

**Design, Build and Commissioning of 7 MLD
Common Effluent Treatment Plant (CETP) and 0.5
MLD Package Sewage Treatment Plant (STP) at
DPIA on EPC basis with 4 years Operation and
Maintenance - Package B**

VOLUME 1
PART 4 CONDITIONS OF CONTRACT
July 2026



Managing Director
Maharashtra Industrial Township Limited
Udyog Sarathi, MIDC Office, Marol Industrial Area,
Andheri (East), Mumbai, Maharashtra State, India - 400093

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1. GENERAL PROVISIONS

1.1 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:

- 1.1.1 **“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.
- 1.1.2 **“Advance Payment”** shall have the meaning set forth in the recitals.
- 1.1.3 **“Affected Party”** shall have the meaning set forth in the recitals.
- 1.1.4 **“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).
- 1.1.5 **“Agreement”** means this Agreement, its Recitals, the Schedules hereto and any amendments thereto made in accordance with the provisions contained in this Agreement.
- 1.1.6 **“Applicable Laws”** means all laws, brought into force and effect by GOI or the State Government including rules, regulations and notifications made there under, and judgments, 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.
- 1.1.7 **“Applicable Permits”** means all clearances, licenses, permits, authorisations, no objection certificates, consents, approvals and exemptions required to be obtained or maintained under Applicable Laws in connection with the construction, operation and maintenance of the Project Works during the subsistence of this Agreement.
- 1.1.8 **“Appointed Date”** means the date of signing of the Contract.
- 1.1.9 **“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.
- 1.1.10 **“Bank”** means a nationalised bank (incorporated in India and approved by RBI).
- 1.1.11 **“Bank Rate”** means the Repo rate of interest announced by the Reserve Bank of India for all its lending operations on the Base Date.

- 1.1.12 **“Base Date”** means the last date of that calendar month, which date precedes the Bid Due Date by at least 28 (twenty-eight) days.
- 1.1.13 **“Bid”** means the documents in their entirety comprised in the bid submitted by the [selected bidder/Consortium] in response to the Request for Qualification cum Request for Proposals in accordance with the provisions thereof.
- 1.1.14 **“Bid Security”** means the Bid Security provided by the Contractor to the Employer in accordance with the Request for Proposal, and which is to remain in force until substituted by the Performance Security.
- 1.1.15 **“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 judgment 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.
- 1.1.16 **“Change of Scope”** shall have the meaning set forth in the recitals;
- 1.1.17 **“Change of Scope Notice”** shall have the meaning set forth in the recitals;
- 1.1.18 **“Change of Scope Order”** shall have the meaning set forth in the recitals;
- 1.1.19 **“Completion Certificate”** shall mean the certificate issued by the employer upon successful conclusion of the construction phase of the project, including the testing, commissioning, trial runs, and performance guarantee test run (PGTR);
- 1.1.20 **“Construction”** shall have the meaning set forth in the recitals;
- 1.1.21 **“Construction Period”** means the period commencing from the Appointed Date and ending on the date of the Completion Certificate;
- 1.1.22 **“Contract”** means the Contract Agreement, the Letter of Award, the Form of Bid, Conditions of Contract, Contract Data Sheet, Employer’s Requirements, General Specifications, Schedules and Datasheets, Indicative Tender Drawings and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Award.
- 1.1.23 **“Contract Price”** means the amount specified in the recitals;

- 1.1.24 **“Contractor”** means the person(s) named as contractor in the Form of Bid whose tender has been accepted by the Employer and the legal successors in title to this person(s).;
- 1.1.25 **“Contractor’s Personnel”** means the Contractor’s Representative and all personnel who may include the staff, labour, other employees of the Contractor, personnel utilised by Contractor on Site, and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.
- 1.1.26 **“Subcontractor”** means any person appointed by Contractor for design, execution, operation, maintenance of any part of the Works; and the legal successors in title to each of these persons.
- 1.1.27 **“Contractor Default”** shall have the meaning set forth in the recitals;
- 1.1.28 **“Damages”** shall have the meaning set forth in the recitals;
- 1.1.29 **“DBO”** means Design Build and Operate
- 1.1.30 **“Defect”** means any defect or deficiency in the Construction of the Works or any part thereof, which does not conform with the Specifications and Standards, and in the case of Maintenance, means any defect or deficiency which is specified in Schedule E;
- 1.1.31 **“Defects Liability Period”** shall have the meaning set forth in the recitals;
- 1.1.32 **“Dispute”** shall have the meaning set forth in the recitals;
- 1.1.33 **“Dispute Resolution Procedure”** means the procedure for resolution of Disputes set forth in the recitals;
- 1.1.34 **“Drawings”** means all of the drawings, calculations and documents pertaining to the Project Works as set forth in Schedule I, and shall include ‘as built’ drawings of the Project Works;
- 1.1.35 **“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;
- 1.1.36 **“Emergency”** means a condition or situation that is likely to endanger the safety or security of the individuals on or about the Project Works, including Users thereof, or which poses an immediate threat of material damage to any of the Project Assets;
- 1.1.37 **“Employer”** means the entity/person named as employer in the Contract Data sheet and the legal successors in title to this person.
- 1.1.38 **“Employer Default”** shall have the meaning set forth in the recitals;
- 1.1.39 **“Employer’s Engineer”** or **“Engineer-in-Charge”** means the person appointed by the Employer from time to time to act as the Engineer;

- 1.1.40 **“Employer’s Personnel”** means such person or persons as may be authorised in writing by the Employer to act on its behalf under this Agreement and shall include any person or persons having the Employer to exercise any rights or perform and fulfil any obligations of the Employer under this Agreement;
- 1.1.41 **“Encumbrances”** means, in relation to the Project Works, 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 Works, where applicable herein but excluding utilities referred to in the recitals;
- 1.1.42 **“EPC”** means Engineering, Procurement and Construction;
- 1.1.43 **“Final Payment Certificate”** shall have the meaning set forth in the recitals;
- 1.1.44 **“Final Payment Statement”** shall have the meaning set forth in the recitals;
- 1.1.45 **“Force Majeure”** or **“Force Majeure Event”** shall have the meaning ascribed to it in the recitals;
- 1.1.46 **“GOI”** or **“Government”** means the Government of India;
- 1.1.47 **“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;
- 1.1.48 **“Government Instrumentality”** means any department, division or subdivision of the Government or the State Government and includes any commission, board, Employer, agency or municipal and other local Employer 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 Works or the performance of all or any of the services or obligations of the Contractor under or pursuant to this Agreement;
- 1.1.49 **“Indemnified Party”** means the Party entitled to the benefit of an indemnity pursuant to the recitals;
- 1.1.50 **“Indemnifying Party”** means the Party obligated to indemnify the other Party pursuant to the recitals;
- 1.1.51 **“Indirect Political Event”** shall have the meaning set forth in the recitals;
- 1.1.52 **“Insurance Cover”** means the aggregate of the maximum sums insured under the insurances taken out by the Contractor pursuant to Clause 13, and includes all insurances required to be taken out by the Contractor under relevant sub clauses of Clause 13 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;
- 1.1.53 **“Intellectual Property”** means all patents, trademarks, 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;
- 1.1.54 **“Interim Payment Certificate”** or **“IPC”** means the interim payment certificate issued by the Employer’s Engineer for payment to the Contractor in respect of the Contractor’s claims for payment raised in accordance with the provisions of this Agreement;
- 1.1.55 **“LOA”** or **“Letter of Award”** means the letter of award referred to in Recital (E);
- 1.1.56 **“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;
- 1.1.57 **“Materials”** are all the supplies used by the Contractor for incorporation in the Works or for the maintenance of the Project Works;
- 1.1.58 **“Non-Political Event”** shall have the meaning set forth in the recitals;
- 1.1.59 **“Parties”** means the parties to this Agreement collectively, and **“Party”** shall mean any of the parties to this Agreement individually;
- 1.1.60 **“Performance Security”** shall have the meaning set forth in the recitals;
- 1.1.61 **“Plant”** means the apparatus and machinery intended to form or forming part of the Works;
- 1.1.62 **“PMNC”** shall mean Program Manager for New Cities, i.e. the Project/Program Management Consultant appointed by the Employer.
- 1.1.63 **“Political Event”** shall have the meaning set forth in the recitals;
- 1.1.64 **“Programme”** shall have the meaning set forth in the recitals;
- 1.1.65 **“Project”** means the Construction and Maintenance of the Project Works 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;
- 1.1.66 **“Project Assets”** means all physical and other assets relating to (a) tangible assets such as civil works and equipment including foundations, civil tanks and structures, buildings, process control hardware and software, electro-mechanical equipment, piping, valves,

- electrical equipment and motor control centres, field instruments and control system, drainage works (b) Project Facilities situated on the Site;
- 1.1.67 **“Project Completion Date”** means the date on which the Completion Certificate is issued;
- 1.1.68 **“Project Completion Schedule”** means the progressive Project Milestones set forth in Clause 17 for completion of the Project Works on or before the Scheduled Completion Date;
- 1.1.69 **“Project Works”** or **“Works”** means the site comprising the existing road forming part of the Design, Build and Commissioning of 7 MLD Common Effluent Treatment Plant (CETP) and 0.5 MLD Package Sewage Treatment Plant (STP) at DPIA on EPC basis with 4 years Operation and Maintenance - Package B and all project assets, and its subsequent development and augmentation in accordance with this Agreement;
- 1.1.70 **“Quality Assurance Plan”** or **“QAP”** shall have the meaning set forth in the recitals;
- 1.1.71 **“Re.”**, **“Rs.”** or **“Rupees”** or **“Indian Rupees”** means the lawful currency of the Republic of India;
- 1.1.72 **“Retention Money”** shall have the meaning set forth in Clause 3.6;
- 1.1.73 **“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 and maintenance of the Project Works in accordance with this Agreement;
- 1.1.74 **“Scheduled Completion Date”** shall have the meaning set forth in the recitals.
- 1.1.75 **“Scope of the Project”** shall have the meaning set forth in Clause 1.8; **“Section”** means a part of the Project Works.
- 1.1.76 **“Site”** shall have the meaning set forth in Clause 1.9;
- 1.1.77 **“Specifications and Standards”** means the specifications and standards relating to the quality, quantity, capacity and other requirements for the Project Works, as set forth in Volume 2 - Employer’s Requirements, Volume 3 - General Specifications, Volume 5 - Tender Drawings, other relevant parts of the tender and any modifications thereof, or additions thereto, as included in the design and engineering for the Project Works submitted by the Contractor to, and expressly approved by the Employer;
- 1.1.78 **“Subcontractor”** means any person or persons to whom a part of the Works or the Maintenance has been assigned for completion/execution/operation by the Contractor and the permitted legal successors in title to such person, but not an assignee to such person;
- 1.1.79 **“Taxes”** means any Indian taxes including Goods and Services Tax, 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 Works 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;

- 1.1.80 **“Termination”** means the expiry or termination of this Agreement as per Clause 11 [Termination];
- 1.1.81 **“Termination Notice”** means the communication issued in accordance with this Agreement by one Party to the other Party terminating this Agreement;
- 1.1.82 **“Termination Payment”** means the amount payable by either Party to the other upon Termination in accordance with Clause 11.8 [Termination Payment] ;
- 1.1.83 **“Tests”** means the tests set forth in Part 1 of Volume 2- Employer’s Requirements to determine the completion of Works in accordance with the provisions of this Agreement;
- 1.1.84 **“Time Extension”** shall have the meaning set forth in Clause 4.6 [Extension of time for completion];
- 1.1.85 **“User”** means a person who uses or intends to use the Project Works or any part thereof;
- 1.1.86 **“Valuation of Unpaid works”** shall have the meaning set forth in the recitals;
- 1.1.87 **“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.

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 Works, 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, upgradation 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 today shall mean a reference to a calendar day.
- j) references to a “business day” shall be construed as a reference to a day (other than a Sunday) on which banks in Raigad, Maharashtra are generally open for business.
- k) any reference to a 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 the 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 “reorganization” 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, reorganization, 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, license or document of any description shall be construed as reference to that Agreement, deed, instrument, license or other document as amended, varied, supplemented, modified or suspended at the time of such reference; provided that this Clause shall not operate so as to increase liabilities or obligations of the Employer hereunder or pursuant hereto in any manner whatsoever;
- t) any agreement, consent, approval, authorization, notice, communication, information or report required under or pursuant to this Agreement from or by any Party or the Employer’s Engineer shall be valid and effective only if it is in writing under the hand of a duly authorized representative of such Party or the Employer’s Engineer, as the case may be, in this behalf and not otherwise.
- u) the Schedules, any addendum/corrigendum 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 or Schedules in this Agreement shall, except where the context otherwise requires, mean references to Recitals, Articles, Clauses, Sub-clauses and Schedules of or to this Agreement, and references to a Paragraph shall, subject to any contrary indication, be construed as a reference to a Paragraph of this Agreement or of the Schedule in which such reference appears.
- w) the damages payable by either Party to the other of them, as set forth in this Agreement, whether on a per diem basis or otherwise, are mutually agreed genuine per-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 Employer shall be provided free of cost and in five copies, and if the Employer 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 Order of Precedence

- 1.3.1 The documents forming the Contract should be regarded as mutually explanatory. For interpretation purposes, the order of priority of the documents shall be as follows:

- a) Contract Agreement,
- b) Letter of Award,
- c) Form of Bid,
- d) Contract Data Sheet,
- e) Employer's Requirements,
- f) Particular Conditions of Contract for O&M,
- g) Conditions of Contract,
- h) General Specifications,
- i) Indicative Tender Drawings and
- j) Schedules and any other documents forming part of the Contract.

If an ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.

- 1.3.2 Subject to the provisions of Clause 1.3 (a), 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/ Stringent/ better/ higher specification relevant to the issue under consideration shall prevail over those in other Clauses.
- b) between the written description on the Drawings and the Specifications, the latter shall prevail.
- c) between the dimension scaled from the Drawing and its specific written dimension, the latter shall prevail; and
- d) Between any value written in numerals and that in words, the latter shall prevail.

1.4 Representations and Warranties

- 1.4.1 Representations and Warranties of the Contractor

The Contractor represents and warrants to the Employer that:

- a) it is duly organised and validly existing under the laws of India and has full power and authority/capability 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/or 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 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 Employer 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 Employer 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; and
- m) nothing contained in this Agreement shall create any contractual relationship or obligation between the Employer and any Sub- contractors, designers, consultants, or agents of the Contractor.

1.4.2 Representations and Warranties of the Employer

The Employer 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 the 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 defaults 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 Employer'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 rights to the Site.

1.4.3 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.

1.4.4 Disclaimer

- a) The Contractor acknowledges that prior to the execution of this Contract Agreement, the Contractor has, after a complete and careful examination, made an independent evaluation of the Request for Qualification (RFQ) cum Request for Proposal (RFP), Scope of the Project, Specifications and Standards of design,

Approved Vendor List, Construction and Maintenance, Project Site, local conditions including weather conditions throughout the year, climate change impacts, physical qualities of ground, subsoil and geology, traffic volumes, suitability and availability of access routes to the Project Site and all information provided by the Employer 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 1.4.2, the Employer makes no representation whatsoever, express, implicit or otherwise, regarding the accuracy, adequacy, correctness, reliability and/or completeness of any assessment, assumptions, site survey data, statement or information provided by it, and the Contractor confirms that it shall have no claim whatsoever against the Employer in this regard.

- b) The Contractor acknowledges and hereby accepts to have satisfied itself as to the correctness and sufficiency of the Contract Price.
- c) 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 1.4.1 (a) above and hereby acknowledges and agrees that the Employer 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.
- d) The Parties agree that any mistake or error in or relating to any of the matters set forth in Clause 1.4.1 (a) above shall not vitiate this Agreement or render it voidable.
- e) In the event that either Party becomes aware of any mistake or error relating to any of the matters set forth in Clause 1.4.1 (a) above, that Party shall immediately notify the other Party, specifying the mistake or error.
- f) Except as otherwise provided in this Agreement, all risks relating to the Project shall be borne by the Contractor, and the Employer shall not be liable in any manner for such risks or the consequences thereof.

1.5 Employer's Use of Contractor's Document

- 1.5.1 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.
- 1.5.2 The Contractor shall be deemed (by signing the Contract) to give to the Employer 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 the Contract, including replacements of any computers supplied by the Contractor.

1.5.3 All the rights to the Construction Documents and other design documents are to be assigned to the Employer.

1.6 Contractor's Use of Employer's Document

1.6.1 Employer shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Employer. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor.

1.7 Confidentiality

1.7.1 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 agreement of the Employer.

1.8 Scope of the Project

1.8.1 Under this Agreement, the scope of the Project (the "Scope of the Project") shall mean and include the relevant section described in Volume 2, including but not limited to Part 1 [General requirements] and Part 2 [Process Specifications].

1.9 Site

1.9.1 The site of the Project Works (the "Site") shall comprise the site described in Volume 2, Employer's Requirements, in respect of which the Right of Way shall be provided by the Employer to the Contractor. The Employer shall be responsible for:

- a) acquiring and providing land on the site in accordance with the land use plan finalised by the Employer, free from all encroachments and encumbrances, and free access thereto for the execution of this Agreement; and
- b) obtaining licenses and permits for environmental clearance, Consent to Establish, Consent to Operate, etc, for the Project Works.

1.10 Inspections and Audit

1.10.1 The Employer or any representative authorised by the Employer on his behalf may inspect and review the progress and quality of the construction of Project Works and

issue appropriate directions to the Employer's Engineer and the Contractor for taking remedial action in the event the Works are not in accordance with the provisions of this Agreement.

