the array of Parties hereinabove as set forth in the Recitals;

“**Contractor Default**” shall have the meaning as set forth in Clause 21.1.1;

“**Cure Period**” means the period specified in this Agreement for curing any breach or default of any provision of this Agreement by the Party responsible for such breach or default and shall:

- (a) commence from the date on which a notice is delivered by one Party to the other Party asking the latter to cure the breach or default specified in such notice;
- (b) not relieve any Party from liability to pay Damages or compensation under the provisions of this Agreement; and
- (c) not in any way be extended by any period of Suspension under this Agreement; provided that if the cure of any breach by the Contractor requires any reasonable action by the Contractor that must be approved by the Authority or the Authority’s Engineer hereunder, the applicable Cure Period shall be extended by the period taken by the Authority or the Authority’s Engineer to accord their approval;

“**Damages**” shall have the meaning as set forth in paragraph (w) of Clause 1.2.1;

“**Defect**” means any defect or deficiency in Construction of the Works or any part thereof, which does not conform with the Specifications and Standards;

“**Defects Liability Period**” shall have the meaning as set forth in Clause 15.1.1; “**Dispute**” shall have the meaning as set forth in Clause 24.1.1;

“**Dispute Resolution Procedure**” means the procedure for resolution of Disputes as set forth in Article 24;

“**Drawings**” means all of the drawings, calculations and documents pertaining to the Project as set forth in Schedule-H, and shall include ‘as built’ drawings of the Project;

**“Document” or “Documentation”** means documentation in printed or written form, or in tapes, discs, drawings, computer programmes, writings, reports, photographs, films, cassettes, or expressed in any other written, electronic, audio or visual form;

**“Emergency”** means a condition or situation that is likely to endanger the safety or security of the individuals on or about the Project, including Users thereof, or which poses an immediate threat of material damage to the Works or any of the Project Assets;

**“Encumbrances”** means, in relation to the Project, any encumbrances such as mortgage, charge, pledge, lien, hypothecation, security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations, and shall include any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the Project, where applicable herein but excluding utilities referred to in Clause 9.1;

**“EPC”** means engineering, procurement and construction;

**“Final Payment Certificate”** shall have the meaning as set forth in Clause 17.12.1;

**“Final Payment Statement”** shall have the meaning as set forth in Clause 17.10.1;

**“Force Majeure” or “Force Majeure Event”** shall have the meaning ascribed to it in Clause 19.1;

**“GAD” or “General Arrangement Drawings”** shall have the meaning as set forth in Clause 4.1.3 (b);

**“GOI” or “Government”** means the Government of India;

**“Good Industry Practice”** means the practices, methods, techniques, designs, standards, skills, diligence, efficiency, reliability and prudence which are generally and reasonably expected from a reasonably skilled and experienced contractor engaged in the same type of undertaking as envisaged under this Agreement and which would be expected to result in the performance of its obligations by the Contractor in accordance with this Agreement, Applicable Laws and Applicable Permits in reliable, safe, economical and efficient manner;

**“Government Instrumentality”** means any department, division or sub-division of the Government or the State Government and includes any commission, board, authority, agency or municipal and other local authority or statutory

body, including panchayat, under the control of the Government or the State Government, as the case may be, and having jurisdiction over all or any part of the Project or the performance of all or any of the services or obligations of the Contractor under or pursuant to this Agreement;

“**IRC**” means the Indian Roads Congress;

“**Indemnified Party**” means the Party entitled to the benefit of an indemnity pursuant to Article 23;

“**Indemnifying Party**” means the Party obligated to indemnify the other Party pursuant to Article 23;

“**Indirect Political Event**” shall have the meaning as set forth in Clause 19.3;

“**Insurance Cover**” means the aggregate of the maximum sums insured under the insurances taken out by the Contractor pursuant to Article 18, and includes all insurances required to be taken out by the Contractor under Clauses 18.1 and 18.9 but not actually taken, and when used in the context of any act or event, it shall mean the aggregate of the maximum sums insured and payable or deemed to be insured and payable in relation to such act or event;

“**Intellectual Property**” means all patents, trade marks, service marks, logos, get-up, trade names, internet domain names, rights in designs, blue prints, programmes and manuals, drawings, copyright (including rights in computer software), database rights, semi-conductor, topography rights, utility models, rights in know-how and other intellectual property rights, in each case whether registered or unregistered and including applications for registration, and all rights or forms of protection having equivalent or similar effect anywhere in the world;

“**Interim Payment Certificate**” or “**IPC**” means the interim payment certificate issued by the Authority’s Engineer for payment to the Contractor in respect of Contractor’s claims for payment raised in accordance with the provisions of this Agreement;

“**LOA**” or “**Letter of Acceptance**” means the letter of acceptance referred to in Recital (D);

{“**Lead Member**” shall, in the case of a consortium, mean the member of such consortium who shall have the authority to bind the Contractor and each member of the Consortium; and shall be deemed to be the Contractor for the purposes of this Agreement;}<sup>§</sup>

<sup>§</sup> This definition may be omitted if the Contractor is not a Consortium.

**“Major Bridge”** means a bridge having a linear waterway of 18 metres or more or which has a clear opening of 12 metres or more in spans;

**“Manuals”** shall mean the manuals as specified in Schedule D;

**“Material Adverse Effect”** means a material adverse effect of any act or event on the ability of either Party to perform any of its obligations under and in accordance with the provisions of this Agreement and which act or event causes a material financial burden or loss to either Party;

**“Materials”** are all the supplies used by the Contractor for incorporation in the Works of the Project;

**“Non-Political Event”** shall have the meaning as set forth in Clause 19.2;

**“Parties”** means the parties to this Agreement collectively and **“Party”** shall mean any of the parties to this Agreement individually;

**“Performance Security”** shall have the meaning as set forth in Clause 7.1.1;

**“Plant”** means the apparatus and machinery intended to form or forming part of the Works;

**“Political Event”** shall have the meaning as set forth in Clause 19.4;

**“Programme”** shall have the meaning as set forth in Clause 10.1.3;

**“Project”** means the construction of the Project in accordance with the provisions of this Agreement, and includes all works, services and equipment relating to or in respect of the Scope of the Project;

**“Project Assets”** means all physical and other assets relating to (a) tangible assets such as civil works and equipment including [foundations, embankments, pavements, road surface, interchanges, bridges, culverts, road over-bridges, drainage works, traffic signals, sign boards, kilometre-stones, electrical systems, communication systems, rest areas, relief centres, maintenance depots and administrative offices]; and (b) Project Facilities situated on the Site;

**“Project Completion Date”** means the date on which the last Provisional Certificate is issued;

**“Project Completion Schedule”** means the progressive Project Milestones set forth in Schedule-I for completion of the Project on or before the Scheduled Completion Date;

**“Project Facilities”** means all the amenities and facilities to be constructed on the Site, as described in Schedule-C;

**“Project Milestone”** means the project milestone as set forth in Schedule-I and includes the Scheduled Completion Date;

**“Proof Consultant”** shall have the meaning as set forth in Clause 10.2.2;

**“Provisional Certificate”** shall have the meaning as set forth in Clause 12.2.1;

**“Punch List”** shall have the meaning as set forth in Clause 12.2.1;

**“Quality Assurance Plan”** or **“QAP”** shall have the meaning as set forth in Clause 11.2.1;

**“Re.”**, **“Rs.”** or **“Rupees”** or **“Indian Rupees”** means the lawful currency of the Republic of India;

**“Request for Proposals”** or **“RFP”** shall have the meaning as set forth in Recital (C);

**“Request for Qualification”** or **“RFQ”** shall have the meaning as set forth in Recital (B);

**“Retention Money”** shall have the meaning as set forth in Clause 7.5.1;

**“Right of Way”** means the constructive possession of the Site free from encroachments and encumbrances, together with all way leaves, easements, unrestricted access and other rights of way, howsoever described, necessary for construction of the Project in accordance with this Agreement;

**“Safety Consultant”** shall have the meaning as set forth in Clause 10.1.5;

**“Scheduled Completion Date”** shall be the date as set forth in Clause 10.3.1;

**“Scope of the Project”** shall have the meaning as set forth in Clause 2.1;

**“Section”** means a part of the Project;

**“Site”** shall have the meaning as set forth in Clause 8.1;

**“Specifications and Standards”** means the specifications and standards relating to the quality, quantity, capacity and other requirements for the Project, as set forth in Schedule-D, and any modifications thereof, or additions thereto, as included in the design and engineering for the Project submitted by the Contractor to, and expressly approved by, the Authority;

“**Stage Payment Statement**” shall have the meaning as set forth in Clause 17.4;

“**State**” means the State or the Union Territory, as the case may be, in which the headquarters of the Authority are situate and “**State Government**” means the government of that State or Union Territory;

“**Structures**” means an elevated [road or a flyover], as the case may be;

“**Sub-contractor**” means any person or persons to whom a part of the Works has been subcontracted by the Contractor and the permitted legal successors in title to such person, but not an assignee to such person;

“**Suspension**” shall have the meaning as set forth in Clause 20.1;

“**Taxes**” means any Indian taxes including excise duties, customs duties, value added tax, sales tax, local taxes, cess and any impost or surcharge of like nature (whether Central, State or local) on the goods, Materials, equipment and services incorporated in and forming part of the Project charged, levied or imposed by any Government Instrumentality, but excluding any interest, penalties and other sums in relation thereto imposed on any account whatsoever. For the avoidance of doubt, Taxes shall not include taxes on corporate income;

“**Termination**” means the expiry or termination of this Agreement;

“**Termination Notice**” means the communication issued in accordance with this Agreement by one Party to the other Party terminating this Agreement;

“**Termination Payment**” means the amount payable by either Party to the other upon Termination in accordance with Article 21;

“**Terms of Reference**” or “**TOR**” shall have the meaning as set forth in Clause 16.2.1;

“**Tests**” means the tests set forth in Schedule-J to determine the completion of Works in accordance with the provisions of this Agreement;

“**Time Extension**” shall have the meaning as set forth in Clause 10.4.1;

“**User**” means a person who uses or intends to use the Project or any part thereof in accordance with the provision of this Agreement and Applicable Laws;

“**Valuation of Unpaid works**” shall have the meaning as set forth in Clause 21.5.1;

“**WPI**” means the wholesale price index for various commodities as published by the Ministry of Commerce and Industry, GOI and shall include any index which substitutes the WPI, and any reference to WPI shall, unless the context otherwise requires, be construed as a reference to the WPI published for the period ending with the preceding month; and

“**Works**” means all works including survey and investigation, design, engineering, procurement, construction, Plant, Materials, temporary works and other things necessary to complete the Project in accordance with this Agreement.

**IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DAY, MONTH AND YEAR FIRST ABOVE WRITTEN.**

SIGNED, SEALED AND  
DELIVERED

For and on behalf of  
[THE AUTHORITY] by:

(Signature)  
(Name)  
(Designation)

SIGNED, SEALED AND  
DELIVERED

For and on behalf of  
THE CONTRACTOR by:

(Signature)  
(Name)  
(Designation)

In the presence of:

- 1.
- 2.

{COUNTERSIGNED and accepted by:

Name and particulars of other members of the Consortium}





# Schedules



SCHEDULE – A  
*(See Clauses 2.1 and 8.1)*

**SITE OF THE PROJECT**

**1 The Site**

- 1.1 Site of the Project shall include the land, buildings, structures and road works as described in Annex-I of this Schedule-A.
- 1.2 The dates of providing the Right of Way to the Contractor are specified in Annex-II of this Schedule-A.
- 1.3 An inventory of the Site including the land, buildings, structures, road works, trees and any other immovable property on, or attached to, the Site shall be prepared jointly by the Authority Representative and the Contractor, and such inventory shall form part of the memorandum referred to in Clause 8.2.1 of this Agreement.
- 1.4 The alignment plans of the Project are specified in Annex-III. In the case of sections where no modification in the existing alignment of the Project is contemplated, the alignment plan has not been provided. Alignment plans have only been given for sections where the existing alignment is proposed to be modified.
- 1.5 The status of the environment clearances obtained or awaited is given in Annex IV.

Annex - I  
(Schedule-A)

**Site for Project<sup>9</sup>**

[Note: Through suitable drawings and description in words, the land, buildings, structures and road works comprising the Site shall be specified briefly but precisely in this Annex-I.]

**1. Site**

The Site of the Project comprises the section commencing from km \*\*\* to km \*\*\* i.e. the \*\*\* - \*\*\* section in the State of \*\*\*. The land, carriageway and structures comprising the Site are described below.

**2. Land**

The Site of the Project comprises the land described below:

| S. No. | Chainage (km) |    | ROW (m) | Remarks |
|--------|---------------|----|---------|---------|
|        | From          | To |         |         |
|        |               |    |         |         |

**3. Carriageway**

The present carriageway of the Project is [single lane]. The type of the existing pavement is [flexible].

**4. Major Bridges**

The Site includes the following Major Bridges:

| S. No. | Chainage (km) | Type of Structure |               |                 | No. of Spans with span length (m) | Width (m) |
|--------|---------------|-------------------|---------------|-----------------|-----------------------------------|-----------|
|        |               | Founda-tion       | Sub-structure | Super-structure |                                   |           |
|        |               |                   |               |                 |                                   |           |

<sup>9</sup> This template is applicable to highway projects. It may be suitably modified in case of other projects.

**5 Road over-bridges (ROB)/ Road under-bridges (RUB)**

The Site includes the following ROB (road over railway line)/RUB (road under railway line):

| S. No. | Chainage (km) | Type of Structure |                | No. of Spans with span length (m) | Width (m) | ROB/ RUB |
|--------|---------------|-------------------|----------------|-----------------------------------|-----------|----------|
|        |               | Foundation        | Superstructure |                                   |           |          |
|        |               |                   |                |                                   |           |          |

**6 Grade separators**

The Site includes the following grade separators:

| S. No. | Chainage (km) | Type of Structure |                | No. of Spans with span length (m) | Width (m) |
|--------|---------------|-------------------|----------------|-----------------------------------|-----------|
|        |               | Foundation        | Superstructure |                                   |           |
|        |               |                   |                |                                   |           |

**7 Minor bridges**

The Site includes the following minor bridges:

| S. No. | Chainage (km) | Type of Structure |               |                 | No. of Spans with span length (m) | Width (m) |
|--------|---------------|-------------------|---------------|-----------------|-----------------------------------|-----------|
|        |               | Founda-tion       | Sub-structure | Super-structure |                                   |           |
|        |               |                   |               |                 |                                   |           |

**8 Railway level crossings**

The Site includes the following railway level crossings:

| S. No. | Location (km) | Remarks |
|--------|---------------|---------|
|        |               |         |

**9 Underpasses (vehicular, non vehicular)**

The Site includes the following underpasses:

| S. No. | Chainage (km) | Type of Structure | No. of Spans with span length (m) | Width (m) |
|--------|---------------|-------------------|-----------------------------------|-----------|
|        |               |                   |                                   |           |

**10 Culverts**

The Site has the following culverts:

| S. No. | Chainage (km) | Type of Culvert | Span /Opening with span length (m) | Width (m) |
|--------|---------------|-----------------|------------------------------------|-----------|
|        |               |                 |                                    |           |

**11 Bus bays**

The details of bus bays on the Site are as follows:

| S. No. | Chainage (km) | Length (m) | Left Hand Side | Right Hand Side |
|--------|---------------|------------|----------------|-----------------|
|        |               |            |                |                 |

**12 Truck Lay byes**

The details of truck lay byes are as follows:

| S. No. | Chainage (km) | Length (m) | Left Hand Side | Right Hand Side |
|--------|---------------|------------|----------------|-----------------|
|        |               |            |                |                 |

**13 Road side drains**

The details of the roadside drains are as follows:

| S. No. | Location  |         | Type               |                   |
|--------|-----------|---------|--------------------|-------------------|
|        | From (km) | To (km) | Masonry/cc (Pucca) | Earthen (Kutchha) |
|        |           |         |                    |                   |

**14 Major junctions**

The details of major junctions are as follows:

| S. No. | Location  |         | At grade | Separated | Category of Cross Road |    |     |        |
|--------|-----------|---------|----------|-----------|------------------------|----|-----|--------|
|        | From (km) | To (km) |          |           | NH                     | SH | MDR | Others |
|        |           |         |          |           |                        |    |     |        |
|        |           |         |          |           |                        |    |     |        |

(NH: National Highway, SH: State Highway, MDR: Major District Road)

**15 Minor junctions**

The details of the minor junctions are as follows:

| S. No. | Location  |         | Type        |            |
|--------|-----------|---------|-------------|------------|
|        | From (km) | To (km) | T -junction | Cross road |
|        |           |         |             |            |

**16 Bypasses**

The details of the bypasses are as follows:

| S. No. | Name of bypass (town) | Chainage (km)<br>(From ..... to) | Length (Km) | Carriageway |      |
|--------|-----------------------|----------------------------------|-------------|-------------|------|
|        |                       |                                  |             | Width (m)   | Type |
|        |                       |                                  |             |             |      |

**[17 Other structures]**

[Provide details of other structures, if any.]

Annex - II  
(Schedule-A)

**Dates for providing Right of Way**

The dates on which the Authority shall provide Right of Way to the Contractor on different Sections of the Site are specified below:

| S. No   | From km to<br>km | Length (km) | Width<br>(m) | Date of providing<br>ROW <sup>@</sup> |
|---|------------------|-------------|--------------|---------------------------------------|
| 1   | 2                | 3           | 4            | 5                                     |
| (i) Full Right of Way<br>(full width)<br>(a) section<br>(b) section<br>(c) section  |                  |             |              |                                       |
| (ii) Part Right of Way<br>(part width)<br>(a) section<br>(b) section<br>(c) section |                  |             |              |                                       |
| (iii) Balance Right<br>of Way (width)<br>a) section<br>b) section<br>c) section     |                  |             |              |                                       |

<sup>@</sup> The dates specified herein shall in no case be beyond 150 (one hundred and fifty) days after the Appointed Date.



Annex - III  
(Schedule-A)

**Alignment Plans**<sup>10</sup>

The existing alignment of the Project shall be modified in the following sections as per the alignment plan indicated below:

---

<sup>10</sup> May be omitted or substituted to reflect project-specific requirements.

Annex - IV  
(Schedule-A)

**Environmental Clearances**

The following environment clearances have been obtained:

[\*\*\*]

The following environment clearances are awaited:

[\*\*\*]

SCHEDULE – B  
(See Clause 2.1)

**DEVELOPMENT OF THE PROJECT**

**1 Development of the Project**

Development of the Project shall include design and construction of the Project as described in this Schedule-B and in Schedule-C.

**[2 Rehabilitation and augmentation<sup>11</sup>**

Rehabilitation and augmentation shall include Two-Laning and strengthening of the Project as described in Annex-I of this Schedule-B and in Schedule-C.]

**3 Specifications and Standards**

The Project shall be designed and constructed in conformity with the Specifications and Standards specified in Annex-I of Schedule-D.

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<sup>11</sup> May be omitted or substituted to reflect project-specific requirements.

Annex - I  
(Schedule-B)

## Description of the Project<sup>12</sup>

**[Note:** Description of the Project shall be given by the Authority in detail together with explanatory drawings (where necessary) to explain the Authority's requirements precisely in order to avoid subsequent changes in the Scope of the Project. The particulars that must be specified in this Schedule-B are listed below as per the requirements of the Manual of Standards and Specifications for Two Laning of Highways (IRC:SP:73-2007), referred to as the Manual. If any standards, specifications or details are not given in the Manual, the minimum design/construction requirements shall be specified in this Schedule. In addition to these particulars, all other essential project-specific details, as required, should be provided in order to define the Scope of the Project clearly and precisely.]

### 1 WIDENING OF THE EXISTING HIGHWAY

1.1 The Highway shall follow the existing alignment unless otherwise specified by the Authority and shown in the alignment plans specified in Annex III of Schedule-A. Geometric deficiencies, if any, in the existing horizontal and vertical profiles shall be corrected as per the prescribed standards for plain and rolling terrain to the extent land is available.

### 1.2 WIDTH OF CARRIAGEWAY

1.2.1 Two-Laning without paved shoulders shall be undertaken. The paved carriageway shall be 7(seven) m wide in accordance with the typical cross section drawings in the Manual.

Provided that in the built-up areas (refer to paragraphs 2.1 (ii) (a) of the Manual and provide necessary details): the width of the carriageway shall be as specified in the following table:

| S. No. | Built-up section<br>(Township) | Location (km<br>to km) | Width<br>(m) | Typical cross section<br>(Ref. to Manual) |
|--------|--------------------------------|------------------------|--------------|---|
|        |                                |                        |              |   |

<sup>12</sup>This template is applicable to highway projects. It may be suitably modified in case of other projects.

- 1.2.2 Except as otherwise provided in this Agreement, the width of the paved carriageway and cross-sectional features shall conform to paragraph 1.1 above.

## **2 GEOMETRIC DESIGN AND GENERAL FEATURES**

### **2.1 General**

Geometric design and general features of the Highway shall be in accordance with Section 2 of the Manual.

### **2.2 Design speed**

The design speed shall be the minimum design speed of 80 km per hr for plain terrain.

### **2.3 Improvement of the existing road geometrics**

[Refer to paragraph 2.1 (v) of the Manual and provide details]

In the following sections, where improvement of the existing road geometrics to the prescribed standards is not possible, the existing road geometrics shall be improved to the extent possible within the given right of way and proper road signs and safety measures shall be provided:

| S. No. | Section (from km to km) | Type of deficiency | Remarks |
|--------|-------------------------|--------------------|---------|
|        |                         |                    |         |

### **2.4 Right of Way**

[Refer to paragraph 2.3 of the Manual]. Details of the Right of Way are given in Annex II of Schedule-A.

### **2.5 Type of shoulders**

[Refer to paragraph 2.5.2 of the Manual and specify]

- (a) In built-up sections, footpaths/fully paved shoulders shall be provided in the following sections:

| S. No. | Section (from km to km) | Fully paved shoulders/ footpaths | Reference to cross section |
|--------|-------------------------|----------------------------------|----------------------------|
|        |                         |                                  |                            |

- (b) In open country, [paved shoulders of 1.5 m width shall be provided and balance 1.0 m width shall be covered with 150 mm thick compacted layer of granular material].
- (c) Design and specifications of paved shoulders and granular material shall conform to the requirements specified in paragraphs 5.9.9 and 5.9.10 of the Manual.

## 2.6 Lateral and vertical clearances at underpasses

2.6.1 Lateral and vertical clearances at underpasses and provision of guardrails/crash barriers shall be as per paragraph 2.11 of the Manual.

2.6.2 Lateral clearance: The width of the opening at the underpasses shall be as follows:

| S. No. | Location (chainage) (from km to km) | Span/opening (m) | Remarks |
|--------|-------------------------------------|------------------|---------|
|        |                                     |                  |         |

## 2.7 Lateral and vertical clearances at overpasses

2.7.1 Lateral and vertical clearances at overpasses shall be as per paragraph 2.12 of the Manual.

2.7.2 Lateral clearance: The width of the opening at the overpasses shall be as follows:

| Sl. No. | Location (chainage) (from km to km) | Span/opening (m) | Remarks |
|---------|-------------------------------------|------------------|---------|
|         |                                     |                  |         |

## 2.8 Service roads

Service roads shall be constructed at the locations and for the lengths indicated below: [Refer to paragraph 2.13 of the Manual and provide details]

| S.No. | Location of service road(from km to km) | Right hand side (RHS)/Left hand side (LHS)/ or Both sides | Length of service road (km) |
|-------|---|---|-----------------------------|
|       |   |   |                             |

## 2.9 Grade separated structures

2.9.1 Grade separated structures shall be provided as per paragraph 2.14 of the Manual. The requisite particulars are given below:

[Refer to paragraphs 2.14.1 of the Manual and provide details]

| S. No. | Location of structure | Length (m) | Number and length of spans (m) | Approach gradient | Remarks, if any |
|--------|-----------------------|------------|--------------------------------|-------------------|-----------------|
|        |                       |            |                                |                   |                 |

2.9.2 In the case of grade separated structures, the type of structure and the level of the Highway and the cross roads shall be as follows: [Refer to paragraphs 2.14.2 of the Manual and specify the type of vehicular under pass/ overpass structure and whether the cross road is to be carried at the existing level, raised or lowered]

| S.No. | Location | Type of structure & Length (m) | Cross road at  |              |               | Remarks, if any |
|-------|----------|--------------------------------|----------------|--------------|---------------|-----------------|
|       |          |                                | Existing Level | Raised Level | Lowered Level |                 |
|       |          |                                |                |              |               |                 |

## 2.10 Cattle and pedestrian underpass /overpass

Cattle and pedestrian underpass/ overpass shall be constructed as follows: [Refer to paragraph 2.14.3 of the Manual and specify the requirements of cattle and pedestrian underpass/ overpass]

| S. No. | Location | Type of crossing |
|--------|----------|------------------|
|        |          |                  |

### 2.11 Typical cross-sections of the Highway

[Give typical cross-sections of the Highway by reference to the Manual]

## 3 INTERSECTIONS AND GRADE SEPARATORS

All intersections and grade separators shall be as per section 3 of the Manual. Existing intersections which are deficient shall be improved to the prescribed standards.

[Refer to paragraphs 3.1.1, 3.1.2 and 3.3 of the Manual and specify the requirements. Explain where necessary with drawings/sketches/general arrangement]

Properly designed intersections shall be provided at the locations and of the types and features given in the tables below:

### (a) At-grade intersections

| S. No. | Location of intersection | Type of intersection | Other features |
|--------|--------------------------|----------------------|----------------|
|        |                          |                      |                |

### (b) Grade separated intersection with/without ramps

| S. No. | Location | Salient features | Minimum length of viaduct to be provided (m) | Road to be carried over/under the structures |
|--------|----------|------------------|--|--|
|        |          |                  |  |  |

## 4 ROAD EMBANKMENT AND CUT SECTION

- 4.1 Widening and improvement of the existing road embankment/cuttings and construction of new road embankment/ cuttings shall conform to the Specifications and Standards given in section 4 of the Manual and the specified cross sectional details. Deficiencies in the plan and profile of the existing road shall be corrected.



**4.2 Raising of the existing road [Refer to paragraph 4.2.2 of the Manual and specify the sections to be raised]**

The existing road shall be raised in the following sections:

| S. No. | Section<br>(from km to km) | Length (km) | Extent of raising<br>[Top of finished road level] |
|--------|----------------------------|-------------|---|
|        |                            |             |   |

**5 PAVEMENT DESIGN**

5.1 Pavement design shall be carried out in accordance with section 5 of the Manual.

**5.2 Type of pavement**

[Refer to paragraph 5.1 of the Manual and state specific requirement, if any, of providing cement pavement.]

**5.3 Design requirements**

[Refer to paragraphs 5.4, 5.9 and 5.10 of the Manual and specify design requirements and strategy]

**5.3.1 Design Period and strategy**

Flexible pavement for new pavement or for widening and strengthening of the existing pavement shall be designed for a minimum design period of 15 (fifteen) years. Stage construction shall not be permitted.

**5.3.2 Design Traffic**

Notwithstanding anything to the contrary contained in this Agreement or the Manual, the Contractor shall design the pavement for a design traffic of \*\*\* million standard axles.

**5.4 Reconstruction of sections**

[Refer to paragraph 5.9.7 of the Manual and specify the sections, if any, to be reconstructed.]

The following sections of the existing road shall be reconstructed. These shall be designed as new pavement.



| S. No. | Section From km to km | Remarks |
|--------|-----------------------|---------|
|        |                       |         |

## 6 ROADSIDE DRAINAGE

Drainage system including surface and subsurface drains for the Highway shall be provided as per section 6 of the Manual.

## 7 DESIGN OF STRUCTURES

### 7.1 General

7.1.1 All bridges, culverts and structures shall be designed and constructed in accordance with section 7 of the Manual and shall conform to the cross-sectional features and other details specified therein.

7.1.2 Width of the carriageway of new bridges and structures shall be as follows:

[Refer to paragraph 7.1 (ii) of the Manual and specify the width of carriageway of new bridges and structures of more than 60 metre length, if the carriageway width is different from 7.5 metres in the table below.]

| S. No. | Bridge at km | Width of carriageway and cross-sectional features @ |
|--------|--------------|---|
|        |              |   |

@ Attach typical cross-section, if necessary.

7.1.3 The following structures shall be provided with footpaths:

[Refer to paragraph 7.1 (iii) of the Manual and provide details of new Structures with footpath.]

| S. No. | Location at km | Remarks |
|--------|----------------|---------|
|        |                |         |

7.1.4 All bridges shall be high-level bridges.

[Refer to paragraph 7.1 (iv) of the Manual and state if there is any exception]

7.1.5 The following structures shall be designed to carry utility services specified in table below:

[Refer to paragraph 7.1 (viii) of the Manual and provide details]

| S. No. | Bridge at km | Utility service to be carried | Remarks |
|--------|--------------|-------------------------------|---------|
|        |              |                               |         |

7.1.6 Cross-section of the new culverts and bridges at deck level for the Highway shall conform to the typical cross-sections given in section 7 of the Manual.

## 7.2 Culverts

7.2.1 Overall width of all culverts shall be equal to the roadway width of the approaches.

### 7.2.2 *Reconstruction of existing culverts:*

The existing culverts at the following locations shall be re-constructed as new culverts:

[Refer to paragraph 7.3 (i) of the Manual and provide details]

| S.No. | Culvert location (Chainage km) | Span/Opening(m) | Remarks, if any <sup>@</sup> |
|-------|--------------------------------|-----------------|------------------------------|
|       |                                |                 |                              |

<sup>@</sup> [Specify modifications, if any, required in the road level, etc.]

### 7.2.3 *Widening of existing culverts*

All existing culverts which are not to be reconstructed shall be widened to the roadway width of the Highway as per the typical cross section given in section 7 of the Manual. Repairs and strengthening of existing structures where required shall be carried out.

| S. No. | Culvert location (Chainage km) | Type, span, height and width of existing culvert(m) | Repairs to be carried out |
|--------|--------------------------------|---|---------------------------|
|        |                                |   |                           |

7.2.4 Additional new culverts shall be constructed as per particulars given in the table below:

| S. No. | Culvert location (Chainage km) | Span/Opening(m) |
|--------|--------------------------------|-----------------|
|        |                                |                 |

7.2.5 Repairs/replacements of railing/parapets, flooring and protection works of the existing culverts shall be undertaken as follows:

[Refer to paragraph 7.23 of the Manual and provide details]

| S. No. | Location at km | Type of repair required |
|--------|----------------|-------------------------|
|        |                |                         |

7.2.6 Floor protection works shall be as specified in the relevant IRC Codes and Specifications.

### 7.3 Bridges

#### 7.3.1 Existing bridges to be re-constructed/widened

[(i) The existing bridges at the following locations shall be re-constructed as new Structures:]

[Refer to paragraph 7.3.2 of the Manual and provide details]

| S. No. | Bridge location (km) | Salient details of existing bridge | Adequacy or otherwise of the existing waterway, vertical clearance, etc <sup>@</sup> | Remarks |
|--------|----------------------|------------------------------------|--|---------|
|        |                      |                                    |  |         |
|        |                      |                                    |  |         |

<sup>@</sup> Attach GAD

[(ii) The following narrow bridges shall be widened:

| S. No. | Location (km) | Existing width (m) | Extent of widening (m) | Cross-section at deck level for widening @ |
|--------|---------------|--------------------|------------------------|--|
|        |               |                    |                        |  |

<sup>@</sup> Attach cross-section

### 7.3.2 *Additional new bridges*

[Specify additional new bridges if required, and attach GAD]

New bridges at the following locations on the Highway shall be constructed. GADs for the new bridges are attached in the drawings folder.

| S. No. | Location (km) | Total length (m) | Remarks, if any |
|--------|---------------|------------------|-----------------|
|        |               |                  |                 |

### 7.3.3 The railings of existing bridges shall be replaced by crash barriers at the following locations:

[Refer to paragraph 7.18 (iv) the Manual and provide details:]

| S. No. | Location at km | Remarks |
|--------|----------------|---------|
|        |                |         |

### 7.3.4 Repairs/replacements of railing/parapets of the existing bridges shall be undertaken as follows:

[Refer to paragraph 7.18 (v) the Manual and provide details]

| S. No. | Location at km | Remarks |
|--------|----------------|---------|
|        |                |         |

### 7.3.5 *Drainage system for bridge decks*

An effective drainage system for bridge decks shall be provided as specified in paragraph 7.21 of the Manual

### 7.3.6 *Structures in marine environment*

[Refer to paragraph 7.22 of the Manual and specify the necessary measures / treatments for protecting structures in marine environment, where applicable]

## 7.4. **Rail-road bridges**

### 7.4.1 Design, construction and detailing of ROB/RUB shall be as specified in section 7 of the Manual. [Refer to paragraph 7.19 of the Manual and specify modification, if any]

#### 7.4.2 Road over-bridges

Road over-bridges (road over rail) shall be provided at the following level crossings, as per GAD drawings attached:

| S. No. | Location of Level crossing<br>(chainage km) | Length of bridge(m) |
|--------|---|---------------------|
|        |   |                     |

#### 7.4.3 Road under-bridges

Road under-bridges (road under railway line) shall be provided at the following level crossings, as per GAD drawings attached:

| S. No. | Location of Level crossing<br>(chainage km) | Number and length of span(m) |
|--------|---|------------------------------|
|        |   |                              |

#### 7.5 Grade separated structures

[Refer to paragraph 7.20 of the Manual]

The grade separated structures shall be provided at the locations and of the type and length specified in paragraphs 2.9 and 3 of this Annex-I.

#### 7.6 Repairs and strengthening of bridges and structures

[Refer to paragraph 7.23 of the Manual and provide details]

The existing bridges and structures to be repaired/strengthened, and the nature and extent of repairs /strengthening required are given below:

##### A. Bridges

| S. No. | Location of bridge (km) | Nature and extent of repairs /<br>strengthening to be carried out |
|--------|-------------------------|---|
|        |                         |   |

**B. ROB / RUB**

| S. No. | Location of ROB/RUB (km) | Nature and extent of repairs / strengthening to be carried out |
|--------|--------------------------|--|
|        |                          |  |

**C. Overpasses/Underpasses and other structures**

| S. No. | Location of Structure (km) | Nature and extent of repairs / strengthening to be carried out |
|--------|----------------------------|--|
|        |                            |  |

**1 List of Major Bridges and Structures**

The following is the list of the Major Bridges and Structures:

| S. No. | Location (Chainage km) |
|--------|------------------------|
|        |                        |

**8 TRAFFIC CONTROL DEVICES AND ROAD SAFETY WORKS**

- 8.1 Traffic control devices and road safety works shall be provided in accordance with section 9 of the Manual.
- 8.2 Specifications of the reflective sheeting. [Refer to paragraph 9.3 of the Manual and specify]

**9 ROADSIDE FURNITURE**

- 9.1 Roadside furniture shall be provided in accordance with the provisions of Section 11 of the Manual.
- 9.2 *Overhead traffic signs: location and size*

[Refer to paragraph 11.5 of the Manual and provide details]

**10 COMPULSORY AFFORESTATION**

[Refer to paragraph 12.1 of the Manual and specify the number of trees which are required to be planted by the Contractor as compensatory afforestation.]