- 1.10.2 At any time during construction, the Employer may appoint an external technical auditor to audit the quality of the Works. The findings of the audit, to the extent accepted by the Employer, shall be notified to the Contractor and the Employer'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 1.8, the external technical audit shall not affect any obligations of the Contractor or the Employer's Engineer under this Agreement.

1.11 Obligations of the Employer

- 1.11.1 The Employer shall, at its own cost and expense, undertake, comply with, and perform all its obligations set out in this Agreement or arising hereunder.
- 1.11.2 To assist in the due discharge of its obligation, the Employer has appointed a Programme Manager for New Cities ("PMNC") to act as "Employer's Engineer" wherein M/s Haskoning India Consulting Pvt. Ltd. is appointed as the PMNC. The role of the Employer's Engineer is to perform activities necessary to plan, integrate, package, administer, and manage the implementation of the DPIA Project. Specifically, the Employer's Engineer will be responsible during the design and construction stage for overseeing the work of consultants and contractors, including reviewing, monitoring, resolving interface issues, and reporting to the State Nodal Agency and MITL on the Programme's progress. All communications and documents related to contract management, project and construction progress, design, drawings, method statements, quality, health, safety and environment, etc, shall be submitted to the Employer's Engineer for final approval of the Employer.
- 1.11.3 The Employer's Engineer's decision on the Scope of the Project shall be final for the contract.
- 1.11.4 The Employer 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 the 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) that no barriers that would have a material adverse effect on the Works are erected or placed on or about the Project Site by any Government Instrumentality or persons claiming through or under it, except for reasons of Emergency, national security, law and order or collection of inter-state Taxes.
- 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

2. THE ENGINEER

2.1 Appointment of the Employer's Engineer

- 2.1.1 The Employer (MITL) has appointed Haskoning India Consulting Pvt Ltd. (PMNC) to be the Engineer (herein referred to as the "**Employer's Engineer** or **Engineer-in-charge**").
- 2.1.2 The Employer's Engineer may exercise the authority attributable to the Engineer as specified or implied from the Contract. However, under no circumstances shall the Employer's Engineer have authority to modify or amend the Contract.
- 2.1.3 Except as otherwise stated in these Conditions, whenever carrying out duties or exercising authority specified in or implied by the Contract, the Engineer shall be deemed to act for the Employer;
- 2.1.4 Except as otherwise stated in these Conditions, the Engineer has no authority to relieve the contractor of any duties, obligations or responsibilities under the Contract;
- 2.1.5 Except as otherwise stated in these Conditions, any approval, consent, test, inspection, authorisation or absence of approval shall not relieve the Contractor of any responsibility under the Contract, including responsibility for errors, defect liability, omissions, discrepancies and non-compliances.
- 2.1.6 The staff of the Employer's Engineer shall include suitably qualified engineers and other professionals who are competent to assist the Employer's Engineer to carry out its duties.

2.2 Duties and Authority of the Employer's Engineer

- 2.2.1 The Employer's Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. The Employer's Engineer shall perform the duties and exercise the Authority in accordance with the provisions of this Agreement.

2.3 Delegation by the Employer's Engineer

- 2.3.1 The Employer's Engineer may, by order in writing, delegate any of his duties and responsibilities to a qualified representative or may revoke any such delegation, under intimation to the Employer/PMNC and the Contractor. The representative may include a site engineer and/or independent inspectors who are accountable to the Engineer-in-

charge. Provided, however, that the Engineer-in-charge shall be responsible and liable for all actions and omissions of such personnel.

- 2.3.2 Any failure of the Engineer-in-charge to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Employer to reject the work, Plant or Materials, which is not in accordance with the provisions of this Agreement and the Specifications and Standards.

2.4 Instructions of the Employer's Engineer

- 2.4.1 The Employer's Engineer at any time may issue instructions and additional or modified Drawings to the Contractor that may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall take such instructions from the Employer's Engineer, or from its representative to whom appropriate Authority has been delegated under Clause 2.3.
- 2.4.2 The instructions issued by the Employer's Engineer shall be in writing. However, if the Employer's Engineer issues any oral instructions to the Contractor, it shall confirm in writing the oral instructions within 2 (two) working days of issuing them.
- 2.4.3 In case the Contractor does not receive the confirmation of the oral instruction within the time specified in Clause 2.4.2, the Contractor shall seek the written confirmation of the oral instructions from the Employer's Engineer. The Contractor shall obtain acknowledgement from the Employer's Engineer of the communication seeking written confirmation. In case of failure of the Employer's Engineer or its delegated assistant 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.
- 2.4.4 In case of any dispute on any of the instructions issued by the delegated representative, the Contractor may refer the dispute to the Employer's Engineer, who shall then confirm, reverse or vary the instructions within 5 (five) business days of the dispute being referred.

2.5 Determination by the Employer's Engineer

- 2.5.1 The Employer's Engineer shall consult with each Party in an endeavour to reach an agreement wherever this Agreement provides for the determination of any matter by the Employer's Engineer. If such an agreement is not achieved, the Employer's Engineer shall make a fair determination in accordance with this Agreement, having due regard to all relevant circumstances. The Employer's Engineer shall give notice to both the Parties of each agreement or determination, with supporting particulars.
- 2.5.2 Each Party shall give effect to each agreement or determination made by the Employer'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 Employer's Engineer, the Dispute shall be resolved in accordance with the Dispute Resolution Procedure.

2.6 Remuneration of the Employer's Engineer

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

2.7 Termination of the Employer's Engineer

The Employer may, in its discretion, replace the Employer's Engineer at any time, in accordance with Clause 2.1.

3. THE CONTRACTOR

3.1 Contractor's General Obligations

- 3.1.1 The Contractor shall design, execute and complete the Works and subsequently operate and maintain them in accordance with the Contract and as per the Engineer-in-charge's instructions. The Contractor shall also remedy any defects whatsoever in the Works to the satisfaction of the Engineer-in-charge and in accordance with the Contract.
- 3.1.2 The Contractor shall provide the Plant, Equipment, Services and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.
- 3.1.3 The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor shall be responsible for all Contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract.
- 3.1.4 The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Engineer.
- 3.1.5 If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated in the Particular Conditions:
 - a) the Contractor shall submit to the Engineer the Contractor's Documents for this part in accordance with the procedures specified in the Contract;
 - b) these Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications as specified, and shall include additional information required by the Engineer-in-charge to add to the Drawings;
 - c) the Contractor shall be responsible for this part, and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract; and
 - d) Prior to the commencement of the Tests on Completion, the Contractor shall submit to the Engineer-in-charge the "as-built" documents and operation and maintenance manuals in accordance with the Specification and in sufficient detail

for the Employer to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking over until these documents and manuals have been submitted to the Engineer-in-charge.

- 3.1.6
- a) Within 30 days of award of work, the contractor shall provide the site office with independent soundproof air-conditioned cabins for use by the Engineer-in-Charge and PMNC/PMC consultants and their staff. The site office should have at least two meeting rooms (min 10-person seating capacity in each), a pantry, and toilet facilities. The site office shall include necessary furniture, required office equipment, i.e., computer with colour laser printer of latest configuration/software and broadband internet connections, photocopier, for use by the Engineer-in-Charge, PMNC/PMC consultant and its staff.
 - b) The location and layout of site offices shall be approved by the Engineer-in-charge before providing the same.
 - c) The Contractor shall provide electricity, water and telephone connections to the site office at his own cost, along with other required facilities.
 - d) Running expenses of the site office shall be borne by the Contractor.
 - e) The Contractor shall not use any part of the project site or any adjoining/nearby site for a labour camp or for accommodation/housing of any labour without the written permission of the Engineer-in-Charge.
- 3.1.7
- a) The Contractor shall provide and keep available at all times for use by the Employer, the Employer's Engineer and Project staff a minimum of 2 (two) Nos. of Multi-Utility Vehicles (MUVs) of make Maruti, Hyundai, Kia or Toyota. Each MUV shall have a minimum engine capacity of 1500 cc and shall have RTO registration of 2025 or later. The vehicles shall remain available throughout the construction period until commencement of Operations and Maintenance, and shall be provided with a competent driver per vehicle at all times. The Contractor shall supply all fuel, lubricants, and consumables at its cost, for an average monthly travel of 7,000 km, and maintain the vehicles in good operational condition through routine service at an authorised service station. The Contractor shall maintain adequate insurance, PUC, comply with all statutory requirements at all times, and submit maintenance logs for each MUV on a quarterly basis. In the event the Contractor fails to provide the foregoing, the Employer may arrange substitute vehicles and recover from the Contractor the actual expense incurred, plus a penalty of 50% of such expense by deduction from the Contractor's bills.
- 3.1.8
- Contractor shall have to provide a project architectural model of size about 9 m x 2.0 m of the project at a place designated by the Employer/ Employer's Engineer, depicting the master plan features using acrylic or any other approved durable material within 3 months from the date of issue of the LOA. This model should be designed for easy dismantling and relocation to the permanent location in the Admin & Control building at a later date. The cost of the model is deemed to be included in the contract price.

3.2 Performance Security

- 3.2.1 The Contractor shall, for the performance of its obligations hereunder during the EPC/Construction Period, provide to the Employer, within the time limit specified in the Contract Data Sheet, a demand draft or an irrevocable and unconditional guarantee from a Bank or Insurance Surety Bond issued by an Insurance Company authorized by the Insurance Regulatory and Development Authority of India in the format set forth in Tender Forms for an amount equal to a percentage of the Contract Price as specified in the Contract Data Sheet.
- 3.2.2 The Performance Security shall be valid and enforceable till the Contractor has executed and completed the Works and remedied any defects or until 60 (sixty) days after the Defects Liability Period, whichever is later, for each section, as applicable.
- 3.2.3 Until such time as 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 Employer shall release the Bid Security to the Contractor. 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 this Clause 3.2 and Vol 1, Part 1, ITB Clause 7.5 [Performance Security] and within the time specified therein or such extended period as may be provided by the Employer, in accordance with the provisions of the Clause, the Employer 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.
- 3.2.4 In the event the Contractor fails to provide the Performance Security within 21 (twenty one) days of this Agreement, it may seek extension of time for a period not exceeding 20 (twenty) 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.

3.3 Extension of Performance Security

- 3.3.1 The Contractor shall provide the Performance Security for the entire project duration, including the Defect Liability Period. In case of extension of contract, the extension of the validity of the Performance Security, as necessary, shall be submitted at least 2 (Two) months prior to the date of expiry of the Bank Guarantee or Insurance Surety bond thereof.
- 3.3.2 If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.

- 3.3.3 Upon the Contractor providing an extended Performance Security, the previous Performance Security shall be deemed to be released, and the Employer 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.

3.4 Appropriation of Performance Security

- 3.4.1 Upon occurrence of a Contractor's Default, the Employer shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to encash and appropriate the relevant amounts from the Performance Security as Damages for such Contractor's Default.
- 3.4.2 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 Employer shall be entitled to terminate the Agreement in accordance with Clause titled 'Termination'. Upon replenishment or furnishing of a fresh Performance Security, as the case may be, as aforesaid, the Contractor shall be entitled to an additional Cure Period of 30 (thirty) days for remedying the Contractor's Default, and in the event of the Contractor not curing its default within such Cure Period, the Employer shall be entitled to encash and appropriate such Performance Security as Damages, and to terminate this Agreement in accordance with Clause 11 titled 'Termination'.

3.5 Release of Performance Security

- 3.5.1 The Employer shall return the Performance Security to the Contractor within 60 (sixty) days of the later of the expiry of the Defects Liability Period under this Agreement. Notwithstanding the aforesaid, the Parties agree that the Employer shall not be obliged to release the Performance Security until all Defects identified during the Defects Liability Period have been rectified.

3.6 Retention Money

- 3.6.1 The Employer shall retain from each payment due to the Contractor the proportion as stated in the Contract Data until Completion of the whole of the Works under the Construction Contract 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 as stated in the Contract Data Sheet.
- 3.6.2 Upon occurrence of a Contractor's Default, the Employer 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.
- 3.6.3 The Contractor may, upon furnishing an irrevocable and unconditional bank guarantee substantially in the form provided in Tender Forms, require the Employer to refund the

Retention Money deducted by the Employer under the provisions of Clauses 3.6.1 and Clause 11.7 [Valuation of Unpaid Works]. Provided that the refund hereunder shall be made in tranches of not less than 1% (one per cent) of the Contract Price.

- 3.6.4 The Parties agree that in the event of Termination of this Agreement, the Retention Money and the bank guarantees specified in this Clause 3.6 shall be treated as if they are Performance Security and shall be reckoned as such for the purposes of Termination Payment under Clause 11.8.

3.7 Site Data

- 3.7.1 The Employer shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Employer's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. The Employer shall similarly make available to the Contractor all such data which comes into the Employer's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.

- 3.7.2 To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):

- a) the form and nature of the Site, including sub-surface conditions,
- b) the hydrological and climatic conditions,
- c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,
- d) the Laws, procedures and labour practices of the Country, and
- e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

3.8 Electricity, Water and Gas

The Contractor shall be responsible for procuring all Power, Water and other services that it may require for execution of the Site Works.

Contractor shall arrange and provide at his own cost electric connection of suitable load from the local electricity supply agency, and will also keep ready Generators of adequate capacity as a standby arrangement in case of electric failure during construction for running pump sets, vibrators, mixer, needle sets and electric set and other electrically operated Construction equipment, etc. at his own cost.

The cabling for the electric connection shall be arranged by the Contractor himself at his own cost. The non-availability /sanction of electric connection shall be no excuse for delay in completion of work.

For operating the plant, the Contractor shall obtain a permanent Power connection as per the requirements of the local electricity supply agency.

For a permanent connection, all the statutory deposits/fees as required by the local electricity supply agency shall be paid by the Employer directly. However, follow-up and liaison with statutory authorities, as well as all other expenses, are within the Contractor's scope. For approval of the entire electrical installation, including H.T. Side, shall be obtained by the Contractor at his own cost from the electrical inspector, and no cost will be reimbursed by Employer on this account.

The Water required for all purposes, including construction purposes, shall be arranged by the Contractor at his cost.

The contractor shall ensure that the quality of water conforms to the relevant BIS standards, as applicable to the use to which the water is put. The quality of water shall be tested as per BIS by the Contractor at his own cost at a laboratory approved by the Engineer-in-Charge.

3.9 Employer's Equipment and Free Issue Material

3.9.1 The employer does not have a provision for any equipment or free issue material.

3.10 Progress Reports

3.10.1 During the Construction Period, the Contractor shall, no later than 2 (two) days after the close of each month/fortnight/week, furnish to the Employer and the Engineer-in-charge a monthly/fortnightly/weekly report on progress of the Works and shall promptly give such other relevant information as may be required by the Engineer-in-charge. Soft copies of the reports are also to be submitted or uploaded to PMIS as directed by the Engineer-in-charge.

3.10.2 Reporting shall continue until the Contractor has completed all work, including that which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

3.10.3 Each report shall include, but not be limited to, the following:

- a) charts and detailed descriptions of progress, including each stage of design, Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor,
- b) photographs/video showing the progress on the Site and the status of manufacture;
- c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, the manufacturing location, percentage progress, and the actual or expected dates of:
 - i. commencement of manufacture,
 - ii. Contractor's inspections,

- iii. tests, and
- iv. shipment and arrival at the Site;
- d) copies of quality assurance documents, test results and certificates of Materials;
- e) list of claims by any party;
- f) Comparisons of actual and planned progress, with details of any events or anticipated risks that may inhibit the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.
- g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations;
- h) any other details as directed from time-to-time by the Employer/Employer's Engineer

3.11 Care of Works and Security of the Site

- 3.11.1 The Contractor shall bear full risk in and take full responsibility for the care of the Works, and of the materials, goods and equipment for incorporation therein, from the Appointed Date until the date of the Completion Certificate (with respect to the Works completed prior to the issuance of the Completion Certificate) and/or Completion Certificate for construction works (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 Employer

Unless otherwise stated:

- a) the Contractor shall be responsible for keeping unauthorised persons off the Site, and
- b) authorised persons shall be limited to the Contractor's Personnel and the Employer's Personnel; and to any other personnel notified to the Contractor by the Employer or the Engineer, as authorised personnel of the Employer's other contractors on the Site.

3.12 Contractor's Personnel

- 3.12.1 The Contractor shall ensure that all the personnel engaged by it or by its Subcontractors in the performance of its obligations under this Agreement are at all times appropriately qualified, skilled and experienced in their respective functions in conformity with Good Industry Practice.
- 3.12.2 The Employer'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. Provided that any such direction issued by the Employer's Engineer shall specify the reasons for the removal of such person.
- 3.12.3 The Contractor shall, on receiving such a direction from the Employer's Engineer, order the removal of such person or persons, comply with directions with immediate effect. It shall be the duty of the Contractor to ensure that such persons are evicted from the Site

- within 10 (Ten) days of any such direction being issued in pursuance of Clause 3.12.2. The Contractor shall further ensure that such persons have no further connection with the Works or Maintenance under this Agreement. The Contractor shall then appoint (or cause to be appointed) a replacement immediately.
- 3.12.4 The Contractor shall report to the Employer the total number of workmen, including those engaged by any subcontractor, within 2 hours of the start of each shift. This reporting is the primary responsibility of the Contractor's Chief HSE Manager and shall be conducted via email or other mode of communication as approved by the Employer's Engineer. The Contractor shall ensure the timely receipt of these reports by the Employer's Engineer.
- 3.12.5 Contractors may utilise the services of experts/agencies empanelled under Rule 250 of BOCWR for training, internal audit, third-party inspection of lifting equipment, gears, and other HSE services, with prior approval of the Employer.

3.13 Sub-contracts and any other Agreements

- 3.13.1 There is no right for the Contractor to sub-contract any part of the contract works, but to address the Employer seeking permission. If the Contractor desires to sub-contract any part of the work during execution, the Contractor should submit in writing the necessity of sub-contracting any part of the contract work, subject to the ceiling of 25% in all, along with the name of the proposed Sub-Contractor, details of qualification, experience and valid registration and as to the proposed Sub-Contractor gets eligibility from a suitable class for such sub-contract work and that he has verified and found genuineness of the proposed sub-Contractor's information. No further qualification criteria other than valid registration are required to consider sub-contracting the works up to a value of Rs. 25 lakhs. However, the total value of works to be awarded on sub-contracting shall not exceed 25% of the contract value. The Tender Accepting Authority before awarding of works on sub-contracting (subject to total sub-contracting of not more than 25 % of the contract value of either one or more sub-Contractors) shall verify the genuineness of the proposed Subcontractors qualification and other eligibility criteria and if the Sub-Contractor satisfies the qualification and other eligibility criteria with reference to the criteria of Contractor in proportion to the value of work proposed to be sub-contracted, he may address for approval by Employer/Employer's Representative. The Contractor shall not sub-contract any Works in more than 25% (Twenty Five per cent) of the total Contract Price of the Project and shall carry out Works directly under its own supervision and through its own personnel in at least 75% (Seventy Five per cent) of the total Contract Price of the Project. Provided, however, that in respect of the Works carried out directly by the Contractor, it may enter into contracts for the supply and installation of materials, plant or part thereof, process equipment, safety devices and labour, as the case may be, for such Works. For avoidance of doubt, MBR, RO system, ZLD, sludge handling will be considered part of the plant.

The Parties further agree that all obligations and liabilities under this Agreement for the entire Project Works shall at all times remain with the Contractor.

- 3.13.2 It is after obtaining approval by the Employer/Employer's Representative for any such Sub-Contracting, the Tender Accepting Authority can permit such Sub-Contracting and mention as to earlier any part of work permitted by sub-contracting and if so, with the proposed one, it in no way exceeds 25% of the contract value. The Employer 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.
- 3.13.3 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.

3.14 Fossils

- 3.14.1 All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

The Contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs costs from complying with the instructions, the Contractor shall give a further notice to the Engineer and shall be entitled, subject to claims for:

- a) an extension of time for any such delay, if completion is or will be delayed, and
- b) payment of any such Cost, which shall be included in the Contract Price.

4. DESIGN AND CONSTRUCTION OF THE PROJECT WORKS

4.1 Obligations prior to commencement of Works

- 4.1.1 Within 15 (fifteen) days of the Letter of Award, the Contractor shall:
- a) appoint its Project Manager (the "**Project Manager**"), duly authorised to deal with the Employer in respect of all matters under or arising out of or relating to this Agreement;
 - b) appoint a Design Manager (the "**Design Manager**") who will head the Contractor's Design unit and shall be responsible for surveys, investigations, collection of data, and preparation of basic and detailed Designs and Drawings;
 - 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, the Applicable Laws and Applicable Permits;

4.1.2 The Contractor, within the stipulated time as indicated in the Contract Data Sheet, shall submit to the Employer and the Engineer-in-charge a project plan and schedule for the Works (the “**Programme**”), developed using networking techniques, giving the following details:

1. 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, Safety Plan covering Safety of users and workers during Construction, Contractor’s key personnel and equipment.
2. Programme for completion of all stages of Construction and Project milestones. The Programme shall include:
 - a. the order in which the Contractor intends to carry out the Works, including the anticipated timing of design, Supply, Installation, Erection, Testing, and Commissioning of all equipment and various packages and stages of Works;
 - b. the periods for reviews;
 - c. the sequence and timing of inspections and tests specified in this Tender.
 - d. The Contractor shall submit a revised programme whenever the previous programme is inconsistent with the actual progress or with the Contractor’s obligations.
3. Monthly Cash Flow Forecast

4.1.3 Procure the adequate licenses for access to the PMIS system being used by the Employer/Employer’s Engineer for the submission of design, drawings, BIM models, reports, Inspection Requests and Primavera P6 schedules.

4.2 Design and Drawings Obligations

4.2.1 The Contractor shall carry out, and be responsible for, the complete Design of the Works, including Basic Engineering, Detailed Engineering, BIM modelling and Construction Drawings. Design shall be prepared by qualified designers/professionals who comply with the criteria stated in the Employer’s Requirements or as directed by the Engineer-in-charge. The Contractor undertakes that the designers shall be available to attend discussions with the Engineer-in-Charge at all reasonable times during the Contract Period.

4.2.2 The Contractor shall furnish the credentials and curriculum vitae (CV) of the expert(s) deployed on the project for review and approval by the Employer’s Engineer. This information shall be provided promptly and shall include all relevant qualifications, experience, and certifications necessary to demonstrate the expert's suitability for the project. The Contractor undertakes that the expert(s)/designer(s) shall be available to attend discussions with the Employer’s Engineer at all times with reasonable notice during the Contract Period.

Contractor shall be responsible for approval of design basis, basic engineering package, detailed engineering drawings, Construction documents and drawings from the Employer

- or any agency or consultant appointed by the Employer for this purpose. No extra payment or charges shall be paid to the contractor for this purpose.
- 4.2.3 The Contractor is required to study the Employer's Design criteria, specifications, etc., as included in the Bid documents, to confirm their correctness in its bid and to assume full responsibility for them. Design, Drawings and BIM model shall be developed in conformity with the design specifications and standards set forth in the Technical Specifications.
- 4.2.4 The EPC Contractor shall develop, maintain, and deliver an integrated Building Information Modelling (BIM) model for the CETP and STP in accordance with Clause 18 and Vol 2 Part 1 Clause 4.4 [BIM and CAD Requirements], using a software platform approved by the Employer's Engineer for BIM modelling. The model shall incorporate all design disciplines, support construction planning, and enable real-time collaboration, clash detection, and data interoperability. The BIM model shall comply with the BIM Execution Plan and be updated throughout the project lifecycle to reflect design changes and construction progress. All BIM data shall be the property of the Employer, who shall be granted full access to the platform and deliverables.
- 4.2.5 The Contractor shall submit the 3D BIM in accordance with the provisions of Vol 2 Part 1 Clause 4.4 [BIM and CAD Requirements] and deploy a 3D BIM (for infrastructure) consultant who has experience in implementing treatment plant projects like CETP, STP etc. The Contractor shall propose a panel of three names of qualified and experienced firms from whom the Employer/Employer's Engineer may choose one to be the 3D-BIM (for infrastructure) modelling Consultant. Provided, however, that if the panel is not acceptable to the Employer and the reasons for the same are furnished to the Contractor, the Contractor shall propose to the Employer a revised panel of three names from the firms empanelled as 3D-BIM (for infrastructure) modelling consultants by the Employer along with their firms and personnel experience, for obtaining the consent of the Employer. The Employer shall, within 30 (Thirty) days of receiving a proposal from the Contractor or providing sufficient information as desired by the Employer, whichever is later hereunder, convey its decision, with reasons, to the Contractor for engaging a 3D-BIM modelling (for infrastructure) Consultant. In case the contractor has in-house capability for 3D-BIM modelling (for infrastructure), he may propose an in-house team having prior experience and capability for review and approval by the Employer's Engineer. Notwithstanding anything to the contrary, the Contractor shall be solely responsible for the implementation of an integrated and coordinated 3D BIM model for the project infrastructure, integrating each of the structures /units/components of the project.
- 4.2.6 The Contractor shall procure an adequate number of licenses of Forma Build – Unlimited cloud Commercial New Single User Access Electronic License Delivery (ELD) Annual Subscription for accessing the Employer's PMIS. The licenses shall be single-user and may not be shared with any person within or outside the contractor's organisation. Providing an adequate number of licenses to Contractor's employees, sub consultants, design

consultants and Proof Consultant to access the Employer's PMIS for the timely document submissions or any other purpose will be the sole responsibility of the Contractor.

- 4.2.7 The Contractor shall appoint a proof check consultant (the "Proof Consultant") for independent reviews of the designs and drawings approved by the Employer's Engineer for safety, IS code compliance, and constructability. The proof consultant shall verify calculations, assess risks, suggest corrections, and coordinate with the Contractor's design team. The proof consultant shall certify that the design meets all applicable standards and project requirements, ensuring structural integrity and regulatory compliance. The contractor shall propose to the Employer a panel of three names of qualified and experienced firms (preferably IITs/NITs/ Government Engineering Institute/s) from whom the Employer may choose one to be the Proof Consultant. Provided, however, that if the panel is not acceptable to the Employer and the reasons for the same are furnished to the Contractor, the Contractor shall propose to the Employer a revised panel of three names from the firms empanelled as proof consultants by the Employer, along with their firms and personnel experience, for obtaining the consent of the Employer. The Contractor shall also obtain the consent of the Employer for two key personnel of the Proof Consultant who shall have adequate experience and qualifications for such treatment plant projects.

The Employer shall, within 30 (Thirty) days of receiving a proposal from the Contractor or providing sufficient information as desired by the Employer, whichever is later hereunder, convey its decision, with reasons, to the Contractor for engaging Proof Consultant. Notwithstanding anything to the contrary, the Contractor shall be solely responsible for the safe design of each structure/ unit/ component, in compliance with the relevant Indian Standards (IS) codes.

The proof consultant shall:

- a) Evolve a systems approach with the Design Manager to minimise the time required for final designs and Construction Drawings, covering and ensuring compliance with respect to the scope of the contract agreement.
- b) Proof checks the detailed calculations, drawings, and designs, which have been approved by the Employer's Engineer and ensures compliance with respect to the scope of the contract agreement.

- 4.2.8 The contractor shall obtain verification from the proof consultant in respect of design and engineering, including field Construction criteria and constructability for each structure as indicated by the Employer's Engineer. If the Contractor wishes to modify any design or document which has previously been submitted for review (and if specified as approved by the Employer's Engineer), the Contractor shall immediately give Notice to the Employer's Engineer, accompanied by a written explanation of the need for such modification. Thereafter, the Contractor shall submit revised documents to the Employer's Engineer in accordance with the above procedure.

4.3 Submission of Design Calculations, Drawings and Documents

- 4.3.1 The Contractor shall prepare and submit the design calculations, detailed engineering drawings, BIM models, Inspection Requests and other documents as indicated in Volume 2, Part 1 [General Requirements] and Part 2 [Process Specifications] of the tender document to the Engineer-in-Charge for approval through the Program Management Information System (PMIS).
- 4.3.2 The submission of design and drawings shall be completed by the Contractor within 90 days, and the BIM model shall be completed within 120 days from the date of the contract agreement.
- 4.3.3 By submitting the design calculations/ Drawings/BIM models for review to the Engineer-in-charge, 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, conform with the Scope of the Project, the Specifications and Standards and the Applicable Laws;
- 4.3.4 Designs, drawings and BIM models submitted to the Employer's Engineer shall be deemed to have been certified by the Contractor's Design Manager thereto and conform with the scope of the project, the specifications and standards and the applicable laws.
- 4.3.5 Any design or drawing submitted by the Contractor for review and approval of the Employer's Engineer shall include references or list all dependent designs and drawings (e.g. the structural drawing submitted for approval shall include the references of the dependent Mechanical GA drawing, Architectural drawing, etc.) along with the status of approval for the same. The Contractor must obtain the Employer's Engineer's prior approval for the dependent designs and drawings or the contingent factors/ parameters/ loads/ equipment manufacturer's requirement associated with the drawing or design being submitted for approval.
- 4.3.6 Within 21 (Twenty-one) days of the receipt of the Drawings, the Employer'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 Engineer in charge will signify his approval or disapproval of the As-Built Drawings and O&M Manuals within 28 (twenty-eight) calendar days of each submission.
- 4.3.7 If the aforesaid observations of the Employer's Engineer indicate that the designs/drawings are not in conformity with the scope of the project or the specifications and standards, such designs/drawings shall be revised by the Contractor to ensure conformity with the provisions of this contract agreement and resubmitted to the Employer's Engineer for review and approval.
- The Contractor shall incorporate all necessary comments of the Engineer-in-Charge or consultant appointed by Employer, if any, and shall resubmit the revised design and drawings through the PMIS system within 14 (fourteen) days for approval of the Engineer-in-Charge.

- 4.3.8 In the event the Contractor fails to revise and resubmit such Drawings, BIM models to the Engineer-in-charge for review as aforesaid, the Engineer-in-charge may withhold the payment for the affected works in accordance with the relevant provisions of the tender. If the Contractor disputes any decision, direction or determination of the Engineer-in-charge hereunder, the Dispute shall be resolved in accordance with the Dispute Resolution Procedure.
- 4.3.9 Any cost or delay in construction arising from review by the Engineer-in-charge shall be borne by the Contractor.
- 4.3.10 No review and/or observation of the Engineer-in-charge 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 Engineer-in-charge or the Employer be liable for the same in any manner; and if errors, omissions, ambiguities, inconsistencies, inadequacies or other Defects are found in the Drawings/BIM models, they and the construction works shall be corrected at the Contractor's cost.
- 4.3.11 The Contractor shall be responsible for delays in submitting the Drawing as set forth in Volume 2, Part 1 [General Requirements] caused by reason of delays in surveys and field investigations, and shall not be entitled to seek any relief in that regard from the Employer;
- 4.3.12 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 approval of Employer and it shall indemnify the Employer and Consultant appointed by Employer against any damage, expense, liability, loss or claim, which the Employer might incur, sustain or be subject to arising from any breach of the Contractor's design responsibility and/or warranty set out in this Clause. The Contractor undertakes that the designers shall be available and attend discussions with the Employer's Representative at the scheduled time.
- 4.3.13 Within 30 (thirty) days of the Project Completion Date, the Contractor shall furnish to the Employer and the Engineer-in-charge a complete set of as built drawings and as-built BIM model reflecting the Project Works as actually designed, engineered and constructed, including an as-built survey illustrating the layout of the Project Works and setback lines, if any, of the buildings and structures forming part of Project Facilities.
- 4.3.14 Works shall be executed in accordance with the Drawings and BIM models provided by the Contractor in accordance with the provisions of this Clause 4.2 and the comments/observations of the Engineer-in-charge thereon as communicated. Such Drawings shall not be amended or altered without prior written notice to the Engineer-in-charge. 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.

- 4.3.15 The contractor shall obtain verification from the proof consultant in respect of design and engineering, including field Construction criteria and constructability for each structure as indicated by the Employer's Engineer. If the Contractor wishes to modify any design or document which has previously been submitted for review (and if specified as approved by the Employer's Engineer), the Contractor shall immediately give Notice to the Employer's Engineer, accompanied by a written explanation of the need for such modification. Thereafter, the Contractor shall submit revised documents to the Employer's Engineer in accordance with the above procedure.

4.4 Construction of the Project Works

- 4.4.1 The Contractor shall construct the Project Works as specified in Schedules and Datasheets in conformance with Volume 2 Employer's Requirements and the CPCB/MPCB requirements, including Online Continuous Effluent Monitoring Systems (OCEMS). 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 Contractor agrees and undertakes that the construction shall be completed within the Time for Completion of Works as indicated in the Contract Data Sheet, including any extension thereof.
- 4.4.2 Any cost or delay in Construction arising from the review of contractor's design/drawings/BIM by the Employer's Engineer and/or Proof consultant shall be borne by the Contractor.
- 4.4.3 Works shall be executed in accordance with the Drawings provided by the Contractor in accordance with the provisions of Technical/Design Specifications and the observations of the Employer's Engineer thereon as communicated pursuant to the provisions of Clause 11.2.7 (d). Such Drawings shall not be amended or altered without prior written notice to the Employer'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. Works shall only be carried out on drawings duly signed and stamped as Good for Construction by the Employer's Engineer.

4.5 Scheduled Completion date

- 4.5.1 The Scheduled Completion Date for Part 1 - EPC of the Works shall occur on the last day of 'Time for Completion for Part 1 - EPC of the Works' as indicated in the Contract Data Sheet.
- 4.5.2 On or before the Scheduled Completion Date, the Contractor shall have completed Part 1 - EPC of the Works in accordance with this Agreement.

4.6 Extension of time for completion

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

- a) delay in providing access to the site;
- b) change of Scope (unless an adjustment to the Scheduled Completion Date has been agreed under Clause 4.9);
- c) occurrence of a Force Majeure Event;
- d) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's personnel or the Employer's other contractors on the Site; and
- e) any other cause or delay which entitles the Contractor to a Time extension in accordance with the provisions of this Agreement.

4.6.2 The Contractor shall, no later than 15 (fifteen) business days from the occurrence of an event or circumstance specified in Clause 4.6.1, inform the Engineer-in-charge by notice in writing, with a copy to the Employer, 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 hereunder.

4.6.3 In the event of the failure of the Contractor to issue to the Engineer-in-charge a notice in accordance with the provisions of Clause 4.6.2 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 4.6, the Employer shall be discharged from all liability in connection with the claim.

4.6.4 The Engineer-in-charge shall, on receipt of the claim in accordance with the provisions of Clause 4.6.2, examine the claim expeditiously within the time frame specified herein. In the event the Engineer-in-charge requires any clarifications to examine the claim, the Engineer-in-charge shall seek the same within 15 (fifteen) days from the date of receiving the claim. The Contractor shall, on receipt of the communication of the Engineer-in-charge requesting clarification, furnish the same to the Engineer-in-charge within 10 (ten) days thereof. The Employer shall, within a period of 60 (sixty) days from the date of receipt of such clarifications, forward in writing to the Contractor its determination of Time Extension.