**11 HAZARDOUS LOCATIONS**

The safety barriers shall also be provided at the following hazardous locations:

| S. No. | Location of section from (km)<br>to (km) | LHS/RHS |
|--------|--|---------|
|        |  |         |

**12 SPECIAL REQUIREMENT FOR HILL ROADS**

[Refer to paragraphs 14.5 and 14.8 of the Manual and provide details where relevant and required.]

**13 CHANGE OF SCOPE**

The length of Structures and bridges specified hereinabove shall be treated as an approximate assessment. The actual lengths as required on the basis of detailed investigations shall be determined by the Contractor in accordance with the Specifications and Standards. Any variations in the lengths specified in this Schedule-B shall not constitute a Change of Scope, save and except any variations in the length arising out of a Change of Scope expressly undertaken in accordance with the provisions of Article 13.

SCHEDULE – C  
(See Clause 2.1)

**PROJECT FACILITIES<sup>13</sup>**

**1 Project Facilities**

The Contractor shall construct the Project Facilities in accordance with the provisions of this Agreement. Such Project Facilities shall include:

- (a) toll plaza[s];
- (b) roadside furniture;
- (c) pedestrian facilities;
- (d) tree plantation;
- (e) truck lay-byes;
- (f) bus-bays and bus shelters;
- (g) rest areas; and
- (h) others to be specified

**2 Description of Project Facilities**

Each of the Project Facilities is described below:

| S. No. | Project Facility | Location | Design Requirements | Other essential details |
|--------|------------------|----------|---------------------|-------------------------|
|        |                  |          |                     |                         |

Note: Provide adequate details of each Project Facility to ensure their design and completion in accordance with the project-specific requirements and the provisions of the Manual.

<sup>13</sup>This template is applicable to highway projects. It may be suitably revised in case of other projects.

## SCHEDULE – D

*(See Clause 2.1)*

### **SPECIFICATIONS AND STANDARDS**

#### **1 Construction**

The Contractor shall comply with the Specifications and Standards set forth in Annex-I of this Schedule-D for construction of the Project.

#### **2 Design Standards<sup>14</sup>**

The Project including Project Facilities shall conform to design requirements set out in the following documents:

[Manual of Standards and Specifications for Two Laning of Highways (IRC: SP: 73-2007), referred to herein as the Manual]

[Note: Specify the relevant Manual, Specifications and Standards]

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<sup>14</sup>This template is applicable to highway projects. It may be suitably revised in case of other projects.

Annex - I  
(Schedule-D)

## Specifications and Standards for Construction<sup>15</sup>

### 1 Specifications and Standards

All Materials, works and construction operations shall conform to the Manual of Standards and Specifications for Two-Laning of Highways (IRC:SP:73-2007), referred to as the Manual, and MORTH Specifications for Road and Bridge Works. Where the specification for a work is not given, Good Industry Practice shall be adopted to the satisfaction of the Authority's Engineer.

### 2 Deviations from the Specifications and Standards

2.1 The terms "Concessionaire", "Independent Engineer" and "Concession Agreement" used in the Manual shall be deemed to be substituted by the terms "Contractor", "Authority's Engineer" and "Agreement" respectively.

2.2 [Notwithstanding anything to the contrary contained in Paragraph 1 above, the following Specifications and Standards shall apply to the Project, and for purposes of this Agreement, the aforesaid Specifications and Standards shall be deemed to be amended to the extent set forth below:]

[Specify the deviations, if any]

[**Note:** Deviations from the aforesaid Specifications and Standards shall be listed out here. Such deviations shall be specified only if they are considered essential in view of project-specific requirements.]

<sup>15</sup>This template is applicable to highway projects. It may be suitably revised in case of other projects.

**SCHEDULE – E**  
*(See Clause 3.1.7(a))*

**APPLICABLE PERMITS**

**1 Applicable Permits<sup>16</sup>**

- 1.1 The Contractor shall obtain, as required under Applicable Laws, the following Applicable Permits:
- (a) Permission of the State Government for extraction of boulders from quarry;
  - (b) Permission of Village Panchayats and Pollution Control Board for installation of crushers;
  - (c) Licence for use of explosives;
  - (d) Permission of the State Government for drawing water from river/reservoir;
  - (e) Licence from inspector of factories or other competent Authority for setting up batching plant;
  - (f) Clearance of Pollution Control Board for setting up batching plant;
  - (g) Clearance of Village Panchayats and Pollution Control Board for setting up asphalt plant;
  - (h) Permission of Village Panchayats and State Government for borrow earth; and
  - (i) Any other permits or clearances required under Applicable Laws.
- 1.2 Applicable Permits, as required, relating to environmental protection and conservation shall have been procured by the Authority in accordance with the provisions of this Agreement.

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<sup>16</sup>This template is applicable to highway projects. It may be suitably revised in case of other projects.

SCHEDULE – F  
(See Clauses 7.1.1, 7.5.3 and 19.2)

**FORM OF BANK GUARANTEE**

Annex-I  
(See Clause 7.1.1)

**Form of Guarantee for Performance Security**

.....,  
.....,  
.....,

**WHEREAS:**

- (A) .....(insert name and address of the contractor) (hereinafter called the “**Contractor**”) and (insert name and address of the project authority), (hereinafter called the “**Authority**”) have entered into an agreement (hereinafter called the “**Agreement**”) for the construction of the .....section of State Highway No. ....on Engineering, Procurement and Construction (the “**EPC**”) basis, subject to and in accordance with the provisions of the Agreement
- (B) The Agreement requires the Contractor to furnish a Performance Security for due and faithful performance of its obligations, under and in accordance with the Agreement, during the Construction Period and Defects Liability Period (as defined in the Agreement) in a sum of Rs..... cr. (Rupees ..... crore) (the “**Guarantee Amount**”).
- (C) We, ..... through our branch at ..... (the “**Bank**”) have agreed to furnish this bank guarantee (*hereinafter called the “**Guarantee**”*) by way of Performance Security.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

- 1. The Bank hereby unconditionally and irrevocably guarantees and undertakes to pay to the Authority upon occurrence of any failure or default in the due and faithful performance of all or any of the Contractor’s obligations, under and in accordance with the provisions of the Agreement during the {Construction

Period/ Defects Liability Period} on its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Authority, under the hand of an officer not below the rank of a Chief Engineer of the Authority, that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.
3. In order to give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
4. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfilment and/or performance of all or any of the obligations of the Contractor contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference

to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.

6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Agreement or for the fulfilment, compliance and/or performance of all or any of the obligations of the Contractor under the Agreement.
7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
8. The Guarantee shall cease to be in force and effect on .....<sup>§</sup>. Unless a demand or claim under this Guarantee is made in writing before expiry of the Guarantee, the Bank shall be discharged from its liabilities hereunder.
9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive.

<sup>§</sup> Insert date being 2 (two) years from the date of issuance of this Guarantee (in accordance with Clause 7.2 of the Agreement).



11. This Guarantee shall come into force with immediate effect and shall remain in force and effect for up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement

Signed and sealed this ..... day of ....., 20..... at .....

SIGNED, SEALED AND  
DELIVERED For and on behalf of the  
Bank by:

(Signature)  
(Name)  
(Designation)  
(Code Number)  
(Address)

NOTES:

- (i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
- (ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.

Annex – II  
(Schedule - F)  
(See Clause 7.5.3)

**Form of Guarantee for Withdrawal of Retention Money**

.....,  
.....,  
.....,

**WHEREAS:**

- (A) .....(insert name and address of the contractor) (hereinafter called the “**Contractor**”) has executed an agreement (hereinafter called the “**Agreement**”) with the (insert name and address of the project authority), (hereinafter called the “**Authority**”) for the construction of the ..... section of State Highway No. .... on Engineering, Procurement and Construction (the “**EPC**”) basis, subject to and in accordance with the provisions of the Agreement.
- (B) In accordance with Clause 7.5.3 of the Agreement, the Contractor may withdraw the retention money (hereinafter called the “**Retention Money**”) after furnishing to the Authority a bank guarantee for an amount equal to the proposed withdrawal.
- (C) We, ..... through our branch at ..... (the “**Bank**”) have agreed to furnish this bank guarantee (hereinafter called the “**Guarantee**”) for the amount of Rs. .... cr. (Rs. .... crore) (the “**Guarantee Amount**”).

NOW, THEREFORE, the Bank hereby unconditionally and irrevocably guarantees and affirms as follows:

- 1. The Bank hereby unconditionally and irrevocably undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Authority, under the hand of an officer not below the rank of a Chief Engineer of the Authority, that the Contractor has committed default in the due and faithful performance of all or any of its obligations for under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Contractor is in default shall be final, and binding on the Bank, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.
3. In order to give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
4. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Retention Money and any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.
6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Retention Money.

7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
8. The Guarantee shall cease to be in force and effect 90 (ninety) days after the date of the Completion Certificate specified in Clause 12.4 of the Agreement.
9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive.
11. This Guarantee shall come into force with immediate effect and shall remain in force and effect up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement.

Signed and sealed this ..... day of ....., 20..... at .....

SIGNED, SEALED AND DELIVERED  
For and on behalf of the Bank by:  
(Signature)

(Name)  
(Designation)  
(Code Number)  
(Address)

NOTES:

- (i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
- (ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.

Annex – III  
(Schedule - F)  
(See Clause 19.2)

**Form of Guarantee for Advance Payment**

.....,  
.....,  
.....,

**WHEREAS:**

- (A) .....(insert name and address of the contractor) (hereinafter called the “**Contractor**” has executed an agreement (hereinafter called the “**Agreement**”) with the (insert name and address of the project authority), (hereinafter called the “**Authority**”) for the construction of the ..... section of State Highway No. .... on Engineering, Procurement and Construction (the “**EPC**”) basis, subject to and in accordance with the provisions of the Agreement
- (B) In accordance with Clause 19.2 of the Agreement, the Authority shall make to the Contractor an interest free advance payment (herein after called “**Advance Payment**”) equal to 10% (ten per cent) of the Contract Price; and that the Advance Payment shall be made in three instalments subject to the Contractor furnishing an irrevocable and unconditional guarantee by a scheduled bank for an amount equivalent to 110% (one hundred and ten per cent) of such instalment to remain effective till the complete and full repayment of the instalment of the Advance Payment as security for compliance with its obligations in accordance with the Agreement. The amount of {first/second/third} instalment of the Advance Payment is Rs. .... cr. (Rupees ..... crore) and the amount of this Guarantee is Rs. .... cr. (Rupees ..... crore)(the “**Guarantee Amount**”)\$.<sup>§</sup>
- (C) We, ..... through our branch at ..... (the “**Bank**”) have agreed to furnish this bank guarantee (*hereinafter called the “**Guarantee**”*) for the Guarantee Amount.

<sup>§</sup> The Guarantee Amount should be equivalent to 110% of the value of the applicable instalment.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful repayment on time of the aforesaid instalment of the Advance Payment under and in accordance with the Agreement, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.
2. A letter from the Authority, under the hand of an officer not below the rank of a Chief Engineer of the Authority, that the Contractor has committed default in the due and faithful performance of all or any of its obligations for the repayment of the instalment of the Advance Payment under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.
3. In order to give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
4. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Advance Payment or to extend the time or period of its repayment or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce

or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.

6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Advance Payment.
7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
8. The Guarantee shall cease to be in force and effect on .....<sup>\$</sup> Unless a demand or claim under this Guarantee is made in writing on or before the aforesaid date, the Bank shall be discharged from its liabilities hereunder.
9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that

<sup>\$</sup> Insert a date being 90 (ninety) days after the end of one year from the date of payment of the Advance payment to the Contractor (in accordance with Clause 19.2 of the Agreement).



the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive.

11. This Guarantee shall come into force with immediate effect and shall remain in force and effect up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement.

Signed and sealed this ..... day of ....., 20..... at .....

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

NOTES:

- (i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
- (ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.

SCHEDULE – G  
(See Clauses 10.1.4 and 19.3)

**CONTRACT PRICE WEIGHTAGES<sup>17</sup>**

- 1.1 The Contract Price for this Agreement is Rs. \*\*\*\*\*
- 1.2 Proportions of the Contract Price for different stages of Construction of the Project shall be as specified below:

| Item  | Weightage in percentage to the Contract Price | Stage for Payment                                     | Percentage weightage |
|---|---|---|----------------------|
| 1   | 2   | 3   | 4                    |
| Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads) | *****   | <b>A- Widening and strengthening of existing road</b> |                      |
|   |   | (1) Earthwork up to top of the sub-grade              | **                   |
|   |   | (2) Granular work (sub-base, base, shoulders)         | **                   |
|   |   | (3) Bituminous work                                   | **                   |
|   |   | (4) Widening and repair of culverts                   | **                   |
|   |   | (5) Widening and repair of minor bridges              | **                   |
|   |   | <b>B- New 2-lane realignment/ bypass</b>              |                      |
|   |   | (1) Earthwork up to top of the sub-grade              | **                   |
|   |   | (2) Granular work (sub-base, base, shoulders)         | **                   |
|   |   | (3) Bituminous work                                   | **                   |
| (4) CC Pavement   | **  |   |                      |

<sup>17</sup>This template is applicable to highway projects. It may be suitably revised in case of other projects.

|  |       |   |  |
|--|-------|---|--|
|  |       | <p><b>C- New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:</b></p> <p>(1) Culverts **</p> <p>(2) Minor bridges **</p> <p>(3) Cattle/Pedestrian underpasses **</p> <p>(4) Pedestrian overpasses **</p> <p>(5) Grade separated structures</p> <p>(a) Underpasses **</p> <p>(b) Overpass **</p>   |  |
| Major Bridge works and ROB/ RUB                  | ***** | <p><b>A- Widening and repairs of Major Bridges</b></p> <p>(1) Foundation **</p> <p>(2) Sub-structure **</p> <p>(3) Super-structure (including crash barriers etc. complete) **</p> <p><b>B- Widening and repair of</b></p> <p>(a) <b>ROB</b> **</p> <p>(b) <b>RUB</b> **</p> <p><b>C- New Major Bridges</b></p> <p>(1) Foundation **</p> <p>(2) Sub-structure **</p> <p>(3) Super-structure (including crash barriers etc. complete) **</p> <p><b>D- New rail-road bridges</b></p> <p>(a)ROB **</p> <p>(b) RUB **</p> |  |
| Structures (elevated sections, reinforced earth) | ***** | <p>(1) Foundation **</p> <p>(2) Sub-structure **</p> <p>(3) Super-structure (including crash barriers etc. complete) **</p> <p>(4) Reinforced Earth **</p>  |  |

|   |       |  |    |
|---|-------|--|----|
| Other works   | ***** | (i) Service roads  | ** |
|   |       | (ii) Toll Plaza  | ** |
|   |       | (iii) Road side drains                                     | ** |
|   |       | (iv) Road signs, markings, km stones, safety devices, etc. | ** |
|   |       | (v) Project facilities                                     | ** |
|   |       | (vi) Repairs to bridges/ structures                        |    |
|   |       | a) Providing wearing coat                                  | ** |
|   |       | b) Replacement of bearings, joints                         | ** |
|   |       | c) Providing crash barriers                                | ** |
|   |       | d) Other items   | ** |
|   |       | (vii) Road side plantation                                 | ** |
| (viii) Repair of protection works                                   | **    |  |    |
| (ix) Safety and traffic management during construction <sup>@</sup> | **    |  |    |

<sup>@</sup> The above list is illustrative and may require modification as per the scope of the work.

### 1.3 Procedure of estimating the value of work done

#### 1.3.1 Road works including approaches to minor bridges, Major Bridges and Structures (excluding service roads).

Procedure for estimating the value of road work done shall be as follows:

Table 1.3.1

| Stage of Payment                              | Percentage -weightage | Payment Procedure  |
|---|-----------------------|--|
| <b>A-Widening and strengthening</b>           | **                    | Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in a length of not less than 10 (ten) percent of the total length. <sup>@</sup> |
| (1) Earthwork up to top of the sub-grade      | **                    |  |
| (2) Granular work (sub-base, base, shoulders) | **                    |  |
| (3) Bituminous work                           | **                    |  |

|  |  |  |
|--|--|--|
| (4) Widening and repair of culverts  | **   | Cost of ten completed culverts shall be determined pro rata with respect to the total number of culverts. Payment shall be made on the completion of ten culverts.   |
| (5) Widening and repair of minor bridges   | **   | Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length of the minor bridges. Payment shall be made on the completion of a minor bridge.   |
| <b>B- New 2-lane realignment, bypass</b><br>(1) Earthwork up to top of the sub-grade<br>(2) Granular work (sub-base, base, shoulders)<br>(3) Bituminous work<br>(4) CC Pavement  | **<br><br>**<br><br>**<br><br>**                               | Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 5 (five) km length.   |
| <b>C- New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:</b><br>(1) Culverts<br><br>(2) Minor bridges<br><br>(3) Cattle/Pedestrian underpasses<br><br>(4) Pedestrian Overpasses<br>(5) Grade separated structures<br>(a) Underpasses<br>(b) Overpasses | **<br><br>**<br><br>**<br><br>**<br><br>**<br><br>**<br><br>** | Cost of each culvert shall be determined on pro rata basis with respect to the total number of culverts. Payment shall be made on the completion of five culverts.<br><br>Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length of the minor bridges. Payment shall be made on the completion of a minor bridge<br><br>Cost of each cattle/pedestrian underpass shall be determined on pro rata basis with respect to the total number of cattle/pedestrian underpasses. Payment shall be made on the completion of the number of cattle/pedestrian underpasses specified below:<br>Total no.<br>Stage for Payment: (i) 1 to 5 - on completion of all, (ii) 6 or more - on completion of five<br>Same as for (3) above<br><br>5(a) Same as for (3) above<br>5(b) Same as for (3) above |

@ For example, if the total length of bituminous work to be done is 100 km, the cost per km of bituminous work shall be determined as follows:

Cost per km = P x weightage for road work x weightage for bituminous work x (1/L)

Where P= Contract Price

L = Total length in km

Similarly, the rates per km for stages (1), (2) and (4) above shall be worked out.

### 1.3.2 Major Bridge works and ROB/RUB.

Procedure for estimating the value of Major Bridge works and of ROB/RUB shall be as specified in table 1.3.2:

Table 1.3.2

| Stage of Payment   | Weightage | Payment Procedure   |
|--|-----------|---|
| <b>A- Widening and repairs of Major Bridges</b>  |           | Cost of each Major Bridge (widening and repairs) shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges (widening and repairs). Payment shall be made on completion of each stage of a Major Bridge as per the weightage given in this table. |
| Foundation: On completion of the foundation work including foundations for wing and return walls   | **        |   |
| Sub-structure: On completion of abutments, piers up to the abutment/pier cap   | **        |   |
| Super-structure: On completion of the super structure in all respects including hand rails/crash barriers, wing walls, return walls, guide bunds, if any, tests on completion etc., bridge complete in all respects and fit for use. | **        |   |
|  | **        |   |
|  | **        |   |
| <b>B- Widening and repairs of</b>  |           | Cost of each ROB/RUB (widening and repairs) shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUB (widening and repairs). Payment shall be made on completion of an ROB/RUB  |
| (a) ROB  | **        |   |
| (b) RUB  | **        |   |

|  |    |  |
|--|----|--|
| <b>C- New Major Bridges</b>  |    | Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges. Payment shall be made on completion of each stage of a Major Bridge as per the weightage given in this table |
| (1) Foundation: On completion of the foundation work including foundations for wing and return walls   | ** |  |
| (2) Sub-structure: On completion of abutments, piers up to the abutment/pier cap   | ** |  |
| (3) Super-structure: On completion of the super structure in all respects including hand rails/crash barriers, wing walls, return walls, guide bunds, if any, tests on completion etc., complete in all respects and fit for use | ** |  |
| <b>D- New Rail-road bridges</b>  |    | Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUB. Payment shall be made on completion of an ROB/RUB   |
| (a) ROB  | ** |  |
| (b) RUB  | ** |  |

### 1.3.3 Structures

Procedure for estimating the value of structure work shall be as specified in table 1.3.3:

Table 1.3.3

| Stage of payment  | Weightage | Payment procedure  |
|---|-----------|--|
| (1) Foundation: On completion of the foundation works including foundations for wing and return walls   | **        | Cost of each structure shall be determined on pro rata basis in respect to the total linear length (m) of all the structures. Payment shall be made on completion of each stage of a structure as per the weightage given in this table. |
| (2) Sub-structure: On completion of abutments, piers up to the abutment/pier cap  | **        |  |
| (3) Super-structure: On completion of the Structure along with super structure, including hand rails/crash barriers, wing walls, return walls, tests on completion etc., elevated structure complete in all respects and fit for use. | **        |  |

|                           |    |  |
|---------------------------|----|--|
| (4) Reinforced earth work | ** | Payment shall be made on pro rata basis on completion of 25 (twenty five) percent of total area. |
|---------------------------|----|--|

#### 1.3.4 Other works.

Procedure for estimating the value of other works done shall be as specified in table 1.3.4:

Table 1.3.4

| Stage of Payment   | Weightage | Payment Procedure  |
|--|-----------|--|
| (i) Service roads  | **        | Unit of measurement is linear length in km. Cost per km shall be determined on pro rata basis with respect to the total length of the service roads. Payment shall be made for completed service road in a length of not less than 20 (twenty) percent of the total length of service roads. |
| (ii) Toll plaza  | **        | Unit of measurement is each completed toll plaza. Payment of each toll plaza shall be made on pro rata basis with respect to the total of all toll plazas.   |
| (iii) Road side drains                                     | **        | Unit of measurement is linear length in km. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 10 % (ten per cent) of the total length.   |
| (iv) Road signs, markings, km stones, safety devices, etc. | **        |  |
| (v) Project Facilities                                     | **        | Payment shall be made on pro rata basis for completed facilities.  |
| a) Bus bays  | **        |  |
| b) Truck lay-byes  | **        |  |
| c) Rest areas  | **        |  |
| d) others  | **        |  |
| (vi) Repairs to existing bridges/ structures               | **        | Payment shall be made for completed items.   |
| a) Providing wearing coat                                  | **        |  |
| b) Replacement of bearing, joints                          | **        |  |
| c) Providing crash barriers                                | **        |  |
| d) Other items   | **        |  |



|  |    |   |
|--|----|---|
| (vii) Roadside plantation                              | ** | Unit of measurement is linear length.   |
| (viii) Protection works                                | ** | Payment shall be made on pro rata basis on completion of a stage in a length of not less than 10% (ten per cent) of the total length. |
| (ix) Safety and traffic management during construction | ** | Payment shall be made on prorata basis every six months.  |

SCHEDULE – H  
*(See Clause 10.2.4)*

**DRAWINGS**

**1 Drawings**

In compliance of the obligations set forth in Clause 10.2 of this Agreement, the Contractor shall furnish to the Authority's Engineer, free of cost, all Drawings listed in Annex-I of this Schedule-H.

**2 Additional Drawings**

If the Authority's Engineer determines that for discharging its duties and functions under this Agreement, it requires any drawings other than those listed in Annex-I, it may by notice require the Contractor to prepare and furnish such drawings forthwith. Upon receiving a requisition to this effect, the Contractor shall promptly prepare and furnish such drawings to the Authority's Engineer, as if such drawings formed part of Annex-I of this Schedule-H.

Annex - I  
(Schedule - H)

**List of Drawings**

[**Note:** The Authority shall describe in this Annex-I, all the Drawings that the Contractor is required to furnish under Clause 10.2.]

SCHEDULE – I  
(See Clause 10.3.2)

**PROJECT COMPLETION SCHEDULE**

**1 Project Completion Schedule**

During Construction period, the Contractor shall comply with the requirements set forth in this Schedule-I for each of the Project Milestones and the Scheduled Completion Date. Within 15 (fifteen) days of the date of each Project Milestone, the Contractor shall notify the Authority of such compliance along with necessary particulars thereof.

**2 Project Milestone-I**

2.1 Project Milestone-I shall occur on the date falling on the 180<sup>th</sup> (one hundred and eightieth) day from the Appointed Date (the “**Project Milestone-I**”).

2.2 Prior to the occurrence of Project Milestone-I, the Contractor shall have commenced construction of the Project and submitted to the Authority duly and validly prepared Stage Payment Statements for an amount not less than 10% (ten per cent) of the Contract Price.

**3 Project Milestone-II**

3.1 Project Milestone-II shall occur on the date falling on the 365<sup>th</sup> (three hundred and sixty fifth) day from the Appointed Date (the “**Project Milestone-II**”).

3.2 Prior to the occurrence of Project Milestone-II, the Contractor shall have continued with construction of the Project and submitted to the Authority duly and validly prepared Stage Payment Statements for an amount not less than 30% (thirty per cent) of the Contract Price.

**4 Project Milestone-III**

4.1 Project Milestone-III shall occur on the date falling on the [550<sup>th</sup> (five hundred and fiftieth)] day from the Appointed Date (the “**Project Milestone-III**”).

4.2 Prior to the occurrence of Project Milestone-III, the Contractor shall have continued with construction of the Project and submitted to the Authority duly

and validly prepared Stage Payment Statements for an amount not less than 60% (sixty per cent) of the Contract Price.

## **5 Scheduled Completion Date**

- 5.1 The Scheduled Completion Date shall be the [650<sup>th</sup> (six hundred and fiftieth)] day from the Appointed Date.
- 5.2 On or before the Scheduled Completion Date, the Contractor shall have completed construction in accordance with this Agreement.

## **6 Extension of time**

Upon extension of any or all of the aforesaid Project Milestones or the Scheduled Completion Date, as the case may be, under and in accordance with the provisions of this Agreement, the Project Completion Schedule shall be deemed to have been amended accordingly.

## SCHEDULE – J

(See Clause 12.1.2)

### TESTS ON COMPLETION<sup>18</sup>

#### 1 Schedule for Tests

- 1.1 The Contractor shall, no later than 30 (thirty) days prior to the likely completion of construction, notify the Authority's Engineer and the Authority of its intent to subject the Project to Tests, and no later than 10 (ten) days prior to the actual date of Tests, furnish to the Authority's Engineer and the Authority detailed inventory and particulars of all works and equipment forming part of Works.
- 1.2 The Contractor shall notify the Authority's Engineer of its readiness to subject the Project Highway to Tests at any time after 10 (ten) days from the date of such notice, and upon receipt of such notice, the Authority's Engineer shall, in consultation with the Contractor, determine the date and time for each Test and notify the same to the Authority who may designate its representative to witness the Tests. The Authority's Engineer shall thereupon conduct the Tests itself or cause any of the Tests to be conducted in accordance with Article 12 and this Schedule-J.

#### 2 Tests

- 2.1 Visual and physical test: The Authority's Engineer shall conduct a visual and physical check of construction to determine that all works and equipment forming part thereof conform to the provisions of this Agreement. The physical tests shall include [\*\*\*].
- 2.2 Riding quality test: Riding quality of each lane of the carriageway shall be checked with the help of a calibrated bump integrator and the maximum permissible roughness for purposes of this Test shall be [2,000 (two thousand)] mm for each kilometre.
- 2.3 Tests for bridges: All major and minor bridges shall be subjected to the rebound hammer and ultrasonic pulse velocity tests, to be conducted in accordance with the procedure described in Special Report No. 17: 1996 of the IRC Highway Research Board on Non-destructive Testing Techniques, at two spots in every

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<sup>18</sup>This template is applicable to highway projects. It may be suitably revised in case of other projects.



span, to be chosen at random by the Authority's Engineer. Bridges with a span of 15 (fifteen) metres or more shall also be subjected to load testing.

- 2.4 Other tests: The Authority's Engineer may require the Contractor to carry out or cause to be carried additional tests, in accordance with Good Industry Practice, for determining the compliance of the Project with Specifications and Standards.
- 2.5 Environmental audit: The Authority's Engineer shall carry out a check to determine conformity of the Project with the environmental requirements set forth in Applicable Laws and Applicable Permits.
- 2.6 Safety Audit: The Authority's Engineer shall carry out, or cause to be carried out, a safety audit to determine conformity of the Project with the safety requirements and Good Industry Practice.

### **3 Agency for conducting Tests**

All Tests set forth in this Schedule-J shall be conducted by the Authority's Engineer or such other agency or person as it may specify in consultation with the Authority.

### **4 Completion Certificate**

Upon successful completion of Tests, the Authority's Engineer shall issue the Completion Certificate in accordance with the provisions of Article 12.



SCHEDULE – K  
(See Clause 12.2 and 12.4)

**PROVISIONAL CERTIFICATE**

- 1 I/We, ..... (Name of the Authority’s Engineer), acting as the Authority’s Engineer, under and in accordance with the Agreement dated ..... (the “**Agreement**”), for construction of the ..... section (km .....to km .....) of State Highway No. .... (the “**Project**”) on Engineering, Procurement and Construction (EPC) basis through ..... (Name of Contractor), hereby certify that the Tests in accordance with Article 12 of the Agreement have been undertaken to determine compliance of the Project with the provisions of the Agreement.
  
- 2 Works that are incomplete on account of Time Extension have been specified in the Punch List appended hereto, and the Contractor has agreed and accepted that it shall complete all such works in the time and manner set forth in the Agreement. In addition, certain minor works are incomplete and these are not likely to cause material inconvenience to the Users of the Project Highway or affect their safety. The Contractor has agreed and accepted that as a condition of this Provisional Certificate, it shall complete such minor works within 30 (thirty) days hereof. These minor works have also been specified in the aforesaid Punch List.
  
- 3 In view of the foregoing, I/We am/are satisfied that the Project from km ..... to km .....can be safely and reliably placed in service of the Users thereof, and in terms of the Agreement, the Project is hereby provisionally declared fit for entry into operation on this the ..... day of ..... 20.....

ACCEPTED, SIGNED, SEALED  
AND DELIVERED

SIGNED, SEALED AND  
DELIVERED

For and on behalf of  
CONTRACTOR by:

For and on behalf of  
AUTHORITY’S ENGINEER by:

(Signature)  
(Name and Designation)  
(Address)

(Signature)  
(Name and Designation)  
(Address)

## COMPLETION CERTIFICATE

- 1 I/We, ..... (Name of the Authority's Engineer), acting as the Authority's Engineer, under and in accordance with the Agreement dated .....  
(the "**Agreement**"), for construction of the ..... section (km ..... to km .....) of State Highway No. .... (the "**Project Highway**") on Engineering, Procurement and Construction (EPC) basis through .....  
(Name of Contractor), hereby certify that the Tests in accordance with Article 12 of the Agreement have been successfully undertaken to determine compliance of the Highway with the provisions of the Agreement, and I/We am/are satisfied that the Project Highway can be safely and reliably placed in service of the Users thereof.
  
- 2 It is certified that, in terms of the aforesaid Agreement, all works forming part of Highway have been completed, and the Project Highway is hereby declared fit for entry into operation on this the ..... day of ..... 20.....

SIGNED, SEALED AND  
DELIVERED For and on behalf of  
the Authority's Engineer by:

(Signature)  
(Name)  
(Designation)  
(Address)

SCHEDULE – L  
(See Clause 18.1.1)

**SELECTION OF AUTHORITY’S ENGINEER**

**1 Selection of Authority’s Engineer**

- 1.1 The provisions of the Model Request for Proposals for Selection of Technical Consultants, issued by the Ministry of Finance, Government of India vide OM 24(23)/PF-II/2008 dated 21, May 2009, or any substitute thereof shall apply for selection of an experienced firm to discharge the functions and duties of an Authority’s Engineer. Provided, however, that no entity which is owned or controlled by the Authority shall be eligible for appointment as the Authority’s Engineer hereunder.
- 1.2 In the event of termination of the Technical Consultants appointed in accordance with the provisions of Paragraph 1.1, the Authority shall appoint another firm of Technical Consultants forthwith and may engage a government-owned entity in accordance with the provisions of Paragraph 3 of this Schedule-L.

**2 Terms of Reference**

The Terms of Reference for the Authority’s Engineer (the “**TOR**”) shall substantially conform with Annex 1 to this Schedule L.

**3 Appointment of Government entity as Authority’s Engineer**

Notwithstanding anything to the contrary contained in this Schedule, the Authority may in its discretion appoint a government-owned entity as the Authority’s Engineer; provided that such entity shall be a body corporate having as one of its primary functions the provision of consulting, advisory and supervisory services for engineering projects; provided further that a government-owned entity which is owned or controlled by the Authority shall not be eligible for appointment as Authority’s Engineer.

Annex – I  
(Schedule - L)

## Terms of reference for Authority’s Engineer<sup>19</sup>

### 1 Scope

- 1.2 These Terms of Reference (the “**TOR**”) for the Authority’s Engineer are being specified pursuant to the EPC Agreement dated ..... (the “**Agreement**), which has been entered into between the (insert name and address of the Authority) (the “**Authority**”) and ..... (the “**Contractor**”) for [Two-Laning] of the .....section (km .....to km .....) of State Highway No. ....in the State of .....on Engineering, Procurement, Construction (EPC) basis, and a copy of which is annexed hereto and marked as Annex-A to form part of this TOR.
- 1.3 The TOR shall apply to construction of the Project .

### 2 Definitions and interpretation

- 2.1 The words and expressions beginning with or in capital letters and not defined herein but defined in the Agreement shall have, unless repugnant to the context, the meaning respectively assigned to them in the Agreement.
- 2.2 References to Articles, Clauses and Schedules in this TOR shall, except where the context otherwise requires, be deemed to be references to the Articles, Clauses and Schedules of the Agreement, and references to Paragraphs shall be deemed to be references to Paragraphs of this TOR.
- 2.3 The rules of interpretation contained in Clauses 1.2, 1.3 and 1.4 of the Agreement shall apply, *mutatis mutandis*, to this TOR.

### 3. General

- 3.1 The Authority’s Engineer shall discharge its duties in a fair, impartial and efficient manner, consistent with the highest standards of professional integrity and Good Industry Practice.

<sup>19</sup>This template is applicable to highway projects. It may be suitably revised in case of other projects.