Provided that when determining each extension of time under this Clause 4.6, the Employer shall review previous determinations and may increase, but shall not decrease, the total Time Extension.

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

- a) a fully 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 Engineer-in-charge 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 Engineer-in-charge shall examine the same in accordance with the provisions of Clause 4.6.4 within a period of 60 (sixty) days of the receipt thereof.

4.7 Incomplete Works

- 4.7.1 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 Employer in accordance with the provisions 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 Employer under this Agreement, including the right to termination under Clause 11 [Termination].

4.8 Change of Scope

- 4.8.1 The Employer may, notwithstanding anything to the contrary contained in this Agreement, require the Contractor to make modifications/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 Clause 4.8.
- 4.8.2 Change of Scope shall mean:
 - 1. change in specifications of any item of Works; and/or
 - 2. any additional work, Plant, Materials or services which are not included in the Scope of the Project
- 4.8.3 For the avoidance of doubt, the Parties agree that the Contractor shall not undertake any Change of Scope without the express consent of the Employer, save and except any Works necessary for meeting any Emergency.
- 4.8.4 In the event of the Employer determining that a Change of Scope is necessary, he will issue to the Contractor a notice specifying in reasonable detail the works and services contemplated thereunder (the "Change of Scope Notice").
- 4.8.5 Upon receipt of a Change of Scope Notice, the Contractor shall, with due diligence, provide to the Employer and the Employer'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. breakdown 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 Works

4.8.6 For the avoidance of doubt, the Parties expressly agree that, subject to the provisions of Clause 4.8, the Contract Price shall be increased or decreased, as the case may be, on account of Change of Scope.

4.8.7 Upon reaching an agreement, the Employer shall issue an order (the “Change of Scope Order”) requiring the Contractor to proceed with the performance thereof.

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

4.9 Restrictions on Change of Scope

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

4.9.2 Notwithstanding anything to the contrary in this Clause 4, no change made necessary because of any default of the Contractor in the performance of its obligations under this Agreement shall be deemed to be a Change of Scope, and shall not result in any adjustment of the Contract Price or the Project Completion Schedule.

4.10 Power of the Employer to undertake works

4.10.1 In the event the Parties are unable to agree to the proposed Change of Scope in accordance with Clause 4.8, the Employer may, after giving notice to the Contractor and considering its reply thereto, award such works or services to any third party or agency as deemed suitable.

4.10.2 It is also agreed that the Contractor shall provide assistance and cooperation to the person or agency who undertakes the works or services hereunder, and will be responsible for rectification of any defects and/ or maintenance of works carried out by other agencies.

4.10.3 Notwithstanding anything contrary to this Clause 4.10, it will be the Contractor's obligation to construct and maintain the Project Works in accordance with this Agreement.

5. STAFF AND LABOUR

5.1 Persons in the Service of Employer

- 5.1.1 The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Employer's Personnel.

5.2 Labour Laws

- 5.2.1 The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall require his employees to comply with all applicable Laws, including those concerning workplace safety.

5.3 Working Hours

- 5.3.1 No work shall be carried out on the Site on locally recognised days of rest, or outside the normal working hours as indicated in the Contract Data Sheet, unless:

- a) otherwise stated in the Contract,
- b) the Engineer-in-charge gives consent, or
- c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer-in-charge

5.4 Facilities for Staff and Labour

- 5.4.1 Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

5.5 Contractor's Superintendence

- 5.5.1 Throughout the execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

Contractor shall appoint a Planning Engineer at the project site with a computer equipped with Primavera P6 and CAD facilities. The role and purpose of the Engineer shall be to maintain weekly reporting to the Employer (in addition to the monthly Progress Report) in an approved format through the PMIS system. Also, a CAD drafting facility is required

to incorporate necessary details/changes on drawings or the As-built drawings from time to time during the construction process and to avoid any discrepancies therein.

5.6 Measures against Insects and Pest Nuisance

- 5.6.1 The Contractor shall at all times take the necessary precautions to protect all staff and labour employed on the Site from insect and pest nuisance, and to reduce the dangers to health and general nuisance occasioned by the same. The Contractor shall provide his staff and labour with suitable prophylactics for the prevention of malaria and take steps to prevent the formation of stagnant pools of water. The Contractor shall comply with all the regulations of the local health authorities and shall arrange to spray thoroughly with approved insecticide in all.

5.7 Epidemics

- 5.7.1 In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities, for the purpose of dealing with and overcoming the same.

5.8 Burial or Cremation of the Dead

- 5.8.1 The Contractor shall make all necessary arrangements for the transport, to any place as required for burial/cremation, of any of his expatriate employees or members of their families who may die at the works. The Contractor shall also be responsible, to the extent required by local regulations, for making any arrangements with regard to the burial/cremation of any of his local employees who may die while engaged upon the Works.

5.9 Alcoholic Liquor or Drugs

- 5.9.1 The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, gift, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale gift, barter or disposal by Contractor's Personnel.

5.10 Arms and Ammunition

- 5.10.1 The Contractor shall not give, barter, or otherwise dispose of to any person or persons, any arms or ammunition of any kind or permit or allow Contractor's personnel to do so.

5.11 Festivals and Religious Customs

- 5.11.1 The Contractor shall respect the Country's/locally recognised festivals, days of rest and religious or other customs.

5.12 Foreign Staff and Labour

- 5.12.1 The Contractor may import any personnel who are necessary for the execution of the Works. The contractor must ensure that these personnel are provided with the required residence visas and work permits. The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of imported Contractor's Personnel. The Contractor shall be responsible for such personnel who are to return until

they have left the Site or, in the case of foreign nationals who have been recruited outside the country, have left it.

6. PLANT, MATERIALS AND WORKMANSHIP

6.1 Quality of Materials and Workmanship

- 6.1.1 The Contractor shall ensure that the Construction, Materials and workmanship are in accordance with the requirements specified in this Agreement, Employer's Requirements, General Specifications and Standards and Good Industry Practice.

6.2 Quality Control System

- 6.2.1 The Contractor shall establish a quality control mechanism to ensure compliance with the provisions of this Agreement (the "Quality Assurance Plan" or "QAP").

The Contractor shall, within 30 (thirty) days of the Appointed Date, submit to the Engineer-in-charge 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, checklist for site activities, and proforma for testing and calibration in accordance with the Indian standards, relevant specifications and Good Industry Practice; and
- c) internal quality audit system.
- d) details of all procedures and compliance documents shall be submitted to the Employer before each design and execution stage is commenced. When any document of a technical nature is issued to the Employer's Engineer, evidence of the prior approval by the Contractor's Design Manager should be available on the submission.

The Employer'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 6.2.

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 and workmanship in accordance with the Quality Assurance Plan.

The cost of testing of Construction, Materials and workmanship under this clause 6 shall be borne by the Contractor.

The Contractor shall appoint a duly qualified QA/QC Officer who shall be stationed from the commencement of the construction work as instructed by the Employer's Engineer. This personnel or a suitable replacement, if required, and for which prior permission of

the Employer is to be obtained, shall be stationed at the site till the end of the contract period.

6.3 Methodology

- 6.3.1 The Contractor shall, at least 15 (fifteen) days prior to the commencement of the construction, submit to the Engineer-in-charge for review the methodology proposed to be adopted for executing the Works and measures for ensuring safety.

6.4 Inspection and Technical Audit by the Employer

- 6.4.1 The Employer or any representative authorized by the Employer in this behalf may inspect and review the progress and quality of the construction of Project Works and issue appropriate directions to the Engineer-in-charge and the Contractor for taking remedial action in the event the Works are not in accordance with the provisions of this Agreement.

6.5 External Technical Audit

- 6.5.1 At any time during construction, the Employer 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 Employer, shall be notified to the Contractor and the Engineer-in-charge 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 6.5, the external technical audit shall not affect any obligations of the Contractor or the Engineer-in-charge under this Agreement.

6.6 Inspection of Construction Records

- 6.6.1 The Employer shall have the right to inspect the records of the Contractor relating to the Works.

6.7 Inspection

- 6.7.1 The Engineer-in-charge and its authorised representative shall at all reasonable 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.

The Contractor shall give the Engineer-in-charge and its authorised agents access, facilities and safety equipment for carrying out their obligations under this Agreement.

For the avoidance of doubt, such inspection or submission of an Inspection Report by the Engineer-in-charge shall not relieve or absolve the Contractor of its obligations and liabilities under this Agreement in any manner whatsoever.

6.8 Inspection Device/Aids

- 6.8.1 The Contractor shall provide a minimum of three handheld electronic tablets of a minimum of 12 inches in size for the exclusive use by the Employer/Employer's Engineer for monitoring, review and approval of the Inspection Requests (IRs) raised by the Contractor.

The electronic tablet shall be of a reputable make, such as Apple, Samsung or equivalent, with adequate hardware and software configuration as approved by the Employer's Engineer for assessing the PMIS system. The electronic tablets shall have a toughened-glass display, be provided with a protective jacket, and be insured against accidental falls or breakage during the construction period until the commencement of the Operation and Maintenance period.

The electronic tablets shall be capable of displaying the IRs along with the attachments, test reports, displaying the BIM model and any other drawings/documents using the applicable viewer software, capturing geotagged photos at the construction site and recording videos during the site visit.

6.9 Third Party Inspection

- 6.9.1 Third-party inspection agency shall be appointed by the contractor at their own cost after proposing to the Employer a panel of three names of qualified and experienced firms as per the qualifying criteria approved by the Employer's Engineer. The employer may choose one to be the Third-Party Inspection Agency. Provided, however, that if the panel is not acceptable to the Employer and the reasons for the same are furnished to the Contractor, the Contractor shall propose to the Employer a revised panel of three names from the firms empanelled as Third Party Inspection agency by the Employer for obtaining the consent of the Employer and shall also provide a sole nodal coordinator for all related activities regarding third party inspections. The Employer shall, within 30 (Thirty) days of receiving a proposal from the Contractor or providing sufficient information as desired by the Employer, whichever is later hereunder, convey its decision, with reasons, to the Contractor for engaging a Third-Party Inspection agency
- 6.9.2 The contractor shall submit the list of equipment/ material proposed for third-party inspection for review and approval by the Employer's Engineer before the start of the procurement. All materials required but not limited to materials such as all types of pipes (of all sizes) R.C.C. / P.S.C. / M.S./ D.I. /CI. /A.C. /HDPE /PVC /GRP & other power equipment's like transformers, switchgear, cables, panels etc., all type of valves (of all sizes), any other materials as per requirements which are supplied by the contractor under this contract are subject to third party inspection. The charges for such inspection shall be paid by the contractor. All the arrangements for inspection i.e. measuring tools, testing equipment and tools, labour required for handling materials during testing etc. shall be made available/ arranged by the manufacturer/ Vendor/ contractor in their premises at their own costs. These costs shall be deemed included in the contractor's price bid and nothing extra shall be paid to the said account. If any particular testing facility is not available at the premises/ location of the Factory, then the test shall be arranged by the factory owner / Vendor at his own cost at other locations/ test

laboratories. All expenses in this regard shall also have to be borne by the manufacturer /vendor /contractor only.

- 6.9.3 If the material inspected fails during a test at no fault of the inspecting agency, fees are payable to the inspecting agency for the said inspection and for any further re-inspection of the same material.
- 6.9.4 If it is subsequently observed that there are defects in the quality of the material, the contractor shall replace the material without any extra cost.
- 6.9.5 In addition to third-party inspection, the Employer's Engineer or his representative may conduct inspection intermittently. The contractor shall also submit a fortnightly testing plan for review and approval by the Employer's Engineer.
- 6.9.6 Third-Party Inspection Report: The third-party inspection report merely in the certificate form stating that pipes/valves/specials or any other material inspected are found satisfactory will not be accepted, but it should be in the form of detailed report stating the parameters checked & observations made with comments of the Inspecting Officer in accordance with the respective Specifications/detailed item wise specifications/ as per Tender notice.

6.10 Inspection Categories

- 6.10.1 The contractor should comply with the following Inspection Categories for the equipment/plants as indicated in the approved vendor list in Volume II.
- 6.10.2 Category A: All design drawings and QAP are to be approved by the Employer's Engineer before manufacturing and Testing. Inspection/Testing in the presence and witness by TPA/Employer's Engineer or its authorised representative at Works/based on approved drawings and QAP. DC (Dispatch clearance) shall be issued by the Employer/Employer's Engineer only after CHP clearance (Customer Hold points) and Test reports approved by the Employer/Employer's Engineer. Typical Type tests (any of the last 5 years) and current Routine tests are mandatory. e.g. items like Pumps, Transformers, Switchgear and their Panels, DG sets, PLC/SCADA Panels with their FAT, Control and Power Cables, all analytical and non-analytical Instruments like DO, Flow, Level etc. and any other Electromechanical/Instrumentation items as per the list approved by Employer/Employer's Engineer in advance based on BBU. The material has to be inspected by the Employer's Engineer or by an Inspecting agency approved by the Employer's Engineer at the manufacturer's premises before packing and dispatching. The Inspection charges of the agency will be borne by the Contractor. The Contractor shall provide the necessary equipment and facilities for tests, and the cost thereof shall be borne by the Contractor. Submission of Internal test Certificates (TCs) to the Engineer, by the Manufacturer through the contractor, is mandatory before raising the inspection call, well in advance of ten days.
- 6.10.3 Category B: All design drawings and QAP are to be approved by the Employer's Engineer before manufacturing and Testing. Inspection/Testing in the presence and witness by the TPA or its authorised representative at the Works/based on approved drawings and QAP.

DC (Dispatch Clearance) shall be issued by the Employer's Engineer only after CHP is cleared (Customer Hold Points) and Test reports are approved. Typical Type tests (any of the last 5 years) and current Routine tests are mandatory. Like small lighting panels, JB's, some I&C cables, non-critical instruments, and lab instruments. The material has to be inspected by the Employer's Engineer or by an Inspecting agency approved by the Employer's Engineer at the manufacturer's premises before packing and dispatching. The Inspection charges of the agency will be borne by the Contractor. The Contractor shall provide the necessary equipment and facilities for tests, and the cost thereof shall be borne by the Contractor. Submission of Internal test Certificates (TCs) to the Engineer, by the Manufacturer through the contractor, is mandatory before raising the inspection call, well in advance of ten days. Notwithstanding the above, the Engineer, after examination of the test certificates, reserves the right to instruct the Contractor to retest, if required, in the presence of the Contractor's representative without any additional cost.

- 6.10.4 Category C: The material may be manufactured as per standard and delivered to the site. No Inspection is required by the Employer's Engineer. Inspection/Testing Test Certificates shall be submitted by the Manufacturer through the Contractor. Only TCs submitted and reviewed by the Employer/Employer's Engineer/Authorised representative/TPA, based on clearance material, are dispatched. No type tests are required. Items like glands, pipe fittings, etc.
- 6.10.5 For material/Equipment under categories "A" and "B", the Engineer will provide authorisation for packing and shipping after inspection. The testing, approval for dispatching shall not absolve the Contractor of the obligation for satisfactory performance of the plant.
- 6.10.6 Contractor shall bear the air travel, taxi, and hotel expenses acceptable to the Employer's Engineer, along with the sustenance charges for any outstation inspections.
- 6.10.7 Notwithstanding the appointment of any third-party inspection agency for inspection and certification of manufactured plant and equipment, the Contractor shall remain solely responsible for ensuring that all plant and equipment supplied under the Contract meet the specified requirements and standards of the Contract Documents. Any oversight, omission, error, or slip on the part of the third-party inspection agency shall not absolve the Contractor of its responsibility under this Contract. If, after delivery, any plant or equipment is found to be deficient, non-compliant, or defective due to any lapse—even if it was inspected or certified by the third-party inspection agency—the Contractor shall, at its own cost and risk, promptly rectify, replace, or make good such deficiency to the satisfaction of the Employer. The Employer shall not be liable under any circumstances for failures resulting from inspection agency lapses.

6.11 Samples

- 6.11.1 The Contractor shall submit the following samples of Materials and relevant information to the Engineer-in-charge for pre-construction review:
 - a) manufacturer's test reports and standard samples of manufactured Materials;
 - and

- b) samples of such other Materials as the Engineer-in-charge may require.

6.12 Tests

- 6.12.1 For determining that the Works conform to the Specifications and Standards, the Engineer-in-charge 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 test checks by the Engineer-in-charge shall comprise at least 20 (twenty) per cent of the quantity or number of tests prescribed for each category or type of test for quality control by the Contractor.

In the event that results of any tests conducted under this Clause 6.9 establish any Defects or deficiencies in the Works, the Contractor shall carry out remedial measures and furnish a report to the Engineer-in-charge on this behalf. The Engineer-in-charge 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 remedial measures in pursuance thereof shall be solely borne by the Contractor.

6.13 Examination of Work Before Covering Up

- 6.13.1 In respect of the work which the Engineer-in-charge is entitled to examine, inspect, measure and/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 Engineer-in-charge whenever any such work is ready and before it is covered up. The Engineer-in-charge shall then either carry out the examination, inspection or testing without unreasonable delay, or promptly give notice to the Contractor that the Engineer-in-charge 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, then 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 Engineer-in-charge 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 Engineer-in-charge within a period of 3 (three) business days from the date on which the Contractor's notice hereunder is delivered to the Engineer-in-charge, the Contractor shall be entitled to assume that the Engineer-in-charge would not undertake the said inspection.