- 3.2 The Authority's Engineer shall perform the duties and exercise the authority in accordance with the provisions of this Agreement, but subject to obtaining prior written approval of the Authority before determining:
- (a) any Time Extension;
  - (b) any additional cost to be paid by the Authority to the Contractor;
  - (c) the Termination Payment; or
  - (d) any other matter which is not specified in (a), (b) or (c) above and which creates an obligation or liability on either Party for a sum exceeding Rs. 5,000,000 (Rs. fifty lakh).
- 3.3 The Authority's Engineer shall submit regular periodic reports, at least once every month, to the Authority in respect of its duties and functions under this Agreement. Such reports shall be submitted by the Authority's Engineer within 10 (ten) days of the beginning of every month.
- 3.4 The Authority's Engineer shall inform the Contractor of any delegation of its duties and responsibilities to its suitably qualified and experienced personnel; provided, however, that it shall not delegate the authority to refer any matter for the Authority's prior approval in accordance with the provisions of Clause 18.2.
- 3.5 The Authority's Engineer shall aid and advise the Authority on any proposal for Change of Scope under Article 13.
- 3.6 In the event of any disagreement between the Parties regarding the meaning, scope and nature of Good Industry Practice, as set forth in any provision of the Agreement, the Authority's Engineer shall specify such meaning, scope and nature by issuing a reasoned written statement relying on good industry practice and authentic literature.

#### 4 **Construction Period**

- 4.1 During the Construction Period, the Authority's Engineer shall review the Drawings furnished by the Contractor along with supporting data, including the geo-technical and hydrological investigations, characteristics of materials from borrow areas and quarry sites, topographical surveys, and the recommendations of the Safety Consultant in accordance with the provisions of Clause 10.1.6. The Authority's Engineer shall complete such review and send its observations

to the Authority and the Contractor within 15 (fifteen) days of receipt of such Drawings; provided, however that in case of a Major Bridge or Structure, the aforesaid period of 15 (fifteen) days may be extended upto 30 (thirty) days. In particular, such comments shall specify the conformity or otherwise of such Drawings with the Scope of the Project and Specifications and Standards.

- 4.2 The Authority's Engineer shall review any revised Drawings sent to it by the Contractor and furnish its comments within 10 (ten) days of receiving such Drawings.
- 4.3 The Authority's Engineer shall review the Quality Assurance Plan submitted by the Contractor and shall convey its comments to the Contractor within a period of 21 (twenty-one) days stating the modifications, if any, required thereto.
- 4.4 The Authority's Engineer shall complete the review of the methodology proposed to be adopted by the Contractor for executing the Works, and convey its comments to the Contractor within a period of 10 (ten) days from the date of receipt of the proposed methodology from the Contractor.
- 4.5 The Authority's Engineer shall grant written approval to the Contractor, where necessary, for interruption and diversion of the flow of traffic in the existing lane(s) of the Project for purposes of maintenance during the Construction Period in accordance with the provisions of Clause 10.4.
- 4.6 The Authority's Engineer shall review the monthly progress report furnished by the Contractor and send its comments thereon to the Authority and the Contractor within 7 (seven) days of receipt of such report.
- 4.7 The Authority's Engineer shall inspect the Construction Works and the Project and shall submit a monthly Inspection Report bringing out the results of inspections and the remedial action taken by the Contractor in respect of Defects or deficiencies. In particular, the Authority's Engineer shall include in its Inspection Report, the compliance of the recommendations made by the Safety Consultant.
- 4.8 The Authority's Engineer shall conduct the pre-construction review of manufacturer's test reports and standard samples of manufactured Materials, and such other Materials as the Authority's Engineer may require.
- 4.9 For determining that the Works conform to Specifications and Standards, the Authority's Engineer shall require the Contractor to carry out, or cause to be

carried out, tests at such time and frequency and in such manner as specified in the Agreement and in accordance with Good Industry Practice for quality assurance. For purposes of this Paragraph 4.9, the tests specified in the IRC Special Publication-11 (Handbook of Quality Control for Construction of Roads and Runways) and the Specifications for Road and Bridge Works issued by MORTH (the "Quality Control Manuals") or any modification/substitution thereof shall be deemed to be tests conforming to Good Industry Practice for quality assurance.

- 4.10 The Authority's Engineer shall test check at least 20 (twenty) percent of the quantity or number of tests prescribed for each category or type of test for quality control by the Contractor.
- 4.11 The timing of tests referred to in Paragraph 4.9, and the criteria for acceptance/ rejection of their results shall be determined by the Authority's Engineer in accordance with the Quality Control Manuals. The tests shall be undertaken on a random sample basis and shall be in addition to, and independent of, the tests that may be carried out by the Contractor for its own quality assurance in accordance with Good Industry Practice.
- 4.12 In the event that results of any tests conducted under Clause 11.10 establish any Defects or deficiencies in the Works, the Authority's Engineer shall require the Contractor to carry out remedial measures.
- 4.13 The Authority's Engineer may instruct the Contractor to execute any work which is urgently required for the safety of the Highway, whether because of an accident, unforeseeable event or otherwise; provided that in case of any work required on account of a Force Majeure Event, the provisions of Clause 21.6 shall apply.
- 4.14 In the event that the Contractor fails to achieve any of the Milestones, the Authority's Engineer shall undertake a review of the progress of construction and identify potential delays, if any. If the Authority's Engineer shall determine that completion of the Project is not feasible within the time specified in the Agreement, it shall require the Contractor to indicate within 15 (fifteen) days the steps proposed to be taken to expedite progress, and the period within which the Project Completion Date shall be achieved. Upon receipt of a report from the Contractor, the Authority's Engineer shall review the same and send its comments to the Authority and the Contractor forthwith.

- 4.15 The Authority's Engineer shall obtain from the Contractor a copy of all the Contractor's quality control records and documents before the Completion Certificate is issued pursuant to Clause 12.4.
- 4.16 Authority's Engineer may recommend to the Authority suspension of the whole or part of the Works if the work threatens the safety of the Users and pedestrians. After the Contractor has carried out remedial measures, the Authority's Engineer shall inspect such remedial measures forthwith and make a report to the Authority recommending whether or not the suspension hereunder may be revoked.
- 4.17 In the event that the Contractor carries out any remedial measures to secure the safety of suspended works and Users, and requires the Authority's Engineer to inspect such works, the Authority's Engineer shall inspect the suspended works within 3 (three) days of receiving such notice, and make a report to the Authority forthwith, recommending whether or not such suspension may be revoked by the Authority.
- 4.18 The Authority's Engineer shall carry out, or cause to be carried out, all the Tests specified in Schedule-J and issue a Completion Certificate or Provisional Certificate, as the case may be. For carrying out its functions under this Paragraph 4.18 and all matters incidental thereto, the Authority's Engineer shall act under and in accordance with the provisions of Article 12 and Schedule-J.

## **5 Determination of costs and time**

- 5.1 The Authority's Engineer shall determine the costs, and/or their reasonableness, that are required to be determined by it under the Agreement.
- 5.2 The Authority's Engineer shall determine the period of Time Extension that is required to be determined by it under the Agreement.
- 5.3 The Authority's Engineer shall consult each Party in every case of determination in accordance with the provisions of Clause 18.5.

## **6. Payments**

- 6.1 The Authority's Engineer shall withhold payments for the affected works for which the Contractor fails to revise and resubmit the Drawings to the Authority's Engineer in accordance with the provisions of Clause 10.2.4 (d).
- 6.2 Authority's Engineer shall -



- (a) within 10 (ten) days of receipt of the Stage Payment Statement from the Contractor pursuant to Clause 19.4, determine the amount due to the Contractor and recommend the release of 90 (ninety) percent of the amount so determined as part payment, pending issue of the Interim Payment Certificate; and
- (b) within 15 (fifteen) days of the receipt of the Stage Payment Statement referred to in Clause 19.4, deliver to the Authority and the Contractor an Interim Payment Certificate certifying the amount due and payable to the Contractor, after adjustments in accordance with the provisions of Clause 19.10.

## **7. Other duties and functions**

The Authority's Engineer shall perform all other duties and functions as specified in the Agreement.

## **8 Miscellaneous**

- 8.1 A copy of all communications, comments, instructions, Drawings or Documents sent by the Authority's Engineer to the Contractor pursuant to this TOR, and a copy of all the test results with comments of the Authority's Engineer thereon, shall be furnished by the Authority's Engineer to the Authority forthwith.
- 8.2 The Authority's Engineer shall retain at least one copy each of all Drawings and Documents received by it, including 'as-built' Drawings, and keep them in its safe custody.
- 8.3 Within 90 (ninety) days of the Project Completion Date, the Authority's Engineer shall obtain a complete set of as-built Drawings, in 2 (two) hard copies and in micro film format or in such other medium or manner as may be acceptable to the Authority, reflecting the Project as actually designed, engineered and constructed, including an as-built survey illustrating the layout of the Project and setback lines, if any, of the buildings and structures forming part of Project Facilities; and shall hand them over to the Authority against receipt thereof.
- 8.4 The Authority's Engineer, if called upon by the Authority or the Contractor or both, shall mediate and assist the Parties in arriving at an amicable settlement of any Dispute between the Parties.
- 8.5 The Authority's Engineer shall inform the Authority and the Contractor of any event of Contractor's Default within one week of its occurrence.

**SCHEDULE – M**

*(See Clauses 19.4.1, 19.6.1, and 19.8.1)*

**FORMS OF PAYMENT STATEMENTS**

**1. Stage Payment Statement for Works**

The Stage Payment Statement for Works shall state:

- (a) the estimated amount for the Works executed in accordance with Clause 19.3.1 subsequent to the last claim;
- (b) amounts reflecting adjustments in price for the aforesaid claim;
- (c) the estimated amount of each Change of Scope Order executed subsequent to the last claim;
- (d) amounts reflecting adjustment in price, if any, for (c) above in accordance with the provisions of Clause 13.2.3 (a);
- (e) total of (a), (b), (c) and (d) above;
- (f) Deductions:
  - (i) Any amount to be deducted in accordance with the provisions of the Agreement except taxes;
  - (ii) Any amount towards deduction of taxes;
  - (iii) Any amount towards deduction of taxes at source under Applicable Laws
  - (iv) Total of (i) and (ii) above.
- (g) Net claim: (e) – (f) (iv);
- (h) The amounts received by the Contractor upto the last claim:
  - (i) For the Works executed (excluding Change of Scope orders);
  - (ii) For Change of Scope Orders, and
  - (iii) Taxes deducted

**2. Contractor's claim for Damages**

**Note:** The Contractor shall submit its claims in a form acceptable to the Authority.

## SCHEDULE – N

*(See Clause 20.1)*

### **INSURANCE**

#### **1. Insurance during Construction Period**

1.1 The Contractor shall effect and maintain at its own cost, from the Appointed Date till the date of issue of the Completion Certificate, the following insurances for any loss or damage occurring on account of Non Political Event of Force Majeure, malicious act, accidental damage, explosion, fire and terrorism:

- (a) insurance of Works, Plant and Materials and an additional sum of [15% (fifteen per cent)] of such replacement cost to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature; and
- (b) insurance for the Contractor's equipment and Documents brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.

1.2 The insurance under paragraph 1.1 (a) and (b) above shall cover the Authority and the Contractor against all loss or damage from any cause arising under paragraph 1.1 other than risks which are not insurable at commercial terms.

#### **2. Insurance for Contractor's Defects Liability**

The Contractor shall effect and maintain insurance cover for the Works from the date of issue of the Completion Certificate until the end of the Defects Liability Period for any loss or damage for which the Contractor is liable and which arises from a cause occurring prior to the issue of the Completion Certificate. The Contractor shall also maintain other insurances for maximum sums as may be required under Applicable Laws and in accordance with Good Industry Practice.

#### **3. Insurance against injury to persons and damage to property**

3.1 The Contractor shall insure against its liability for any loss, damage, death or bodily injury, or damage to any property (except things insured under Paragraphs

1 and 2 of this Schedule or to any person (except persons insured under Clause 20.9), which may arise out of the Contractor's performance of this Agreement. This insurance shall be for a limit per occurrence of not less than the amount specified below with no limit on the number of occurrences.

The insurance cover shall be not less than: Rs. [.....]

3.3 The insurance shall be extended to cover liability for all loss and damage to the Authority's property arising out of the Contractor's performance of this Agreement excluding:

- (a) the Authority's right to have the construction works executed on, over, under, in or through any land, and to occupy this land for the Works; and
- (b) damage which is an unavoidable result of the Contractor's obligations to execute the Works.

4. **Insurance to be in joint names**

The insurance under paragraphs 1 to 3 above shall be in the joint names of the Contractor and the Authority.

# Appendices

## APPENDIX-I

### LIST OF BID-SPECIFIC PROVISIONS<sup>£</sup>

#### A. Provisions with currency-based footnotes

##### *Footnotes with “£” sign*

1. Appendix-I: List of Bid-specific provisions.

**Note:** The above footnotes marked “£” shall be removed prior to execution of the Concession Agreement.

##### *Footnotes with “\$” sign*

1. Heading of the EPC Agreement
2. Clause 1.5: Joint and several liability.
3. Clause 3.2.1: Obligations relating to sub-contracts and any other agreements.
4. Clause 13.5.1: Power of the Authority to undertake works.
5. Clause 26.1: Definitions of Consortium and Lead Member.
6. Schedule-F (Annex-I): Form of Bank Guarantee: Paragraph 8.
7. Schedule-F(Annex-III): Form of Bank Guarantee: Recital B and Paragraph 8.

**Note:** Non-numerical footnotes marked “\$” shall not be deleted. They shall remain in the Concession Agreement to be executed between the Parties.

#### B. Provisions where curly brackets are used

1. Clause 1.5: Joint and several liability.
2. Clause 3.2.1: Obligations relating to sub-contracts and any other agreements.
3. Clause 5.1 (I): Representations and warranties of the Contractor.
4. Clause 25.13 (a) and (b): Notices.
5. Clause 26.1: Definitions of Affiliate, Consortium and Lead Member.
6. EPC Agreement: Signature page.
7. Schedule-F (Annex-I): Form of Bank Guarantee: Paragraph 1.
8. Schedule-F (Annex-III): Form of Bank Guarantee: Recital B.

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<sup>£</sup> This Appendix-I contains a list of provisions that would need to be suitably modified for reflecting bid-specific provisions after the Concessionaire has been selected. This Appendix-I may be included in the draft Concession Agreement forming part of the bid documents. It may, however, be deleted when the Concession Agreement is to be executed.

**C. Provisions with blank spaces**

1. Recitals: First line and Recital 2.

**Note:** All blank spaces in Schedules shall be retained in the EPC Agreement to be executed between the Parties. These shall be filled up as and when the format of the respective Schedule is used.

**Note:** The Table of Contents may also be suitably modified to reflect omission(s) and/ or re-numbering of Bid-specific provisions.

## APPENDIX-II

### LIST OF PROJECT-SPECIFIC PROVISIONS<sup>20</sup>

#### **A. Provisions with serially numbered Footnotes (Fn)**

1. Recital: First line of the EPC Agreement (Fn. 1).
2. Clause 4.1.3: Obligations of the Authority (Fn. 2 and 3).
3. Clause 4.3: Obligations relating to Environmental and Forest Clearances (Fn. 4).
  
4. Clause 7.5: Retention Money (Fn. 5): Also address Clause 7.1.
5. Clause 14.1: Traffic Regulation by the Contractor (Fn. 6).
6. Clause 17.2.1: Advance Payment (Fn. 7).
7. Clause 17.8.4: Price adjustment for Works (Fn. 8)\*.
8. Appendix-II: List of Project-specific provisions (Fn. 20).

**\*Note:** The provisions to which these Footnotes relate also include square parenthesis or asterisks, which may be addressed simultaneously. Such square parenthesis or asterisks have not been listed in (B) or (C) below.

#### **B. Provisions with square parenthesis**

1. Recitals: Recitals 1, A, B and D.
2. Clause 3.2.1: Obligations relating to sub-contracts and any other agreements.
3. Clause 4.1.4: Obligations of the Authority.
4. Clause 4.2: Obligations relating to Operation & Maintenance.
5. Clause 8.1 (a): The Site.
6. Clause 9.3.3: New utilities.
7. Clause 10.2.4 (a) and (c): Design and Drawings.
8. Clause 10.3.1: Construction of the Project.
9. Clause 10.4.1 (a): Extension of time for completion.
10. Clause 13.2.3 (b): Procedure for Change of Scope.
11. Clause 18.1.6: Insurance for Works.
12. Clause 26.1: Definitions of Bid, Project Assets and Structures.

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<sup>20</sup>This Appendix-II contains a list of provisions that would need to be suitably modified prior to issue of bid documents for reflecting project-specific provisions. This Appendix-II should be omitted before issuing the draft Concession Agreement, forming part of the bid documents.



**C. Provisions with asterisks**

1. Recitals: Recitals 1, A, B and D.
2. Clause 17.1.1: Contract Price.

**D. Schedules with Footnotes, square parenthesis and asterisks**

1. Schedules A, B, C, D and G relate to the physical and technical aspects of the Project and contain several Notes, Footnotes, square parenthesis and asterisks. These Schedules require a comprehensive and integrated scrutiny for Project-specific customisation.
2. Schedule-F (Annex-I): Form of Bank Guarantee: Recital A.
3. Schedule-F (Annex-III): Form of Bank Guarantee: Recital B.
4. Schedule-H (Annex-I): List of Drawings: Note.
5. Schedule-I: Project Completion Schedule: Paragraphs 4.1 and 5.1.
6. Schedule-J: Tests on Completion: Paragraphs 2.1 and 2.2.
7. Schedule-L (Annex-I): Terms of Reference for Authority's Engineer: Paragraph 1.1.
8. Schedule-N: Insurance: Paragraphs 1.1 (a) and 3.1.

**Note:** The Table of Contents may also be suitably modified to reflect omission(s) and/ or re-numbering of Project-specific provisions.

### Proposed changes in Article 3 of Model EPC Agreement

| Clause No. in Model document | Existing Clause in brief   | Changes Proposed   |
|------------------------------|--|--|
| 3.1.6 (g)                    | ensure that the Contractor and its Sub-contractors comply with the safety and welfare measures for labour in accordance with Applicable Laws and Good Industry Practice; | ensure that the Contractor and its Sub-contractors comply with the safety and welfare measures for labour in accordance with Applicable Laws and Good Industry Practice. <i>The contractor shall have skill certified personnel having valid Skill certificates issued by any Government Institution, any Constituent unit of Engineering Council of India or CIDC;</i>  |
| 3.1.6 (k)                    | Inserted new clause  | <i>The contractor, at the time of bidding shall submit his Comprehensive Green rating, Grading and his enrolment details on the National database of CIDC.</i>   |
| 3.1.6 (l)                    | Inserted new clause  | <i>The designs to be submitted by the Contractor both at the time of submitting his proposals &amp; subsequently after the award of the work, for execution, must be vetted by any one of the following Institutions.</i><br>(i) IIT<br>(ii) NIT<br>(iii) Any Government Engineering Institution<br>(iv) Engineering Council of India  |
| 3.1.7                        | The Contractor shall undertake all necessary superintendence to plan, arrange, direct, manage, inspect and test the Works  | The Contractor shall undertake all necessary superintendence to plan, arrange, direct, manage, inspect and test the Works, <i>with an emphasis on approved practices or working in confined spaces.</i>  |
| 3.4                          | Inserted new clause.   | <b>Employment of -</b>   |
| 3.4.1                        |  | <b>Skilled/ semi skilled worker</b><br><br><i>The contractor shall, at all stages of work, deploy skilled/semi skilled tradesmen who are qualified and possess certificate in particular trade from CPWD Training Institute/Industrial Training Institute/National Institute of construction Management and Research (NICMAR)/ National Academy of Construction, CIDC or any similar reputed and recognized Institute managed/ certified by State/Central Government. The number of such qualified tradesmen shall not be less than 30% of total skilled/semi skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its</i> |

|       |  |  |
|-------|--|--|
|       |  | <p>scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer in charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Engineer-in-Charge. Failure on the part of contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate of Rs. 100 per such tradesman per day. Decision of Engineer in Charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding.</p>                         |
| 3.4.2 |  | <p><b>Registered Professional Engineers</b></p> <p>The contractor shall, at all stages of work, deploy engineers including Diploma holders, Degree holders and higher levels who are qualified and registered as professional engineers with the Engineering Council of India. The number of such registered professional Engineers shall not be less than 25% of total numbers of engineers at any stage of work.</p> <p>Failure on the part of contractor to deploy registered professional engineers will attract a compensation to be paid by contractor at the rate of Rs. 1000 per such professional engineer per day. Decision of professional engineer in Charge as to whether particular engineer's registration is valid or not and amount of compensation in case default shall be final and binding.</p> |

Vol. 2

# SPECIAL CONDITIONS OF CONTRACT

“Being edited for incorporation”

***Shri P. C. Sunoj, State Bank of India-***

1. Assignment of contract – It will be preferable to include a provision allowing assignment of contract, to the Lenders as security for the Financial assistance to be availed for the project. Similarly, all the bank guarantees (wherein the employer is a beneficiary) shall be assignable to the Lenders.
2. Recognition of substitution rights of the Lenders– it will be preferable to include a provision recognizing the substitution rights of the Lenders so as to bind the contractor for performance of his duties to the substituted entity.
3. Termination / Extension of contract – shall be under prior intimation / notice to the Lenders
4. Access to project site – the lenders representative shall have a right to access the project site, which shall be acknowledged by the contractor
5. Insurance policies obtained by the contractor in joint name with the employer – assigns of the employer may also be added (so as to cover the situation of substitution)
6. Bank guarantee formats provided in the document can be in line with IBA model format. (extension period provided in the format of EMD may not be acceptable)
7. Ecological balance / compliance with environmental laws- Certain lending (like lending from EIB facility) requires compliance to environmental and social standards, which may have to be ensured by the contractor as well.

***Shri P. V. Rao, MD, Peps Pennar Ltd -***

8. **Lowest price syndrome:** It is always a guiding principle nowadays that the work should be awarded to Lowest bidder only. Proper evaluation of Lowest bidder has to happen in terms of his credentials in jobs execution, financial capability, safety statistics , technical capability etc before the price bid is considered.
9. **Dispute Resolution-Arbitration:** Most of the times, it is one sided favouring the customer, not the vendor. Time lines for arbitration also are not mentioned in the tender documents. Also, If there are several disputes in one job, payments should be

released to vendor as soon as particular dispute is resolved, rather than waiting for resolution of all disputes.

10. **Engagement of screened & credible vendors:** A committee has to thoroughly study the technical bid of the vendors and then come to a conclusion on their capability to execute the project in terms of financial & technical parameters and also the track record of the vendors in executing similar works. CIDC is having approved vendors list and that list should be given preference while choosing the vendors.
11. **Cash flows and payments to be released :** Abnormal delays are happening in payments to vendors. Time lines to be defined strictly for payments and interest to be paid to vendors if there is delay in payments.
12. **Pre-engineered and pre-fabricated technologies:** In many government departments, even now, obsolete construction technologies are being used. A committee has to be formed to study new technologies in construction to save time & cost, and adopt them in construction. CIDC has list of approved vendors who adopt such technologies and vendors should be short-listed accordingly .
13. **Penalties and Bonuses :** Mostly the penalties are levied one sided only, and as a result, vendors are suffering. A rational and logical approach is required in this regard. Also bonus clause should be incorporated in the tender document to reward the vendors in case of early completion of work.

***Shri Asaithambi Manickam, MD, L & W Construction Private Limited -***

14. **Lowest price syndrome :** A weighted average evaluation approach to be implemented while the selection of final bidders are being conducted. This will ensure the decisions are not becoming a purely a pricing exercise, as in India, at times you normally don't get really comparable players in a band of expected Contract value / or technical capabilities. And other intangible like Quality of work, Safety standards, innovation, customer feedback etc also matters, and should be given due importance while a decision is being made.
15. **Dispute resolution – Arbitration :** Both parties (Employer & Contractor) shall jointly appoint the Arbitrator.

16. **Safety, health, & Environment concerns** : Clear expectations, to be set while the bid document is prepared, and bidders are placed at equal level for pricing basics against the exact same EHS standards. Ideal to include illustrations thro pictorial way, so industry Safety standards are improved on long run. Also, promote the culture through incentives.
17. **Insurance products (Tailor made)** : Insurance Clauses for the extended period to be clearly mentioned, for the scope & cost of Insurance.
18. **Penalties & Bonuses** : Generally in Indian context, these clauses are one sided. This has to be relooked more fairly, and contracting firms to be incentivised for exceeding the contractual obligations/deliverables as being penalized for the delays/ misses.
19. **Cash flows & payments to be released.**: Partial taking over clauses to be relooked fairly & the DLP period clearly specified from the Employer Taking over dates. Overheads shall not be included in the material cost & it shall be added in a separate line Item as Preliminaries head.
20. **Pre-engineered & pre-fabricated Construction:** Incentives to be offered worked out for innovation, and new technology solutions. This can be part of the contract template or a perquisite, so level playing ground is created.

***Shri M K Datar, Senior Advisor, Indian Banks Association -***

21. Throughout the Contract, the Organization inviting bids for the execution of the contract has been referred as "Employer". Although Clause 61.2 states that the employees of the Contractor and Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time, the use of expression "Employer" shall be best avoided. In several Labour Legislations as also Income Tax Act, the expression "Employer" has been used to refer to Organisation in their role of hiring employees. Thus, unintentionally, use of this expression may give rise to apprehension of existence of relationship of "Employer-Employee" which may bring along with it several obligations for the Organisation inviting bids such obligations which

can be avoided by avoiding use of expression "Employer". Since the expression „contractor“ has been liberally employed to refer to successful bidder, we suggest that „contractee“ or any other suitable expression may be used to avoid imputation of any other meaning to the expression „Employer“.

- 22.** Since Clause 4.4(b) makes it mandatory to have only 25% of total number of engineers as professional engineers registered with engineering council of India, it is required that experience requirement in number of years shall be prescribed for others to be qualified being employed as an engineer.
- 23.** In Clause 20.1 where reference to Envelope 2b is made it shall be mentioned that failure to provide Masked Bill of Quantity / Material shall lead to disqualification of the bid without any obligation to open the „Price Bid.“
- 24.** In Clause 23.1, it shall also be mentioned that where Organization inviting bids has reasonable ground to believe that withdrawal of bids is being made to form cartel for collusive bidding or to impair the fair bidding process or to enter into a collusion for defeating the fair bidding process or for any other sufficient reason it is considered necessary not to allow such modification, such organization may refuse modification of bids.
- 25.** In Clause 27.2, it has been mentioned that in the event of discrepancy in totals and unit price, unit price will be considered for the purpose of the bid and in the event of contractor not admitting such corrected bid, EMD may be forfeited. Clearly such an event of discrepancy indicates that an error has crept in. Such error may also arise to wrong mentioning of unit price by bidder. Therefore, although it may be appropriate to admit unit rate, it shall be advisable not to forfeit the EMD amount so as to avoid unfruitful and avoidable litigation; rejection of bid shall suffice.
- 26.** In Clause 13.5, it has been mentioned that there shall be no obligation for the insurances to include loss or damage caused by war, hostilities, rebellion, insurrection,



and contamination by radio activity, pressure waves caused by aircraft etc. However, in Clause 1.2 it has been mentioned that costs of redoing of work attributable to such causes shall not be payable by Employer to Contractor. There seems to be some gap in this regard. When such events are neither covered by such insurance nor reimbursable by employer, how the same, if arising, are to be taken care of. The gap in this regard shall be plugged.

27. Clause 45 may give rise to apprehensions of compromise in quality if the work is completed in haste to claim 10% incentive. Such clause may not be desirable. If incentive is to be given, it should be only for timely completion of work and not before agreed timelines.
28. Note to Clause 26 says that Dispute Resolution and Arbitration is being dealt by Arbitration Manual which form Part II. However no such manual has been found forming part of SBD. Therefore, such manual shall be devised and various options of dispute resolution be offered as several organizations will not be inclined the dispute resolution to be governed by Clauses 24, 25 and 26 in their present form.
29. **Aggressive Bidding** : Aggressive biddings should be eliminated during the bidding process. The document mentions *“if the Bid of the successful Bidder is seriously unbalanced i.e. extraordinarily low/high priced in relation to the Employer’s estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the BOQ/PS”*.
30. **Right of Way** : A number of projects are delayed on account of issued related to, right of way” (RoW) which also leads to escalation of costs. Considering this, the availability of RoW should be ascertained prior to the award and communicated to the bidders during the process of bidding. Further, clarity should be provided on the timeline for providing the balance RoW.
31. **Timeline for Grant of Compensation** : As per Point No. 12 of Section 3 (Page xlvi), *“if a Compensation Event would cause an additional cost or would prevent the work being completed within the Time for Completion, the Contractor shall submit claim as per procedure laid in clause 41 within 14 days of the occurrence of Compensation Event and the Employer will give his duly considered evaluated decision as early as possible within three months.”* However, no timeline has been proposed in the document for payment of these claims in case the Employer agrees to the payment of the same. Considering this, a maximum time period (of say 30 days) may be incorporated in the document for grant of compensation in such instances.

**32. Variation Clause :** As per Page lix and lx of the document, *“While working out the value of work for the purpose of variation, the extra/substituted items for which new rates have been paid (but includes similar items, rate of which has been worked out from the BOQ) and payment towards price adjustment, and the adjustment towards statutory variations shall not be considered.”* Further, in case variation is more than 20% of the contract price executed in the initial contract period, the payment made shall actually be less than the actual work done. Thus, in case the variation of work is by 60%, the payment for 40% (i.e. 60%-20%) of the work done shall be reduced by 4%. However, this may result in large losses to the contractor, in case the variations are on account of factors beyond the control of the contractor. Considering this, the variation may be allowed on the extra/substituted items which have actually been used. Further, variation in value of work for the entire amount (without putting any restriction for variation by more than 20%) may be considered.

**33. Procedure for Claims settlement :** As mentioned above, a suitable clause may be inserted for timeline of payment of claims in case the claims are accepted by the Authority.

**34. Dispute Resolution :** In case certain amount related to variation claims is under dispute between the contractor and the employer, the lowest amount payable to the Contractor may be released by the Authority. Such payments may be made against bank guarantee of equivalent amount being made available by the Contractor. This should not be considered full and final settlement of the matter.

**35. Payment Upon Termination :** In case of termination of contract, a clause may be inserted in the bidding document proposing timeline for payment of dues to the contractor.

**36. Insertion of Not Withstanding Clause in the EMD, Performance and Advance BGs :** In the draft of the various bank guarantees, the Not Withstanding Clause may be inserted as per the following standard format:

*Notwithstanding anything contained herein:*

a) *The Bank's liability under this guarantee/undertaking shall not exceed Rs (BG Amount),*

b) *This guarantee/undertaking shall remain in force upto \_\_\_\_\_ and*

c) *Bank is liable to pay the guaranteed amount or part thereof under this Bank Guarantee only and only if Employer serve upon us,a written*

claim or demand on or before \_\_\_\_\_ **[Expiry Date]**.

d) Thereafter the Bank shall stand discharged from its liability under this Guarantee and all the rights of Employer under this Guarantee shall stand extinguished, irrespective of the fact whether the Guarantee in original is returned back to the Bank or not.

**37. Advance Bank Guarantee :** Advance Bank Guarantees shall be reduced to the extent of advances recovered out of the work completed. The corresponding reduction in the value of BG should be done on a quarterly/half- yearly basis.

**38. Changes in BG Format :**

1) Modification of the following clause related to the performance bank guarantees (addition of the clause underlined):

*o Any such demand made by the Employer on the Bank shall be conclusive,, and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority, **subject to no stay order being received from the Court or any other authority***

2) Modification of the following clause in the BG draft:

*Current Text: The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without **proceeding against** the Contractor and notwithstanding any security or other guarantee the Employer may have in relation to the Contractor,,s liabilities*

Proposed Text:

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without **reference to** the Contractor and notwithstanding any security or other guarantee the Employer may have in relation to the Contractor,,s liabilities.

***Builders' Association of India Members -***

39. On award of work to the contractor, Department can sign a Tripartite agreement along with the Bank as one of the party. At present such structure is followed for few PPP project. This can be implemented in all EPC projects.

40. On submission of each bill, on verification of work executed through 3rd party Engineer. Under the Tripartite agreement, Bank can release 90% payment and balance can be made to release after the department approval of the said bill.

41. At the outset it may submit that the present model form has been prepared keeping the High way project and Railways in mind. This needs to be modified to suit the building works. In buildings the requirement has to be frozen by way of preparation of architectural drawings before the contract is awarded. For this purpose the authority has to take suitable action to finalize the drawings well in time. The structural drawings and services drawings can be prepared by the contractor.
42. The method of execution and supervision has to undergo major changes. The authority cannot continue to have the British legacy in the supervision of the works. Major structural modifications should be carried out in the set of the authority which should focus on the results than on the procedures. The bureaucratic set up of the authority has to be restructured.
43. The levels of supervision from the authority have to be restructured. Many levels of supervision should be done away with. There should be only two levels of supervision from the authority's side. They should be responsible for the entire execution of the contract and should be delegated with suitable powers to decide all the issues pertaining to the contract - quantity variations, change of specifications extra items, substituted items, extension of time, arbitration etc etc. Depending on the value of work, the decision making and approvals are self defeating and lead to delay in deciding the contract matters.
44. As far as the eligibility criteria are concerned for a simple work of 50% of the estimated amount and in the case of two works, 25% of the estimated amount of the work is to be considered within 7 years. Likewise the turnover for the eligibility is to be taken as 50% of the estimate within 7 years.
45. The Performance security of 5% of the contract price provided in Article 7.1 is an exorbitant one and it must be limited to 2.5% of the contract price.
46. The Retention Money provided in clause 7.5.1 may be released within one year of DLP as the DLP of two years carries much burden to the contractors.
47. Article 8 and Article 9 provide various aspects of right of way, utilities and trees. In this connection it is submitted that the public utility shifting, land, NOC's from government/administrative authorities for earth cutting or tits transporting, clay transporting, tribal pass etc should be facilitated by the authority.
48. The damages provided in Article.8.3 is calculated on 'per meter' basis. It is confusing and the compensation is to be calculated on area basis.
49. If relaxation is made on the design criteria as provided in Article. 10.2.1, there maybe corresponding price adjustment also to be calculated.

50. In the last sentence of Cl. 10.4.3, it is mistakenly written as Cl. 10.4.3 instead of Cl. 10.4.2. That may be amended as 10.4.2.
51. In connection with extension of time provided in Article. 10.4.4. for expediency and avoiding unnecessary delay of the work the following may be added to the said clause. "If no communication of received from the authority's engineer within 60 days from the date of submission of the claim for extension of time, the same shall be deemed to have been granted by the authority's engineer."
52. As per Article 15-1 the Default liability period is 2 years from the date of completion certificate. DLP of 2 years is an unbearable burden for the contractors. Hence it is to be limited to one year. Moreover in case the DLP is to be extended for more than one year it must be limited with an indemnity bond and insurance cover policy.
53. Regarding the rate of interest for advance payment as provided in Article. 17.2.1, it should be 1% less than the rate at which the contractor could have obtained a loan from a scheduled bank. As interest rates keep changing fixed interest rate could be avoided.
54. Article 17 is provided for payments. It is submitted that in Article. 7.7.2, the second line may be as "the authority shall pay to the contractor...." instead of "liable to pay..." As far as the "bank rate" in the same clause is concerned there must be clarity. It shall be the rate at which scheduled banks could have given loan to the contractor for executing the work.
55. Regarding cement price in Article. 17.8.4, it should be the retail price of that area instead of WPI because there is considerable variation in price of cement from state to state.
56. On restriction of price adjustment as provided in Article. 17.9, it is submitted that the price increase may be paid for the extended period also, in the event of grant of extension of time without any action by the Authority's Engineer.
57. Regarding arbitration procedure in Article. 24.3.1. provides for arbitration in accordance with the Rules of Arbitration of the International Centre for Alternative Dispute Resolution, New Delhi. The International centre for alternative Dispute Resolution, New Delhi is a society. There is no need to follow its rules. The arbitration shall be held as per The Arbitration and Conciliation Act and the rules framed under that by the competent authorities.
58. Another area of concern is the protection of workers. The agreement does not elaborate on the protection of the workers. Provisions should be made to protect the workers especially the out of the state workers who are the most exploited category. Their welfare measures, leave, payment etc. should be detailed. Even the best of the best contractors do not take care of the welfare of workers to the required extent.

**Builders' Association of India -**

| <b>Clause No.</b> | <b>Description</b>   | <b>Comments/Suggestion</b>  |
|-------------------|--|---|
| 1.1               | <b>Scope of Work</b>   | Scope of work should be elaborative and descriptive   |
| 2                 | <b>Source of funds</b>   | The flow/availability of funds must to clearly defined in the NIT, to ensure timely payment to the contractor for the work done leading to timely completion of work. |
| 3.5               | <b>Eligibility Criteria</b>  |   |
| 3.5 (iii)         |  | The Construction experience for executing major civil works of similar nature should be 7 years instead of 4 years as proposed  |
| 3.5 (iv)          | Regarding minimum utilized banking facilities within 30 days prior to date of bid submission/opening etc.<br><br>a) Cash Credit/facilities – 3 months need of the contract value<br>b) Bank Guarantee Limit – 15% of the Contract Value<br><br>c) Turnover<br><br>d) Net Worth – Positive for 3 out of preceding 5 years | Such Parameters should be for high value/specialized priority nature work. The suggested value should be between 200-250 Cr. Project                                  |

|         |  |   |
|---------|--|---|
| 4       | Qualification of Bidder-Submission of Experience Certificate of the work done in various department  | There are different formats being followed in various departments. The same should be accepted in the format they have been issued and need not be insisted to be submitted in a particular format and the bidders should not be disqualified for the same. It is very cumbersome and time consuming process to get the modified experience certificate issued from the department. |
| 4.4 (a) | Employment of Skilled/Semiskilled works – 20% of the skilled/semiskilled workers employed should possess qualified certificate from CPWD Training Institute/ITI/NICMR etc compensation of Rs. 100 Per person/day should be levied. | This Clause is not acceptable in its present form. There may be issue related to availability of such tradesmen and may demand extra wages in view of the scarcity of such tradesmen. It should be implemented in phases and contractor should be motivated/encouraged in employment of such workmen instead of penalty/compensation clause.  |
| 4.4 (b) | Engagement of Engineer – Employment of Professional enrolled engineer with engineering council of India should be not less than 25%  | This clause is not acceptable in its present form. There may be scarcity of such engineers in terms of their availability and may demand extra emolument as compared to normal wages pattern. This should be implemented in phases and there should be motivational/encouragement clause instead of compensation/Penalty Clause   |
| 5.0     | Disqualification/Ineligibility of Bidders clause No.5.1 to 5.4   | This Clause should be invoked only upon obtaining very strong evidences/documents and not on mere excuses of poor performance etc.  |

|          |   |   |
|----------|---|---|
| 9.00     | <b>Contact of Bidding Documents</b>                                     | It would be appropriate to enclosed GFC drawing/precise BOQ Quantities in the bidding document to avoid major deviations & minimize disputes/discrepancies at a later date                            |
| 16       | <b>Bid Validity</b>   | Validity of Bid should be 60 days instead of 180 days as stated   |
| 17       | <b>EMD</b>  |   |
| 17.1     | In case of Joint Venture  | Any member may deposit EMD instead of Lead Partner of JV/C  |
| 17.2 (b) |   | It should also be accepted in the form of BG valid for 90 days instead of 225 days as desired   |
| 17.4     |   | It Should be cleared immediately but max within 7 days upon opening of bid in case of other than lowest renderer/unsuccesful renderers  |
| 33       | <b>Security Deposit</b><br><br>(Performance security & Retention money) | Considering that the estimated contractors profit is 7%, the total deposits with the Employer on account of Performance security and retention money should be around 5-6% instead of 10% as proposed |



|           |   |  |
|-----------|---|--|
|           | Proposed Performance Security @5%<br><br>Retention money to be recovered from R/A Bills @5%   |  |
| SECTION 3 | <b>Time Control</b>   |  |
| 24        | <b>Program</b><br>Program to be submitted in 28 days & shall be finalized in 60 days. Updated program shall be submitted every weekly/fortnightly/monthly for approval/revision | It should be finalized within 30 days max. to avoid hampering of progress of work. The modified program for review shall be submitted at the time of key milestone stages. Submission of the same weekly/fortnightly/monthly may lead to lot of unproductive work and mismanagement of already approved program towards its implementation |
|           | <b>COST CONTROL</b>   |  |
| 35        | Variation   |  |
| 38.2      | i) Increase in payment for minus variation<br>ii) Decrease in payment for plus variation  | The Proposal is not acceptable at all. There should not be any decrease in payment for plus variation. The variation may be controlled by providing GFC drawings & Precise calculations of BOQ & Submitted along with the Tender Document.   |

|    |   |   |
|----|---|---|
|    |   | The variation limit in respect of individual item shall be kept at 30% & rate negotiation shall be carried out based on market rates for any quality beyond the said limit In case of foundation work it should be kept at 100% |
| 40 | <b>Payments</b>   |   |
|    | Payments shall be made within 30 days of the submission of the bill   | 80% of the payment shall be released within 3 days of the submission of the bill and remaining within 10 days in the interest of timely completion of work & to maintain cash flow to the work                                  |
| 42 | <b>Price Adjustments</b>  |   |
|    | Price adjustment formula has been provided. It is further stated that certain fixed percentage of the base price (quoted rate by renderer) shall not be subjected to price adjustment | This is not acceptable. The 10 CC clause already applicable in case of CPWD agreement should be adopted which is quite fair and reasonable which covers all the works executed at Site.   |

Vol. 3

**ARBITRATION &  
DISPUTE RESOLUTION  
MANUAL**

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## **Introduction**

It is believed that substantial sums amounting to several crores of rupees are locked up in many contractual disputes in the Construction Sector alone in India. The Construction Industry therefore felt the need to introduce new measures so that disputes are resolved in a fair, speedy and cost efficient manner.

With a view to provide an institutional mechanism for resolution of construction and infrastructure related disputes, the Construction Industry Development Council, India (CIDC) in cooperation with the Singapore International Arbitration Centre (SIAC) set up an Arbitration Centre in India called the Construction Industry Arbitration Council (CIAC) on 7<sup>th</sup> June, 2006. CIAC is a Registered Society with its headquarters in New Delhi.

In the recent years, the need for effective dispute resolution especially in the area of construction projects has become the subject of deliberation at the global level and in order that India also be at par with other international organizations, CIDC has come up with its full support to CIAC in order to provide a scientific approach in resolving the dispute of the construction industry. CIAC is functional since 2006 & intends to serve as an Arbitral Institution to administer both domestic and international arbitration with a high standard of professionalism.

To maintain the expected level of professionalism, it is the basic requirement that a panel of experts in arbitration is drawn from different fields such as legal practitioners, engineers, management & financial specialists etc. CIAC has succeeded in creating & maintaining such a panel of Arbitrators.

The Council has so far added to its panel 163 experts as arbitrators from the participants of the Empanelment Workshops.

CIAC provide facilities for:

- Alternative Dispute Resolution (ADR), which includes international, domestic & commercial arbitration.
- Conducts executive development programmes
- workshops and
- National/International Conferences on various aspects of Alternate Dispute Resolution process (ADR).

### **Arbitration under the auspices of the CIAC have the following features:**

a. **Speed;**

CIAC Arbitration Rules provides for tight timelines for appointment of arbitrator and for rendering of the award. Under CIAC Arbitration Rules, the arbitrator will make a reasoned award within 30 days from close of hearing.

b. **Trained Arbitrators:**

The panel of arbitrators of CIAC consists of professionals from the construction industry as well as the legal fraternity. They have gone through formal training before being admitted to the panel. As on 31<sup>st</sup> August, 2013, 163 arbitrators have been trained and certified in arbitration workshops conducted by the expert faculties of the CIAC. in India and have been admitted to the panel.

c. **Strict Code of Ethics for Arbitrators, Parties & their Counsels.**

An arbitrator is appointed only after availability and conflict of interest checks. Arbitrators thus appointed are reminded in each assignment, of the strict Code of Ethics under which they are to conduct the arbitration. Apart from this CIAC has code of ethics for the parties & their counsels.

d. **Transparent Management of Arbitrator's Fees:**

To assist parties know the costs of arbitration, CIAC charge parties, based on a published Scale of Fees.

e. **Monitoring the Progress of the Case:**

The Secretariat of CIAC monitors the progress of the case throughout the arbitration.

f. **Facilities and Services for Hearing:**

The Secretariat arranges rooms for arbitration hearings. The secretariat is also able to arrange transcription, translation and interpretation services. Audio and video recording facilities can also be arranged.

The first edition of the CIAC Arbitration Rules Manual was published on 7<sup>th</sup> June, 2006 and its reprints were published in September, 2008 and July, 2009. This is the second revised edition – 2013 published on 1<sup>st</sup> September, 2013. The salient feature of this manual is that it lay down the Duties of the Registrar, Role of Secretariat, Fast Track Arbitration, Check over the Adjournments, & issue of Award within 30 days after close of the hearing, Settlement of Disputes & With-drawls of Arbitration Cases during Arbitration Proceedings & its impact on the Arbitration cost, Code of Ethics for arbitrators, Parties & their counsels & Guide-lines for Conduct of Arbitration Proceedings etc.

This Revised Edition of this Manual consists of the CIAC Model Arbitration Clause, Recommended Arbitration Agreement, the CIAC Arbitration Rules, CIAC's Panel of Arbitrators and CIAC's Fee Structure.

Construction companies, Public Sector Undertakings and Government departments choosing arbitration may consider the clear advantages of an institution-administered arbitration as opposed to ad-hoc arbitrations. CIAC would be happy to answer enquires on drafting of arbitration clauses apart from recommending to the parties that they adopt its Model Arbitration Clause in their contracts.

1<sup>st</sup> September, 2013

Dr. P. R. Swarup,  
Secretary, CIAC

## MODEL CLAUSE

### CIAC MODEL ARBITRATION CLAUSE

In drawing up contracts, we recommend that parties include the following arbitration clause:

“All and any dispute arising out of or in connection with this contract, what-so-ever arising between the parties relating to the construction, meaning, scope, operation or effect of this contract or its existence, validity or termination, shall be referred to and finally resolved by arbitration in India/ Foreign country in accordance with the Arbitration Rules of the Construction Industry Arbitration Council 2013 ("here in after called CIAC -Arbitration Rules-2013") in force at the commencement of the arbitration, which rules are deemed to be incorporated by reference in this clause, and the award made in pursuance thereof shall be binding on the parties”

\* Choose as appropriate - If the matter is domestic (between Indian parties) then New Delhi or any other place in India can be chosen. If the matter is International (between an Indian party and foreign party or between two foreign parties) then any country as per agreement or as decided by the chairman of CIAC.

#### **Parties may have to consider adding the followings.**

- (i) The number of Arbitrator (s)/conciliator(s) shall be..... (State an odd number).
- (ii) The language of the arbitration/ conciliation shall be.....English.
- (iii) Specific qualifications of the arbitrator(s) / conciliator(s) including Technical qualifications & Experience.

#### **Governing Law Clause**

The governing law clause should be drafted under legal advice. The following are simple model clauses:

- I. Where the place of arbitration is New Delhi or any other city in India: -

“This contract is governed by the laws of India.”

- II. Where the place of arbitration is International: -

“This contract is governed by the laws of the country as laid down in the agreement or as decided by the Chairman, CIAC.”

**RECOMMENDED ARBITRATION AGREEMENT**

Parties to an existing dispute who have not included an arbitration clause in their underlying contract may agree to refer the dispute to CIAC for arbitration under CIAC Arbitration Rules in the following terms:

We, \_\_\_\_\_, the undersigned, hereby agree that all disputes and differences arising under, out of, or in connection with the following contract:

[Brief description of the contract under which the disputes have arisen or may arise]

Be referred to and finally resolved by arbitration in [India/Foreign Country]\* in accordance with the Arbitration Rules of the Construction Industry Arbitration Council ("CIAC Arbitration Rules") in force at the commencement of the arbitration."

The Tribunal shall consist of \_\_\_\_\_\* arbitrator(s) to be appointed by the Chairman of the Construction Industry Arbitration Council.

\* Choose as appropriate - If the matter is domestic (between Indian parties) then New Delhi or any other place in India can be chosen. If the matter is international (between an Indian party and foreign party or between two foreign parties) then in the country as per agreement of the parties is to be chosen or as decided by the Chairman.

**Parties may have to consider adding the followings.**

- (i) The number of Arbitrator (s)/conciliator(s) shall be..... (state an odd number).
- (ii) The language of the arbitration/ conciliation shall be.....English.
- (iii) Specific qualifications of the arbitrator(s) / conciliator(s) including Technical qualifications & Experience.

This Agreement has been signed this the \_\_\_\_\_ day of \_\_\_\_\_ 2013\_\_ at \_\_\_\_\_ by:

- 1. \_\_\_\_\_ for and on behalf of \_\_\_\_\_  
(Name and Address of the Party to be given)
- 2. \_\_\_\_\_ for and on behalf of \_\_\_\_\_  
(Name and Address of the party to be given)



**CIAC – ARBITRATION RULES, 2013**

**Second Revised Edition, 1<sup>st</sup> September, 2013**

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## CIAC Arbitration Rules

### **Rule 1 - Scope of Application**

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| 1.1   | Where any agreement, submission or reference provides for arbitration at the Construction Industry Arbitration Council ("CIAC"), or under the Arbitration Rules of the CIAC and where the case is a domestic arbitration as defined in Rule 2, the parties shall be taken to have agreed that the arbitration shall be conducted in accordance with the these Rules, or such Rules as amended by the CIAC where the amendments take effect before the commencement of the arbitration.   |
| 1.1.1 | These rules shall apply where parties have agreed in writing that (a) a dispute has arisen or (b) a dispute which may arise between them in respect of defined legal relationship whether contractual or not, shall be settled under the Rules of Arbitration.   |
| 1.2   | Where any agreement, submission or reference provides for arbitration at the Construction Industry Arbitration Council ("CIAC"), or under the Arbitration Rules of the CIAC and where the case is an international arbitration as defined in Rule 2, the parties shall be taken to have agreed that the arbitration shall be conducted in a place approved by the chairman with consent of both the parties or in case of difference of opinion by the chairman in accordance with the Arbitration Rules applicable as per agreement or decided by the chairman. |
| 1.3   | Any question as to whether a case is to be treated as a domestic arbitration or an international arbitration for the purpose of these Rules and falls to be arbitrated and administered under these Rules or should be arbitrated and administered under any Rules is determined by the Chairman, whose decision is final and is not subject to appeal or review.  |
| 1.4   | These rules shall also apply where the parties sign a joint memorandum agreeing to their dispute (s) being resolved by the arbitration in accordance with the CIAC (Arbitration) Rules, in any proceeding in any court, including<br>(a) Under section 89 of the code of civil procedure, 1908; or<br><br>(b) Under sections 11, 8 or 9 of the Arbitration and conciliation Act, 1996  |

### **Rule 2 – Definitions**

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| 2.1 | These Rules shall be referred to as "the CIAC Arbitration Rules".  |
| 2.2 | In these Rules:<br>(i) "Act" means the 'Arbitration and Conciliation Act 1996' of India and any statutory modifications or Re-enactments thereof.<br><br>(ii) "CIAC" means the Construction Industry Arbitration Council.<br><br>(iii) "Rules Means Rules of CIAC<br><br>(iv) "CIAC Arbitrator Panel" means the list of persons admitted to serve as Arbitrators under these Rules<br><br>(v) "Council means the Construction Industry Arbitration Council |

- (vi) "CIDC" means the Construction Industry Development Council, India.
- (vii) "Chairman" means the Chairman of the Board of Governors of the CIAC.
- (viii) "Board of Governors" –Means the Board of Governors of the CIAC.
- (ix) "Arbitral Tribunal" means either a Sole Arbitrator or all Arbitrators when more than one is appointed for determining a particular dispute or difference.
- (x) "Arbitral Award"- includes an interim Award, Partial and Preliminary Award
- (xi) "Party"- means a party to an arbitration agreement. It shall include any Individual, Firm, Company, Government Organisation or Govt. Under Taking
- (xii) "Registrar" means the Registrar of CIAC and also includes an Acting/ Assistant Registrar.
- (xiii) "Secretary"- Means the secretary of CIAC
- (xiv) "Domestic arbitration" is an arbitration which does not fall within the definition of International Arbitration as defined in this Rule.
- (xv) "International Commercial arbitration" means an arbitration relating to disputes arising out of legal relationships, where contractual or not, considered as commercial under the law in force in India and where at least one of the parties is: -
- i. An individual who is a National of, or habitually resident in any country other than India; or
  - ii. A body corporate which is incorporated in any country other than India; or
  - iii. A company or an association or a body of individuals whose central management and control is Exercised in any country other than India; or
  - iv. The Government of a country or State other than India.
- (xvi) "Fast Track Arbitration" –Means arbitration in accordance with Rule 37.3 of CIAC.
- (xvii) "Guidelines"- means the guide lines for arbitrators and the parties to arbitration for expeditious conduct of the arbitration proceedings, given in the annexure to these rules.
- (xviii) "Rules of conciliation" means the Rules of Conciliation of the Arbitration & Conciliation Act,1996 or its amendments thereafter
- (xix) Words- imparting the singular number include, where the context admits or requires, the plural Number and vice versa.

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| <b>Rule - 3.0 Rules Applicable</b>        |  |
| 3.1                                       | <p>(a) Any dispute relating to any commercial matter including building construction, engineering, technical assistance, or labour, arising between two or more parties in India or a party or parties in India and a party or parties in a foreign country or between foreign parties who agree or have agreed for arbitration by the Council, or under the Rules of Arbitration of the Council, shall be determined and settled in accordance with these Rules.</p> <p>(b) The Council shall also be competent to administer the conduct of arbitration in any dispute or difference relating to a commercial transaction between parties as mentioned in sub-clause (a) where they have agreed to have their dispute arbitrated under any other Rules of Arbitration and have agreed to have such arbitration administered by the Council, wholly or in respect of some matters arising out of such arbitration.</p> <p>(c) In case the parties have provided different procedure for appointment of arbitrator or schedule of cost including the arbitrator's fee, the Council shall not be bound to process the case unless both the parties agree to follow the entire procedure of arbitration under Rules of Arbitration of the Council.</p> <p>(d) The Council shall be competent to function as Appointing Authority as contemplated under the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL).</p> |
| 3.2                                       | Wherever the Parties have provided or agreed for arbitration by the Construction Industry Arbitration Council for arbitration under the Rules of CIAC, these rules or any amendment thereof, in the form obtaining at the time the dispute is referred to arbitration of the Council shall apply.  |
| 3.3                                       | If one or both of the parties to a dispute which is referred to arbitration by the Council belong to a country or countries other than India, in the absence of an agreement by the parties on the substantive law to be applied, it will be determined by the Arbitral Tribunal. The procedural law shall be the laws of India and parties shall be deemed to have submitted to the jurisdiction of the Courts in India   |
| <b>Rule 4.0 Interpretation of Rules</b>   |  |
| 4.1                                       | The decision of the Chairman on any question relating to interpretation of these rules or any procedural matter thereunder shall be final and binding on the parties.  |
| <b>Rules - 5.0 Panel of Arbitrators -</b> |  |

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| 5.1                                  | <p>A Panel of Arbitrators shall be prepared by the Council from amongst persons who are qualified and possess knowledge and experience in their respective field of profession and arbitration law &amp; procedure and are willing to serve as arbitrators generally or in specific fields and who are from time to time recommended by the members of the Council or any other person or organization and who have gone through a formal training conducted by the expert faculty of CIAC. Chairman of the CIAC shall also be empowered to appoint any suitable &amp; competent person as arbitrator on the penal of CIAC without under taking formal training as laid down under this rule.</p> <p>All the members of the panel will carry equal status and parties will not have any right to challenge the appointment of the arbitrator on the ground that its nominee arbitrator has higher status than the Presiding Arbitrator.</p>   |
| 5.2                                  | <p>The Registrar shall prepare and maintain an up-to-date Panel of Arbitrators together with adequate information as to their qualifications and experience. Separate lists may be kept and maintained of arbitrators included in the Panel for disputes in general and for each of the fields of international trade and/or business transactions in which the Chairman decides that the Council will offer arbitration facilities under the Rules. The parties to a dispute or the Registrar where he appoints the arbitrator may choose any person from the panel with reference to any dispute. If any party appoints a foreigner/person residing abroad, as arbitrator from the panel, that party will have to meet the travel &amp; stay expenses of the person appointed as arbitrator at the venue of arbitration. The Arbitral Tribunal may, however, make any order in regard there in the award. The panel of Arbitrators shall be open to inspection by all persons with the permission of the Registrar.</p> <p>A curriculum vitae (CV) shall be maintained of the persons selected for empanelment as Arbitrators in the form prescribed in Form C. List of empanelled arbitrators selected for CIAC's penal is 163 and given in Annexure "1"</p> |
| 5.3                                  | <p>The Chairman may at any time add the name of any person to the list of arbitrators included in the panel or delete the name of any person from the panel, who work against the interest of CIAC or fail to comply the CIAC – Rules after giving a show cause notice.</p>   |
| 5.4                                  | <p>The persons who have attained the age of more than 80 years will automatically cease to be member of the panel of arbitrators provided the Chairman allows him to continue for a further period as deemed fit. In the case of a person, who has been appointed as Arbitrator before attainment of the age of 80 years, his panel membership will continue till the pronouncement of the Award in pending arbitration matters referred to him. In case the empanelled Arbitrator, who is interested to continue beyond the age of 80 years in the CIAC panel will be required to make request for the same to the Chairman prior to expiry of his appointment at the age of 80 years.</p>   |
| <b>Rule 6.0. Duties of Registrar</b> |   |
| 6.1                                  | <p>The Registrar shall receive applications for arbitration by the Council, receive payment of fees and deposits, appoint, in consultation with the Chairman of the CIAC, and in his absence in consultation with the Secretary of the CIAC, an arbitrator or arbitrators as hereinafter provided. The Registrar shall also receive all communications made to the Arbitral Tribunal by the parties and communicate to them the orders and directions of the Arbitral Tribunal, keep a register of applications to the Council and of awards made by the Arbitral Tribunal, keep such other books or memoranda and make such other records or returns as the chairman/ secretary shall from time to time require and generally carry out the directions of an Arbitral Tribunal so constituted under these rules and take such</p>  |

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|  | other steps as may be necessary to assist such Arbitral Tribunal in carrying out of its functions.   |
| 6.2  | The Registrar may delegate to any officer of the Council, Chambers of Commerce or Trade Association at the premises of which the arbitration proceedings are taking place, to discharge such of the functions and administrative duties of the Registrar as are deemed proper and necessary from time to time, with reference to a particular case or cases.   |
| <b>Rule 7 - Notice, Calculation of Periods of Time</b> |  |
| 7.1  | For the purposes of these Rules, any notice, including a notification, communication or proposal, is deemed to have been received if it is physically delivered to the addressee or if it is delivered at his habitual residence, place of business or mailing address, or, if none of these can be found after making reasonable inquiry, then at the addressee's last-known residence or place of business. Notice shall be deemed to have been received on the day it is so delivered.  |
| 7.2  | For the purposes of calculating a period of time under these Rules, such period shall begin to run on the day following the day when a notice, notification, communication or proposal is received. If the last day of such period is an official holiday or a non-business day at the residence or place of business of the addressee, the period is extended until the first business day which follows. Gazetted public holidays or non-business days occurring during the running of the period of time are included in calculating the period.  |
| 7.3  | Without prejudice to the effectiveness of any other form of written communication, written communication may be made by fax, e-mail or any other means of electronic transmission effected to a number, address or site of a party.  |
| 7.4  | The transmission is deemed to have been received on the day of transmission.   |
| <b>Rule 8 - Commencement of Arbitration</b>            |  |
| 8.1  | Any party wishing to commence an arbitration under these Rules ("the Claimant") shall file with the Registrar and serve on the other party ("the Respondent"), a written notice of Arbitration ("the Notice of Arbitration") which shall include the following: <ul style="list-style-type: none"> <li>a. A request that the dispute be referred to arbitration;</li> <li>b. The names, addresses, telephone numbers, fax numbers and email addresses of the parties to the dispute;</li> <li>c. A reference to the arbitration clause or any separate arbitration agreement that is invoked and provide a copy of the arbitration clause or arbitration agreement;</li> <li>d. A reference to the contract out of which the dispute arises and provide a certified copy of the contract.</li> <li>e. Statement of the claim including the amount of interest due till date of commencement of arbitration and facts supporting the claim, points of issues and relief or remedies sought with other details of the claimant's case</li> </ul> |



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|     | <p>f. Original or duly certified copies of the arbitration agreement and such other documents and information relevant or relied upon</p> <p>g. A proposal as to the number of arbitrators (i.e. one or three), if the parties have not previously agreed on the number; and qualifications, if any prescribed in the arbitration agreement on which parties have already agreed in writing; and</p> <p>h. The name of the Claimant's nominated arbitrator proposed from CIAC's Arbitration panel.</p> <p>i. Statements as to the applicable rules of law, if any.</p> <p>j. Order of court, if any, passed in proceedings of these rules, along with the signed joint memorandum.</p> <p>k. Submit an under taking of the parties for resolving the Dispute in Form "A"</p>   |
| 8.2 | <p>A Registration fee of Rs.10, 000/- for claims upto Rs.1 crores &amp; Rs.20, 000/- for claim more than Rs. 1 crore is payable at the time of filing the Notice of Arbitration, towards non-refundable administrative cost of the council.</p> <p>(a) The claimant shall also make an advance payment of his share of administrative costs and arbitrators' fees, in terms of Rule 41 of these rules, in the event the claimant (s) fails to comply with any of the aforesaid requirements, Registrar may fix a time limit within which, the claimant must comply, failing which, the file shall be closed without prejudice to the right of the claimant to submit the claims at a later date by way of a fresh application.</p> <p>(b) The Registrar shall send a copy of the notice of arbitration, statement of claim and the documents annexed thereto, at the earliest to the respondent (s) for his reply to the notice.</p> |
| 8.3 | <p>The date of filing of the Notice of Arbitration with the Registrar along with request registration fee is the date of commencement of the arbitration for the purpose of these Rules.</p>   |
| 8.4 | <p>If any Court makes an order directing that an arbitration be held under these Rules, in addition to the documents listed in Rules 8.1, the order of that Court or a copy thereof shall accompany the application for arbitration.</p>   |
| 8.5 | <p>(a) On receipt of an application for arbitration, the Registrar shall have absolute discretion to accept or reject the said application. The Registrar is not bound to give reasons for the exercise of his discretion.<br/>Before deciding on the acceptability of an application for arbitration, the Registrar may ask the parties for further information and particulars of their claims.</p> <p>(b) Similarly, if any information or particulars regarding the arbitration agreement furnished by claimant with the application for arbitration are found to be incorrect or false, at any time subsequently, the Registrar shall have a right to reject the application for arbitration.</p> <p>(c) Any Party aggrieved by the decision of the Registrar, in accepting or rejecting an application for arbitration as above, may apply to the Chairman for suitable directions.</p>  |

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|  | Chairman's orders shall be final & binding on both the parties and there after no appeal shall lie before any authority or court.  |
| <b>Rule 9 - Response by Respondent</b> |  |
| 9.1                                    | <p>Within thirty days from the date of receipt of the notice and the Statement of Claim, from the Registrar, the Respondent shall send his written response (the "Reply") to the CIAC addressed to the Registrar, which shall <i>inter alia</i>, contain the following information and be accompanied by:-</p> <p>(a) His name in full, description, contact details and address;</p> <p>(b) Confirmation or denial of all or part of the claim(s) made by the Claimant in the Statement of claim;</p> <p>(c) Comments in response to the nature and circumstances of the dispute giving rise to the Claim(s) contained in the notice;</p> <p>(d) Response to the relief sought in the notice;</p> <p>(e) Statement describing the nature and circumstances giving rise to any Counter- claim(s), if any, including all relevant or supporting documents; provided the counter claim, arises under the same transaction as the original claim.</p> <p>(f) Statements, if any, as to the applicable rules of law and the language of the arbitration.</p> |
| 9.2                                    | <p>The Registrar may, on sufficient grounds in writing explain the delay, grant an extension of time for filing the reply and/or Counter-claim to the respondent, upon payment of such costs as compensation as may be deemed appropriate and within such time as may be specified;</p> <p>Provided, that the request for extension of time shall be entertained only once and such extension shall not exceed thirty days. If the Respondent fails to file his reply and/or counter-claim, the Registrar shall proceed further in accordance with the Rules.</p>  |
| 9.3                                    | Failure of the Respondent to file his Reply and/or Counter-claim within the time stipulated or the extended time shall constitute a waiver of the Respondent's opportunity to file the Reply.  |
| 9.4                                    | Reply and/or Counter-claim shall be supplied to the secretariat in sufficient number of copies thereof being one copy for the CIAC, one copy each for arbitrator(s) (if the number of arbitrators is mentioned in the arbitration agreement) and one copy each for the Claimant(s).  |
| 9.5                                    | <p>A registration fee of Rs 10,000/- for claim upto Rs1 1 crore &amp; Rs 20,000/- for claim more than 1 crore is payable at the time of filing the response to wards non- refundable administrative cost of the council.</p> <p>The respondent shall also make an advance payment of his share of administrative costs and arbitrators' fees as the Registrar may require in terms of rule 41 of these rules, determined in accordance with CIAC rules in force on the date the request is submitted.</p>  |
| 9.6                                    | A copy of the Reply to the claims & Counter-claim if any and the documents annexed thereto received from the respondent shall be communicated to the claimant(s) by the Registrar  |

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| <b>Rule 10. (a) - Claimant's Reply to Counter – Claim &amp; Rejoinder for Reply to Claims</b> |  |
| 10.1  | The Claimant(s) shall file a Reply to Counter- claim if any and file rejoinder for reply to claims of the respondent, if so desired, within 30 days from the date of receipt of the Counter-claim communicated by the Registrar.   |
| 10.2  | The Registrar may, on sufficient grounds in writing explaining the delay, grant the Claimant an extension of time for filing the Reply only upon payment of costs as compensation as may be deemed appropriate;<br><br>Provided, that the request for extension of time shall be entertained only once and such extension cannot exceed thirty days.   |
| 10.3  | Failure of the Claimant(s) to file his Reply to Counter-claim within the time stipulated or the extended time shall constitute a waiver of the Claimant's opportunity to file the Reply to Counter- claim.   |
| <b>Rule 10 (b) -Respondent's Rejoinder for Reply to Counter Claim</b>                         |  |
| 10.4  | Within 15 days after service of the statement of claimant's reply to counter – claims, the respondent shall file rejoinder in reply to counter – claims of the claimant, if so desire.   |
| 10.5  | No further case statements may be filed without the leave of the Arbitral Tribunal or if Arbitral Tribunal has not been appointed by the Registrar   |
| <b>Rule 11 - Contents of Case Statements</b>  |  |
| 11.1  | The case statements must contain the fullest possible particulars of the party's claim, defiance or counterclaim and must thus contain a comprehensive statement of the facts and contentions of law supporting the party's position.  |
| 11.2  | It must:<br>a. Set out all items of relief or other remedies sought together with the amount of all quantifiable claims and detailed calculations.<br>b. State fully its reasons for denying any allegation or statement of the other party.<br>c. State fully its own version of events if a party intends to put forward a version of events different from that given by the other party. |
| 11.3  | A case statement must be signed by or on behalf of the party making it.  |
| <b>Rule 12 - Default in Filing and Serving Case Statements</b>                                |  |
| 12.1  | If any party of an arbitration agreement fails to participate or refuse to take part in an arbitration proceedings at any stage, then such party shall be proceeded ex-parte and a notice to this effect shall be sent to the defaulting party along with a copy to the other party (s).   |

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| 12.2   | If a party proceeds Ex-parte', the Registrar shall send an intimation in writing to this effect to the defaulting party as well as the other party (s). However this shall not preclude such party from participating in any subsequent stage of the arbitration proceedings.  |
| 12.3   | If the Claimant fails within the time specified under these Rules or as may be fixed by the Arbitral Tribunal or by the Registrar, to submit its Statement of Case, the Arbitral Tribunal or if a Arbitral Tribunal has not been appointed, the Registrar, may issue an order for the termination of the arbitral proceedings or make such other directions as may be appropriate in the circumstances.  |
| 12.4   | If the Respondent fails to submit a Statement of Respondent's Defence, the Arbitral Tribunal may nevertheless proceed with the arbitration and make the award.   |
| <b>Rule 13 - Further Written Statements</b>                |  |
| 13.1   | The Arbitral Tribunal will decide which further written statements, in addition to the case statement(s) already filed, are required from the parties and shall fix the periods of time for giving, filing and serving such statements.  |
| 13.2   | All such further statements must be given to the Arbitral Tribunal, filed with the Registrar and served on the Claimant or Respondent, whichever is applicable.  |
| <b>Rule 14 - CIAC to Provide Assistance</b>                |  |
| 14.1   | At the request of the Arbitral Tribunal or either party, the Registrar will render such assistance as is required within the Rules of CIAC for the conduct of the arbitration.   |
| 14.2   | Any additional expense incurred or to be incurred for any such arrangements shall be borne by the parties equally.   |
| <b>Rule 15 - Appointment of authorized Representatives</b> |  |
| 15.1   | (1) Each party shall advise, in writing, the other party and the Registrar of-<br>(a) The names and addresses of persons who will represent or assist him or her, and<br>(b) The capacity in which those persons will act.<br><br>(2) Once the Arbitral Tribunal has been established, the parties or their representatives may communicate in writing directly to the Arbitral Tribunal, with a copy of the communication addressed to the Registrar. |
| <b>Rule 16 - Constitution of Arbitral Tribunal</b>         |  |
| 16.1   | On receipt of the application for arbitration, the Registrar shall take necessary steps to have the Arbitral Tribunal constituted for the adjudication of the dispute or difference as provided hereunder.   |
| 16.2   | The number of arbitrators to hear a dispute shall be determined as under:  |