6.14 Rejection

- 6.14.1 If, as a result of an examination, inspection, measurement or testing, any Plant, Materials, design or workmanship is found to be defective or otherwise not in accordance with the provisions of this Agreement, the Engineer-in-charge shall reject the Plant, Materials, 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.

If the Engineer-in-charge requires the Plant, Materials, design or workmanship to be retested, the tests shall be repeated under the same terms and conditions, as applicable

in each case. If the rejection and retesting cause the Employer to incur any additional costs, such costs shall be recoverable by the Employer from the Contractor, and may be deducted by the Employer from any monies due to be paid to the Contractor.

6.15 Remedial work

6.15.1 Notwithstanding any previous test or certification, the Engineer-in-charge 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 Works, 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 14 shall apply.

If the Contractor fails to comply with the instructions issued by the Engineer-in-charge under this Clause 6.12.1, within the time specified in the Engineer-in-charge's notice or as mutually agreed, the Engineer-in-charge may advise the Employer to have the work executed by another agency. The cost so incurred by the Employer for undertaking such work shall, without prejudice to the rights of the Employer to recover Damages in accordance with the provisions of this Agreement, be recoverable from the Contractor and may be deducted by the Employer from any monies due to be paid to the Contractor.

6.16 Royalties

6.16.1 Unless otherwise stated in the Specification, the Contractor shall pay all royalties, rents and other payments for:

- a) natural Materials obtained from outside the Site, and
- b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site are specified in the Contract.

6.17 Delays during construction

6.17.1 In the event the Contractor does not achieve any of the Project Milestones or the Engineer-in-charge shall have reasonably determined that the rate of progress of Works is such that Completion of the Project Works is not likely to be achieved by the end of the Scheduled Completion Date, it shall notify the same to the Contractor, and the Contractor shall, within 15 (fifteen) days of such notice, by a communication inform the Engineer-in-charge 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.

6.18 Suspension of Unsafe Construction Works

6.18.1 Upon recommendation of the Engineer-in-charge to this effect, the Employer may, by notice, require the Contractor to suspend forthwith the whole or any part of the Works

if, in the reasonable opinion of the Engineer-in-charge, such work threatens the safety of the Users and pedestrians.

The Contractor shall, pursuant to the notice under this Clause 6.15.1, suspend the Works or any part thereof for such time and in such manner as may be specified by the Employer and thereupon carry out remedial measures to secure the safety of suspended works, the Users and pedestrians. The Contractor may by notice require the Engineer-in-charge to inspect such remedial measures forthwith and make a report to the Employer recommending whether or not the suspension hereunder may be revoked. Upon receiving the recommendations of the Engineer-in-charge, the Employer 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 Employer, and the procedure set forth in this Clause 6.15.1, shall be repeated until the suspension hereunder is revoked.

Subject to the provisions of Clause 14 [Force Majeure], 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 Employer, the Preservation Costs shall be borne by the Employer.

If suspension of Works is for reasons not attributable to the Contractor, the Engineer-in-charge shall determine any Time Extension to which the Contractor is reasonably entitled.

6.19 Video Recording

- 6.19.1 During the Construction Period, the Contractor shall provide to the Employer for every calendar quarter, a drone video recording and on-ground photography of the project site, as per the directions of the Employer’s Engineer, covering the status and progress of Works in that quarter. The video recording shall be provided to the Employer’s Engineer no later than 15 (Fifteen) days after the close of each quarter after the stipulated date.

7. COMMENCEMENT, DELAYS AND SUSPENSION

7.1 Commencement of Work

- 7.1.1 The commencement date shall be within the time specified in the Contract Data Sheet.

7.2 Time for Completion

- 7.2.1 The Contractor shall complete the whole of the Works, and each Section complete in itself (if any), within the Time for Completion for the Works or Section (as the case may be), including:
- a) achieving the passing of the Tests on Completion, and
 - b) completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking over.

7.3 Delay Damages

7.3.1 If the Contractor fails to comply with the time for completion of the project, the Contractor shall be subject to a penalty as specified per the delay damages to the Employer for this default. These delay damages shall be the sum stated in the Contract Data Sheet, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages as stated in the Contract Data Sheet.

7.3.2 These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.

7.4 Suspension of Work

7.4.1 The Engineer-in-charge may at any time instruct the Contractor to suspend progress of part or all of the Works. The Engineer-in-charge may also notify the cause for the suspension.

7.4.2 During such suspension, the Contractor shall protect, store and secure such part of the Works against any deterioration, loss or damage.

7.4.3 The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure.

7.5 Tests on Completion

7.5.1 At least 15 (fifteen) days prior to the likely completion of the Project Works, or a Section thereof, the Contractor shall notify the Engineer-in-charge of its intent to subject the Project Works or a Section thereof to Tests. The date and time of each of the Tests shall be determined by the Contractor in consultation with the Engineer-in-charge and notified to the Employer, who may designate its representative to witness the Tests.

7.5.2 Contractor shall submit the testing plan and procedure for the Engineer-in-charge's approval two months before the scheduled tests.

7.5.3 Provisioning of all electricity, equipment, fuel, instruments, labour, materials and suitably qualified and experienced staff shall be made available by the Contractor.

7.5.4 Contractor shall carry out the tests properly and maintain formal test records of start, duration, finish, test pressure, witness, along with weather conditions and observations.

7.5.5 The Engineer-in-charge shall observe, monitor and review the Tests conducted by the Contractor and review the results of the Tests to determine compliance of the Project Works or a Section thereof with Specifications and Standards.

7.5.6 If it is reasonably anticipated or determined by the Engineer-in-charge during the course of any Test that the performance of the Project Works 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 the Defect or deficiencies.

- 7.5.7 For the avoidance of doubt, it is expressly agreed that the Engineer-in-charge 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 Works or Section thereof with the Specifications and Standards.

7.6 Delayed Tests

- 7.6.1 If the Tests on Completion are being unduly delayed by the Contractor, the Engineer may, by notice, require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contractor may fix and of which he shall give notice to the Engineer.
- 7.6.2 If the Contractor fails to carry out the Tests on Completion within the period of 21 days, the Employer's Personnel may proceed with the Tests at the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor, and the results of the Tests shall be accepted as accurate.

7.7 Retesting

- 7.7.1 If the Works, or a Section, fail to pass the Tests on Completion, the Engineer or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

7.8 Failure to Pass Tests on Completion

- 7.8.1 In the event Tests on Completion demonstrate that the Work has failed to pass Tests on Completion, the Contractor shall have 3 months from the date of expiry of the relevant Time for Completion (unless such period is extended in accordance with this Contract) to achieve Required Output Standards or, at a minimum, the minimum permissible Output Standards from the facilities.
- 7.8.2 If the Works, or a Section, again fail to pass the Tests on Completion repeated under Clause 7.7 [*Retesting*], the Engineer shall be entitled to:
- a) order further repetition of Tests on Completion.
 - b) reject the Works or Section (as the case may be) if the failure deprives the Employer of substantially the whole benefit of the Works or Section.

7.9 Liquidated Damages

- 7.9.1 In the event that the Works fail to pass any or all of the Tests on Completion as defined in Vol 2 Part 1 - General Requirements, then the Employer shall levy Liquidated Damages, based on the extent of such failure, in accordance with the following formulae, subject to the condition that the total amount of Delay Damages for Works and/or Liquidated Damages for failure to pass the Tests on Completion shall not exceed the Maximum Amount of Delay Damages as defined in this Contract Data Sheet.

7.9.2 Treated Water Output Guarantee:

On failure to achieve the rated maximum output of treated water as per Vol 2, Part 2 Process Specifications, the contractor will be levied Liquidated Damages equal to 1.5% of Contract Price for Part 1- EPC of the Works for each 1.0% shortfall below the guaranteed capacity.

7.9.3 Water Quality Guarantee:

On failure to achieve the guaranteed water quality parameters as per Vol 4, Part 3, Schedule of Guarantee, the contractor will be levied Liquidated Damages equal to 0.1% Contract Price for Part 1- EPC of the Works for each incremental increase in measured water quality parameters over 24 hours composite sampling beyond the stipulated requirements. The charges will be applied separately for each parameter. No increase in coliform count beyond the stipulated limit is allowable. Applicable Increments: Turbidity - 0.3 NTU, All other parameters 1 mg/L

8. EMPLOYER'S TAKING OVER

8.1 Taking Over

8.1.1 "Taking Over" shall not mean physical taking over of the works by the Employer. The Employer shall be deemed to have taken over the Construction Works on the date when the trial run and the Tests on Completion would have been completed and duly informed by the Contractor to the Employer in writing unless refuted by the Employer within 14 days.

8.1.2 Contractor shall carry out the Operation and Maintenance during the Defect Liability Period without any additional cost to Employer.

9. VARIATIONS AND ADJUSTMENTS

9.1 Right to Vary

9.1.1 Variations may be initiated by the Engineer at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal.

9.1.2 The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Engineer stating (with supporting particulars) that the Contractor cannot readily obtain the Goods required for the Variation. Upon receiving this notice, the Engineer shall cancel, confirm or vary the instruction.

9.1.3 Each Variation may include:

- a) changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation),
- b) changes to the quality and other characteristics of any item of work,
- c) changes to the levels, positions and/or dimensions of any part of the Works,

- d) omission of any work unless it is to be carried out by others,
- e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or

The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Engineer instructs or approves a Variation.

9.2 Adjustment for Changes in Cost

9.2.1 No adjustment in the cost shall be permitted under this contract.

10. CONTRACT PRICE AND PAYMENT

10.1 The Contract Price

10.1.1 Payment for the Works shall be made on a lump sum basis according to four major work categories as follows:

1. Design and documentation, including all necessary Designs and documentation required for the Works;
2. Civil works, Installation, Testing, Commissioning and other services required for the different plant components in accordance with the payment units as set out in the Schedule of Prices and/or as proposed by the Contractor and approved by the Engineer;
3. Plant and Equipment, whether manufactured or fabricated outside or within the Employer's country, including supply of all electro-mechanical, electrical and instrumentation equipment, etc., for the different plant components according to the payment units as set out in the Schedule of Prices and/or as proposed by the Contractor and approved by the Engineer; and
4. Operation and Maintenance of the constructed facilities after completion and acceptance of the Design Build part of the Works.

10.1.2 Deleted.

10.1.3 The Contractor shall pay all the duties, fees and taxes in consequence of his obligations under the Contract, and the Contract Price shall not be adjusted for such costs.

10.1.4 Any quantities which may be set out in the Schedule are only estimated quantities and are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfilment of his obligations under the Contract. The Contractor is responsible for assessing the exact requirements and quantities for all items for the purpose of quoting their rates, and no variation in rates will be allowed on account of any variation in the estimated quantities unless specifically provided elsewhere in the Bid Document.

- 10.1.5 Any quantities, prices or rates of payment per unit quantity which may be set out in the Schedule are only to be used for the purposes stated in the Schedule and may be inapplicable for other purposes.
- 10.1.6 The cost of any taxes incurred in India on the supply of Plant and equipment listed under specific Schedules of Schedule of Prices, whether manufactured or fabricated outside or within the Employer's country, shall be reimbursed at actual cost, not at the estimated cost listed in the Schedule of Prices.
- 10.1.7 Progressive payments shall be made for the work completed by the Contractor in accordance with the provisions of Clause 10.2 [Payment Schedule for Interim Valuation]."

10.2 Payment Schedule for Interim Valuation

- 10.2.1 Prior to commencing construction of the Works, the Contractor shall submit a Bill of Principal Quantities of the Permanent Works (herein referred as "BPQPW") including provision for construction, installation, testing, trial run and commissioning, together with such supporting information and calculations as the Engineer may reasonably require.
- 10.2.2 The BPQPW shall include the anticipated final quantities of the principal items of Permanent Works, which shall have been priced using all-in rates such that the total amount equals the Accepted Contract Amount.
- 10.2.3 The BPQPW shall not contain priced items for design (other than as may be specified in the Schedule of Prices) or for Temporary Works; the value of each element of such work, and of any other work elements not described in the BPQPW, shall each be included in the rates for Permanent Works to be constructed after such element is carried out.
- 10.2.4 The BPQPW shall be subject to the approval of the Employer's Engineer, who may require the Contractor to revise and reissue the BPQPW at any time before taking-over to reflect Variations or if the Employer's Engineer determines that the BPQPW will not fully represent the Permanent Works at taking-over. If the total amount of the BPQPW at any time differs from the Contract Price, the Contract Price shall prevail.
- 10.2.5 During the Time for Completion of Part 1 - EPC of the Works, the Contract Price for the purpose of sub-paragraph (a) of Clause 10.3 [Application for Interim Payment Certificates] shall not exceed the amount calculated from the current BPQPW, based on the quantities of Permanent Works which have been constructed in accordance with the Contract. The Contractor's interim statement shall be in the same form as that of the current BPQPW and shall be accompanied by the Contractor's signed statement that the current BPQPW attached thereto (including anticipated final quantities) and the as-constructed quantities are all correct; each such statement shall also be accompanied by a Construction Certificate, signed by the Contractor's Representative, certifying that the part of the Works constructed to date complies with the Contract. However, the Contractor may propose such a lesser amount as is reasonable, supported with appropriate calculation on a similar basis to the procedure described in this Sub-Clause.

- 10.2.6 The above procedures notwithstanding, interim valuations for the purposes of determining payments to be made to the Contractor by the Employer will be subject to the conditions summarised in the following Table 1 to ensure successful completion of the Works and satisfactory performance of the Contractor's obligations under the Contract. The designation "P" means progressive monthly payments up to the limits indicated, based on progress made by the Contractor. The designation "LS" means that lump sum payment is made upon completion of the activity described.

10.2.7	Payment Schedule for Interim Valuations			
	Major Work Category	Payment (in % of Total Price)	Type of Payment	Description (Stage of Work)
	Designs and Documentation:			
	Design and Drawings for Survey reports, documents for Basic and Detailed Engineering and BIM Model.	100%	P	Progressive payments in proportion to completion, approval and acceptance of the final designs by the Employer's Engineer.
	Civil Works:			
	Water Retaining Structures (e.g. Aeration Tank, MBR tank, Thickeners, Grit Separators, etc.)	90%	P	Progressive payments up to completion of the civil works, but prior to hydraulic testing.
		10%	LS	Balance payment on successful completion of hydraulic testing of water retaining structures
	General Civil Works (excavation, site grading, backfilling, roadwork, drainage, structures, building other than water retaining structures)	90%	P	Progressive payment commensurate with progress achieved, up to 90% of the Contract price for the subject item.
		10%	LS	Balance payable on completion of clean-up, removal of debris and Contractor's equipment, final grading and landscaping of the site.
	Supply and Delivery of Plant and Equipment for Incorporation in the Permanent Works:			
	Mechanical and Electrical Equipment, Instrumentation, etc.	50%	LS	Payment on supply, delivery to the site, proper storage and acceptance.
		40%	LS	LS payment on completion of installation.

		10%	LS	LS payment on successful completion of testing, trial run, commissioning and performance guarantee test.
Operation and Maintenance:				
Monthly Services	O&M	100%	P	On completion of each quarter's operations and maintenance.

10.3 Application for Interim Payment Certificates

- 10.3.1 For payments relating to Part 1- EPC of the Works, the Contractor shall submit a statement to the Employer/Employer's Engineer after the end of each month, in a form approved by the Engineer, showing the amounts to which the Contractor considers himself to be entitled together with supporting documents which shall include the detailed report on the progress during the month in accordance with Clause 3.10 [Progress Reports].
- 10.3.2 The statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:
1. the contract value, at base rates and prices, of the Contractor's Documents produced and the Works (including Variations) executed up to the end of the month.
 2. any amount to be deducted for retention, calculated by applying the percentage of retention stated in the Contract Data Sheet to the total of the above amounts, until the amount so retained by the Employer reaches the limit of Retention Money (if any) stated in the Contract Data Sheet;
 3. any amounts to be added and deducted for the advance payments and repayments in accordance with Clause 10.4 [Advance Payment];
 4. any other additions or deductions which may have become due in accordance with the Contract (including those under Clause 15 [Claims, Disputes and Arbitration]), other than under Sub-Clause 7.3 [Delay Damages]; and
 5. the deduction of the amounts certified in all previous Interim Payment Certificates.
- 10.3.3 For payments relating to Part 2 - Operation and Maintenance of the Works, the Contractor shall submit a statement to the Employer/Employer's Engineer after the end of each month, in a form approved by the Engineer, showing the amounts to which the Contractor considers himself to be entitled together with supporting documents.
- 10.3.4 The Statement shall include the following items as applicable:
1. the estimated contract value of the Operation and Maintenance services of the facilities up to the end of the month; and
 2. any amounts to be added and deducted for changes in cost in accordance with relevant clause mentioned in Part 5-Particular Conditions of O&M;

10.4 Advance Payment

- 10.4.1 The Employer shall make an interest-bearing advance payment (the “**Advance Payment**”) at the rate of interest and total amount as indicated in the **Contract Data Sheet**, for mobilisation expenses and for the procurement of equipment. The Advance Payment shall be made in two equal instalments of 5% of the Contract Price.
- 10.4.2 The Contractor may apply to the Employer for each instalment of the Advance Payment along with an irrevocable and unconditional guarantee from a Bank/Insurance surety bond for an amount equivalent to 110% (one hundred and ten per cent) of such instalment, substantially in the form provided. The guarantee/bond shall remain effective until the advance payments have been repaid, but its amount shall be progressively reduced by the amounts repaid by the Contractor as indicated in the Interim Payment Certificates
- 10.4.3 The Employer’s Engineer shall issue an Interim Payment Certificate for the first instalment of the Advance Payment only after execution of the Form of Agreement by the parties hereto, furnishing of the Performance Security for Part 1 – EPC of the Works in accordance with the provisions of this Clause 10.4
- 10.4.4 The Contractor may apply for the second instalment after the first instalment of the advance payment has been utilised as per the approved programme, and to the satisfaction of the Employer’s Engineer, the Contractor may then apply for the second instalment. The Employer will make payment of the second instalment after the Contractor has successfully fulfilled the following conditions:
1. Mobilised the survey and subsoil investigation crews to the Site and commenced the surveys and subsoil investigations.
 2. Submitted a list of proposed subcontractors for construction and their respective agreements for approval by the Employer’s Engineer.
 3. Submitted the proposed “Submission and Anticipated Approval Programme” for construction documents for approval by the Employer’s Engineer.
 4. Submitted the proposed construction programme for approval by the Employer’s Engineer.
 5. Submitted for approval by the Employer’s Engineer, mobilisation/ deployment schedules for:
 - i. Contractor’s key personnel required for managing, executing and supervising the Works,
 - ii. Drawing and document list along with the proposed schedule for Basic and Detailed Engineering and BIM modelling
 - iii. Contractor’s Plant, Machinery and Equipment required for executing the Works; and
 - iv. Procurement Schedule for major materials and equipment to be incorporated into the Permanent Works.
 6. Submitted a Cash Flow Forecast for approval by the Employer’s Engineer.