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|      | <p>(a) Where the claim including amount of interest, if any, being claimed upto the date of commencement of arbitration in terms of Rule 8, does not exceed Rs. One crore and where the arbitration agreement does not specify three arbitrators, the reference shall be deemed to be to a sole arbitrator.</p> <p>(b) Where the claim including amount of interest, if any, being claimed upto the date of commencement of arbitration in terms of Rule 8 exceeds Rs. One crore the dispute will be heard and determined by three arbitrators, unless the agreement provides otherwise or the parties to the dispute agree to refer the dispute to a sole arbitrator within thirty days from the date of notification of the request for arbitration.</p> <p>(c) Where three arbitrators have to be appointed as per the above sub-rule and any of the parties to the dispute fails to make the necessary deposit towards the costs and expenses of arbitration, instead of three arbitrators, the Registrar shall request the arbitrator appointed by any of the parties to act as sole arbitrator irrespective of the claim exceeding Rs. one crore. In the event the agreement provides for appointment of three arbitrators, the Registrar in consultation with the Chairman of the CIAC may appoint arbitrators on behalf of Claimant or Respondent, as the case may be, as well as presiding arbitrator.</p>   |
| 16.3 | The disputes shall be decided by a sole arbitrator or by three arbitrators.   |
| 16.4 | <p>The appointment of sole arbitrator or three arbitrators shall be made in the following manner:</p> <p>(a) In case a Sole Arbitrator has to be appointed, the Registrar shall, by a notice in writing, call upon the parties to the dispute to forward the name of an agreed arbitrator from among the Panel CIAC of Arbitrators. The said notice shall specify the period within which the nomination shall be made which shall not be more than thirty days from the date of the said notice to the respective parties. If the parties fail to agree on the person to be appointed as sole arbitrator within the time granted by the Registrar, the Registrar in consultation with the Chairman of the CIAC and in his absence in consultation with the secretary, CIAC shall appoint the sole arbitrator from among the Panel of Arbitrators. If one of the parties is a national or resident of a country other than India, the sole arbitrator shall, as far as possible, be chosen or appointed by the Registrar from among the nationals of a country other than that of either of the parties. The sole arbitrator so nominated shall constitute the Arbitral Tribunal to hear the dispute and shall be appointed as such in writing by the Registrar. The Registrar shall give notice to the Parties of the constitution of the Arbitral Tribunal.</p> <p>(b) Where the reference is to three arbitrators, the Registrar shall in the first instance call upon the parties to nominate one arbitrator each from among the Panel of Arbitrators by a notice in writing, sent to them. The said notice shall specify the period within which the nomination shall be made which shall not be more than thirty days from the date of the said notice to the respective Parties. If a Party to the dispute refuses or neglects to appoint an arbitrator on his behalf within the period specified or if he requests the Registrar to nominate an arbitrator on behalf of that party, the Registrar in consultation with the Chairman of the CIAC and in his absence in consultation with the secretary, CIAC shall appoint the arbitrator from the Panel of arbitrators on behalf of that party. On receipt of the nominations from the respective parties or on the appointment as aforesaid by the</p> |

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|   | <p>Registrar, the Registrar shall appoint another person as the Presiding Arbitrator of the Arbitral Tribunal in consultation with Chairman of the CIAC and in his absence in consultation with secretary, CIAC, from among the panel of arbitrators to be additional arbitrator to act as Presiding Arbitrator of the Arbitral Tribunal.</p> <p>(c) If one of the parties is a national or resident of a country other than India, the additional arbitrator shall, as far as possible, be chosen or appointed from among the nationals of a country other than that of either of the parties. The arbitrators so nominated or appointed shall constitute the Arbitral Tribunal and shall be appointed as such in writing by the Registrar. The additional arbitrator appointed by the Registrar shall act as Presiding Arbitrator of the Arbitral Tribunal. The Registrar in consultation with the chairman of CIAC shall give notice to the parties of the constitution of the Arbitral Tribunal.</p> |
| 16.5  | The parties will obtain the consent from the persons nominated by them as arbitrator and intimate the Registrar accordingly. The Registrar will obtain the consent from person(s) nominated by him. After a person gives his consent for appointment as arbitrator, he will be duly intimated about his appointment to decide the dispute, by a Memo in writing under the hand of the Registrar about the constitution of the Arbitral Tribunal. The appointment of the arbitrator will take effect from the date of such intimation about the constitution of the Arbitral Tribunal.  |
| 16.6  | An arbitrator to be appointed under these Rules shall be a person on the CIAC Arbitration Panel as at the date of the appointment. The appointed arbitrator/arbitrators shall submit declaration, Acceptance and statement of Independence in form "D"   |
| <b>Rule 17 - Multi-Party Appointment of the Arbitral Tribunal</b> |  |
| 17.1  | If there are more than 2 parties in the arbitration, the parties shall agree on the procedure for appointing the Arbitral Tribunal within 21 days of the receipt of the Notice of Arbitration.   |
| 17.2  | If the parties are unable to do so, upon the lapse of the 21 days time period mentioned herein, the Arbitral Tribunal shall be appointed by the Chairman as soon as practicable.   |
| 17.3  | Where disputes arise amongst more than two parties out of a defined legal relationship or out of a series of interconnected contracts (including "chain" or "string" contracts), the parties may agree that the Arbitral Tribunal shall consist of three members, one to be nominated by each of the parties (supporting parties will be grouped together and treated as one party for the purpose of such nomination of the arbitrator) and the third arbitrator shall be appointed by the chairman and such third arbitrator shall Chair the Arbitral Tribunal.  |
| 17.4  | If the parties to a dispute are required to be grouped in three groups, each such group will nominate one arbitrator each and the three members of the Arbitral Tribunal shall nominate one out of themselves to Chair the Arbitral Tribunal. If the members fail to so nominate, the chairman shall nominate anyone of them to Chair the Arbitral Tribunal within fifteen days of the constitution of the Arbitral Tribunal.  |

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| 17.5  | If the parties to a dispute are required to be grouped in four groups, each such group will nominate one arbitrator and the chairman will appoint an independent arbitrator from the panel who shall Chair the Arbitral Tribunal.   |
| 17.6  | If the parties to a dispute are required to be grouped in five groups, each such group will nominate one arbitrator each and the five members of the Arbitral Tribunal shall nominate one out of themselves to Chair the Arbitral Tribunal. If the members fail to so nominate, the chairman shall nominate anyone of them to Chair the Arbitral Tribunal within fifteen days of the constitution of the Arbitral Tribunal.   |
| 17.7  | All efforts shall be made to ensure that such grouping of parties shall not exceed five. In case the groups are more than five, the chairman shall adopt such procedure for the appointment of arbitrators as may be deemed appropriate, in view of the facts and circumstances of the case, but in no case shall the number of arbitrators comprising the Arbitral Tribunal shall exceed five.   |
| 17.8  | Any decision of the chairman for the appointment of the arbitrators, either for the number or for the nomination, shall be final and binding upon the parties.  |
| <b>Rule 18 - Appointment of Substitute Arbitrator</b>                   |   |
| 18.1  | In the event of the death or resignation of any of the arbitrators, a substitute arbitrator shall be appointed by the same procedure as in Rule 16 by which the arbitrator concerned was appointed, failing which, the Chairman will make the appointment.  |
| <b>Rule 19 - Independence and Impartiality of the Arbitral Tribunal</b> |   |
| 19.1  | The Arbitral Tribunal conducting an arbitration under these Rules shall be and remain at all times independent and impartial, and shall not act as advocate for any party.  |
| 19.2  | A prospective arbitrator shall disclose to those who approach him in connection with his possible appointment, any circumstances likely to give rise to justifiable doubts as to his impartiality or independence.  |
| 19.3  | An arbitrator, once nominated or appointed, shall disclose any such circumstance referred to in Rule 19.2 to the Registrar and upon receipt of such information, the Registrar shall disclose it to the parties, who if willing to proceed under the circumstances disclosed, shall advise the Registrar accordingly. If either parties declines to waive the presumptive disqualification, the prospective arbitrator shall be disqualified from acting as arbitrator and the vacancy so created shall be filled in accordance with the applicable provision of these Rules. |
| <b>Rule 20 - Challenge of Arbitrators</b>                               |   |
| 20.1  | An arbitrator may be challenged if there are circumstances that give rise to justifiable doubts as to his impartiality or independence.   |
| 20.2  | An arbitrator may also be challenged if he does not possess the qualifications required by the agreement of the parties.  |

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| 20.3  | A party may challenge an arbitrator appointed on its nomination or with its agreement only for reasons of which it becomes aware after the appointment has been made.  |
| 20.4  | A party who intends to challenge an arbitrator shall file with the Registrar and serve on the other party or all other parties, whichever is applicable, a Notice of Challenge.  |
| 20.5  | The Notice of Challenge must be filed and served within 14 days from the appointment of the arbitrator or within 14 days after the circumstances mentioned in Rule 20.1 became known to that party.  |
| 20.6  | The Notice of Challenge must state the reasons for the challenge.  |
| 20.7  | The arbitration shall be suspended until the challenge is resolved or decided upon.  |
| 20.8  | When an arbitrator has been challenged by one party, the other party may agree to the challenge. The arbitrator may also, after the challenge, withdraw from his office. However, it is not implied in either case that there has been an acceptance of the validity of the grounds for the challenge. In both cases, the procedure provided in Rule 16 read with Rule 18, shall be used for the appointment of a substitute arbitrator.   |
| <b>Rule 21 - Decision on Challenge</b>            |  |
| 21.1  | If the other party does not agree to the challenge and the challenged arbitrator does not withdraw, the decision on the challenge will be made by the Chairman.  |
| 21.2  | If the Chairman sustains the challenge, a substitute arbitrator shall be appointed or chosen pursuant to the procedure applicable to the appointment of an arbitrator as provided in Rule 16 read with Rule 18. If the Chairman dismisses the challenge, the arbitrator shall continue with the arbitration.   |
| 21.3  | The Chairman's decision shall be final and shall not be subject to appeal.   |
| <b>Rule 22 - Removal of the Arbitral Tribunal</b> |  |
| 22.1  | The Chairman may, on the application of a party, remove an arbitrator: <ul style="list-style-type: none"> <li>(a) If any appointed arbitrator resigns or dies or becomes incapable of acting or neglects or fails to act expeditiously, prior to or during the arbitration hearings, or if he fails to make the award within the time and/ or extended time prescribed under Rule 44.8.</li> <li>(b) If any appointed arbitrator resigns or dies or becomes incapable of acting or neglects or fails to act expeditiously, prior to or during the arbitration hearings, or if he fails to make the award within the time and/ or extended time prescribed under Rule 44.8, the Registrar in consultation with the Chairman may terminate the authority of such an appointed arbitrator and inform him accordingly. In the event of such termination, the arbitrator or arbitrators as the case may be, and whose authority has been terminated, shall not be entitled to any fee.</li> <li>(c) who is physically or mentally incapable of conducting the proceedings or where there are justifiable doubts as to his ability to do so; or</li> </ul> |



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|  | (d) who has refused or failed to use all reasonable dispatch in conducting the arbitration or making an award within the time and/or extended time prescribed under the CIAC Rules   |
| 22.2   | The arbitrator(s) concerned is entitled to appear and be heard at the hearing of the application to remove him.  |
| 22.3   | Upon the removal of the arbitrator, a substitute arbitrator shall be appointed in accordance with Rule 16 read with Rule 18.   |
| 22.4   | In case of the resignation or death or termination of authority of an appointed arbitrator under Rule 22.1 (a) new arbitrator will be appointed in his place by the Registrar in consultation with the Chairman of the CIAC in case they had appointed the original arbitrator. Where the appointment was made by the parties, the Registrar shall call upon the party who had appointed the arbitrator to nominate another arbitrator in his place. If any Party refuses or neglects to nominate an arbitrator within 15 days of the date of notice requiring him to nominate the arbitrator or within such extended time not exceeding thirty days, the Registrar in consultation with the Chairman of the CIAC shall nominate the arbitrator on behalf of that Party from among the Panel of Arbitrators. |
| 22.5   | The Chairman's decision on the application is final and is not subject to appeal or review.  |
| 22.6   | The arbitrator(s) appointed and the parties shall be informed about the reconstitution of the Arbitral Tribunal and the reconstituted Arbitral Tribunal shall make the award expeditiously within the time prescribed under the Rule 44.8 from the date when the reconstituted Arbitral Tribunal enters on the reference.  |
| <b>Rule 23 - Re-hearing in the Event of the Replacement of the Arbitral Tribunal</b> |  |
| 23.1   | The reconstituted Arbitral Tribunal shall proceed with the arbitration with the liberty to act on the record of evidence and proceedings as then existing or to commence the proceedings de novo.  |
| <b>Rule 24 (a) - Jurisdiction of the Arbitral Tribunal</b>                           |  |
| 24.1   | The Arbitral Tribunal shall have the power to rule on its own jurisdiction, including any objection with respect to the existence, termination or validity of the arbitration agreement. For that purpose, an arbitration agreement which forms part of a contract shall be treated as an agreement independent of the other terms of the contract. A decision by the Arbitral Tribunal that the contract is null and void shall not entail ipso jure the invalidity of the arbitration agreement.   |
| 24.2   | A plea that the Arbitral Tribunal does not have jurisdiction shall be raised not later than in the Statement of Defence. A plea that the Arbitral Tribunal is exceeding the scope of its authority shall be raised promptly after the Arbitral Tribunal has indicated its intention to decide on the matter alleged to be beyond the scope of its authority. In either case the Arbitral Tribunal may nevertheless admit a late plea under this Rule if it considers the delay justified. A party is not precluded from raising such a plea by the fact that he has nominated, or participated in the appointment of an arbitrator.  |
| 24.3   | The Arbitral Tribunal must rule on an objection that it lacks jurisdiction as a preliminary question upon the objection being raised. It may rule on an objection that it exceeds the scope of its authority either as a preliminary question or in an award on the merits, as it deems just and convenient.   |

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| 24.4  | In addition to the jurisdiction to exercise the powers defined elsewhere in these Rules, the Arbitral Tribunal shall have jurisdiction to determine any question of law arising in the arbitration; proceed with the arbitration notwithstanding the failure or refusal of any party to comply with these Rules or with the Arbitral Tribunal's orders or directions, or to attend any meeting or hearing, but only after giving that party written notice that it intends to do so; and to receive and take into account such written or oral evidence as it shall determine to be relevant, whether or not strictly admissible in law.  |
| <b>Rule 24 (b) – Additional Powers of the Arbitral Tribunal</b> |   |
| 24.5  | In addition to the powers conferred by the Act, the Arbitral Tribunal shall also have the power to: <ul style="list-style-type: none"> <li>• Allow any party, upon such terms (as to costs and otherwise) as it shall determine, to amend claims or counterclaims;</li> <li>• Extend or abbreviate any time limits provided by these Rules;</li> <li>• Conduct such enquiries as may appear to the Arbitral Tribunal to be necessary or expedient;</li> <li>• Order the parties to make any property or thing available for inspection;</li> <li>• Order any parties to produce to the Arbitral Tribunal, and to the other parties for inspection, and to supply copies of any documents or classes of documents in their possession, custody or power which the Arbitral Tribunal determines to be relevant;</li> <li>• Make orders or give directions to any party for interrogatories;</li> <li>• Make orders or give directions to any party for an interim injunction or any other interim measure;</li> <li>• Make such orders or give such directions as it deems fit in so far as they are not inconsistent with the Act or any statutory re-enactment thereof or such law which is applicable or these Rules.</li> </ul> |
| 24.6  | If the parties so agree, the Arbitral Tribunal shall also have the power to add other parties (with their consent) to be joined in the arbitration and make a Single Final Award determining all disputes between them.   |
| <b>Rule 25 - Applicable Law, Amiable Compositeur</b>            |   |
| 25.1  | Where the arbitration is a 'domestic arbitration' as defined in Rule 2, the Arbitral Tribunal shall decide the dispute in accordance with the substantive law for the time being in force in India.   |
| 25.2  | Where the arbitration is an 'International Arbitration' as defined in Rule 2, the Arbitral Tribunal shall apply the law designated by the parties as applicable to the substance of the dispute. Failing such designation by the parties, the Arbitral Tribunal shall apply the law determined by the conflict of laws rules which it considers applicable.   |

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| 25.3 | The Arbitral Tribunal shall decide as amiable compositeur or ex aequo et bono only if the parties have expressly authorised it to do so and if the law applicable to the arbitral procedure permits such arbitration. |
| 25.4 | In all cases, the Arbitral Tribunal shall decide in accordance with the terms of the contract and shall take into account the usages of the trade applicable to the transaction.                                      |

**Rule 26 - Transmission of Case File to the Arbitral Tribunal**

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| 26.1 | The Registrar shall, as soon as practicable transmit to the Arbitral Tribunal, a file containing the Notice of Arbitration, the Response and all case statements to the Arbitral Tribunal with a request to proceed with the arbitration and the Arbitral Tribunal shall be deemed to have entered on the reference on the day on which the case have been dispatched to him, with intimation to the parties.   |
| 26.2 | If the Claimant does not file all the requisite documents, papers, etc. or does not deposit the appropriate fees as per the Rules after having been given due opportunity for the purpose by the Registrar or the Arbitral Tribunal, the Registrar or the Arbitral Tribunal may dismiss/close the case on file for lack of pursual by the Claimant. Similarly, if the Respondent fails to produce any requisite documents, papers including the statement of defence or information or fails to deposit administrative fees, or arbitrators fees etc. after having been given due opportunity for the purpose by the Registrar or the Arbitral Tribunal, the Registrar or the Arbitral Tribunal may proceed further with the arbitration proceedings as per the Rules, notwithstanding such failure or refusal by the Respondent. |
| 26.3 | The Arbitral Tribunal shall as soon as practicable, after consultation with the parties, issue such orders and/or directions as are necessary for the conduct of the arbitration to conclusion, including a time table for steps to be taken in the arbitration and for the hearing of the arbitration  |
| 26.4 | The time-table so fixed shall remain firm and binding on all concerned.   |
| 26.5 | The Arbitral tribunal shall communicate the time- table to the registrar and also the time period for publication of the award.   |
| 26.6 | Where there are two or more applications for arbitration by the Council and the issue involved in the dispute arises out of same transactions, the Registrar may, if he thinks proper to do so and with the consent of the Parties, fix the hearings of the disputes to be heard jointly or refer the applications to the same Arbitral Tribunal. The awards, however, shall be given separately in each case. Each case shall be treated as independent for all aspects, expects holding of joint arbitration proceedings.   |

**Rule 27 - Notifications and/or Communications from the Registrar**

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| 27.1 | All applications which the parties desire to make to the Arbitral Tribunal and all notices to be given to the Parties before or during the course of arbitration or otherwise in relation thereto shall be made through and sent by the Registrar who shall communicate the orders and directions of the Arbitral Tribunal thereon to the Parties. |
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**Rule 28 - Amendment of Claims, Etc.**

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| 28.1 | Amendments of the claim, defence statement, counter-claim or reply submitted to the Arbitral Tribunal must be formulated in writing by the Party so desiring. The Arbitral Tribunal will decide whether such amendments should be allowed or not. The Administrative fee and Arbitrator's fee (for each Arbitrator) shall get revised to the extent of increase for such additional claims/counter-claims. The party making such additional claim/counter-claim shall deposit the entire fees payable in respect of such increase of additional claim as set out in the schedule of fees in Rule 41 |
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**Rule 29 – Place of Arbitration.**

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| 29.1 | All the arbitrations proceedings shall be conducted at the chamber of Construction Industry Arbitration Council (CIAC), 801, Hemkunt Chambers, 89, Nehru Place, New Delhi- 110019 where the arbitration is a ‘domestic arbitration’ as defined in Rule 2 or at any other place on the request of the parties or otherwise if approved by the Chairman and/ or the Secretary, CIAC. |
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| 29.2 | Unless otherwise agreed by the parties, where the arbitration is an ‘International Arbitration’ as defined in Rule 2, the juridical seat of arbitration shall be Singapore or at any place outside India at the discretion of the chairman. |
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**Rule 30 - Language of Arbitration**

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| 30.1 | Subject to any agreement by the parties, the Arbitral Tribunal shall, within 7 days after its appointment, determine the language or languages to be used in the proceedings. In the absence of agreement or determination, the language shall be English. |
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| 30.2 | This determination shall apply to the entire arbitration proceedings, including but not limited to, the Statement of Claimant’s Case, the Statement of Respondent’s Defence, and any further written statements or other communications. |
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| 30.3 | The Arbitral Tribunal, or if the Arbitral Tribunal has not been established, the Registrar, may order a party to submit a translation if a document is drawn up in a language other than the language(s) of the arbitration, which is English. |
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**Rule 31 – Interpreters**

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| 31.1 | If required, one or both of the parties may appoint an interpreter with the leave of the Arbitral Tribunal. |
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| 31.2 | The interpreter shall be independent of both parties and the party appointing the Interpreter shall pay for the interpreter’s fees. |
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| 31.3 | If the interpreter is appointed by both parties, the fees will be shared by both parties in such proportion as the Arbitral Tribunal may determine. |
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**Rule 32- Proceedings before the Arbitral Tribunal/Conciliation**

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| 32.1 | Optional Conciliation: The parties may opt for conciliation and request the Arbitral Tribunal before the commencement of the arbitration proceedings unless they have already agreed |
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|  | otherwise, to settle their dispute through conciliation as per Rules of Conciliation of the Council, provided the dispute is settled within the time as laid down under Rule 44.8 of these Rules. |
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**Rule 33 - Conduct of the Proceedings**

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| 33.1 | The Arbitral Tribunal shall have the widest discretion allowed by the Act to ensure the just, expeditious, economical and final determination of the dispute.                 |
| 33.2 | The Arbitral Tribunal shall not be bound by the Code of Civil Procedure, 1908 (5 of 1908) or the Indian Evidence Act, 1872 (1 of 1872).                                       |
| 33.3 | In the absence of any specific provision in these Rules the parties are free to agree on the procedure to be followed by the Arbitral Tribunal in conducting its proceedings. |
| 33.4 | Failing any agreement referred to in - rule (33.3), the Arbitral Tribunal may conduct the proceedings in the manner it considers appropriate.                                 |
| 33.5 | The power of the Arbitral Tribunal under - sub - rule 33.4 Includes the power to determine the admissibility, relevance, materiality and weight of any evidence.              |
| 33.6 | The Arbitral Tribunal may, where necessary, secure agreement of parties to dispense with formal proof of documents, except in case of questioned documents.                   |

**Rule 34 - Communications between Parties and the Arbitral Tribunal**

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| 34.1 | Where the Arbitral Tribunal sends any written communication to one party, it shall send a copy to the other party or parties as the case may be.   |
| 34.2 | Where a party sends any written communication (including Statements, expert reports or evidentiary documents) to the Arbitral Tribunal, the same shall be copied to the other party or all other parties, whichever is applicable, and show to the Arbitral Tribunal that the same has been so copied. |
| 34.3 | The addresses of the parties for the purpose of all communications during the proceedings shall be those set out in the Notice of Arbitration, or as either party may at any time notify the Arbitral Tribunal and the other party or parties, whichever is applicable.                                |
| 34.4 | All correspondence between the parties and the Arbitral Tribunal shall be copied to the Registrar.   |

**Rule 35- Party Representatives**

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| 35.1 | At a hearing, a party shall be entitled to appear through counsel, attorney, advocate or a duly authorized adviser or representative or personally. However, where the dispute is purely of a commercial nature, the parties shall have no right to be represented by lawyers except where, having regard to the nature or complexity of the dispute, the Arbitral Tribunal considers it necessary in the interest of justice that the parties should be allowed to be represented by counsel, attorney or advocate. |
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**Rule 36 - Hearing/ Adjournment**

**Rule 36 (a) – Hearings**

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| 36.1 | Unless the parties have agreed on documents-only arbitration, the Arbitral Tribunal shall hold a hearing for the presentation of evidence by witnesses, including expert witnesses, or for oral submissions.  |
| 36.2 | The Arbitral Tribunal shall fix the date, time and place of any meetings and hearings in the arbitration, and shall give the Parties reasonable notice thereof.   |
| 36.3 | Prior to the hearing, the Arbitral Tribunal may provide the Parties with a list of matters or questions to which it wishes them to give special consideration.  |
| 36.4 | In the event that a party to the proceedings without sufficient cause, fails to appear at a hearing of which the notice has been given, the Arbitral Tribunal may proceed with the arbitration and may make the Award after the party present has submitted evidence to prove its case. |
| 36.5 | All meetings and hearings shall be in private unless the parties agree otherwise.   |

**Rule 36 (b) Request for Adjournments**

No adjournment will be entertained for any case fixed for arbitration by the Registrar, because such dates are fixed by the arbitral tribunal with the consent of both the parties. Any adjournment if allowed leads to delay the finalization of arbitration. Requests of adjournment by any party in the arbitration case are against law established by the Supreme Court. In a recent judgment Supreme Court has warned and directed the judges for not allowing adjournments, in the court cases in future for early justice.

Further the Govt. of India has suggested that the higher judiciary impose fines on judges for allowing frequent & many adjournments, which delays the justice.

Moreover in the interest of natural justice and under extra ordinary circumstances, adjournments of the fixed hearing may be required. Therefore any party seeking adjournment in date & /or time fixed for the arbitration proceedings shall make a written request, supported by sufficient and cogent reasons and necessary documents, if any, at least 15 days prior to the date for which such adjournment is sought along with costs by way of Demand Draft in the name of CIAC for a sum of Rs. 5,000/- as Compensation Fee to the Registrar. The Arbitral Tribunal may accede to such request after recording its reasons in writing.

If a request for adjournment could not be made at least 15 days prior to the date for which it is sought, then the same may be entertained only if it is made in writing and supported by sufficient and cogent reasons and necessary documents, subject to payment of costs as given below:

| Sl. No | Adjournment Requested                                    | Compensation Cost |
|--------|--|-------------------|
| 1.     | 14 to 12 days (both days inclusive) prior to fixed date. | 5,500/-           |
| 2.     | 11 to 9 days (both days inclusive) prior to fixed date.  | 6,000/-           |
| 3.     | 8 to 5 days (both days inclusive) prior to fixed date    | 7,500/-           |

Provided that no request for adjournment shall be entertained 4 days before the scheduled date,

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|  | <p>unless supported by special or exceptional reasons or in cases of emergency. The percentage of additional costs may be decided by the Chairman in such cases, including the power to exempt the imposition of additional costs, original costs to remain unaffected. In all such cases the chairman shall record special reasons in writing.</p> <p>The Chairman may, for reasons to be recorded in writing, exempt a party from depositing costs for seeking adjournment or may reduce the amount of costs.</p> <p>For removal of doubts, it is clarified that the Arbitral Tribunal may, in addition to the above costs payable to the CIAC, determine costs, if any, payable by the party seeking adjournment to the opposite party(s).</p> |
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**Rule 37 - Documents-only Arbitration**

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| 37.1 | The dispute may be decided without an oral hearing if it is so agreed by the parties. |
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| 37.2 | Where the parties agree to dispense with oral hearing, the Arbitral Tribunal must be promptly informed by either of the parties, as soon as is practicable. The Arbitral Tribunal must also be promptly informed if, at a later stage, the parties or either of them intends to apply for an oral hearing. |
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| 37.3 | <p><b>Fast Track Arbitration :</b></p> <p>The Parties may opt for Fast Track Arbitration and request the Arbitral Tribunal, with an agreement in form “B” before the commencement of the arbitration proceedings, to decide the reference in a fixed time frame of 3 to 6 months or any other time agreed between the Parties, according to the Fast Track Arbitration procedure, as under:</p> <p>(1) The arbitral tribunal will be authorised to decide the dispute on the written pleadings, documents and written submissions filed by the Parties without any oral hearings.</p> <p>(2) The arbitral tribunal shall have power to call for any further information/clarification from the parties in addition to the pleading and documents filed by them.</p> <p>(3) An oral hearing may be held if both the parties make a joint request or if the Arbitration tribunal considers an oral hearing necessary in any particular case.</p> <p>(4) If an oral hearing is held, the arbitral tribunal may dispense with any technical formalities and adopt such procedure as it deems appropriate and necessary for economic and expeditious disposal of the case.</p> |
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**Rule 38 – Witnesses**

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| 38.1 | The Arbitral Tribunal may require each party to give notice of the names and designations of the witnesses it intends to call. |
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| 38.2 | No party shall call any expert witness without the leave of the Arbitral Tribunal. |
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| 38.3 | Any witness who gives evidence may be questioned by each party or its representative subject to any rulings made by the Arbitral Tribunal. |
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| 38.4  | A witness may be required by the Arbitral Tribunal to testify under oath or affirmation.   |
| 38.5  | Subject to such order or direction which the Arbitral Tribunal may make, the testimony of witnesses may be presented in written form, either as signed statements or by duly sworn or affirmed affidavits.   |
| 38.6  | Any party may require a witness to attend an oral examination at a hearing. If the witness fails to attend, the Arbitral Tribunal may place such weight on the written testimony as it thinks fit, or may exclude it altogether.   |
| 38.7  | The Arbitral Tribunal shall determine the admissibility, relevance, materiality and weight of the evidence given by any witness.   |
| <b>Rule 39 - Experts Appointed by the Arbitral Tribunal</b> |  |
| 39.1  | Unless otherwise agreed by the parties, the Arbitral Tribunal may: <ul style="list-style-type: none"> <li>a. Appoint one or more experts to report to the Arbitral Tribunal on specific issues;</li> <li>b. Require a party to give any such expert, any relevant information or to produce, or to provide access to, any relevant documents, goods or property for inspection by the expert.</li> </ul> |
| 39.2  | Unless otherwise agreed by the parties, if a party so requests or if the Arbitral Tribunal deems it fit, the expert shall, after delivery of his written or oral report, participate in an oral hearing, at which the parties may question him and present expert witnesses in order to testify on the points at issue.  |
| 39.3  | Rule 39.2 Shall not apply to an assessor appointed by agreement of the parties, or to an expert appointed by the Arbitral Tribunal to advise solely in relation to procedural matters.   |
| <b>Rule 40 - Closure of Hearings</b>                        |  |
| 40.1  | The Arbitral Tribunal may inquire of the parties if they have any further proof to offer or witnesses to be heard or submissions to make and, if there are none, declare the hearings closed.  |
| 40.2  | The Arbitral Tribunal may also, in view of exceptional circumstances, re-open the hearings at any time before the award is made.   |
| 40.3  | The arbitral Tribunal may, if it considers it necessary owing to exceptional circumstances, decide on its own initiative or upon application of a party, to re-open the hearings at any time before the award is made with proper intimation to the parties and the exceptional circumstances which warranted him (Arbitral Tribunal) to re-open the hearing.  |
| 40.4  | After the conclusion of evidence and hearing the arbitral tribunal shall fix a date in the presence of the parties, for pronouncement of the award provided both the parties have paid the arbitration cost intoto and after obtaining the report from the registrar.  |
| <b>Rule 41- Deposits to Costs and Expenses</b>              |  |



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| 41.1  | The Arbitral Tribunal's Fees and CIAC's Administrative Fees shall be ascertained in accordance with the Schedule of Fees as annexed with these Rules in force at the time of commencement of the arbitration.  |
| 41.2  | The Registrar may require the parties before transmission of the case to the Arbitral Tribunal to deposits in advance the arbitration cost i.e Administrative Fee & Arbitration Fee with CIAC as required under Rule 41.3  |
| 41.3  | No dispute of the claimant shall be referred to the respondent for response till the arbitration cost of one – half of the fee payable as required is deposited with the CIAC. The Respondent shall also deposit with the CIAC one-half of the fees payable at the time of filing the Statement of Respondent's Defence and Counterclaim (if any). The balance of fees payable shall be paid 60 days before the date of the final hearing or on such other date that the Registrar may direct. |
| 41.4  | The Claimant shall deposit with the CIAC one-half of the fees payable at the time of filing of the notice for the arbitration along with Statement of Case.  |
| 41.5  | When one of the Parties neglects or refuses to make the deposit, the Registrar or the arbitral tribunal, as the case may be, may require such deposit whether in relation to a claim or a counter-claim, to be made by the other Party to the dispute (Claimant or Respondent as the case may be).   |
| 41.6  | The Registrar may from time to time direct parties to make one or more deposit(s) towards any further expenses incurred or to be incurred on behalf of or for the benefit of the parties   |
| 41.7  | All deposit(s) shall be made to and held by the CIAC. No payment shall be released to the arbitrators directly by the parties. Any interest which may accrue on such deposit(s) shall be retained by the CIAC. Any deposit made in excess shall be refunded to such of parties as the arbitral tribunal may direct.  |
| 41.8  | If a party fails to make the payments or deposits required or directed, the Arbitral Tribunal may refuse to hear the claims or counterclaims, whichever is applicable, by the non-complying party, although it may proceed to determine claims or counterclaims by any party who has complied with orders.   |
| 41.9  | The parties shall remain jointly and severally liable to the CIAC for payment of all such fees and expenses until they have been paid in full even if the arbitration is abandoned, suspended or concluded, by agreement or otherwise, before the final Award is made.   |
| 41.10 | Where the arbitration proceedings under an adhoc arbitration or under the rules of arbitration of any other arbitral organization or otherwise are administered by the CIAC wholly or in respect of some matters arising out of such arbitration, the Council may charge an appropriate fee for such administration and other services.  |
| 41.11 | The amount of interest, whenever specified, will be included in the claim amount for the purpose of calculation of arbitrator's & administrative fee. Further, claims and counter-claims referred for arbitration shall be taken into consideration separately for the purpose of calculation of arbitrators as well as administrative fee under CIAC Rules. In case no interest is claimed at the time of submission of claims prior to commencement of arbitration if any,                   |