7. Submitted a list of proposed quarries, suppliers of construction material, along with their credentials, for approval by the Employer's Engineer.
 8. Established the fully furnished Site office as per the Contract Requirement.
- 10.4.5 In case the advance payment is not utilised by the Contractor as per the approved programme and within the stipulated period to the satisfaction of the Employer/Employer's Engineer, default proceedings as per Clause 11 [Termination], shall be initiated against the Contractor.
- 10.4.6 Repayment of the advance payment shall be by deduction from the Interim Payments in accordance with the percentages shown in the Table below, such that 100% of the advance will be repaid within a period of not more than 12 months from the Commencement Date.

10.4.7 **Table for Repayment of Advance Payment**

Interim Payment for the Work Done during the Month After Payment of the Advance	Deduction from Interim Payment (Percent of Advance Amount)	Cumulative Recovery of Advance (Percent of Advance Amount)
0 to 3 Months	No Recovery	0%
4 Months	10%	10%
5 Months	10%	20%
6 Months	10%	30%
7 Months	10%	40%
8 Months	10%	50%
9 Months	10%	60%
10 Months	10%	70%
11 Months	10%	80%
12 Months	10%	90%
13 Months	10%	100%

- 10.4.8 If the advance payment has not been repaid by the end of the 13th month from the Commencement Date or prior to termination under Clauses 11 [Termination] or Clause 14 [Force Majeure] (as the case may be), then the whole of the balance then outstanding shall immediately become due and payable by the Contractor to the Employer.

10.5 Payment

- 10.5.1 The Employer shall pay to the Contractor:
1. the first instalment of the advance payment in accordance with relevant clauses of Clause 10.4 [Advance Payment] within the time specified in the Contract Data Sheet

2. the amount certified in each Interim Payment Certificate within 30 days from the date on which the Employer's Engineer receives the duly completed Statement and supporting documents; and
3. the amount certified in the Final Payment Certificate within 90 days from the date of issue of the Certificate.

Payments shall be made in Indian Rupees, into a bank account nominated by the Contractor, in India.

10.6 Delayed Payment

- 10.6.1 The Payments due from the Employer 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 Employer shall pay interest for the period of delay calculated at a rate mentioned in the Contract Data Sheet. In the event of the failure of the Employer, Clause 11 may prevail.

10.7 Payment of Retention Money

- 10.7.1 50% of this Retention Money shall be released within 28 days of the issue of the Completion Certificate. The balance Retention Money may be paid to the contractor upon submission of a Bank Guarantee of 110% of the balance amount, valid up to 60 days beyond the expiry of the Defect Liability Period.
- 10.7.2 The Contractor shall ensure that the guarantee is valid and enforceable until the Contractor has executed and completed the Works or Section and remedied any defects, as specified in the Performance Security in Clause 3.2, and shall be returned to the Contractor accordingly.

10.8 Currencies of Payment

The currency of account shall be the Local Currency, i.e. INR (Indian National Rupees), and all payments made in accordance with the Contract shall be in Local Currency.

10.9 Change in laws

- 10.9.1 The Contract Price is subject to adjustment for any increase or decrease in Cost due to any significant change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) made after the date of issue of the Letter of Award, which affects the Contractor in the performance of obligations under the Contract.
- 10.9.2 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 cost, notify the Employer with a copy to the Engineer-in-charge of such additional cost due to Change in Law.

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 cost, notify the other Party with a copy to the Engineer-in-charge of such reduction in cost due to Change in Law.

The Engineer-in-charge shall, within 30 (thirty) days from the date of receipt of the notice from the Contractor or the Employer, determine any addition or reduction to the Contract Price, as the case may be, due to the Change in Law.

11. TERMINATION

11.1 Corrupt or Fraudulent Practices

- 11.1.1 The Employer may terminate this Contract, by not less than thirty (30) days' written notice of termination to the Contractor, in the case if the Contractor, in the judgment of the Employer has engaged in Corrupt or Fraudulent Practices in competing for or in executing the Contract.

For the purpose of this clause:

"Corrupt Practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution.

"Fraudulent Practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the Employer, and includes collusive practice among contractors (prior to or after submission of proposals) designed to establish prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.

11.2 Notice to Correct

If the Contractor fails to carry out any obligation under the Contract, the Engineer may issue a notice to the Contractor to make good the failure and to remedy it within a specified reasonable time.

11.3 Termination for Contractor Default

- 11.3.1 The Employer shall be entitled to terminate the Contract under any of the following conditions:
1. the Contractor fails to provide, extend or replenish, as the case may be complying with Clause 3.2 [Performance Security] or take adequate action as per notice under Clause 11.2 [Notice to Correct]
 2. the Contractor abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,
 3. the Contractor does not achieve the latest outstanding Project Milestone due in accordance with the project schedule approved by Employer, subject to any Time Extension, and continues to be in default for 45 (forty-five) days;

4. 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 Engineer-in-charge;
 5. the Contractor subcontracts the whole or any part of the Works or assigns the Contract or the Maintenance without prior consent of the Engineer-in-charge;
 6. the Contractor becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events
 7. the Contractor creates any Encumbrance in breach of this Agreement;
 8. 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 Employer, a Material Adverse Effect;
 9. 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;
 10. the Contractor submits to the Employer any statement, notice or other document, in written or electronic form, which has a material effect on the Employer's rights, obligations or interests and which is false in material particulars;
 11. the Contractor has failed to fulfil any obligation, for which failure Termination has been specified in this Agreement;
 12. 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 Employer.
- 11.3.2 Save as otherwise provided in this Agreement, in the event that any of the defaults specified above shall have occurred, the Contractor shall be deemed to be in default of this Agreement (the "Contractor Default"), unless the default has occurred solely as a result of any breach of this Agreement by the Employer or due to Force Majeure.
- 11.3.3 Without prejudice to any other rights or remedies which the Employer may have under this Agreement, upon occurrence of a Contractor Default, the Employer shall be entitled to terminate this Agreement by issuing a Termination Notice to the Contractor; provided that before issuing the Termination Notice, the Employer 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.
- 11.4 Termination for Employer Default**
- 11.4.1 In the event that any of the defaults specified below shall have occurred, and the Employer 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 Employer shall be deemed

to be in default of this Agreement (the “Employer 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:

- a) the Employer has failed to make payment of any amount due and payable to the Contractor within the period specified in this Agreement;
- b) the Employer has failed to provide, within a period of 180 (one hundred and eighty) days from the Award Date, the environmental clearances required for construction of the Project Works;
- c) the Employer repudiates this Agreement or otherwise takes any action that amounts to or manifests an irrevocable intention not to be bound by this Agreement; or
- d) the Engineer-in-charge fails to issue the relevant Interim Payment Certificate within 60 (sixty) days after receiving a statement and supporting documents.

Without prejudice to any other right or remedy which the Contractor may have under this Agreement, upon occurrence of an Employer’s Default, the Contractor shall be entitled to terminate this Agreement by issuing a Termination Notice to the Employer; provided that before issuing the Termination Notice, the Contractor shall by a notice inform the Employer of its intention to issue the Termination Notice and grant 15 (fifteen) days to the Employer 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.

11.5 Termination for Employer’s Convenience

- 11.5.1 Notwithstanding anything stated herein above, the Employer may terminate this Agreement for convenience. The termination shall take effect 30 (thirty) days from the date of notice hereunder.

11.6 Requirements after Termination

- 11.6.1 Upon Termination of this Agreement, Contractor shall deliver to the Employer all Plant and Materials which shall have become the property of the Employer.
- 11.6.2 After termination of this Agreement for Contractor Default, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and these entities may then use any Materials, Plant and Equipment, drawings and other design documents made by or on behalf of the Contractor.
- 11.6.3 Upon Termination of this Agreement for Contractor Default, the Contractor shall then vacate the Site within one week and deliver any required Goods, all Contractor’s Documents and other design documents (including all relevant records, reports, Intellectual Property and other licenses pertaining to the Works, Maintenance, other design documents and in case of Termination occurring after the Provisional Certificate has been issued, the “as built’ Drawings for the Works) made by or for him, to the Engineer-in-charge. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment

of any subcontract, and (ii) for the protection of life or property or for the safety of the Works. The contractor shall transfer and/or deliver all Applicable Permits to the extent permissible under Applicable Law.

- 11.6.4 Upon Termination of this Agreement for Contractor Default, the Employer shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Employer, these items may be sold by the Employer in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

11.7 Valuation of Unpaid Works

- 11.7.1 After a notice of termination under Clause 11.3 [Termination for Contractor Default], the Employer may:

- a) Within a period of 45 (forty-five) days after Termination under applicable sub-clauses of clause 11, as the case may be, the Engineer-in-charge shall proceed in accordance with Clause 2.5 [Determination by the Employer's Engineer] to determine as follows the valuation of unpaid Works (the "Valuation of Unpaid Works"):
- b) value of the completed stage of the Works, less payments already made;
- c) 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
- d) value of Maintenance, if any, for completed months, less payments already made, 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.

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

11.8 Termination Payment

- 11.8.1 Upon Termination on account of Contractor's Default under Clause 11, the Employer shall:
- a) withhold further payments to the Contractor until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Employer, have been established, and/or recover from the Contractor any losses and damages incurred by the Employer and any extra costs of completing the Works.
 - b) encash and appropriate the Performance Security and Retention Money, or in the event the Contractor has failed to replenish or extend the Performance Security

- c) encash and appropriate the bank guarantee, if any, for and in respect of the outstanding Advance Payment and interest thereon; and 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.

11.8.2 Upon Termination on account of an Employer Default under Clause 11.4 [Termination for Employer Default] or Clause 11.5 [Termination for Employer's Convenience], the Employer shall:

- a) return the Performance Security and Retention Money forthwith;
- b) encash and appropriate the bank guarantee, if any, for and in respect of the outstanding Advance Payment; 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 Engineer-in-charge, of the Plant and Materials procured by the Contractor and transferred to the Employer 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 Engineer-in-charge; and

Termination Payment shall become due and payable to the Contractor within 45 (forty five) days of a demand being made by the Contractor to the Employer with the necessary particulars, and in the event of any delay, the Employer shall pay interest at the Base Rate plus 2% (two 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 Employer of its payment obligations in respect thereof hereunder.

The Contractor expressly agrees that Termination Payment under this Clause 11 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.

11.9 Other Rights and Obligations of the Parties

Upon Termination for any reason whatsoever

- a) property and ownership in all Materials, Plant and Works and the Project Works shall, as between the Contractor and the Employer, vest in the Employer in whole; provided that the foregoing shall be without prejudice to Clause 11.8 [Termination Payment]
- b) risk of loss or damage to any Materials, Plant or Works and the care and custody thereof shall pass from the Contractor to the Employer; and

- c) the Employer 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 Employer in accordance with the provisions of this Agreement.

11.10 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.

12. RISK AND RESPONSIBILITY

12.1 General indemnity

The Contractor will indemnify, defend, save and hold harmless the Employer and its officers, servants, agents, Government Instrumentality and Government owned and/or controlled entities/enterprises, (the "Employer 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 Employer Indemnified Persons.

12.2 Indemnity by the Contractor

Without limiting the generality of Clause 12 [Risk and Responsibility], the Contractor shall fully indemnify, hold harmless and defend the Employer and the Employer Indemnified Persons from and against any and all loss and/or damages arising out of or with respect to:

- d) bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and
- e) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss:
 - i. arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, and

- ii. is attributable to any negligence, wilful act or breach of the Contract by the Contractor, the Contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them
- f) failure of the Contractor to comply with Applicable Laws and Applicable Permits;
- g) 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
- h) 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.
- i) 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 Works, 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 Employer a license, at no cost to the Employer, authorizing continued use of the infringing work. If the Contractor is unable to secure such license 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.

12.3 Indemnity by the Employer

- 12.3.1 The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover as described in relevant sub-clauses of Clause 13 [Insurance].

12.4 Notice and contest of claims

- 12.4.1 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 Clause 12 [Risk and Responsibility], (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.

12.5 Defence of claims

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 Clause 12 [Risk and Responsibility], 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 defense. 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.

If the Indemnifying Party has exercised its rights under Clause 12.4 [Notice and contest of claims], 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).

If the Indemnifying Party exercises its rights under Clause 12.4 [Notice and contest of claims], 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 authorized in writing by the Indemnifying Party; or
- 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 defense of such action; or
- 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 12.4 shall be applicable, the counsel for the Indemnified Party shall have the right to direct the defense 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.

12.6 Limitation of Liability

- 12.6.1 Notwithstanding anything to the contrary contained in this Clause 12 [Risk and Responsibility], neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract.
- 12.6.2 The total liability of the Contractor to the Employer, under or in connection with the Contract, shall not exceed the sum stated in the Contract Data Sheet.
- 12.6.3 This Clause 12.6 [Limitation of Liability] shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

13. INSURANCE

13.1 Insurance for Works and Maintenance

- 13.1.1 The Contractor shall effect and maintain at its own cost the insurances specified in Clause 13 and as per the requirements under the Applicable Laws.
- 13.1.2 Subject to the relevant provisions of Clause 14 [Force Majeure], the Employer and the Contractor shall, in accordance with its obligations as provided for in this Agreement, be liable to bear the cost of any loss or damage that does not fall within the scope of this Clause 13 [Insurance] or cannot be recovered from the insurers.
- 13.1.3 Subject to the exceptions specified in Clause 13.1.4 below, the Contractor shall, save and except as provided for in this Agreement, fully indemnify, hold harmless and defend the Employer 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 (other than the Works);

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.

- 13.1.4 Notwithstanding anything stated above in Clause 13.1.3, the Employer 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 Employer;

- b) the right of the Employer to execute the Works, or any part thereof, on, over, under, in or through any land;
- c) 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
- d) the death of or injury to persons or loss of or damage to property resulting from any act or neglect of the Employer, its agents, servants or other contractors, not being employed by the Contractor Provided that, in the event of any injury or damage as a result of the contributory negligence of the Contractor, the Employer 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 may be proportionately determined to be the liability of the Employer, its servants or agents or other contractors not associated with the Contractor in such injury or damage.

13.1.5 Without prejudice to the obligations of the Parties as specified under Clauses 13.1.3 and 13.1.4, the Contractor shall maintain or effect such third party insurances as may be required under the Applicable Laws.

13.1.6 The Contractor shall provide to the Employer, within 30 days of the Appointed Date, evidence of professional liability insurance maintained by its Project Manager and/or consultants to cover the risk of professional negligence in the design of Works. The professional liability coverage 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.

13.2 Insurance for Works and Contractor's Equipment

13.2.1 The Contractor shall effect and maintain at its own cost, from the Date of Letter of Award till the date of issue of the last Completion Certificate, the following insurances procured from the Directorate of Insurance, Government of Maharashtra for a minimum amount as indicated in the Contract Data Sheet 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, 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.
- c) The Contractor shall effect and maintain at its own cost, from the Appointed Date till the date of issue of the last completion certificate and during the full 4 years O & M period from the issue of 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, Terrorism and War and Riots Protection Insurance.

- 13.2.2 The insurance under Clause 13.2 above shall cover the employer and the contractor against all loss or damage from whatsoever cause arising other than risks which are not insurable at commercial terms.

“All risks of loss including theft of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the Exceptional Risks are the responsibility of the Contractor. Any loss not insured or not recovered (including policy excesses etc.) from insurers shall be borne by the Contractor. All insurances shall be in the joint name of contractor and the Employer. The contract shall maintain a Contractors All Risk Policy (CAR) for the entire duration of the contract including O&M period for the entire facility” The Contractor shall also take additional covers (Add-On covers) insurance like Third Party Liability, Surrounding properties, Clearance and Removal of debris, Cross liability, Express Freight, Extended Maintenance Cover up to Final Takeover, etc. The sum insured for such Add-On covers shall be decided by the CONTRACTOR based on his assessment and risk involved in the contract. Risks to be covered by insurance shall not be limited merely to the items mentioned above. The CONTRACTOR shall arrange for insurance of any other risks he may deem prudent, but the expenses thereof shall be to the account of the contractor only full plant. If necessary, Transit and storage (all risks) insurance coverage for additional transit involved for sending equipment/material to Sub-Contractor/Fabricator’s shop for fabrication/ reprocessing and receiving back at site shall be taken.

13.3 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 arises from a cause occurring prior to the issue of Completion Certificate. The Contractor shall also maintain other insurances for maximum sums as may be required under the Applicable Laws and in accordance with Good Industry Practice.

13.4 Insurance to be in Joint Names

The Insurance under headings 13.2 and 13.3 above shall be in the joint names of the Contractor and the Employer.

13.5 Notice to the Employer

No later than 15 (fifteen) days after the date of this Agreement, the Contractor shall by notice, furnish to the Employer, in reasonable detail, information in respect of the insurances that it proposes to effect and maintain in accordance with this Clause 13 [Insurance]. Within 15 (fifteen) days of receipt of such notice, the Employer 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.

13.6 Evidence of Insurance Cover

All insurances obtained by the Contractor in accordance with this Clause 13 [Insurance] 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 Employer notarized true copies of the certificate(s) of insurance, copies of insurance policies and premium 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 Employer. The Contractor shall act in accordance with the directions of the Employer. Provided that the Contractor shall produce to the Employer the insurance policies in force and the receipts for payment of the current premium. The Contractor shall ensure the adequacy of the insurances at all times in accordance with the provisions of this Agreement.

13.7 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 Employer shall have the option to either keep in force any such insurances, and pay such premium 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.

13.8 Waiver of Subrogation

All insurance policies in respect of the insurance obtained by the Contractor pursuant to this Clause 13 [Insurance] shall include a waiver of any and all rights of subrogation or recovery of the insurers thereunder against, inter alia, the Employer, 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.

13.9 Contractor's Waiver

The Contractor hereby further releases, assigns and waives any and all rights of subrogation or recovery against, inter alia, the Employer 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.

13.10 Cross liabilities

Any such insurance maintained or effected in pursuance of this Clause 13 [Insurance] shall include a cross liability clause such that the insurance shall apply to the Contractor and to the Employer as separately insured.

13.11 Accident or Injury to Workmen

Notwithstanding anything stated in this Agreement, it is hereby expressly agreed between the Parties that the Employer 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 Employer, its agents or servants. The Contractor shall indemnify and keep indemnified the Employer 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 Employer shall be liable.

13.12 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 Site from and against any liability incurred in pursuance of this Clause 13 [Insurance]. Provided that for the purposes of this Clause 13.12, the Contractor's personnel/any person employed by the Contractor shall include the Sub-contractor and its personnel. It is further provided that, in respect of any persons employed by any Sub-contractor, the Contractor's obligations to insure as aforesaid under this Clause shall be discharged if the Sub-contractor shall have insured against any liability in respect of such persons in such manner that the Employer is indemnified under the policy. The Contractor shall require such Sub-contractor to produce before the Employer, 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 Employer.

13.13 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 Works 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.

13.14 Compliance with Policy Conditions

Each Party hereby expressly agrees to fully indemnify the other Party from and against all losses and claims arising from its failure to comply with conditions imposed by the insurance policies effected in accordance with this Agreement.

14. FORCE MAJEURE

14.1 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 14.2, 14.3 and 14.4 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 (i) is beyond the reasonable control of the Affected Party, and (ii) the Affected Party could not have prevented or overcome by exercise of due diligence and following Good Industry Practice, and (iii) has Material Adverse Effect on the Affected Party.

14.2 Non-Political Event

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

- a) act of God, epidemic, pandemic, 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, Subcontractors or their respective employees/representatives, or attributable to any act or omission of any of them) interrupting supplies and services to the Project works 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 14.3;
- 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 Employer 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 Employer;
- 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;

14.3 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 Works by the Contractor for an aggregate period exceeding 10 (ten) days in an Accounting Year;
- d) any failure or delay of a Sub-contractor to the extent caused by any Indirect Political Event;

14.4 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 10.9 [Change in laws];
- 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 unauthorized or without jurisdiction revocation of, or refusal to renew or grant without valid cause, any clearance, license, permit, authorization, 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, license, authorization, 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

14.5 Duty to Report Force Majeure Event

14.5.1 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 Clause 14 [Force Majeure] 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.

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.

For so long as the Affected Party continues to claim to be materially 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 14.5.1, and such other information as the other Party may reasonably request the Affected Party to provide.

14.6 Effect of Force Majeure Event on the Agreement

Upon the occurrence of any Force Majeure 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:

- a) 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;
- b) 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 Employer to the Contractor for the Force Majeure events; and
- c) upon occurrence of a Political Event, all Force Majeure costs attributable to such Political Event shall be reimbursed by the Employer 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.

Save and except as expressly provided in this Clause 14 [Force Majeure], 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.

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.

14.7 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 Clause 14 [Force Majeure], 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.

14.8 Termination Payment for Force Majeure Event

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 11.7 [Valuation of Unpaid Works].

Provided that in the event Termination occurs during the Maintenance Period, the Employer's Engineer shall only determine the value of Works associated with Maintenance.

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

- a) any sums due and payable under Clause 11.7 [Valuation of Unpaid Works]; and
- b) the reasonable cost, as determined by the Employer's Engineer, of the Plant and Materials procured by the Contractor and transferred to the Employer for use in Construction or Maintenance, only if such Plant and Materials are in conformity with the Specifications and Standards;

If Termination is on account of a Political Event, the Employer shall make a Termination Payment to the Contractor in an amount that would be payable under Clause 11.8 [Termination Payment] as if it were an Employer Default.

14.9 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.

14.10 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.

15. CLAIMS, DISPUTES AND ARBITRATION

15.1 Dispute Resolution

- 15.1.1 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 Amicable Settlement procedure set forth in Clause 15.2 or further clauses.

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.

15.2 Amicable Settlement

- 15.2.1 Each Party shall select and appoint one senior representative not connected with the day-to-day operations of the Facility, within a period of 28 days from the day on which the notice of dispute has been sent by one Party to the other. The representatives shall meet at the project site/MITL's Head Office as and when necessary, and, in good faith and in their best endeavours at all times, attempt to resolve the dispute and produce written terms of settlement.
- 15.2.2 If the dispute has not been resolved as evidenced by the signing of the written terms of settlement within 56 days after the receipt of the notice as provided above, the provisions of the following Clause shall be applicable

15.3 Expert Committee

- 15.3.1 Dispute resolution through the Expert Committee can be resorted to if both Parties agree to refer the dispute to the Expert Committee or as a result of the above Clause.
- 15.3.2 In the event a Party issues a notice (Expert Committee Notice) to refer the dispute to the Expert Committee, the Parties may finalise a choice of an independent expert in the field of wastewater treatment and supply and/or financial and cost accounting as the case warrant within three weeks of such notice, failing which, each Party shall appoint such an independent expert within four weeks of the Expert Committee Notice.
- 15.3.3 Such independent experts shall have adequate experience in the design, construction, operation and maintenance of wastewater treatment facilities and/or finances, accounting, costing and valuation practices as the case warrants.
- 15.3.4 The two experts will jointly appoint a third expert with similar experience within one week of their appointment.

- 15.3.5 The Party issuing the Expert Committee Notice will provide the Experts with a written submission of the nature of the dispute and the claim of the other Party, along with supporting documents, within another three weeks of the constitution of the Expert Committee. Within four weeks of the furnishing of such submission, the other Party may choose to provide written submissions defending its position.
- 15.3.6 The Expert Committee may call on either Party to furnish additional information as deemed necessary to solve the dispute.
- 15.3.7 The Expert Committee shall give the Majority decision to both Parties within twelve weeks of the receipt of a written submission from the contracting Parties.
- 15.3.8 Either party shall have the right to issue an Arbitration Notice within a period of 4 weeks from the Expert committee communicating such a decision to the Parties. In the absence of such notice, the decision of the Expert Committee shall be final and binding on the Parties.
- 15.3.9 The costs of the engagement of the Expert Committees shall be shared equally by the Parties.

15.4 Conciliation

In the event of any Dispute between the Parties, either Party may call upon the Employer's Engineer or such other person as the Parties may mutually agree upon (the "Conciliator") to mediate and assist the Parties in arriving at an amicable settlement thereof. Failing mediation by the Conciliator or without the intervention of the Conciliator, either Party may require such Dispute to be referred to the Managing Director of the Employer 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) days of the meeting or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 30 (thirty) days of the notice in writing referred to in Clause 15.1.1 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 15.3.

15.5 Arbitration

- 15.5.1 Any Dispute which is not resolved amicably by conciliation, as provided in Clause 15.2, shall be finally decided by reference to arbitration by a Board of Arbitrators appointed in accordance with Clause 15.3.2. Such arbitration shall be held in accordance with the Rules of Arbitration of the International Centre for Alternative Dispute Resolution, 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 Act. The venue of such arbitration shall be [Mumbai], and the language of the arbitration proceedings shall be English.
- 15.5.2 There shall be a Board of 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.

- 15.5.3 The arbitrators shall make a reasoned award (the "Award"). Any Award made in any arbitration held pursuant to this Clause 15 [Claims, Disputes And Arbitration] shall be final and binding on the Parties as from the date it is made, and the Contractor and the Employer agree and undertake to carry out such Award without delay.
- 15.5.4 The Contractor and the Employer agree that an Award may be enforced against the Contractor and/or the Employer, as the case may be, and their respective assets wherever situated.
- 15.5.5 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.
- 15.5.6 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 120 % (one hundred and twenty per cent) of 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.

15.6 Adjudication by Regulatory Employer, Tribunal or Commission

In the event of constitution of a statutory regulatory Employer, tribunal or commission, as the case may be, with powers to adjudicate upon disputes between the Contractor and the Employer, all Disputes arising after such constitution shall, instead of reference to arbitration under Clause 15.3 [Arbitration], be adjudicated upon by such regulatory authority, tribunal or commission in accordance with the Applicable Law and all references to Dispute Resolution Procedure shall be construed accordingly. For the avoidance of doubt, the Parties hereto agree that the adjudication hereunder shall not be final and binding until an appeal against such adjudication has been decided by an appellate tribunal or court of competent jurisdiction, as the case may be, or no such appeal has been preferred within the time specified in the Applicable Law.

15.7 Mediation

- 15.7.1 In the event of any dispute or difference arising out of or in connection with this Agreement, including any question regarding its existence, validity, or termination, the Parties shall first attempt to resolve such dispute through mediation in accordance with the Mediation Rules of the Indian Dispute Resolution Centre (IDRC) and procedures of the Indian Institute of Arbitration and Mediation (IIAM) or as per procedure specified in office memorandum issued by Procurement Policy Division, Department of Expenditure,

Ministry of Finance, Govt. of India vide no. F.1/2/2024-PPD dated 3rd June, 2024 or any other institution agreed upon by the Parties.

- 15.7.2 The mediation shall be conducted by a sole mediator appointed by the Parties or by the institution agreed upon. The mediator's decision shall not be binding on the Parties.
- 15.7.3 The mediation shall be conducted in Mumbai, India. If the dispute is not resolved through mediation within 180 days, either Party may initiate arbitration in accordance with Clause 15.3 or seek relief through other dispute resolution mechanisms available under Indian law.
- 15.7.4 By agreeing to this clause, the Parties undertake to keep the mediation proceedings confidential and not disclose any information relating to the mediation to any third party without the prior written consent of the other Party.

16. PERMITS

The Contractor shall obtain, as required under the Applicable Laws, the following Applicable Permits:

- a) Consent to establish from the State Pollution Control Board / Gram Panchayat.
- b) Permission of Gram Panchayat/State Government/Concerned Authority for excavation & utilisation of Borrow Pits / Ordinary earth.
- c) Permission of Gram Panchayat/State Government/Concerned Authority for the extraction of boulders from the Stone quarry.
- d) Permission of Gram Panchayat/State Government/Concerned Authority for the extraction of Sand.
- e) Permission of Gram Panchayat/ Local body/Concerned Authority for abstraction/utilisation of Water for construction activities during the construction stage.
- f) Permission from the State Pollution Control Board / Local body / Concerned Authority for handling, storage, and disposal of Hazardous Waste.
- g) Permission from the State Pollution Control Board / Local body / Concerned Authority for handling, storage, and disposal of Construction & Demolition Waste.
- h) Permission from the State Pollution Control Board / Local body / Concerned Authority for handling, storage and disposal of Electronic Waste, Plastic Waste.
- i) License from the Inspector of Factories.
- j) Labour License, including all compliances such as BOCWA registration, ESIC registration, PF, Gratuity, Bonus & Medical facilities as applicable on the EPC contractor.
- k) Tree cutting.
- l) Insurance Policies such as CAR Policy, Personal & Accident Policy, etc.

- m) Local body permits & NOC if any.
- n) Any other permits, clearances or approvals required for the execution of the scope as per the tender.
- o) Any other permits, clearances or approvals required under Applicable Laws.

Applicable permits, as required, relating to environmental protection and conservation shall have been procured by the Employer in accordance with the provisions of this Agreement. The statutory deposits/fees for all the environmental permits like Consent to Establish, Consent to Operate, as required by the MPCB/CPCB shall be paid by the Employer directly. However, follow-up and liaison with statutory authorities and all other expenses are in the Contractor's scope.

17. PROJECT MILESTONES

- 17.1.1 During the Construction period, the Contractor shall comply with the requirements mentioned below 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 Employer of such compliance along with the necessary particulars thereof.

- 17.1.2 **Project Milestone-I** shall occur on the date falling on the 120th (one hundred and twentieth) day from the Appointed Date (the "Project Milestone-I").

Prior to the occurrence of Project Milestone-I, the Contractor shall complete all the designs, drawings for the entire project work, also the 3D BIM model with clash resolution and shall have commenced construction at the site and submitted to the Employer duly and validly prepared Stage Payment Statements for a cumulative amount not less than 5% (five per cent) of the Contract Price.

- 17.1.3 **Project Milestone-II** shall occur on the date falling on the 270th (two hundred and seventieth) day from the Appointed Date (the "Project Milestone-II").

Prior to the occurrence of Project Milestone-II, the Contractor shall have completed the design, drawings, models, including GFC drawings and an integrated and coordinated BIM model, as per the agreed schedule and continued with the Construction at site and submitted to the Employer duly and validly prepared Stage Payment Statements for a cumulative amount not less than 40% (Forty percent) of the Contract Price.

- 17.1.4 **Project Milestone-III** shall occur on the date falling on the 420th (Four hundred and twenty) day from the Appointed Date (the "Project Milestone-III").

Prior to the occurrence of Project Milestone-III, the Contractor shall have continued with the construction and installation of plant and equipment and submitted to the Employer's Engineer, duly and validly prepared Stage Payment Statements for a cumulative amount not less than 75% (Seventy-five percent) of the Contract Price.

- 17.1.5 **Scheduled Completion Date** shall occur on the 548th (Five hundred and forty-eight) day from the Appointed Date. On or before the Scheduled Completion Date, the Contractor shall have completed Construction, Supply, Erection, Testing, Commissioning, Trial Runs,

Performance Guarantee Test Run (PGTR), along with the Punch list and as-built drawings, along with the updated coordinated BIM model, in accordance with this Agreement.

If the raw wastewater or effluent is not available at the time of completion of works, the contractor is to provide an undertaking that he shall complete the commissioning and performance testing upon the availability of the raw wastewater/effluent during the 4 years of O&M period, as instructed by the Employer/Employer's Engineer at no additional cost to the employer. The contractor shall provide a Bank Guarantee of value equivalent to the weightage amount for the release of payment for commissioning and performance testing. If the effluent is not available even after 4 years, the contractor shall arrange for the effluent and demonstrate the PGTR of the whole plant for the release of the BG.

- 17.1.6 **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, including the Project milestones, shall be deemed to have been amended accordingly.

18. DRAWINGS

- 18.1.1 The contractor shall submit the list of drawings, calculations, and 3D BIM models proposed for the project, along with the timeline, within 30 days from the date of agreement for review and approval by the Engineer-in-charge.
- 18.1.2 In compliance with the obligations set forth in Clause 4.2 of this Agreement, Volume 2, Volume 3 and Volume 5 of the tender document, the Contractor shall furnish to the Employer's Engineer, free of cost, all the drawings, calculations and 3D BIM models for review and approval.
- 18.1.3 The Contractor's submission of individual design drawings and models shall not be deemed complete until the approval of the fully integrated Building Information Modelling (BIM) model by the Engineer-in-charge. This integrated BIM model, as set forth in Vol 2 Part 1 Clause 4.4 [BIM and CAD Requirements], must consolidate and coordinate all components from architectural, structural, MEP, piping, and other relevant disciplines, ensuring consistency, clash resolution, and alignment with the overall project design intent. Approval of the integrated BIM model shall be a prerequisite for final acceptance of the design documentation.
- 18.1.4 Notwithstanding any prior approvals granted for individual designs, drawings, or models, the Contractor shall be responsible for incorporating all modifications, adjustments, or corrections identified during the development and coordination of the integrated 3D BIM model. Any such changes necessary to resolve conflicts, ensure consistency, or achieve full integration across disciplines shall be deemed part of the Contractor's scope of work. These changes shall be implemented in the final design and executed at the site without any additional cost or time implications to the Employer.
- 18.1.5 If the Employer's Engineer determines that, for discharging its duties and functions under this Agreement, it requires any Drawings other than those listed in Volume 2 Part 1 and Volume 2 Part 2, 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 Employer's Engineer, as if such Drawings formed part of this Clause 18.

18.2 Engineering Documentation

18.2.1 Submission of Documentation and Drawings

Unless otherwise specified, all documentation and drawing submittals required by the Contract shall be in accordance with the following clauses.