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|                                      | the same shall not be maintainable there after by the party either on claims or counter claims, the same shall be considered as waived out by the party from the due date till the commencement of the Arbitration provided the chairman allow it under special circumstances.  |
| 41.12                                | Where the amount of the claim or the counterclaim is not quantifiable at the time payment is due, the Registrar will make a provisional estimate. The fees will be adjusted in the light of such information as may subsequently become available   |
| 41.13                                | The amount of the claim shall be stated in the application by the party applying for arbitration. If the amount is stated in a currency other than the rupee, it shall be converted into Rupees, at the current official rate of exchange.  |
| <b>Rule 41 A – Fees and Expenses</b> |   |
| 41A.1                                | The arbitral tribunal shall be entitled to allow fees and expenses of witnesses, expenses connected with the selection and carriage of sample and examination of goods, Licensed Measure's Department charges, conveyance, hire, cost of legal or technical advice or proceedings in respect of any matter arising out of the arbitration incurred by the arbitral tribunal, and any other incidental expenses and charges in connection with or arising out of the reference or award as the arbitral tribunal shall, in its absolute discretion, think fit.   |
| 41A.2                                | The fees, costs and expenses incidental to the reference and the award shall include the following :<br><br>(a) Registration Fee<br>The Registration fee shall be payable with regard to the amount in dispute in each case as hereunder. The registration fee shall not be refunded and becomes the property of the Council.<br><br>(a) Rs. 10,000/- for claim less than Rs. one crore<br>(b) Rs.20,000/- for claim more than Rs. one crore<br><br>(b) Administrative Fee and Arbitrator's Fee<br>The Administrative Fee (CIAC) and Arbitrator's fee (for each arbitrator) will be fixed separately with regard to the amount in dispute including amount of interest claimed upto the date of commencement in each case, and shall be ascertained in accordance with the schedule of fees, as annexed with these rules in force at the time of commencement of arbitration.   |
| 41A.3                                | The CIAC will be entitled to receive a Special Fee of Rs. 5,000/- per hearing for providing facilities of hearing rooms, for arbitration hearings and secretarial assistance etc. at the arbitration hearing.<br><br>(a) Notwithstanding the provisions in Sub-Rule 41A.2 of this Rule, the Chairman of the CIAC may prescribe the Arbitrator's fee, expenses and the Administrative fee of the Council at a figure higher than those prescribed in the said Sub-Rules, if in the exceptional circumstances of the case this appears to be necessary.<br><br>(b) Notwithstanding the provision in Sub-Rule 41A.2 hereinabove, in arbitration cases to which Rule 26.6 applies, the Arbitrator's fee and the Administrative fee of the CIAC will be fixed by computing the fee applicable to larger claim in addition to 60% of the applicable fees of all claims being tried jointly. Provided that the Chairman will have the power to prescribe |

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|       | the Arbitrator's Fee and Administrative Fee under this Sub-Rule in any other manner, having regard to the nature and facts of the matters under reference.   |
| 41A.4 | In the event any foreign national is appointed as an arbitrator, in that event, the Registrar in consultation with the Chairman, shall be entitled to fix additional fee and travelling & out of pocket expenses over and above what has been prescribed under Rule 41, 41A, 41B, 41C, & 41D for such arbitrator   |
| 41A.5 | CIAC's Administrative fee, Arbitrator Fee & Appointment of an arbitrator from the panel of CIAC's Arbitrators are given in Annexure (X <sub>1</sub> , X <sub>2</sub> & X <sub>3</sub> ), (Y <sub>1</sub> , Y <sub>2</sub> & Y <sub>3</sub> ) & (Z <sub>1</sub> , Z <sub>2</sub> & Z <sub>3</sub> ) for the period applicable w. e. f. 14.6.2006, 1.4.2011 & 1.9.2013 respectively. |

**Rule 41 B - Travelling & Other Expenses**

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| 41B.1  | The arbitrator may be paid an amount of Rs.1,000/- towards local conveyance for attending one or more arbitration hearing per day in the city of his residence where the place of hearing is same. In respect of joint trial, the hearing will be treated as one irrespective of the number of cases. Any traveling and other expenses incurred by the arbitrator or the Registrar for attending the arbitration hearings in a city other than the place of residence shall also be reimbursed to him as provided hereinafter. All the above expenses shall form part of the arbitration costs.   |
| 41.B.2 | An arbitrator who has to travel shall be paid traveling expenses by air or rail (air conditioned wherever available) or car (when neither air nor rail transport is available) at actuals. In addition, he may be paid out-of-pocket expenses at actuals for boarding, lodging and local transport subject to maximum of Rs. 20,000/- per day in metropolitan cities and Rs. 12,000/- per day in all other cities. An arbitrator who makes his own arrangements for boarding, lodging, local transport etc. may be paid out of pocket expenses at the rate of Rs. 10,000/- per day, without production of vouchers. The limits for stay of the Registry officials will be of those applicable to arbitrators. |
| 41 B.3 | The cost to be incurred on payment of expenses referred to in rule 41B.2 to an arbitrator nominated by a party will be borne and paid by the party nominating the arbitrator. However, if an appointed arbitrator changes his residence after his nomination by a party, he will not be entitled to reimbursement of any enhanced expenses for attending the arbitration hearing, unless the party nominating him agrees to reimburse the same to him. The expenses payable to the third arbitrator or sole arbitrator appointed by the CIAC will be borne and paid by both the parties in equal proportion or in such other manner as may be determined by the Arbitral Tribunal.                            |

**Rule 41 C - Fee Structure for Conduct of Arbitration Proceedings**

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| 41C.1 | Fee structure for conduct of arbitration proceedings shall be @ Rs. 2,000/- + Service Tax per hearing, (which shall include, the room hiring charges, secretarial assistance, tea & biscuits & other allied services) connecting with the record of arbitration proceedings. |
| 41C.2 | Lunch (Vegetarian) on demand, will be arranged separately and charged @ Rs. 300/- per person.  |

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| 41C.3   | In case of any change in venue other than the CIAC, the travelling expenses (to and from) and other administrative charges of the CIAC representative shall be borne by the concerned parties @ Rs. 2000/- per hearing. Out station travel be on actual.  |
| <b>Rule 41 D - Settlement of Disputes &amp; its Impact on Arbitration Fee</b> |   |
| 41D.1   | If the arbitration is settled or disposed off without hearing, but after the appointment of an arbitral tribunal, the amount of the Tribunals' fees and CIAC's administrative fees shall be finally determined by the Registrar, who will have regard to all the circumstances of the case, including the stage of proceedings at which the arbitration is settled or otherwise disposed off.         |
| 41D.2   | If the arbitration is settled before the appointment of arbitral tribunal, the amount of CIAC's administrative fees shall be finally determined by the Registrar, which shall be payable by the claimant or equally shared by both the parties if there are counter claims of the respondent.   |
| 41D.3   | If a case has been filed with the CIAC & the arbitrator has been appointed, even if there is no hearing, then in any case arbitration cost shall be paid by the claimant or equally shared by both the parties if there are counter claims of the respondent, as decided by the Registrar with prior approval of the Chairman.  |
| 41D.4   | If private settlement is done between the claimant & the respondent during the arbitration proceedings, the claimant is liable to pay arbitration cost in full.   |
|   | <ul style="list-style-type: none"> <li>• NB:- Service Tax is payable by both the parties on the arbitration cost at the rate notified by the Govt. from time to time. The present rate of Service Tax applicable is 12.36 % on the arbitration cost payable.</li> <li>• NO TDS is allowed on the payment made to the CIAC, as the CIAC is exempted under section 2A of the Income Tax Act.</li> </ul> |
| <b>Rule 42.0 - Return of Documents</b>  |   |
| 42.1  | Unless required to be filed in a court of law, the Arbitral Tribunal shall have full discretion to retain/ to return all books, documents or papers produced before it and may direct at any time that the books, documents or papers produced before it or any of them may be returned to the parties producing them on such terms and conditions as the Arbitral Tribunal may impose.               |
| <b>Rule 43 - Decision Making by the Arbitral Tribunal</b>                     |   |
| 43.1  | Where an Arbitral Tribunal has been appointed, any direction, order, decision or award of the Arbitral Tribunal must be made by the whole Arbitral Tribunal or a majority. If an arbitrator refuses or fails to sign the Award, the signatures of the majority shall be sufficient, provided that the reason for the omitted signature is stated.   |

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| 43.2                             | If there is no unanimity or majority, the same shall be made by the presiding arbitrator alone as if acting as a sole arbitrator.   |
| 43.3                             | However, in the case of a three-member Arbitral Tribunal the presiding arbitrator may, after consulting the other arbitrators, make procedural rulings alone.   |
| <b>Rule 44 – Making of Award</b> |   |
| 44.1                             | Unless the Registrar extends the time or the parties agree otherwise, the Arbitral Tribunal shall make its Award in writing within 30 days from the date on which the hearings are closed and shall state the reasons upon which its award is based. The award shall contain the date and the place of arbitration and shall be signed by the arbitrator or arbitrators.  |
| 44.2                             | The Arbitral Tribunal may make interim awards or separate awards on different issues at different times and get it issued to the parties through Registrar.   |
| 44.3                             | All awards including the interim awards must be submitted by the Arbitral Tribunal to the Registrar and they shall be issued through the Registrar.   |
| 44.4                             | The Arbitral Tribunal must deliver to the Registrar number of originals of the award sufficient for the parties and for filing with the Registrar.  |
| 44.5                             | The Registrar shall release the award to the parties only upon receipt of sufficient deposits to cover the fees and expenses due to the Arbitral Tribunal and to the CIAC.  |
| 44.6                             | By agreeing to have arbitration under these Rules, the parties undertake to carry out the award without delay.  |
| 44.7                             | No award shall be made by the Arbitral Tribunal unless the case of the party applying for arbitration has been brought to the notice of the other party and until after the lapse of such specified time within which he has been asked to submit his defence statement under Rule 9.   |
| 44.8                             | The Arbitral Tribunal shall make the award as expeditiously as possible, preferably within six months, from the date of the reference if the claim amount exceeds 1 crore and within a period of 4 months, where the claim amount is less than 1 crore subject to a maximum limit of one year from the date on which Arbitral Tribunal entered into reference in terms of Rule 26.1. The Arbitral Tribunal only in case of extreme necessity, may request the Registrar to extend the time to make the award and the Registrar may in consultation with the Chairman CIAC, extend such time for a period not exceeding one year, if such request is found to be reasonable and necessary. |
| 44.9                             | The arbitral award shall state the reasons upon which it is based, unless :   |

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|                                   | <p>(i) The parties have agreed that no reasons are to be given, or</p> <p>(ii) The award is an arbitral award on agreed terms.</p>  |
| 44.10                             | The arbitrators constituting the Arbitral Tribunal or the Presiding Arbitrator where ever applicable, shall sign the award and the Registrar shall give notice in writing to the Parties of the making and signing thereof and of the amount of fees & charges payable in respect of the arbitration and the award. The arbitrators fee shall be payable by the CIAC on receipt of the award and requisite deposit made by the parties.   |
| 44.11                             | <p><b>Issue of Award.</b></p> <p><b>(a)</b> When an award has been made, the Registrar shall furnish a true copy of the award to the parties by registered post provided the arbitration costs have been fully paid to the CIAC by the parties or by one of them.</p> <p><b>(b)</b> The Registrar may require either Party to notify him of the compliance with the award.</p> <p><b>(c)</b> The Arbitral Tribunal and the Registrar of the CIAC shall assist the parties in complying with any formalities that may be necessary for the enforcement of the award or for other purposes.</p> <p><b>(d)</b> The CIAC may print, publish or otherwise circulate any award made under its rules or under its auspices, in any arbitration journal, magazine, report, etc. for the purpose of creating arbitration jurisprudence or precedents for the benefit and guidance of future arbitrations.</p> <p>No party to the arbitration shall have any objection to the publication of awards as above provided that the names and addresses of any Party to the dispute will be omitted from such publication and its identity duly concerned if so desired by such party.</p> |
| 44.12                             | Additional copies of the award certified true by the Registrar shall be made available to the parties but to no one else, at all times at request and on payment as fixed by the Registrar.   |
| 44.13                             | A party shall in all things abide by and obey the award which shall be binding on the Parties and their respective representatives, notwithstanding the death of any party before or after the making of the award and such death shall not operate as revocation of the submission or reference. The award made by the arbitrators/s shall be final and binding on the Parties.  |
| <b>Rule 45 – Additional Award</b> |   |
| 45.1                              | Within 30 days after the receipt of the award, either party with notice to the Registrar and the other party may request the Arbitral Tribunal to make an additional award as to claims presented in the arbitral proceedings but omitted from the award.   |
| 45.2                              | If the Arbitral Tribunal considers the request for an additional award to be justified and considers that the omission can be rectified without any further hearings or evidence, it shall  |

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|                                       | notify all the parties within 7 days of the receipt of the request, that it will make an additional award, and complete the additional award within 60 days after the receipt of such request.   |
| <b>Rule 46 – Correction of Awards</b> |  |
| 46.1                                  | Within 30 days of receiving an Award, unless another period of time has been agreed upon by the parties, a party may by notice to the Registrar and the other party request the Arbitral Tribunal to correct in the Award, any errors in computation, any clerical or typographical errors or any errors of similar nature occurring in the award.   |
| 46.2                                  | If so agreed by the parties, with notice to the other party, may request the Arbitral Tribunal to give an interpretation of a specific point or part of the Award. If the Arbitral Tribunal considers the request to be justified, it shall make the correction(s) within 30 days of receiving the request. Any correction shall be notified in writing to the parties and shall become part of the Award.   |
| 46.3                                  | The Arbitral Tribunal may correct any error of the type referred to in Rule 46.1 on its own initiative within 30 days of the date of the Award   |
| 46.4                                  | The Arbitral Tribunal may extend, if necessary, the period of time within which it shall make a correction, give an interpretation or make an additional award under rule.   |
| 46.5                                  | Section 44 shall apply to a correction or to an additional arbitral award made under Rule 46 & Rule 45 of CIAC.  |
| <b>Rule 47 – Settlement</b>           |  |
| 47.1                                  | If, before the Award is made, the parties agree on a settlement of the dispute and the Arbitral Tribunal is satisfied that such agreement is genuine and not to defeat the purpose of any law, the Arbitral Tribunal shall either issue an order for the termination of the arbitral proceedings or, if requested by both parties and accepted by the Arbitral Tribunal, record the settlement in the form of an arbitral award on agreed terms. The Arbitral Tribunal is not obliged to give reasons for such an award. Otherwise, the Arbitral Tribunal shall make the award on the basis of the documents evidence, etc filed before it by the parties. |
| 47.2                                  | <b>The parties shall:</b><br><br>a. Notify to the Arbitral Tribunal and the Registrar immediately if the arbitration is settled or otherwise terminated;<br><br>b. Make provision in any settlement for payment of all the costs of the arbitration and fees and expenses due to the CIAC and the Arbitral Tribunal  |
| 47.3                                  | If the continuation of the arbitral proceedings becomes unnecessary or impossible for any reason not mentioned in Rule 47.1, before the award is made, the Arbitral Tribunal shall   |

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|                           | inform the parties of its intention to issue an order for the termination of the proceedings. The Arbitral Tribunal shall have the power to issue such an order unless a party raises justifiable grounds for objection.  |
| 47.4                      | Copies of the order for termination of the arbitral proceedings or of the arbitral award on agreed terms, signed by the Arbitral Tribunal, shall be communicated by the Arbitral Tribunal to the parties through the Registrar.   |
| 47.5                      | An arbitral award on agreed terms shall have the same status and effect as any other arbitral award on the substance of the dispute.  |
| <b>Rule 48 – Interest</b> |   |
| 48.1                      | <p>(a) Unless otherwise agreed by the parties, where and in so far as an arbitral award is for the payment of money, the Arbitral Tribunal may include in the sum for which the award is made interest, at such rate as it deems reasonable, on the whole or any part of the money, for the whole or any part of the period between the date on which the cause of action arose and the date on which the award is made.</p> <p>(b) A sum directed to be paid by an arbitral award shall, unless the award otherwise directs, carry interest at the prevailing rate of bank from the date of award to the date of payment. Arbitrator has power to award interest at all four stages.</p> |
| <b>Rule 49 – Costs</b>    |   |
| 49.1                      | The Arbitral Tribunal shall specify in the final Award, the costs of the arbitration and decide which party shall bear them and in what proportion they shall be borne, w. r. t. the CIAC – Rules laid in CIAC Manual.  |
| 49.2                      | <p>In this Rule, “costs of the arbitration” shall include:</p> <ol style="list-style-type: none"> <li>a. The fees and expenses of the Arbitral Tribunal and the administration fees of the CIAC as determined by the Registrar in accordance with the Schedule of Fees;</li> <li>b. The costs of Arbitral Tribunal appointed experts or of other assistance rendered; and</li> <li>c. All expenses which are reasonably incurred by the CIAC in connection with the arbitration.</li> <li>d. Any other expenses incurred in connection with the arbitral proceedings &amp; the arbitral award.</li> <li>e. Cost of witnesses,</li> <li>f. Legal fees &amp; expenses</li> </ol>            |



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| 49.3  | The Arbitral Tribunal has power to order in its Award, that all or part of the legal or other costs (such as legal fees and expenses, costs incurred in respect of party appointed experts etc) of one party shall be paid by the other party.  |
| <b>Rule 50 - Filing of Award</b>                          |   |
| 50.1  | The Arbitral Tribunal shall at the request of any of the Parties to the proceedings or of any person claiming under a Party or if so directed by the Court and upon payment of fees and charges due in respect of the arbitration and award and of the costs and charges of filing the award, cause the award or a signed copy thereof together with the deposition or documents which may have been taken and proved before it to be filed before the Court. |
| 50.2  | A fee of Rs. 2,000/- plus incidental expenses at actuals in addition to the court fees, on the scale for the time being in force is payable by the party requiring the award to be filed.   |
| <b>Rule 51 - Stamp Duties</b>                             |   |
| 51.1  | Stamp duties is to be paid by the party, in whose favour the award has been made in accordance with the scale of stamp duties prevailing at the time the award is made.   |
| <b>Rule 52 - Copies of Proceedings</b>                    |   |
| 52.1  | No party is entitled as of right to copies of proceedings before the Arbitral Tribunal. In case the Registrar is required to furnish copies of depositions and/or documents which have been taken or proved before the arbitrator, a charge as demanded by the Registrar shall be paid by the party requiring such copies.  |
| 52.2  | The Registrar shall, upon the written request of a party, furnish to such party at his expense certified facsimile of any documents filed in the arbitration proceedings.   |
| <b>Rule 53 - Cases With Drawn or Terminated</b>           |   |
| 53.1  | When the party instituting a case desires to withdraw it before an Arbitral Tribunal has been constituted, the Registrar shall return to him any deposits made by him, after deducting such charges as he might have incurred in connection with the cases. The registration fee, however, shall not be refundable.   |
| 53.2  | If the arbitration is terminated by the act or default of any parties after constitution of the Arbitral Tribunal and before the award is made, any fee, charges, deposited by the Parties shall not be refunded.   |
| <b>Rule 54 - Indemnity of Secretariat and Arbitrators</b> |   |
| 54.1  | When the party instituting a case desires to withdraw it before an Arbitral Tribunal has been constituted, the Registrar shall return to him any deposits made by him, after deducting such charges as he might have incurred in connection with the cases.<br><br>The registration fee, however, shall not be refundable.  |

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| 54.2                                    | If the arbitration is terminated by the act or default of any parties after constitution of the Arbitral Tribunal and before the award is made, any fee, charges, deposited by the Parties shall not be refunded.  |
| <b>Rule 55 - Waiver</b>                 |  |
| 55.1                                    | A party which is aware of non-compliance with these Rules and yet proceeds with the arbitration without promptly stating its objection in writing to such non-compliance shall be deemed to have waived its right to object.   |
| <b>Rule 56 - Confidentiality</b>        |  |
| 56.1                                    | The parties and the Arbitral Tribunal must at all times treat all matters relating to the arbitration (including the existence of the arbitration) and the award as confidential. A party or any arbitrator must not, without the prior written consent of the other party or the parties, as the case may be, disclose to a third party any such matter except: <ul style="list-style-type: none"> <li>a. for the purpose of making an application to any competent court;</li> <li>b. for the purpose of making an application to the courts of any State to enforce the award;</li> <li>c. Pursuant to the order of a court of competent jurisdiction;</li> <li>d. in compliance with the provisions of the laws of any State which is binding on the party making the disclosure; or</li> <li>e. in compliance with the request or requirement of any regulatory body or other authority which, if not binding, nonetheless would be observed customarily by the party making the disclosure.</li> </ul> |
| 56.2                                    | The CIAC may publish any award made under these Rules in any form provided that the names or identities of the parties shall not be disclosed without the written consent of all the parties to the dispute.   |
| <b>Rule 57 - Exclusion of Liability</b> |  |
| 57.1                                    | The Arbitral Tribunal, the Chairman, the CIAC and any of its officers, employees or agents shall not be liable to any party for any act or omission in connection with any arbitration conducted under these Rules.  |
| 57.2                                    | After the Award has been made and the possibilities of correction and additional Awards have lapsed or been exhausted, neither the Arbitral Tribunal nor the Chairman shall be under any obligation to make any statement to any person about any matter concerning the arbitration, and no party shall seek to make any arbitrator or the Chairman or the CIAC and any of its officers a witness in any legal proceedings arising out of the arbitration.   |
| <b>Rule 58 - General Provisions</b>     |  |

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| 58.1                                | In all matters not expressly provided for in these Rules, the Chairman, the Registrar and the Arbitral Tribunal shall act in the spirit of these Rules and shall make every reasonable effort to ensure the just, expeditious and economical conclusion of the arbitration. |
| 58.2                                | The Registrar may from time to time issue Practice Notes on the implementation of these Rules.  |
| <b>Rule 59 - Amendment to Rules</b> |   |
| 59.1                                | These Rules may from time to time be amended by the Chairman in consultation with Board of Governors.   |

**UNDERTAKING OF THE PARTIES FOR RESOLVING THE  
DISPUTE TO BE SIGNED BY PARTIES**

We hereby agree & undertake that disputes or differences, which have arisen between us in respect of our contract \_\_\_\_\_ (give details) vide agreement No \_\_\_\_\_ dated \_\_\_\_\_ to be resolved by arbitration in accordance with the Rules of Construction Industry Arbitration Council (CIAC). It is added that the claims have taken the shape of dispute.

In Witness Whereof, this Agreement has been signed on this \_\_\_\_\_ Day of \_\_\_\_\_

Month of (year) at by:

1. \_\_\_\_\_ for and on behalf of \_\_\_\_\_.

2. \_\_\_\_\_ for and on behalf of \_\_\_\_\_.



# Construction Industry Arbitration Council

(An Arbitration Council established for resolution of Construction and Infrastructure related disputes)

801, (8<sup>th</sup> Floor), Hemkunt Chambers, 89, Nehru Place, New Delhi-110019  
Tel.: +91-11-26489992, 41619840-42, 41617971\* Fax: +91-11-26451604  
Email: [mail@ciac.in](mailto:mail@ciac.in) \* [www.ciac.in](http://www.ciac.in)

## Model Agreement for Fast Track Arbitration

- This agreement is between .....(name and address of the initiating party) and .....(name and address of the other party or parties).
- In the matter relating to .....The parties to this Agreement agree as follows:

WHEREAS the parties desire to resolve their disputes by the Construction Industry Arbitration Council following its Fast Track Arbitration.

WHEREAS the parties hereby undertake to dispense with the requirement of oral evidence and agree that the Arbitration Proceedings be held on the basis of documents only.

WHEREAS the parties hereby waive their right to present oral evidence and agree that the award made by the Arbitral Tribunal following the Fast Track Arbitration of the Construction Industry Arbitration Council shall be final and binding on the parties.

AND WHEREAS the parties hereby undertake to strictly adhere to the time schedule drawn up for hearing under the Fast Track Arbitration.

IN WITNESS WHEREOF, this agreement has been signed on this .....Day of .....Month of .....(Year)at .....by:

1. ....for and on behalf of .....
2. ....for and on behalf of .....



# Construction Industry Arbitration Council

(An Arbitration Council established for resolution of Construction and Infrastructure related disputes)

801, (8<sup>th</sup> Floor), Hemkunt Chambers, 89, Nehru Place, New Delhi-110019  
Tel.: +91-11-26489992, 41619840-42, 41617971\* Fax: +91-11-26451604  
Email: [mail@ciac.in](mailto:mail@ciac.in) \* [www.ciac.in](http://www.ciac.in)

## Form for Empanelment as Arbitrator on CIAC's Panel

- First Name .....Middle Name.....Surname .....
- Age & Date of Birth .....Nationality .....
- Personal Address.....
- City .....Pin .....State .....Region .....
- Telephone with STD Code .....Mobile No.....Tele fax .....
- E-mail .....Website .....
- Education Qualification .....
- Technical Qualification .....
- Subject of Specialisation .....
- Present Occupation.....
- Business Address (Including Company or Firm Name where applicable).....  
.....
- Telephone with STD Code .....Mobile No.....Tele fax.....
- E-mail .....Website.....

• **Membership of :-**

- Professional Bodies

\_\_\_\_\_

\_\_\_\_\_

- Arbitration Council/Centres

\_\_\_\_\_

\_\_\_\_\_

|       |       |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

- **Professional Experience:-**

Arbitration/Mediation Training:-

| S.No. | Training Course | Training Organisation | Training Period | National/<br>International |
|-------|-----------------|-----------------------|-----------------|----------------------------|
|       |                 |                       |                 |                            |
|       |                 |                       |                 |                            |
|       |                 |                       |                 |                            |
|       |                 |                       |                 |                            |
|       |                 |                       |                 |                            |

- **Arbitration /Mediation Experience :-**

Number of Cases as a Sole/Co-Arbitrator/Mediator



Number of Cases as a Counsel /Expert witness



Field (s) Experience.....

.....

.....

- **Name of ADR Courses/Seminars/Conferences Participated:-**

| S.No. | Name of Seminar | Name of Organiser | Period |
|-------|-----------------|-------------------|--------|
|       |                 |                   |        |
|       |                 |                   |        |
|       |                 |                   |        |
|       |                 |                   |        |

• **Details of Publication if any :-**

.....  
.....  
.....

Mention category for Empanelment As arbitrator/Mediator (Please √)

- |  |                          |                      |                          |
|--|--------------------------|----------------------|--------------------------|
| 1. Judges                                  | <input type="checkbox"/> | 5. Businessmen       | <input type="checkbox"/> |
| 2. Engineers                               | <input type="checkbox"/> | 6. Foreign National  | <input type="checkbox"/> |
| 3. Advocates                               | <input type="checkbox"/> | 7. Other Specialists | <input type="checkbox"/> |
| 4. Chartered Accountants/Financial Experts | <input type="checkbox"/> |                      |                          |

**Undertakings:-**

- a) I agree to abide by the Rules of Arbitration of the CIAC including Guidelines
- b) I shall take up and complete the arbitration assigned to me with utmost diligence and expedition
- c) All arbitrators being of equal status, I shall not object of my appointment as arbitrator in a particular case on the basis of my previous status or that of any appointed arbitrator.
- d) I note that my name will be deleted from the Panel as soon as I attain 80 years of age or up-to the extended period by chairman, CIAC.
- e) I declare that above particulars furnished are true & correct.
- f) I have not been convicted or charged of any offence or any criminal investigation or vigilance enquiry pending against me.
- g) I am eligible for empanelment as Arbitrator/Mediator as per CIAC's Rule.

**Signature of the Applicant**

- Broad Categories of Qualifications and Experience etc. for the Empanelled Arbitrators:-**
- (i). **Judges:-**  
Honorably Retired as Judges of the Supreme Court or any of the High Courts and have made judicial pronouncements in some arbitration cases.
  - (ii). **Engineers, Chartered Engineers etc.:-**



(a) Honorably retired not below the rank of Chief Engineer in Central Govt. /State Govt. /Local Bodies/Underselling & /or of any other Govt. Deptt.

**(iii). Advocates:-**

Practicing in the Supreme Court or at the level of the High Court for at least fifteen years with experience in arbitration matters and knowledge of corporate laws particularly Arbitration and Contract Law and Arbitration Procedures.

(b) Chartered Engineers having specialisation of Engineering, Construction contracts and work in specific field at least fifteen years such as Valuation of Building and Urban Laws, designing of building, building construction, architectural or structural designing of building, projects, dam, Govt. Contracts etc. and at least five years experience in conduct of arbitration cases, law and procedure.

**(iv). Chartered Accountants:-**

Chartered Accountants/Chartered secretaries with at least fifteen years experience and knowledge in the profession and at least five years experience in conduct of arbitration cases, law & procedures.

**(v). Businessmen:-**

Company directors and other persons with outstanding reputation and experience in domestic or international trade for at least ten years and at least five years experience in the Arbitration Law & Procedure.

**(vi). Foreign National:-**

Suitable persons of nationalities other than Indian resident in India or abroad who have adequate knowledge and at least fifteen years experience in commercial and arbitration procedures in any of the above categories.

**(vii). Other Specialists:-**

Persons having 15 years experience in any other specialized areas and have at least five years experience in the Arbitration Law & Procedure.



# Construction Industry Arbitration Council

(An Arbitration Council established for resolution of Construction and Infrastructure related disputes)

801, (8<sup>th</sup> Floor), Hemkunt Chambers, 89, Nehru Place, New Delhi-110019  
Tel.: +91-11-26489992, 41619840-42, 41617971\* Fax: +91-11-26451604  
Email: [mail@ciac.in](mailto:mail@ciac.in) \* [www.ciac.in](http://www.ciac.in)

## Arbitrator's Declaration & Acceptance of Appointment and Statement of Independence

Shri.....S/o/D/o.....

Shri./Ms.....R/o.....

hereby declare that I

- am Empanelled Arbitrator of CIAC & My Name is at S.No. ....of the Empanelled Panel of Construction Industry Arbitration Council.
- accept to serve as arbitrator under the CIAC-Arbitration Rules,2013 in the instant case.
- take oath to follow the code of Ethics laid down for the arbitrators by CIAC.
- am independent of each of the parties and intend to remain so.
- decline to serve as arbitrator in this case for the reasons .....

.....

Dated.....

Signature of the Arbitrator

**CIAC- CODE OF ETHICS**

CIAC has laid down a code of conducts for the arbitrator, parties & the counsel/parties's representative to ensure smooth and environment friendly atmosphere for conduct of arbitration, which is laid down as under:-

**(A) CODE OF ETHICS FOR ARBITRATORS**

This code of Ethics shall apply to all empaneled arbitrators of CIAC

**1. Appointment**

1.1 A prospective arbitrator shall accept an appointment only if he is fully satisfied that he is able to discharge his duties without bias, he has adequate knowledge of the law and process of conducting of the arbitration, and he is able to give to the arbitration the time and attention which the parties are reasonably entitled to expect.

**1.2 IN THIS CODE, THE MASCULINE INCLUDES THE FEMININE.**

**2. Disclosure**

2.1 A prospective arbitrator shall disclose all facts or circumstances that may give rise to justifiable doubts as to his impartiality or independence, such duty to continue throughout the arbitral proceedings with regard to new facts and circumstances.

2.2 A prospective arbitrator shall disclose to the Registrar and any party who approaches him for a possible appointment:

(a) Any past or present close personal relationship or business relationship, whether direct or indirect, with any party to the dispute, or any representative of a party, or any person known to be a potentially important witness in the arbitration;

(b) The extent of any prior knowledge he may have of the dispute.

**3. Bias**

3.1 The criteria for assessing questions relating to bias are impartiality and independence. Partiality arises when an arbitrator favours one of the parties or where he is prejudiced in relation to the subject matter of the dispute. Dependence arises from relationships between an arbitrator and one of the parties, or with someone closely connected with one of parties.

3.2 Any close personal relationship or current direct or indirect business relationship between an arbitrator and a party, or any representative of a party, or with a person who is known to be a potentially important witness, will normally give rise to justifiable doubts as to a prospective arbitrator's impartiality or independence. Past business relationships will only give rise to justifiable doubts if they are of such magnitude or nature as to be likely to affect a prospective arbitrator's judgment. He should decline to accept an appointment in such circumstances unless the parties agree in writing that he may proceed.

#### **4. Communications**

- 4.1 Before accepting an appointment, an arbitrator may only enquire as to the general nature of the dispute, the names of the parties and the expected time period required for the arbitration.
- 4.2 No arbitrator shall confer with any of the parties or their counsel until after the Registrar gives notice of the formation of the Arbitral Tribunal to the parties.
- 4.3 Throughout the arbitral proceedings, an arbitrator shall avoid any unilateral communications regarding the case with any party, or its representatives.
5. In accepting an appointment, an arbitrator agrees to the remuneration as settled by the Registrar of CIAC, and he shall make no unilateral arrangements with any of the parties or their counsel for any additional fees or expenses without the agreement of all the parties and the consent of the Registrar of CIAC.

#### **6. Conduct**

- 6.1 Once the arbitration proceedings commence, the arbitrator shall acquaint himself with all the facts and arguments presented and all discussions relative to the proceedings so that he may properly understand the dispute.

#### **7. Confidentiality**

- 7.1 The arbitration proceedings shall remain confidential. An arbitrator is in relationship of trust to the parties and should not, at any time, use confidential information acquired during the course of the proceedings to gain personal advantage or advantage for others, or to affect adversely the interest of another.
- 7.2 This Code is not intended to provide grounds for the setting aside of any award.

#### **8) Others**

- 8.1) Regarding the fee: the Arbitrator shall be governed by the pre-arranged fee structure of CIAC, and shall not enter into any direct arrangement with the parties.
- 8.2) Decision-Making: the Arbitrator shall decide all matters justly, exercising independent judgment and should not permit outside pressure to effect the decisions. He shall also construct the award in a logical order, centered around the following principal elements:
- Brief summary of facts
  - Disputes/issues referred to arbitration
  - Averment of the parties on each of the issues
  - Evidence led, particularly the vital document, if any
  - Statement, in respect of each point, of the applicable Rules of Law and application of said rule to the issue being examined.
  - Reasons for the award.

**B – Code of Ethics for the parties:**

- 1) The parties shall maintain the dignity of Proceedings and shall act with honesty and diligence.
- 2) The parties shall follow the Guidelines for Expeditious Conduct of Arbitration Proceedings annexed to the CIAC Rules of Arbitration.
- 3) The parties shall deposit the sum required by the Registrar within the stipulated time period.
- 4) The parties shall respond in a timely manner to reasonable requests for information from the arbitrator or other party/ies.
- 5) The parties shall strictly conform to the timetable (set out by the arbitrator in the first meeting) and submit all relevant documents and statements within the time period set out in the timetable.
- 6) The parties shall not extend any hospitality, directly or indirectly to the Arbitrator/s.
- 7) The parties shall pay the fees as agreed and their share of costs as specified in the Award.
- 8) The parties shall follow all orders/directions/rulings given by the arbitrators/s during the Proceedings.
- 9) The Parties shall avoid any kind of dilatory tactics and shall make maximum/best/ all possible efforts for an expeditious resolution of the dispute.

**C – Code of Ethics for the Counsel:**

- 1) The Counsel shall fully co-operate with the parties and the Arbitrator/s during the Arbitration Proceedings.
- 2) The Counsel shall be bound by the code of Ethics prescribed by the Bar Council of India.

**Construction Industry Arbitration Council  
Panel of Arbitrators –As on August 23,2013**

| <b>Sl No</b> | <b>Name, Designation &amp; Organization</b>  |
|--------------|--|
| 1.           | <b>Er. A. C. Bhatia</b><br>Chief Engineer<br>Life Insurance Corporation of India               |
| 2.           | <b>Er. A. D. Narain</b><br>Former Director General<br>MOST                                     |
| 3.           | <b>Mr. A. K. Sarkar</b><br>President-PMC (An Adani Group Co.)<br>And Ex-CMD, NBCC              |
| 4.           | <b>Mr. A. P. Radhakrishan</b><br>Secretary<br>Chennai Port Trust                               |
| 5.           | <b>Mr. A. P. S. Manocha</b><br>Chief Manager (Legal)<br>Rural Electrification Corporation Ltd. |
| 6.           | <b>Dr. A. Ramakrishna</b><br>Former Deputy Managing Director<br>Larsen & Toubro Ltd.           |
| 7.           | <b>Mr. Abhay R. Jadhav</b><br>Jr. Law Officer<br>Navi Mumbai Municipal Corporation             |
| 8.           | <b>Er. Ajit B. Pawar</b><br>Former Secretary (PWD)<br>Government of Maharashtra                |
| 9.           | <b>Mr. Ajith P.</b><br>GMR Infrastructure Ltd.   |
| 10.          | <b>Er. Amit Yadav</b><br>Executive Director (Engg.)<br>Life Insurance Corporation of India     |
| 11.          | <b>Mr. Anil Bhatnagar</b><br>Partner<br>Dua Associates   |
| 12.          | <b>Mr. Anil Kumar Mukherjee</b><br>Advocate  |
| 13.          | <b>Mr. Anil Mehar Singh Jarial</b><br>Juris Corp Advocates & Solicitors                        |
| 14.          | <b>Mr. Arunav Pankaj</b><br>C & C Construction Limited   |
| 15.          | <b>Er. Arvind. S Patil</b><br>Additional Chief Engineer<br>CIDCO Ltd.                          |

16. **Er. Ashok Kumar Goel**  
Superintending Engineer (P & A)  
CPWD
17. **Mr. Ashutosh Burathoki**  
Former President, Advocate  
Himachal Pradesh High Court Bar Association
18. **Mr. Atul Yeshwant Chitale**  
Chitale & Chitale Partners  
Senior Advocates & Legal Consultants
19. **Er. B. Majumdar**  
Former Director General  
Central Public Works Department
20. **Mr. Balaji Pathak**  
Legal Officer  
EDAC Engg. Ltd
21. **Mr. Basant Kumar**  
Former Addl. Secretary  
Government of India
22. **Er. Bharat Dhaneshwar Trivedi**  
Engineer & Consultant
23. **Er. C. B. Lal**  
Former Director General  
CPWD
24. **Er. C. Mruthunjaya Swamy**  
Chief Engineer  
Communications & Buildings (South)  
Public works, Ports & Inland Water Transport  
Department Government of Karnataka
25. **Mr. C. N. Ramdas**  
Former Secretary  
Government of India  
Chairman  
CNG Group of Companies
26. **Mr. Chandan Gupta**  
Executive Trainee  
SJVN Ltd.
27. **Mr. Chander Verma**  
Chairman  
Construction Industry Development Council
28. **Mr. D. K. Srivastava**  
Chief Legal Advisor  
Lucknow Development Authority
29. **Mr. D. S. Prakash Rao**  
Professor and Head  
Department of Civil Engineering  
University College of Engineering  
Osmania University

30. **Mr. D. V. Gupta**  
Former Chairman  
Airports Authority of India
31. **Mr. Daljit Singh Nirmohi**  
Arbitrator
32. **Er. Damde Vemlateswarulu**  
Consulting Engineer
33. **Er. Devinder Paul Bajaj**  
Technical Advisor, PUDA  
Chief Engineer Punjab PWD (B&R) Retired
34. **Er. Dileep Kumar Karnavat**  
Chief Engr. & Tech. Member PHED (Retd.)  
Public health Engineering Department, Jaipur
35. **Hon. Edward Mark Gajanayake de Zylva**  
Chairman Emeritus  
SAARC-Construction Industry Council
36. **Mr. G. K. Balaya**  
Goyal MG Gases Pvt. Ltd.
37. **Mr. G. K. Kharbanda**  
Vice President (Legal), EPI  
Engineering Project (I) Limited
38. **Mr. G. K. Nandan**  
General Manager  
Uttar Haryana Bijli Vitran Nigam
39. **Er. G. M. Naik Parrikar**  
Executive Engineer  
PWD
40. **Mr. G. S. Prakash**  
Company Secretary  
Karnataka Neeravari Nigam Limited
41. **Mr. G. V. Ramakrishna**  
Chairman Emeritus  
Construction Industry Development Council
42. **Smt. Gargi Malhotra**  
FA & CAO  
Uttar Haryana Bijli Vitran Nigam Ltd.
43. **Mr. H. Jayesh**  
Founder Partner  
Juris Corp Advocates & Solicitors
44. **Er. H. L. Chawla**  
Chartered Engineer, President  
Technovate Solutions
45. **Mr. H.S. Mohamed Rafi**  
Advocate – Arbitrator
46. **Mr. Hari Easwaran**  
General Manager B&I  
Punj Lloyd Ltd.



47. **Mr. Harjinder Singh**  
Executive Director (Works)  
IRCON International Limited
48. **Mr. Harkirat Sawhney**  
Advocates & Legal Consultants  
Bakshi Sawhney Associates
49. **Mr. Hemant Ambalal Upadhyay**  
AGM- Contracts  
IVRCL Infrastructure Ltd.
50. **Er. Inder Mohan Singh**  
Former Engineer-in-Chief  
PWD, Govt. of Delhi
51. **Mr. J. Izan Basha**  
General Manager Contracts  
AFCONS Infrastructure Ltd.
52. **Er. J. P. Shukla**  
Managing Director  
Rail Vikas Nigam Ltd.
53. **Mr. Jagpal Singh**  
Consultant  
Punj Lloyd Ltd
54. **Mr. Jamshed Pesi Cama**  
Senior Advocate
55. **Mr. Joy Mukherjee**  
Project Manager  
Simplex Infrastructures Ltd.
56. **Mr. K B Dubey**  
Director Projects  
National Thermal Power Corpn. Ltd.
57. **Er. K. B. Rai**  
Chief Engineer  
PWD
58. **Dr. K. C. Iyer**  
Professor, Department of Civil Engineering  
Indian Institute of Technology Delhi
59. **Er. K. D. Arcot**  
Chartered Engineer  
Chennai
60. **Er. K. K. Singal**  
Technical Advisor & Arbitration Expert
61. **Er. K. S. Krishna Reddy**  
Chief Engineer  
Karnataka State Highways Improvement Project
62. **Er. K. S. Ramaswamy**  
Former Chief Engineer
63. **Mr. K. V. Rangaswami**  
President (Operations)  
Larsen & Toubro Ltd.

64. **Er. K. Vasudevan**  
Scientist Ge IV (5)  
Structural Engineering Research Centre – SERC
65. **Mr. K. Venkataramanan**  
Member of the Board & President (O)  
Larsen & Toubro Ltd.
66. **Mr. Keshav Dayal**  
Senior Advocate  
Indian Council of Arbitration
67. **Mr. Kiran P. Badkatte**  
Asst. Vice President (Contracts)  
JMC Projects (India) Ltd.
68. **Er. Krishan Kumar**  
Former Director General (Works)  
CPWD
69. **Dr. Krishna Kumari Areti**  
Executive- Advisor (Legal)  
GMR Group
70. **Mr. Krishnakant G. Vakharia**  
Senior Advocate  
Gujarat High Court Sola
71. **Er. Kunj Behari Lal Singal**  
Former Engineer-in-Chief  
Haryana P.W.D.
72. **Mr. L. V. Sreerangaraju**  
Former General Manager  
Karnataka Power Corporation Ltd.
73. **Mr. Lal Chand Jain**  
Legal Advisor
74. **Mr. M. K. Agrawal**  
Executive Vice President  
Unitech Limited
75. **Er. M. K. Chitkara**  
Former Addl. Director General  
Military Engineer Service
76. **Mr. M. Kishore Kumar**  
Nag Infrastructure Consulting Engineers Pvt. Ltd
77. **Er. M. Kumar**  
Chief Engineer  
Tamil Nadu Police Housing Corporation Ltd.
78. **Mr. M. L. Bansal**  
Joint Director General (Pers.)  
Headquarters  
Chief Engineer Western Command
79. **Mr. M. M. Lal**  
Former Principal Advisor  
Ministry of Shipping

80. **Mr. M. Muthian**  
Managing Director  
Macro Marvel Projects Ltd
81. **Mr. M. Ramkumar**  
Vice President & Head - (Hydrocarbon, Construction & Pipelines)  
Larsen & Toubro Limited
82. **Mr. M. Subramaniam**  
Chairman  
R&M Infrastructure Services (P) Ltd.
83. **Mrs. Malini Ganesh**  
Legal consultants & Advocates
84. **Mrs. Mamta Tiwari**  
Partner  
Fox Mandal Solicitors & Advocates
85. **Mrs. Me. Sarashwathy**  
Advocate  
Madras High Court
86. **Mr. Michael Dias**  
Advocate
87. **Mr. N. D. Bhagatkar**  
Jt Dir Gen (Contract)  
Headquarters Chief Engineer, Western Command
88. **Er. N. K. Bahri**  
Fellow emeritus & former President  
The Institution of Surveyors  
Arbitrator & Member Dispute Review Board  
Contract Management & Arbitration Consultant
89. **Er. N. K. Sinha**  
Former Special Secretary  
Ministry of Road Transport & Highways
90. **Mr. N. Lakshmana Rao Peshve**  
Secretary To Govt.  
Public works, Ports & Inland water Transport  
Department Government of Karnataka
91. **Mr. N. R. Rao**  
N R Associates
92. **Er. Narain Prakash Mathur**  
Former Chief Engineer  
PWD
93. **Mr. Narain Upadhayay**  
Legal Advisor  
Uttar Pradesh State Road Transport Corporation
94. **Ms. Neha Vijayvargiya**  
Juris Corp
95. **Mr. Niranjana Swarup**  
Executive Director  
Indian Society for Trenchless Technology

96. **Er. O. P. Goel**  
Former Director General  
CPWD
97. **Er. O.P. Gaddhyan**  
Director  
SMH Infrastructure Ltd.
98. **Er. O. P .Gupta, VSM**  
Senior Advisor, CIDC &  
Former Chief Engineer, MCD
99. **Er. P. B. Vijay**  
Former Director General  
CPWD
100. **Mr. P. H. Parekh**  
Senior Advocate  
Supreme Court of India
101. **Mr. P. K. Solanki**  
SM (Law)  
GAIL
102. **Dr. P. V. Amarnath Prasad**  
Chief Consultant  
Amarnath Prasad & Company
103. **Mr. P. Y. Khoche**  
Senior Vice President  
SEW Infrastructure Limited
104. **Mr. P.C. Rawal**  
(IAS, Retd.),  
Former Secretary to Govt. of India
105. **Er. Pammi Tulasi Ram**  
Joint Director General (Tech Exam)  
ADGTE Office
106. **Mr. Pawan Chopra**  
Director  
Dua Consulting
107. **Capt. Pradip Kumar**  
Senior Advisor (Legal)  
Oil India Ltd.
108. **Er. Pradip M. Tambade**  
Superintending Engineer (Civil)  
CIDCO Ltd.
109. **Er. Prafulla Kumar**  
Former Director General (Road Development) & Addl. Secretary  
MOST
110. **Mr. R. C. Kehar**  
Representative Director  
Intercontinental Consultants and Technocrats Pvt. Ltd.
111. **Er. R. C. Mahajan**  
Chief Engineer

- Military Engineer Services  
Chief Engineer Bareilly Zone
112. **Mr. R. D. Soni**  
Director  
Canal System Sardar Sarovar Narmada Nigam Ltd.
113. **Dr. R. K. Chopra**  
Punj Lloyd Ltd
114. **Mr. R. L. Srivastava**  
Member  
District Consumer Dispute
115. **Mr. R. Manimuthu**  
Superintendent  
Chennai Port Trust
116. **Brigadier (Retd.) R. N. Trivedi**  
Vice President (Tech.)  
M/s MFar Constructions Pvt. Ltd.
117. **Mr. Rahul P. Dave**  
Partner  
Dua Associates
118. **Mr. Rajesh Goel**  
Deputy Chief (CP)  
HUDCO Ltd.
119. **Mr. Ranjit Sinha**  
Managing Director  
Bharat Wagon & Engineering Company Limited
120. **Mr. Ravi Sankar J**  
(AVP - Commercial & Contracts)  
GMR Infrastructure Ltd. (EPC- Division)
121. **Mr. Ravi Shanker**  
Deputy Project Manager Claim & Legal (Contracts)  
U. P. State Bridge Corporation Ltd.
122. **Mr. S. B. Jhamb**  
Former Addl. Director General (Spl.) (NR)  
Central Public Works Department
123. **Mr. S. Hariharan**  
VP & Head(Project Development)  
Larsen & Toubro Ltd.
124. **Mr. S. Jayaraman**  
Former Finance Director  
State Trading Corporation
125. **Mr. S. K. Dholakia**  
Senior Advocate  
Supreme Court of India
126. **Mr. S. K. Kapoor**  
Additional General Manager (Civil)  
RITES Ltd.
127. **Mr. S. K. Maniktala**  
Advocates, Consultants, Solicitors

128. **Er. S. P. Lalla**  
Former Addl. Director General (Works)  
CPWD
129. **Mr. S. S. Fonia**  
Head (Legal Cell)  
Engineers India Ltd.
130. **Er. S. S. Juneja**  
Former Engineer-in-Chief  
Himachal Pradesh PWD
131. **Mr. S. Venkateswaran**  
Advocate
132. **Mrs. S.C. Maheshwari**  
Former General Manager (Projects)  
BPCL CHS Ltd
133. **Mr. S. Ratnavel**  
**CEO**  
**SCEBA Consultancy Services**
134. **Mr. Sameer Sawant**  
Consulting Structural Engineer
135. **Mr. Sanjay Kumar Goyal**  
Consultants  
Quantum Meruit Consultants
136. **Er. Sant Bhushan Lal**  
Arbitrator, Valuer, Mediator, Advocate & Consultant  
M/s Lal Consultants
137. **Er. Sarup Singh**  
Former Chief Engineer  
Punjab PWD
138. **Mr. Sarup Singh**  
Senior Advocate  
Supreme Court of India
139. **Mr. Sarweshwar Jha**  
Former Add. Secretary to the Govt. of India  
Former Member Central Administrative Tribunal Principal Bench, New Delhi
140. **Mr. Satish Chander**  
Chief Arbitrator  
Standing Panel Arbitrator of Pune
141. **Er. Satish Chandra Sharma**  
Former Director General  
MOST
142. **Mr. Shardul Thacker**  
Partner  
Mulla & Mulla Advocates, Solicitors & Notaries
143. **Mr. Shiban Raina**  
Former Director General  
National Council for Cement & Building Material Consultant

144. **Mr. Sudhir Saxena**  
Engineer in Chief  
PHED Bhopal
145. **Mr. Sumant Batra**  
Senior Partner  
Kesar Dass B & Associates
146. **Mr. Sumeet Kachwaha**  
Partner  
M/s Kachwaha & Partners Solicitors & Advocates
147. **Dr. Sundeep Khanna**  
Director General  
RCVP Noronha Academy of Administration
148. **Mr. Sunil Mahajan**  
Director  
Construction Industry Development Council
149. **Mr. Surendra Kumar Singhi**  
Company Secretary
150. **Mr. Sushant Baliga**  
Executive Director  
National Building Construction Corporation Ltd.
151. **Justice (Retd.) Sushil Kumar Jain**  
Former Judge  
Punjab & Haryana High Court
152. **Mr. T. N. Gupta**  
Former Scientist – CBRI  
Former Executive Director-MBPTC  
Consultant-UNIDO  
Senior Advisor-CIDC  
Secretary General-ICC
153. **Mr. Tanmay Nandi**  
AFCONS Infrastructure Ltd.
154. **Mr. U. N. Srivastav**  
Chief General Manager  
NABARD
155. **Mr. U. N. Joshi**  
Managing Director  
Bharat Oman Refineries Ltd.
156. **Dr. Uddesh Kohli**  
Chairman Emeritus  
Construction Industry Development Council
157. **Er. V N Purohit**  
Retired Chief Engineer (MES)
158. **Mr. V. N. Rai**  
Managing Director  
Krishak Bharati Co-operative Limited
159. **Mr. V. S. S. Kumar**  
Associate Professor  
Construction Eng. & Mgmt  
Dept of Civil Engineering

160. **Mr. V. Subramanyam**  
Former Controller of Stores  
Southern Railway
161. **Er. Vijay Kumar Gupta**  
Retire Chief Engineer  
Public Health Govt. of Haryana
162. **Mr. Vinay Chhokar**  
Deputy Director  
Patel Engineering Limited
163. **Mrs. Yogita Anish Paralkar**  
Asst. Legal Advisor  
Mumbai Metropolitan Region Development Authority



**GUIDELINES FOR ARBITRATORS AND THE PARTIES FOR EXPEDITIOUS CONDUCT OF ARBITRATION PROCEEDINGS**

CIAC has laid down the Guide lines for the arbitrators and the parties to arbitration to ensure economic and expeditious disposal of arbitration cases, because the delay in finalization of the arbitration leads to a time loss & money loss, which are as under:-

**1.0 For Arbitrators**

1.1 The arbitrators are required to take up the arbitration expeditiously soon on receipt of the request from the CIAC and should also make efforts to complete the same within a period of 6 months where the claim amount exceeds 1 crore and within a period of 4 months where the claim amount is less than Rs.1 crore.

1.2 The arbitrator may at the initial stage assess the possibility of a settlement to the parties but may not insist from his side for settlement. Both the parties be encouraged for settlement, if both the parties request in writing to the arbitrator with a copy to the Registrar and not objected to by the arbitral tribunal. In case one of the party is interested in settlement but the other party is not in favaur of settlement, the arbitral tribunal shall proceed with the arbitration proceedings. The party interested for settlement can be allowed a time period of 10-15 days maximum for settlement if the arbitral tribunal considers so. While according this concession of time period for settlement, the arbitral tribunal shall keep in mind the limit for making of an award under CIAC Arbitration Rules 44.8 of 2013

1.3 During the arbitration proceedings, the arbitral tribunal shall refrain from all unilateral contact with the parties or their counsel from giving the parties, either directly or through their counsel, intimation of decisions in the evidence taking place or on the merits; as all such actions are to be done exclusively by the CIAC.

1.4 The arbitral tribunal shall encourage an environmental friendly atmosphere during the arbitral proceedings. In particular, the date of the hearings shall be fixed with mutual consent of both the parties in compliance with the principle of equal treatment and adversarial proceedings.

1.5 The first hearing of the arbitral tribunal should be convened within 15 days of the receipt of the case statement from the Registrar. Arbitral Tribunal shall draw the programme for conduct of arbitration proceedings keeping in mind the time limit for making an award.

1.6 The arbitral tribunal shall ensure that the list of witnesses, if any, be filed in advance by the parties and they should also file affidavits of witness on the date fixed for evidence preferably within a weeks of the settlement of issues. Cross examination of such of the deponent's witnesses whose presence is demanded by the opposite party should be ensured at a hearing fixed for that purpose.

1.7 Arguments preferably should be heard within 15 days of the completion of evidence, to be followed by submission of written arguments, if any.

1.8 No request for Adjournments of duly fixed hearing shall be entertained except for unavoidable reasons as laid down in Rule 36 (b) of the CIAC Arbitration Rules, 2013 with compensation cost.

1.9. The Arbitrator should make the award expeditiously after the close of the hearings, preferably within 30 days.

1.10 The arbitrator who does not comply with the provisions of these guidelines may be replaced by the Registrar with prior approval of the chairman after a show cause notice & its reply to the show cause. Where it is not appropriate to replace the arbitrator in order not to cause delay in the arbitral proceedings, the CIAC may also take such action after the conclusion of the arbitral proceedings, by refusing to confirm him in subsequent arbitral proceedings.

## **2.0 For Parties**

2.1 The claimant shall file request for arbitration to the Registrar of the CIAC with, full statement of claim and copies of documents relied upon, along with other information as required as per CIAC Rules 2013 in 3 sets in case of a Sole Arbitrator and in 5 sets in case of Three Arbitrators.

2.2 The respondent shall file his reply to the claim and counter –claim, if any with complete information and documents relied upon, in 3 or 5 sets as above within the prescribed time. No fresh documentation/claims shall be entertained at a later stage of the proceedings unless the arbitral tribunal is satisfied about the reasons for granting such permission.

2.3 No request for Adjournments of duly fixed hearing shall be entertained except for unavoidable reasons as laid down in Rule 36 (b) of the CIAC – Arbitration Rules, 2013 with compensation cost.

2.4. Parties shall deposit arbitration and administrative fees with the CIAC within the stipulated time, as per the CIAC Arbitration Rules 41 of 2013, failing which no claim and/or counter – claim shall be entertained.

2.5 The parties are advised to be more careful while selecting their arbitrators from the CIAC Panel for its suitability w.r.t the nature of dispute, because suitability of the arbitrator helps in finalization of the arbitrations within stipulated time, In case a party still chooses an arbitrator not conversant with the nature of dispute it may lead to delay finalization of the arbitration & making of the award, Further if the arbitrator chosen is from a place other than the place of hearing, the concerned party will bear the entire extra cost to be incurred on stay TA/DA etc. of the arbitrator nominated by it.

### **3.0 Review of progress of Arbitration Proceedings**

3.1 The Chairman, CIAC may examine the arbitration case file, from time to time to evaluate the progress of the proceedings and to ascertain whether the arbitrators have granted adjournments only on reasonable grounds and in compliance of CIAC's Arbitration Rules 36 (b) of 2013.

3.2 The Chairman, CIAC shall be sole judge of the grounds of violations of the guidelines and its decision shall be final and binding on the arbitral tribunal as well as the parties.

## **CIAC Fee Structure**

### **Our Philosophy**

We believe that all the things that we do for our users –selecting an arbitrator, negotiating the terms of appointment, managing the finances, supervision-we can do more conveniently, more effectively and at less cost, than could the parties themselves. This is where we believe CIAC adds value to arbitration.

CIAC tries to do its part to keep the cost of arbitration attractive. As a not-for-profit organisation CIAC only seeks to recover, by way of fees, what it costs CIAC to provide its services. It seeks above all, to give value. Our fee scales reflect these guiding principles.

### **How the Fees Apply**

CIAC's fee structure is a simple one.

Where a case is conducted according to CIAC's arbitration rules, parties pay an administration fee in cases falling outside CIAC's arbitration rules, where CIAC is asked to appoint an arbitrator, we charge an appointment fee.

The administration fee is pegged to the amount of the claimant and/or counterclaim according to a scale.

The arbitrator appointment fee, on the other hand, is a flat fee, not dependent on the amount of claim.

The arbitrator's fee is pegged to the total amount in dispute, i.e, claim plus counterclaim (if any) including interest claimed up to the commencement of arbitration according to a scale.

### **Other Fees and Charges**

For provision of facilities and support services like arranging arbitration hearing rooms; arranging transcription, translation or interpretation services; or where audio and video recording facilities are arranged, whether in conjunction with an arbitration that CIAC administers or otherwise, the fee would be charged based on the actual cost that would be incurred.

The details of CIAC's Scales of Fee are given in Annexures ("X<sub>1</sub>", "X<sub>2</sub>", "X<sub>3</sub>"), ("Y<sub>1</sub>", "Y<sub>2</sub>", "Y<sub>3</sub>"), ("Z<sub>1</sub>", "Z<sub>2</sub>", "Z<sub>3</sub>"), for period applicable w.e.f 14.06.2006, 01.04.2011 & 01.09.2013 respectively.

**Annexure - "X<sub>1</sub>"**

| <b>CIAC Administration Fees</b><br>(Valid with effect from 14 <sup>th</sup> June,2006 till 31 <sup>st</sup> March,2011)<br>(For cases under Arbitration Rules)  |  |
|---|--|
| <b>Claim (or) Counter Claim</b><br>(In Indian Rupees)   | <b>Administration Fees</b><br>(In Indian Rupees) |
| <b>Upto 50,000</b>  | <b>2,750</b>                                     |
| <b>50,001 to 1,00,000</b>   | <b>2,750 + 1.5% excess over 50,000</b>           |
| <b>1,00,001 to 5,00,000</b>   | <b>3,500 + 1% excess over 1,00,000</b>           |
| <b>5,00,001 to 10,00,000</b>  | <b>7,500 + 0.7% excess over 5,00,000</b>         |
| <b>10,00,001 to 20,00,000</b>   | <b>11,000 + 0.45% excess over 10,00,000</b>      |
| <b>20,00,001 to 50,00,000</b>   | <b>15,500 + 0.22% excess over 20,00,000</b>      |
| <b>50,00,001 to 1,00,00,000</b>   | <b>22,100 + 0.13% excess over 50,00,000</b>      |
| <b>1,00,00,001 to 5,00,00,000</b>   | <b>28,600+ 0.05% excess over 1,00,00,000</b>     |
| <b>5,00,00,001 to 8,00,00,000</b>   | <b>48,600 + 0.03% excess over 5,00,00,000</b>    |
| <b>8,00,00,001 to 10,00,00,000</b>  | <b>57,600 + 0.02% excess over 8,00,00,000</b>    |
| <b>Over 10,00,00,000</b>  | <b>62,000 + 0.01% excess over 10,00,00,000</b>   |
| <b>Note:</b>  |  |
| <ol style="list-style-type: none"> <li>1. The Claimant is to bear the Administration Fees for the Claim. If there is a Counterclaim, the Respondent has to bear the Administration Fees for the Counterclaim.</li> <li>2. If the Claim and/or Counterclaim is not quantified, the Registrar of CIAC would fix the Administration Fees.</li> <li>3. Please see Rule 34 of the CIAC Arbitration Rules June,2006 that deals with 'Deposits to Costs and Expenses'.</li> <li>4. A filing of Rs.2,500 each is to be paid by the Claimant and Respondent at the time of filing the Notice of Arbitration and Response to the Notice of Arbitration respectively</li> <li>5. Taxes, if any, shall be payable under the relevant laws of the land.</li> </ol> |  |

**Annexure –“X<sub>2</sub>”**

| <b>CIAC Appointment Fees</b><br><b>(Valid with effect from 14<sup>th</sup> June,2006 till 31<sup>st</sup> March,2011</b><br><b>(For ad-hoc arbitrations where CIAC acts as the appointing authority by agreement of parties)</b> |  |
|--|--|
| <b>Number of Arbitrators</b>   | <b>Appointment Fees<br/>(In Indian Rupees)</b> |
| <b>One Arbitrator</b>  | <b>10,000</b>                                  |
| <b>Two Arbitrators</b>   | <b>18,000</b>                                  |
| <b>Three Arbitrators</b>   | <b>25,000</b>                                  |

**Note:**

1. The fee mentioned in the above table is to be shared equally by the parties. Parties are jointly & severally liable for the Appointment Fee.
2. Taxes, if any, shall be payable under the relevant laws of the land.

**Annexure –“X<sub>3</sub>”**

| <b>CIAC Arbitrator’s Fees</b>   |  |
|---|--|
| <b>(Valid with effect from 14<sup>th</sup> June,2006 till 31<sup>st</sup> March,2011)</b>   |  |
| <b>(For cases under CIAC Arbitration Rules and for ad-hoc arbitrations where CIAC appoints arbitrators)</b>   |  |
| <b>Sum in Dispute (Claim + Counter Claim)</b><br><b>(In Indian Rupees)</b>  | <b>Arbitrator’s Fees (In Indian Rupees)</b>      |
| <b>Upto 50,000</b>  | <b>5,000</b>                                     |
| <b>50,001 to 1,00,000</b>   | <b>5,000 + 14% excess over 50,000</b>            |
| <b>1,00,001 to 5,00,000</b>   | <b>12,000 + 5.25% excess over 1,00,000</b>       |
| <b>5,00,001 to 10,00,000</b>  | <b>33,000 + 3.8% excess over 5,00,000</b>        |
| <b>10,00,001 to 20,00,000</b>   | <b>52,000 + 1.9% excess over 10,00,000</b>       |
| <b>20,00,001 to 50,00,000</b>   | <b>71,000 + 0.9% excess over 20,00,000</b>       |
| <b>50,00,001 to 1,00,00,000</b>   | <b>98,000 + 0.5% excess over 50,00,000</b>       |
| <b>1,00,00,001 to 5,00,00,000</b>   | <b>1,23,000 + 0.2% excess over 1,00,00,000</b>   |
| <b>5,00,00,001 to 8,00,00,000</b>   | <b>2,03,000 + 0.13% excess over 5,00,00,000</b>  |
| <b>8,00,00,001 to 10,00,00,000</b>  | <b>2,42,000 + 0.09% excess over 8,00,00,000</b>  |
| <b>Over 10,00,00,000</b>  | <b>2,60,000 + 0.06% excess over 10,00,00,000</b> |
| <b>Note:</b>  |  |
| <ol style="list-style-type: none"> <li>1. The fee mentioned in the above table is the amount payable to one arbitrator. If there are 3 arbitrators, the fees would have to be multiplied by 3.</li> <li>2. The fee is pegged to the entire sum in dispute [i.e. Claim plus Counterclaim (if any)]. The fees would have to be shared equally by the parties in the first instance. Parties are jointly &amp; severally liable for the Arbitrator’s Fees.</li> <li>3. If the Claim and/or Counterclaim is not quantified, the Registrar of CIAC would fix the Arbitrator’s Fees.</li> <li>4. Please see Rule 34 of the CIAC Arbitration Rules June,2006 that deals with ‘Deposits to Costs and Expenses’.</li> <li>5. Taxes, if any, shall be payable under the relevant laws of the land.</li> </ol> |  |

| <b>CIAC Administration Fees</b><br>(Valid with effect from 01 <sup>st</sup> April,2011 till 31 <sup>st</sup> August,2013)<br>(For cases under CIAC Arbitration Rules) |  |
|---|--|
| <b>Claim (or) Counter Claim</b><br>(In Indian Rupees)   | <b>Administration Fees</b><br>(In Indian Rupees) |
| <b>Upto 50,000</b>  | <b>5,500</b>                                     |
| <b>50,001 to 1,00,000</b>   | <b>5,500 + 3.0% excess over 50,000</b>           |
| <b>1,00,001 to 5,00,000</b>   | <b>7,000 + 2% excess over 1,00,000</b>           |
| <b>5,00,001 to 10,00,000</b>  | <b>15,000 + 1.4% excess over 5,00,000</b>        |
| <b>10,00,001 to 20,00,000</b>   | <b>22,000 + 0.90% excess over 10,00,000</b>      |
| <b>20,00,001 to 50,00,000</b>   | <b>31,000 + 0.44% excess over 20,00,000</b>      |
| <b>50,00,001 to 1,00,00,000</b>   | <b>44,200 + 0.26% excess over 50,00,000</b>      |
| <b>1,00,00,001 to 5,00,00,000</b>   | <b>57,200+ 0.10% excess over 1,00,00,000</b>     |
| <b>5,00,00,001 to 8,00,00,000</b>   | <b>97,200 + 0.06% excess over 5,00,00,000</b>    |
| <b>8,00,00,001 to 10,00,00,000</b>  | <b>1,15,200 + 0.044% excess over 8,00,00,000</b> |
| <b>Over 10,00,00,000</b>  | <b>1,24,000 + 0.02% excess over 10,00,00,000</b> |

**Note:**

1. The Claimant is to bear the Administration Fees for the Claim. If there is a Counterclaim, the Respondent has to bear the Administration Fees for the Counterclaim.
2. If the Claim and/or Counterclaim is not quantified, the Registrar of CIAC would fix the Administration Fees.
3. Please see Rule 34 of the CIAC Arbitration Rules June,2006 that deals with 'Deposits to Costs and Expenses'.
4. A filing fee of Rs.5,000 each is to be paid by the Claimant and Respondent at the time of filing the Notice of Arbitration and Response to the Notice of Arbitration respectively
5. Taxes, if any, shall be payable under the relevant laws of the land.



**Annexure –“Y<sub>2</sub>”**

| <b>CIAC Arbitrator's Appointment Fees</b><br><b>(Valid with effect from 01<sup>st</sup> April,2011 till 31<sup>st</sup> August,2013)</b><br><b>(For ad-hoc arbitrations where CIAC acts as the appointing authority by agreement of parties)</b> |  |
|--|--|
| <b>Number of Arbitrators</b>   | <b>Appointment Fees<br/>(In Indian Rupees)</b> |
| <b>One Arbitrator</b>  | <b>20,000</b>                                  |
| <b>Two Arbitrators</b>   | <b>36,000</b>                                  |
| <b>Three Arbitrators</b>   | <b>50,000</b>                                  |

**Note:**

1. The fee mentioned in the above table is to be shared equally by the parties. Parties are jointly & severally liable for the Appointment Fee.
2. Taxes, if any, shall be payable under the relevant laws of the land.

**Annexure –“Y<sub>3</sub>”**

| <b>CIAC Arbitrator’s Fees</b>   |  |
|---|--|
| <b>(Valid with effect from 01<sup>st</sup> April,2011 till 31<sup>st</sup> August,2013))</b>                |  |
| <b>(For cases under CIAC Arbitration Rules and for ad-hoc arbitrations where CIAC appoints arbitrators)</b> |  |
| <b>Sum in Dispute (Claim + Counter Claim)</b><br><b>(In Indian Rupees)</b>                                  | <b>Arbitrator’s Fees (In Indian Rupees)</b>      |
| <b>Upto 50,000</b>  | <b>10,000</b>                                    |
| <b>50,001 to 1,00,000</b>   | <b>10,000 + 28% excess over 50,000</b>           |
| <b>1,00,001 to 5,00,000</b>   | <b>24,000 + 10.50% excess over 1,00,000</b>      |
| <b>5,00,001 to 10,00,000</b>  | <b>66,000 + 7.6% excess over 5,00,000</b>        |
| <b>10,00,001 to 20,00,000</b>   | <b>1,04,000 + 3.8% excess over 10,00,000</b>     |
| <b>20,00,001 to 50,00,000</b>   | <b>1,42,000 + 1.8% excess over 20,00,000</b>     |
| <b>50,00,001 to 1,00,00,000</b>   | <b>1,96,000 + 1.0% excess over 50,00,000</b>     |
| <b>1,00,00,001 to 5,00,00,000</b>   | <b>2,46,000 + 0.4% excess over 1,00,00,000</b>   |
| <b>5,00,00,001 to 8,00,00,000</b>   | <b>4,06,000 + 0.26% excess over 5,00,00,000</b>  |
| <b>8,00,00,001 to 10,00,00,000</b>  | <b>4,84,000 + 0.18% excess over 8,00,00,000</b>  |
| <b>Over 10,00,00,000</b>  | <b>5,20,000 + 0.12% excess over 10,00,00,000</b> |

**Note:**

1. The fee mentioned in the above table is the amount payable to one arbitrator. If there are 3 arbitrators, the fees would have to be multiplied by 3.
2. The fee is pegged to the entire sum in dispute [i.e. Claim plus Counterclaim (if any)]. The fees would have to be shared equally by the parties in the first instance. Parties are jointly & severally liable for the Arbitrator’s Fees.
3. If the Claim and/or Counterclaim is not quantified, the Registrar of CIAC would fix the Arbitrator’s Fees.
4. Please see Rule 34 of the CIAC Arbitration Rules June,2006 that deals with ‘Deposits to Costs and Expenses’.
5. Taxes, if any, shall be payable under the relevant laws of the land.

**Annexure –“Z<sub>1</sub>”**

| <b>CIAC Administration Fees</b><br><b>(Valid with effect from 01<sup>st</sup> September,2013 till further amendment)</b><br><b>(For cases under CIAC Arbitration Rules)</b>   |   |
|---|---|
| <b>Sum in Dispute (Claim plus Counter Claim plus interest claimed upto commencement of Arbitration) (In Indian Rupees)</b>  | <b>Administration Fees<br/>(In Indian Rupees)</b> |
| <b>Upto 50,000</b>  | <b>10,000</b>                                     |
| <b>50,001 to 1,00,000</b>   | <b>10,000 + 20% excess over 50,000</b>            |
| <b>1,00,001 to 5,00,000</b>   | <b>20,000 + 10% excess over 1,00,000</b>          |
| <b>5,00,001 to 10,00,000</b>  | <b>60,000 + 6% excess over 5,00,000</b>           |
| <b>10,00,001 to 20,00,000</b>   | <b>90,000 + 2% excess over 10,00,000</b>          |
| <b>20,00,001 to 50,00,000</b>   | <b>1,10,000 + 1.5% excess over 20,00,000</b>      |
| <b>50,00,001 to 1,00,00,000</b>   | <b>1,55,000 + 1.0% excess over 50,00,000</b>      |
| <b>1,00,00,001 to 5,00,00,000</b>   | <b>2,05,000+ 0.40% excess over 1,00,00,000</b>    |
| <b>5,00,00,001 to 8,00,00,000</b>   | <b>3,65,000 + 0.25% excess over 5,00,00,000</b>   |
| <b>8,00,00,001 to 10,00,00,000</b>  | <b>4,40,000 + 0.15% excess over 8,00,00,000</b>   |
| <b>Over 10,00,00,000</b>  | <b>4,70,000+ 0.10% excess over 10,00,00,000</b>   |
| <b>Note:</b>  |   |
| <ol style="list-style-type: none"> <li>1. The administrative fee worked out shall be shared equally by the claimant &amp; respondent.</li> <li>2. If the Claim and/or Counterclaim is not quantified, the Registrar of CIAC would fix the Administration Fees.</li> <li>3. Please see Rule 41 of the “CIAC Arbitration Rules, 2013” that deals with ‘Deposits &amp; Costs and Expenses’.</li> <li>4. A Registration Fee Rs.10,000 for a claim upto Rs.1 Crore &amp; Rs.20,000 for a claim more 1 Crore is to be paid by the Claimant and Respondent at the time of filing the Notice of Arbitration and Response to the Notice of Arbitration respectively.</li> <li>5. Taxes, if any, shall be payable under the relevant laws of the land.</li> </ol> |   |

**Annexure - "Z<sub>2</sub>"**

| <b>CIAC Arbitrator's Appointment Fees</b><br><b>(Valid with effect from 01<sup>st</sup> September,2013 till further amendment)</b><br><b>(For ad-hoc arbitrations where CIAC acts as the appointing authority by agreement of parties)</b> |  |
|--|--|
| <b>Number of Arbitrators</b>   | <b>Appointment Fees<br/>(In Indian Rupees)</b> |
| <b>One Arbitrator</b>  | <b>25,000</b>                                  |
| <b>Two Arbitrators</b>   | <b>45,000</b>                                  |
| <b>Three Arbitrators</b>   | <b>60,000</b>                                  |

**Note:**

1. The fee mentioned in the above table is to be shared equally by the parties. Parties are jointly & severally liable for the Appointment Fee.
2. Taxes, if any, shall be payable under the relevant laws of the land.

**Annexure – “Z<sub>3</sub>”**

| <b>CIAC Arbitrator’s Fees</b>  |   |
|--|---|
| <b>(Valid with effect from 01<sup>st</sup> September,2013 till further amendment)</b>  |   |
| <b>(For cases under CIAC Arbitration Rules and for ad-hoc arbitrations where CIAC appoints arbitrators)</b>  |   |
| <b>Sum in Dispute (Claim plus Counter Claim plus interest claimed upto commencement of Arbitration)</b><br><b>(In Indian Rupees)</b>   | <b>Arbitrator’s Fees</b><br><b>(In Indian Rupees)</b> |
| <b>Upto 50,000</b>   | <b>10,000</b>   |
| <b>50,001 to 1,00,000</b>  | <b>10,000 + 28% excess over 50,000</b>                |
| <b>1,00,001 to 5,00,000</b>  | <b>24,000 + 10.50% excess over 1,00,000</b>           |
| <b>5,00,001 to 10,00,000</b>   | <b>66,000 + 7.6% excess over 5,00,000</b>             |
| <b>10,00,001 to 20,00,000</b>  | <b>1,04,000 + 3.8% excess over 10,00,000</b>          |
| <b>20,00,001 to 50,00,000</b>  | <b>1,42,000 + 2.25% excess over 20,00,000</b>         |
| <b>50,00,001 to 1,00,00,000</b>  | <b>2,09,500 + 2.00% excess over 50,00,000</b>         |
| <b>1,00,00,001 to 5,00,00,000</b>  | <b>3,09,500 + 0.50% excess over 1,00,00,000</b>       |
| <b>5,00,00,001 to 8,00,00,000</b>  | <b>5,09,500 + 0.4% excess over 5,00,00,000</b>        |
| <b>8,00,00,001 to 10,00,00,000</b>   | <b>5,99,500 + 0.3% excess over 8,00,00,000</b>        |
| <b>Over 10,00,00,000</b>   | <b>6,59,500 + 0.2% excess over 10,00,00,000</b>       |
| <b>Note:</b>   |   |
| <ol style="list-style-type: none"> <li>1. The fee mentioned in the above table is the amount payable to one arbitrator. If there are 3 arbitrators, the fees would have to be multiplied by 3.</li> <li>2. The fee is pegged to the entire sum in dispute [i.e. Claim plus Counter Claim plus Interest claimed upto commencement of Arbitration]. The fees would have to be shared equally by the parties in the first instance. Parties are jointly &amp; severally liable for the Arbitrator’s Fees &amp; payment of other CIAC’s expenditures.</li> <li>3. If the Claim and/or Counterclaim is not quantified, the Registrar of CIAC would fix the Arbitrator’s Fees &amp; other expenses payable in advance.</li> <li>4. Please see Rule 41 of the “CIAC Arbitration Rules, 2013” that deals with ‘Deposits &amp; Costs and Expenses’.</li> <li>5. Taxes, if any, shall be payable under the relevant laws of the land.</li> </ol> |   |

Vol. 4

# TECHNICAL SPECIFICATIONS

“Being edited for incorporation”

**WATERPROOFING GUIDELINES FOR NEW CONSTRUCTION  
PROJECTS FOR GOOD CONSTRUCTION PRACTICES**

as

Part of Bidding Document

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## 1.0 Method Statement for applying Plaster

### 1. Materials

- Use good quality PPC based cement as per IS 1489 and sand for plaster as per IS 1542 to prepare the plaster mortar.
- Water content in the plaster should be controlled and ratio to be maintained as per the specification.
- The plaster mortar should be mixed with integral waterproofing compound to reduce its permeability and better cohesion reducing rebound loss in case of plaster. The material should confirm to water permeability test as per IS 2645:2003 where no leakage should occur.

### 2. Joint Filling

- At the window frame joints, Silicone sealant should be applied to seal the gap.
- The separation gaps between concrete and masonry section should be properly filled with polymer modified mortar and open-woven fibre mesh to be applied before plastering

### 3. External Building Features- Chajja, Canopies, Overhangs etc.

- Canopies to be designed 300mm from wall and in a slope so that water does not stagnate.
- Chajjas to be casted with concrete in a slope.
- Angle fillet to be provided at chajja to wall junction.
- Drip mould to be provided of size 15mm x 10mm at a distance of 25mm from overhang.

### 4. Surface Preparation

- Surfaces to be plastered must be clean and free from dust, loose material, oil, grease, mortar droppings, sticking of foreign matter, etc.
- Raking out of joints should be carried out along with masonry to receive a good key.
- Any unavoidable projections in masonry and concrete surfaces shall be chiseled out.
- Thickness of one coat should not be more than 15mm and less than 8 mm for single coat finished plaster.
- Undercoats shall be scratched or roughened before they are fully hardened to form a mechanical key.
- Required concealing services must be completed and tested and no further cutting should be allowed.
- Repairs carried out to masonry or concealing work must be cured and dry.



- Any shrinkage crack on plaster surface should be properly cleaned and then filled with non-shrink acrylic crack filling compounds
- All plumbing lines should be kept away from the building surface to avoid seepage of water through the plaster.

#### **5. Application**

- Surface should be thoroughly cleaned and sufficiently damp prior to plastering.
- Before the plaster application, the bond coat of cement - polymer slurry to be applied
- Plaster to be applied when the bond coat is in tacky condition - do not allow it to dry.
- Plaster area must be provided with level dabs or spots allowing working and checking with 2-3 m straight edge. Plaster dabs are checked for plumb and level by the Engineer-in-charge or his representative.
- The required plaster thickness of first coat to be applied and at any case should not be less than 8 mm. Continuous curing should be done by sprinkling of water after setting of first coat.
- Second coat of plaster of 10 – 12 mm thick is to be applied above the first coat on next day.
- The plastering surface area should not be more than 15 sqm to avoid any shrinkage cracks. Joint should be provided at each 15 sqm or as directed by Engineer-in-charge.

#### **6. Curing**

- All the plastered surfaces must be wet cured properly for minimum 14 days period.

## **2.0 Method Statement for Waterproofing Treatment of Wet Areas**

**(Bathrooms, toilets, wash areas, kitchens, sinks, balconies,)**

### **1. Material**

The waterproofing material shall be a polymer modified cementitious coating or any other approved liquid applied seamless coating. The material should confirm to water permeability test (Depth of penetration at 5 bar pressure) where no leakage should occur after 24 hours as per EN 12390, part 8:2000 or as per IS 2645:2003 test methods.

### **2. Surface Preparation**

- RCC kerb of 100 mm high to be constructed at floor level at all masonry wall to prevent migration of moisture into dry areas.
- Waterproofing should extend up to 150 mm into dry area covering the kerb surface

- Angle fillet (corner rounding) of 50 mm x 50 mm shall be done using polymer modified mortar at all horizontal and vertical junctions (floor & wall junction) along with screed mixed with waterproofing compound.
- Angle fillet (corner rounding) of 25 mm x 25 shall be done using polymer modified mortar at all horizontal and vertical junctions (sunken floor, sunken bath tub etc.) along with screed mixed with waterproofing compound.
- Surfaces to be applied upon must be clean, reasonably dry, free from dirt, loose material, oil & grease and be as smooth as possible.
- Honeycombing in concrete should be filled with polymer modified grouts before applying any surface patch material.
- Slope of the surface to be checked before applying waterproofing material

### **3. Sealing the gap around plumbing fixtures**

- All PVC pipes should be wrapped with double sided bituminous tape, at the place where they go through the wall or floor.
- The gap between wrapped pipe and wall and gaps around Nahani traps, pipe outlets should be filled with ready to use free flowing non-shrink cementitious grout.
- All concealed pipelines should be filled with polymer modified mortar.
- Ensure the water tightness of plumbing system with pressure test and do any rectification for leakages if any.
- Complete all plumbing and sanitation work before commencement of waterproofing works

### **4. Waterproofing Application**

- Surface should be pre-wetted to make surface saturated dry (SSD) condition.
- Apply by brush or roller a coat of a polymer modified cementitious liquid applied seamless waterproofing coating at a specified coverage per kg to all required areas to achieve a thickness of 500 – 600 micron in one coat and allow the surface to dry for 4 -6 hours.
- Apply second coat in the opposite direction at the same rate. After the application of second coat, the total thickness of membrane should be 1 to 1.2 mm. The treatment is left as it is for 48 hours for air cure before carrying out ponding test.
- At the floor & wall joint junction provide a glass fibre mesh cut to size covering the fillet area laid to size and shape followed by 2<sup>nd</sup> coat of waterproofing for additional protection.

- Sprinkle coarse sand after the 2<sup>nd</sup> coat application while it is still wet for providing a key for subsequent tile adhesive material.
- The waterproofing shall be carried at least 300 mm on vertical surfaces above the floor finish level except the splash zone of shower where the waterproofing should be carried out to 1.8 to 2.1 m height in bathroom and toilets. In other wet areas the vertical surface should be waterproofed for a minimum height of 150 mm.
- The coating shall be applied to the internals of the down pipes for minimum 50 mm down to the floor outlet before laying of the tiles, bedding and floor traps.

#### **5. Ponding Test**

Ponding test shall be carried out at a depth of 50 mm for 48 hours to determine the water tightness after closing all the outlets. Necessary remedial actions should be taken for any seepage or leakage of water. The waterproofing shall be considered satisfactory, if no leaks or damp patches show on the soffit.

#### **6. Protective Screed**

- Upon successful completion of the ponding test, a layer of 10mm Cement/Sand (Ratio 1:4) protective screed, using an integral waterproofing compound shall be applied on top of the membrane.
- If the drainage pipes are laid on the floor the minimum thickness of screed should be 20 mm.
- The floor level should be provided with adequate slope considering the pipe thickness.
- Care shall be taken whilst laying the protective screed so as not to damage the waterproofing membrane below.
- The contractor shall take all measures necessary to prevent any damage to the membrane or protective screed during subsequent work.

### **3.0 Method Statement for Waterproofing Treatment for Flat Roofs**

#### **1. Surface Preparation**

- Roof slab must be of sound concrete and honeycomb should not be formed.
- Soundness of roof slab should be checked with rubber or hard nylon hammer and unsound concrete and cracks on the concrete surface to be properly treated with polymer modified mortar (PMM).
- Honeycombing of concrete should be filled with polymer grouts before applying any surface patch material.

- Stair cover or canopy slab should be given adequate slope so that water does not stagnate.
- Depending on quantity of rainfall minimum finished fall required according to BS6229 is 1:80. Rain outlet should be of 100 mm to 150 mm depending upon rainfall
- If area is less than 100 m<sup>2</sup> then minimum 1 outlet should be provided and if greater than 100 m<sup>2</sup> then at least 2 outlets should be provided.
- Rain water outlets shall be fixed in continuity of screed slope throughout the parapet wall.
- Service pipes should be fixed 50 mm to 75 mm away from face of the wall with clamps of anti-corrosive anchor fasteners.
- Solar panel if any should be aligned and fixed on 50 mm thick mortar bed platform.
- Air conditioning units should be aligned and fixed on a specified platform with detailing.
- All the terraces required to be waterproofed using heavy duty acrylic liquid applied coating shall be cleaned thoroughly to remove all loose particles before laying a concrete screed to slope.
- Concrete screed / brick bat coba shall be laid to slope as per the specifications of Engineer-in-charge over the terrace slab. The slope shall be maintained at 1:80 or as per the drawing and shall be cured for a minimum period of 15 days.
- Wherever the Brickbat Coba is specified, the terrace should be undercoated with elastomeric protective coating before application of minimum thickness 1 mm and minimum elongation of 80%.
- The top of screed surface shall be finished slightly rough and all the rain water down take pipes shall be fixed as per the drawing or instructions of Engineer-in-charge.
- Remove water from the terrace after its curing and leave the surface to get dried.
- Thorough inspection shall be done to locate / identify any shrinkage cracks. All major shrinkage cracks, if any, shall be filled with polymer-based crack filling ready to use paste form crack filling material up to 5 mm wide cracks and wider cracks need to be filled with polymer modified mortar.
- Angle fillet (corner rounding) of 75 mm x 75 mm shall be done using polymer modified mortar at all horizontal and vertical junctions (roof slab & parapet wall junction) along with screed mixed with waterproofing compound.
- Angle fillets to be provided and properly dressed with waterproofing materials at parapet to slab junctions, platforms for service units and upstands.
- Finally, clean the surface once again thoroughly to remove all dust and cement particles.

## 2. Liquid applied seamless coating for terrace

### 2.1 Material

The waterproofing material should **at least** satisfy following performance requirement as per the mentioned test standard/equivalent standard.

| Properties   | Test Method        | Values                   |
|--|--------------------|--------------------------|
| Hardness (Shore A)                                 | ASTM D 2240 : 2002 | 80                       |
| Tensile Strength, N/mm <sup>2</sup>                | ASTM D 412 : 2002  | >1.2                     |
| Elongation at Break, %                             | ASTM D 412 : 2002  | > 80                     |
| UV Resistant – Accelerated Weathering (2000 hours) | ASTM G 154 : 2000  | No thermal degradation   |
| Adhesion Strength, N/mm <sup>2</sup>               | ASTM D 4541 : 2002 | >1                       |
| Water Vapour Transmission, gm/m <sup>2</sup> /day  | ASTM E 96 : 2000   | 15                       |
| Algae & Fungus Resistant                           | SS 345 : 1998      | No algae & fungus growth |
| Crack Bridging                                     | ASTM C 836 : 1995  | Up to 2 mm width         |

### 2.2 Waterproofing Application

#### 2.2.1 Primer Application

- Pre wet the surface prior to application of primer and allow surface water to evaporate to make surface saturated dry (SSD) condition.
- Apply acrylic based primer (diluted with water as per manufacture's specification) on the cleaned surface or as per manufactures specification to enhance the adhesion of the membrane to the substrate and blocking the surface pores.
- Allow the primer coat to dry.

#### 2.2.2 Terrace waterproofing Application

- Apply 1<sup>st</sup> coat of on the dried primer coat uniformly with a roller at coverage as specified by Manufacturer. Apply 2<sup>nd</sup> and 3<sup>rd</sup> coat at the same rate after drying of the previous coat to achieve a thickness of 1-1.2 mm in 3 coats.
- Roof in excess of area of 200 sq.m should be provided with reinforcing fabric mesh between 1<sup>st</sup> & 2<sup>nd</sup> coat.
- Make some square grid of 1m x 1m or 2 m x 2m for ensuring the consumption of right quantity of material as specified in the same grid.

- The drying time for each coat depends on the ambient temperature and can vary from place to place. At 30 degree C, the coat will dry up within 6 to 8hour.
- All the concrete / masonry pedestals present on the roof, constructed for supporting the water tanks or pipe lines or dish antenna/solar panel, etc., also should be coated with extra coat of same material incorporating reinforcing fabric.
- Allow the system to air cure for 7 days prior to carry out ponding test.

### 2.2.3 Application on Parapet walls

- The application on parapet surface must continue over the parapet wall up to the top. If desired, one can terminate the coating at 300 mm height on the vertical face of a parapet wall at the drip mould, made in plaster. In absence of any such drip mould, the coating shall be extended till top of parapet wall.
- All rain water pipe 'openings' shall be coated with same waterproofing coating from inside to a distance of 50 mm.

## 3. APP Preformed torch applied membrane for large terrace<sup>1</sup>/for terrace garden<sup>2</sup>/for terrace of higher rainfall areas<sup>2</sup>/ for terrace of mechanical traffic<sup>2</sup>

### 3.1 Material

APP torch applied membrane made from high-grade bitumen & selected polymers should be used. The APP modified bitumen should be coated to non-woven Polyester reinforcement to give high tear & puncture resistance. The thickness should be 3 to 4 mm as per the requirement. It should satisfy following performance requirement as per the mentioned test standard/equivalent standard.

| Properties   | Standards               | <sup>1</sup> Values | <sup>2</sup> Values |
|--|-------------------------|---------------------|---------------------|
| Softening point, °C                                      | ASTM D 36               | ≥ 150               | ≥ 150               |
| Low temperature flexibility, ° C                         | ASTM D 5147             | (-) 20              | (-) 20              |
| Heat resistance, compound stability @ 100 °C for 2 hours | ASTM D 5147             | No flow             | No flow             |
| Tensile strength, N/5 cm                                 | EN 12311-1              |                     |                     |
| Longitudinal   |                         | 350 ± 150           | 700 ± 150           |
| Transverse   |                         | 300 ± 90            | 450 ± 90            |
| Tear strength, N   | ASTM D 5147             |                     |                     |
| Longitudinal   |                         | 180 ± 50            | 300 ± 50            |
| Transverse   |                         | 200 ± 50            | 250 ± 50            |
| Water absorption, % Wt @ 23 °C for 24 hrs                | ASTM D 5147             | 3.2                 | 3.2                 |
| Resistance to water pressure 5 bar/50 m                  | UEAtc M. O. A. T.<br>30 | -                   | No leakage          |

### 3.2 Application

### **3.2.1 Primer Application**

- Apply solvent-based bitumen primer on cleaned concrete surface as per Manufacturer's specification to enhance the adhesion of the membrane to the substrate.
- Allow the primer coat to dry. The drying will generally depend on the ambient temperature

### **3.2.2 Membrane Application**

- Unroll the APP membrane roll once the priming coat is dried from lowest sloped point of the roof terrace.
- Align the APP membrane roll correctly & re-roll it half in alignment before torching. Avoid shifting of the membrane while torching.
- Use gas burner to heat the terrace substrate & underside of the APP membrane to softening points. When the embossing disappears, roll forward & press firmly against substrate to bond from the lower end towards the higher end.
- Ensure sufficient bleed on side & end over laps. Once the half of the roll is torched properly to the substrate, unroll the balance roll and repeat the process.
- An overlap of 100-mm shall be maintained for all the continuing sides. Heating shall be done on both the membranes to be overlapped and pressed firmly with the help of round shape trowel. The care shall be taken to leave no gap at any point in the overlapped area. If noticed, reheating shall be done to seal it.
- All angles & abutments up stands should be sealed with extra care to ensure perfect bondage. Seal the edges well into grooves & protect with a Polysulphide sealant.
- In case of open drains running along the slab for water to get collected and then drained out through a down take pipe, the size and shape of the drain should be sufficient to allow the laying of membrane in the drain. In such case, the rectangular corner of screed and drain shall be chamfered for membrane to take smooth curve inside the drain. The membrane shall be screwed with GI screws to the drain wall along with aluminum or GI strip.
- The drain shall have an adequate slope towards the down take pipe (1:100), the same shall be ensured before starting application of membrane.
- In case of inadequate drain size (for fixing the membrane); the waterproofing of drain section shall be done with polymer modified bituminous coating, which is a cold applied waterproof coating. Apply 3 coats to cover the entire drain section and overlay with a screed of 20 mm thick mortar mixed with integral waterproofing compound to protect the surface. The plaster shall be finished smooth and cured for 7 days.

### **3.2.3 Termination of Membranes**

- The membranes shall be first laid up to the parapet wall junction and then shall be overlapped with another membrane (flashing) with an overlap of 100 mm and taken upward on the parapet wall up to a distance of 300 mm. This overlap shall be firmly sealed over the corner rounding or fillet area at the junction of parapet wall and slab.
- The rendering shall be done above this level till top of parapet wall to match the level of membrane and drip mould shall be created in the plaster at the place where membranes is terminated to drift the rainwater away from the membrane. Alternatively an aluminum or G.I. sheet flashing can also be fixed over the membrane, fixed with GI screws with the parapet wall.

### **3.2.4 Termination at the opening of rain water pipes**

Membrane should also be torched and glued to the inside of the rain water down take pipes

### **4. Expansion Joint Treatment**

- In the case of large roofs with an expansion joints, the membrane application should be terminated at the joint.
- A curb wall of 100 mm thick shall be constructed on both sides of joint, which may be from 150 mm to 200 mm in height.
- The curb wall shall be plastered smoothly and corner rounding with polymer-modified mortar shall be done before terrace waterproofing applications starts.
- The joint shall be covered either with GI strip fixed on one of the curb walls while leaving other end free or by neoprene sheet.
- The expansion joint shall be filled with 2 part flexible Polysulphide Sealant in accordance with the product specifications.
- Prepare the joints maintaining depth to width ratio as 1:2.
- Insert back up material or filler board made from polystyrene to required depth
- Insert polystyrene rod as a bond breaker over back up material
- Use masking tape on the both edges of the joint to have proper finish

### **5. Ponding Test**

Ponding test shall be carried out at a depth of 50 mm for 48 hours to check the water tightness of the system after closing all the rain water outlets. Necessary remedial actions should be taken for any seepage or leakage of water. The waterproofing shall be considered satisfactory, if no leaks or damp patches show on the soffit.

### **6. Protective measure**



- No screed is required for normal foot traffic however movement of machinery & equipment are not allowed on the coated surface
- For movement of machinery & equipment, a layer of 12mm thick Cement/Sand (Ratio 1:4) protective screed, using an integral waterproofing as specified by manufacturer shall be applied on top of the membrane.
- The top screed over the waterproofing coating either should be casted in panels or a minimum joint of 12 mm by 12 mm should be created to allow thermal movement. The joints should be filled with elastomeric sealant.
- In case of APP torch applied glass finished membrane and non-foot traffic area the surface should be finished with aluminum paint.
- In case of APP torch applied glass finished membrane, the self-finished mineral surface provides a decorative and solar protective finish for the waterproofing membrane system.
- Suitable anti-root treatment shall be provided over the screed for terrace garden surface as per the consultant's specification.
- For terrace garden use APP modified bitumen torch-on, root resistant waterproofing membrane reinforced with spun bond non-woven polyester fabric.

## 4.0 Waterproofing Treatment for Corrugated Sheets (A.C/ G.I) Slopped Roof

### 1. Material

APP modified bitumen Torchshield membranes made from High-grade bitumen & selected polymers. The performance standard of materials as mentioned above<sup>1</sup>.

### 2. Application

- Clean the surfaces thoroughly, as they should be free from oil, grease, dust, debris and unsound substrate.
- Apply solvent-based bitumen primer on cleaned & leveled surface as per Manufacturer's specification.
- Starting at low point from the roof, unroll the 1.5 -2.0 mm membrane after 1-2 hour of application of primer or once the primer has reached dry condition.
- Align the membrane roll correctly & re-roll it half in alignment before torching. Avoid shifting of the membrane while torching.

- Use gas burner to heat substrate & underside to softening points. When the embossing disappears, roll forward & press firmly against substrate to bond from the lower end towards the higher end. Ensure sufficient bleed on side & end over laps.
- Keep doing the above process until one half part of the roll torching is done. Afterward repeat the same process as explained above for the half-untorched roll.
- For other new roll to be torched keep an overlap margin for minimum 100-mm at both the side and lower end.
- Heat both the overlaps & use round tipped trowel to seal overlap. Excess compound should be smoothed & pressed into seam using hot trowel.
- In case on non-sanded membrane, sprinkle sand on the top surface by torching the top of membrane for better adhesion.
- Apply two coats of Aluminium paint over the finished membrane

## 5.0 Waterproofing Treatment over Basement

### 1. Material

For normal basement waterproofing, torch applied APP polymer modified membranes with modified bitumen having upper and lower surfaces laminated with polyethylene film can be used. The material properties, application procedure and protection measures should be followed as explained earlier for APP torch on membrane.

EPDM rubber based prefabricated membrane for high water table & long service life. It should satisfy following performance requirement as per the mentioned test standard/equivalent standard.

| Properties   | Standards  | Values                 |
|--|------------|------------------------|
| Thickness, mm  | EN 1849-1  | 1.14/1.2/1.5           |
| Tolerance on Nominal Thickness, %  | ASTM D 412 | (+)10                  |
| Tensile Strength, min N/mm <sup>2</sup>  | ASTM D 412 | 9                      |
| Elongation, Ultimate, min %  | ASTM D 412 | 300                    |
| Tear Strength, min, (KN/m)   | ASTM D 624 | 27                     |
| Factory Seam Strength, min   | ASTM D816  | Sheet failure at 24 kg |
| Brittleness Point, max (°C)  | ASTM D 746 | (-) 45                 |
| Tensile Strength, min, (MPa)   | ASTM D 412 | 5                      |
| Elongation, Ultimate, min %  | ASTM D 412 | 200                    |
| Tear Strength, min, (KN/m)   | ASTM D 624 | 22                     |
| Linear Dimensional change, max, %  | ASTM D1204 | 0.3                    |
| Resistance to water absorption: After 7 days immersion @ (70°C) Change in mass, max, % | ASTM D 471 | 1.2                    |

|  |           |     |
|--|-----------|-----|
| Water vapour Permeance, Max, perms<br>(Proc B or BW) | ASTM E 96 | 0.1 |
|--|-----------|-----|

## 2. Surface Preparation

- Soundness of slab should be checked with rubber or hard nylon hammer and unsound concrete and cracks on the concrete surface to be properly treated with polymer modified mortar (PMM).
- Honeycombing in concrete should be filled with polymer grouts before applying any surface patch material.
- The pile heads should be cut and brought in same height followed by proper dressing with high strength polymer modified mortars or epoxy grout materials.
- The waterproofing method statement should include the detailing to cover the peripheries of all the upstands like Earth Rod, Pressure release pipes etc.
- The construction joints should be watertight with flexible waterbar.
- The raft surface should be thoroughly cleaned using a wire brush and any laitance on the surface is removed by chipping
- Dust, dirt, foreign matter or any debris is removed from the surface. Fine dust is removed using a fine bristled brush
- The substrate must be completely dry before installation of membrane.

## 3. Application

- Over the prepared substrate, install a minimum 150 GSM geotextile as a cushion layer.
- After installing the cushion layer, align the EPDM membrane and once alignment is done, install the membrane properly as loose laid.
- The overlap shall be of minimum 100 mm. The overlap shall be sealed with quick applied Seam Tape (tape overlap should be 175 mm).
- Before installing the seam tape, the seam area must be prepared by means of splice primer as per manufacture's recommendation to enhance the adhesion properties between two membranes.
- For any vertical surface a bonding adhesive should be used for fully bonding
- PU sealant should be used to seal at all termination of membrane and lap joint locations.

## 4.0 Protective Measures

- Once the membrane installation is over, a minimum 150 GSM geotextile to be placed to protect the membrane from mechanical damages.
- Over the installed system, 50 mm thick protection screed admixed with liquid waterproofing compound to be installed prior to reinforcement work.

## 6.0 Waterproofing Treatment on Retaining Structures

(Any water retaining structures, water tank, swimming pool etc.)

### 1. Material

For high water table areas crystalline system should be used. It should comprise of high quality cement, properly selected & graded inert aggregates, proprietary waterproofing active chemicals & additives should be used. The crystalline system should confirm to below properties.

| Properties                          | Standards                | Values  |
|-------------------------------------|--------------------------|---------|
| Water permeability                  | BS EN 12390 Part 8: 2000 | Nil     |
| Water pressure head, m              | -                        | 40 - 50 |
| Rate of water penetration /week, mm | -                        | 2       |

Two components cementitious coating system should be used for any other retaining structures, water tank, swimming pool etc. The following properties of cementitious coating should satisfy as per mentioned standard.

| Properties                            | Standards           | Values |
|---------------------------------------|---------------------|--------|
| Water penetration (5 bar pressure), % | BS EN 12390         | 1      |
| Tensile strength, N/mm <sup>2</sup>   | ASTM D 412          | 1      |
| Elongation at break, %                | ASTM D 412          | > 120  |
| Food grade certification              | CFTRI certification | Passes |

### 2. Surface Preparation

- Soundness of slab should be checked with rubber or hard nylon hammer and unsound concrete and cracks on the concrete surface to be properly treated with polymer modified mortar (PMM).
- Honeycombing in concrete should be filled with polymer grouts before applying any surface patch material.
- Provide angle fillet of 100 mmx100 mm at wall and slab junctions along with screed mixed with waterproofing compound.
- All PVC pipes should be wrapped with two sided bituminous tape.

- Fill the gap around PVC pipe and concrete with free flowing cementitious grout.
- Ensure that the surface should be sound, thoroughly prepared by mechanical surface scarification, shot blasting, etc. and vacuum cleaned to a finish of a sand paper to allow crystalline products to penetrate effectively.
- Remove dirt, laitance, loose particles, paints, etc., by means of mechanical grinding, sand blasting, pressure water cleaning or suitable mechanical means.
- Clean with water jet and make surface saturated dry (SSD) condition.

### 3. Application

- Mix the powder with one part of water as per Manufacturer’s specification to form slurry and apply with brush on the surface in two coats. Apply the second coat while the first coat is still tacky
- Allow the coating to dry for 24 hrs and moist curing to commence after 24hrs of application. The curing has to be done for at least 7 days. Wherever possible ponding can be also done after 24 hrs of application of coating.

## 7.0 Waterproofing Treatment on External Wall Surfaces

### 1. Material

Elastomeric acrylic based waterproofing coating having crack bridging ability to achieve a thickness of 110 microns in two coats. It should satisfy following performance requirement as per the mentioned test standard/equivalent standard.

| Properties   | Test Method        | Values                   |
|--|--------------------|--------------------------|
| Tensile Strength, N/mm <sup>2</sup>                              | ASTM D 412 : 2002  | >1.5                     |
| Elongation , %   | ASTM D 412 : 2002  | > 100                    |
| UV Resistant – Accelerated Weathering (2000 hours)               | ASTM D 4587        | No thermal degradation   |
| Adhesion Strength, N/mm <sup>2</sup>                             | ASTM D 4541 : 2002 | >1                       |
| Algae & Fungus Resistant   | SS 345 : 1998      | No algae & fungus growth |
| Carbon dioxide diffusion (equivalent air layer thickness), meter | DIN EN 1062-6:2002 | 55                       |

### 2. Surface Preparation

- All new cement-sand renderings /concrete surfaces should be allowed to age minimum 28 days before surface coating.
- Cracks on the surface to be properly treated with polymer crack filling material after routing cracks in form of 'V' grooves.
- Remove dirt, laitance, loose particles, paints, etc., by means of pressure water cleaning or wire brushing.
- Clean with water jet and make surface saturated dry (SSD) condition.

### **3. Application**

- Prime the surface with an acrylic based primer diluted with potable water as per manufacture's specification and allow the primed surface to dry for 2 to 3 hours.
- Apply two coats of elastomeric coating without dilution by a roller at a time interval of 5-6 hours.
- For enhanced protection, apply additional coat on rain lashing walls, chajjas and parapet walls, surfaces exposed to industrial environment & marine climate.

**Responses may be emailed to [amit.bhardwaj@gov.in](mailto:amit.bhardwaj@gov.in) or sent to the Office of Shri Amit Bhardwaj Dy. Adviser (Transport), Room 427B, NITI AAYOG, Sansad Marg, New Delhi – 110001 latest by 13th April 2018**