18.2.2 Formats and Quantities

Documentation and drawings shall be submitted in English in both paper and electronic versions. Three copies of paper versions shall be provided for all documents. For drawings, this shall include three copies at the original sheet size (e.g. A1), unless agreed otherwise with the Employer's Engineer. The format of the electronic copies shall be agreed upon with the Employer's Engineer.

18.2.3 Delivery of Submittals

All submittals shall be made by delivery to the Employer's Engineer's site office during the Employer's Engineer's normal working hours between 10 am to 4 pm. Any submittal received beyond 4 pm will be logged and considered to be submitted on the next working day. Apart from the hard copy submissions, the Contractor shall upload the documents to the Employer's PMIS document system (once operational). In any case, the date of submission on the Engineer in charge's 'Received' stamp shall be considered for all contractual purposes.

All revised submittals should be accompanied by the Compliance Sheet which will summarise all the previous comments and their respective compliances. In the case of drawings, all the changes/compliance shall be duly clouded with the revision number.

18.2.4 Contractor's Approval

Documents and drawings submitted for approval shall be signed as approved by the Contractor. In the case of sub-contractor documents and drawings, these shall also be checked and corrected by the Contractor's Technical Manager prior to issue for approval. The Contractor shall date-stamp and sign each of the subcontractor's documents and drawings. Any documents or drawings submitted to the Employer's Engineer for approval that have not been signed as checked and approved by the Contractor's Technical Manager will be returned for resubmission. Each submittal shall be accompanied by a submittal checklist as agreed with the Employer's Engineer prior to the start of the design/engineering works.

18.2.5 Deviations

Submissions by the Contractor shall be accompanied by details of any proposed deviations from the requirements of the Contract or failing which it shall be deemed that the Contractor's proposal is fully compliant vide the requirements of the Contract.

- 18.2.6 Successive submissions of drawings or documents by the Contractor that do not fully address and/or comply with the comments provided by the Employer's Engineer shall be deemed void and non-responsive. Such submissions shall not be considered valid for review or approval purposes. The Employer shall bear no responsibility for any resulting delays, loss of time, or any direct or indirect losses incurred by the Contractor, including those affecting the timely construction and completion of the project. All such consequences shall be solely at the Contractor's risk and cost.
- 18.2.7 Any failure to achieve project milestones or the Completion Date due to non-compliant submissions shall not relieve the Contractor from liability for liquidated damages or other contractual remedies available to the Employer.

18.3 Document Approval by the Employer's Engineer

- 18.3.1 A response will be given by the Employer's Engineer within twenty-one days of receipt of the drawings or documents. The Employer's Engineer will inform the Contractor by letter or by return of a copy of the document, marked with one of the following remarks:

Type of Code	Description
Code A	Approved for Construction
Code B	Approved Subject to Comments
Code C	Not Approved. Resubmit.
Code D	For information only.

- "Code A – Approved for Construction" authorises the contractor to proceed with the manufacturing or construction at the site.
 - "Code B - Approved Subject to Comments" authorises the Contractor to proceed with the appropriate section of the Works subject to the corrections or Employer Engineer's comments noted on the document and/or accompanying letter or approval sheet. The Contractor shall resubmit the revised document to the Employer's Engineer for approval, incorporating all required corrections. All revisions shall be clearly marked using revision clouds indicating the changes made in the drawings and accompanied by a separate compliance sheet.
 - "Code C - Not Approved. Resubmit" indicates that the document must be revised and resubmitted for approval before proceeding with the manufacturer or construction at the site
 - "Code D - For information only" indicates that the details on the document are not considered to require approval by the Employer's Engineer due to such details being standard, typical, etc., or not relevant to the acceptability of the proposed works/method.
- 18.3.2 Approval of drawings or documents marked as "Approved with Comments" shall not relieve the Contractor of his obligation to ensure full compliance with the contract specifications, the engineer-in-charge's comments, applicable codes, and standards. Any construction work executed based on such drawings is subsequently found to be non-

compliant, the Contractor shall, at their own cost and risk, dismantle and reconstruct the affected works to achieve full compliance. The Employer or Employer's Engineer shall not bear any responsibility or liability for such non-compliant work, regardless of prior conditional approvals. Furthermore, the Employer reserves the right to withhold payment for any such non-compliant work until it is rectified to the satisfaction of the Engineer/Employer's Engineer.

- 18.3.3 The approval shall not be taken as constituting an expression of opinion on the part of the Employer's Engineer as to the strength or efficiency of the plant and equipment or to its correctness or in any way relieving the Contractor from his responsibilities or obligations under the Contract.

18.3.4 Delayed Employer's Engineer Response

The Contractor shall not proceed with any Works that require approval until such approval is given by the Employer's Engineer. In the event that the twenty-one-day review period elapses and no response is received from the Employer's Engineer, the Contractor may proceed at his own risk with the affected element of the works subject to the fulfilment of his contractual obligations.

18.3.5 Late Submittals

Submissions for the Approval of the Employer's Engineer shall be made at times to suit the Contractor's program and as detailed in the Contractor's program. Should the drawings and documents not be submitted in accordance with the Contractor's program, the periods for review by the Employer's Engineer shall be extended as necessary without the Contractor having any entitlement to any associated Extension of Time for Completion.

19. HEALTH, SAFETY AND ENVIRONMENT PLAN REQUIREMENTS

The Contractor shall provide General and Administrative HSE Procedures that will engage the welfare of labour, staff and others abiding by the rules and regulations and provide records to the Employer's Engineer.

19.1 Environmental Conditions

19.1.1 Climatic Conditions

The following typical climatic conditions prevail in the area of the works.

- a) Peak ambient temperature - 50°C
- b) Minimum ambient temperature - 4°C
- c) Average Relative humidity - 99.6%
- d) Special hazards include thunderstorms.

19.2 Health and Safety Conditions

19.2.1 Within 21 days of the Appointed date, the Contractor shall submit a Health and Safety Plan. The Health and Safety Plan shall contain, but not be limited to:

- a) Construction risk assessment and control measures.
- b) Organization and management arrangements for the implementation of the plan
- c) Safety procedures and emergency response protocols
- d) Hazard communication program
- e) PPE compliance
- f) Training and induction programs
- g) Occupational health monitoring and safety audit schedules.
- h) Lifting schedule and lifting equipment certification.
- i) Scaffolding and temporary access controls.
- j) Provisions for First Aid, Welfare and Fire Fighting.
- k) Temporary Power Supplies.
- l) Access Control

The Health and Safety Plan shall be updated as appropriate throughout the duration of the Contract. The Contractor is responsible for the strict implementation of the approved HSE Plan throughout the duration of the project.

19.2.2 HSE Manager

The Contractor shall appoint a competent HSE Manager (should have a minimum 5 years of experience in similar kinds of work and should have a relevant degree or

diploma in construction safety) and shall take all reasonable precautions to prevent accidents to the Contractor's workforce and to the public by providing, inter alia, proper ladders for access, adequate temporary covers to manholes, fencing around excavations, guard rails for inspection of works above ground, hard hats for use in designated areas and notices clearly indicating "hard hat" areas, warning lights and general illumination of hazardous areas.

The HSE Manager shall be stationed from the commencement of the construction work as instructed by the Employer's Engineer. This personnel or a suitable replacement, if required, and for which prior permission of the Employer is to be obtained, shall be stationed at the site till the end of the contract period.

19.2.3 Cease Works

In the event that the Contractor's safety arrangements and precautions are not to the satisfaction of the Employer's Engineer, he shall be instructed to cease work on the Works or a particular section of the Works until such time as he improves such arrangements and precautions to satisfy the Employer's Engineer.

19.2.4 Work near Live Sewers

Care must be exercised when working in or near live sewers, and tests must be made to verify that no low oxygen atmospheres, hydrogen sulphide or other poisonous gases are present before anyone enters an existing manhole or confined space.

Particular attention is drawn to the dangers of poisoning, asphyxiation or explosion while working in or near, or inspecting, sewers, manholes, chambers, treatment units, pumping stations or any confined space. In this connection, the Contractor shall obtain appropriate safety equipment and acquaint all personnel with the dangers involved and precautions to be taken and shall regularly discuss with the Employer's Engineer's Representative the sufficiency of safety precautions on the site.

19.2.5 Safety of the Public

The need for adequate protection for the general public in the vicinity of all excavations and other potentially dangerous areas of the Works is stressed.

19.2.6 First-Aid

The Contractor shall arrange for the treatment of casualties on the Site in first aid units and for the removal by ambulance of injured or sick employees to hospitals or to their homes.

19.2.7 First-aid boxes

The Contractor shall ensure that at a construction site, one First-aid box for 100 workers is provided and maintained for providing First-aid to the building workers. Every First-aid box is distinctly marked "First-aid" and is equipped with the articles specified in Schedule III of BOCWR.

19.2.8 Occupational Health Centre

The Contractor shall ensure that at a construction site that an occupational health centre, mobile or static, is provided and maintained in good order. Services and facilities shall be provided as per the scale laid down in Schedule X of BOCWR. A construction medical officer appointed in an occupational health centre will possess the qualification as laid down in Schedule XI of BOCWR.

19.2.9 Ambulance Van

The Contractor shall ensure at a construction site of a building or other construction work that an ambulance van and room are provided at such construction site or an arrangement is made with a nearby hospital for providing such ambulance van for transportation of serious cases of accident or sickness of workers to hospital promptly and such ambulance van and room are maintained in good repair and is equipped with standard facilities specified in Schedule IV and Schedule V of BOCWR.

19.2.10 Fire Protection

The Contractor shall construct, equip and administer at his cost fire points in such positions and of such size as will provide an adequate service for the protection against fire on the Site. He shall install and maintain a proper warning system to ensure that firefighting equipment can be concentrated on the fire before it has had time to spread.

19.2.11 Motivational Program and Award to Employees/Labourers/Subcontractors

The Contractor should arrange a motivational Program at the site, in which HSE in charge along with his counterparts and the project in charge should motivate and encourage the labors for good safety practices at site and recognize them by providing gifts/ safety badges and certificates. The best safety person should come from labors, staffs and subcontractors. It should be done monthly during Monthly HSE committee meeting.

19.2.12 Monthly Safety Committee Meeting

The Contractor shall form a safety committee with Project In charge being the Head of the committee. The committee should call a monthly meeting and include representatives from Client, Contractor and Subcontractor to discuss on the safety issues pertaining to the site with sole objective and intent to keep site safe from any kind of expected or unaccepted hazards, The MOM shall be recorded and kept and shared among all.

19.2.13 Staff Trainings

The HSE incharge must regularly conduct safety training among the workers and staffs to impart site practical knowledge and threats associated with specific tasks like height work, electrical work, Mechanical lifting work, Hot work etc. in order to

mitigate the risk due to any accident which can happen due to lack of knowledge. The trainings should also discuss industry safety standards and root cause analysis or case studies of previous incidents.

19.2.14 Assembly Point

The contractor shall allocate and declare one specific area as an “Assembly Point” where in case of emergency the workers and staffs should gather.

19.2.15 Safety Mock Drills

The HSE In charge must regularly conduct safety trainings among the workers and staffs to impart site practical knowledge and threats associated with specific tasks like height work, electrical work, Mechanical lifting work, Hot work etc. in order to mitigate the risk due to any accident which can happen due to lack of knowledge. The trainings should also discuss industry safety standards and root cause analysis or case studies of previous incidents.

19.2.16 Celebration of Key Days

The Contractor shall actively participate in and facilitate the celebration of national and international safety and awareness events at the project site. This includes but is not limited to:

- a) National Safety Week
- b) Road Safety Week
- c) Electrical Safety Week
- d) Fire Safety Week
- e) Earth Day
- f) World Environment Day
- g) World Water Day
- h) World No Tobacco Day
- i) World AIDS Day

19.2.17 Toolbox Talk (TBT)

As per the standard site HSE practice, The Contractor’s HSE In charge shall ensure that the job specific TBT is given to the worker daily at site before commencing the work and proper documentation is maintained for better record.

19.2.18 Safety Induction of New Labourers and Staffs

The Contractor shall ensure that all new workers/labors staffs and visitors whether unskilled, skilled or semi-skilled must go through the safety induction before visiting the site.

19.2.19 Screening of Labourers

The HSE in charge, in coordination with the respective department must ensure the screening of labourers before assigning the site specific task to check and ensure the competency of the person to avoid any risk of mishap at the time of job due to lack of experience or work competency.

19.2.20 Third Party Inspection

The Contractor shall ensure that third party inspection (TPI) is carried out for any large equipment's and their parts to ensure their workability like sling, ropes, crane, batching plants etc.

19.2.21 Tie up with local hospital and ambulances.

The Contractor shall arrange and maintain tie-ups with the nearest fully equipped hospital for emergency medical services during the construction period.

A minimum of one ambulance (with stretcher and basic life support equipment) shall be stationed at the site or made available within a 15-minute response time throughout working hours.

Contact details of the hospital and ambulance service shall be visibly displayed at the site and communicated to all workers and staff.

A basic first-aid centre must be established at the site with trained first-aiders available at all times

19.2.22 Hazardous Waste Management

The Contractor shall be fully responsible for the identification, handling, segregation, storage, transportation, and disposal of hazardous waste generated at the site, in full compliance with applicable local, state, and national environmental regulations.

A detailed Hazardous Waste Management Plan shall be submitted and approved prior to commencement of works.

All hazardous materials shall be clearly labelled and stored in designated, ventilated, and secure areas.

Contractor shall maintain a log of all hazardous waste generated and disposed, including manifest copies of disposal by authorized vendors.

All personnel involved in handling hazardous materials shall be trained and provided with proper PPE.

19.3 Personal Protective Equipment (PPE)

The Contractor shall provide safety helmets, safety shoes and high visibility clothing for all visitors, its own or sub-contractor's employees, including workmen, traffic marshal and other employees who are engaged for any work. The PPEs and safety

appliances provided by the Contractor shall be of the standard as prescribed by Bureau of Indian Standards (BIS).

19.4 Welfare Measures for Workers

Latrine and Urinals - Latrine and urinals shall be provided as per Section 33 of BOCWA and maintained as per Rule 243 of BOCWR, and shall also comply with the requirements of public health authorities.

Drinking water - As per Section 32 of BOCWA, the Contractor shall make effective arrangements to provide a sufficient supply of wholesome drinking water with a minimum quantity of 5 litres per workman per day. Quality of the drinking water shall conform to the requirements of national standards on Public Health

On-site rest shelters with shade and seating for meal/rest breaks shall be provided.

Regular health check-ups for workers involved in hazardous activities.

19.5 HSE Plan Requirements

The Contractor shall prepare specific HSE plans based on the specific Construction procedures to be adopted specifically for this Project to address complexity, safety, and welfare of labor/staff/equipment as per the details given below.

19.5.1 HSE Standards

The contractor shall ensure that all personnel engaged (including sub-contractors) with the project shall be conversant with and at all times comply with the HSE standards for the project. The HSE standards for the project shall include the relevant Contract Documents; India HSE legislation, Relevant IS standards (Bureau of Indian Standards) & Project HSE documents (prepared by Safety Consultant of contractor approved by Employer's Engineer.).

19.5.2 Legislation

For the purposes of the project, relevant Indian HSE legislations shall apply to the project as dictated by the various Ministries, including but not least the Ministry of Labour & Employment, Department of Labour – Government of Maharashtra; the Ministry of Environment, Forest, and Climate Change. Contractor shall develop a thorough understanding of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996, Central Rules 1998, Maharashtra Govt. Rules, Building and Other Construction Workers' Welfare Cess Act, 1996 and Central Rules, 1998 and Maharashtra Building Construction Workers' Welfare Board Rules and Environmental Protection Act 1986 and Rules 1986, not only to satisfy the Inspectors' perspective, but also to use legislation as a strong tool for effective HSE management at construction worksites. Contractor is strongly advised to practice the principle of voluntary compliance.

19.5.3 HSE Management System

- a) The contractor shall ensure that they will have an HSE policy and an HSE Management system (including safe work procedures) that is documented, visibly endorsed by the company's top management, and implemented & maintained at the project. The contractor shall ensure that the safe working procedures meet the requirements of the relevant IS standards and are relevant to the works being undertaken by the contractor.
- b) The contractor shall also ensure that the scope of their HSE Management system (including safe work procedures) shall cover not only all areas & tasks being undertaken by the contractor on the project, but also cover the areas & tasks being undertaken by any of their sub-contractor, interfaces with the Employer's Engineer & Employer.
- c) Any omissions, inconsistencies and errors in the OH&S and Environmental Plan or the Employer's acceptance or rejection of the OH&S and Environmental Plan and/or supplements thereto shall be without prejudice to the Contractor's obligations with respect to site safety, industrial health and environment and shall not excuse any failure by the contractor to adopt proper and recognized safety practices throughout the execution of the Work

19.5.4 HSE Risk Management

The contractor shall ensure that they employ best practice methods and meet all legal requirements in identifying, assessing, and controlling HSE hazards. They shall document these methods and the outcomes.

19.5.5 Hazard identification and control

- a) The contractor shall identify hazards and their control measures through a formal hazard identification process. The contractor shall also ensure that they have a written safe work procedure for all the works to be undertaken on the project. Any works that do not have a written work procedure shall have a detailed method statement & job safety analysis (JSA)/risk assessment in place. No work shall be undertaken without an approved method statement & risk assessment in place.
- b) The contractor shall submit written summaries of upcoming work (Two week look ahead) tasks and associated risk control measures to the Employer's Engineer to discuss the risks of upcoming work tasks and the planned mitigation measures in the weekly progress/HSE meetings.

19.5.6 HSE Enforcement

- a) The Employer's Engineer or its representatives shall have the right at any time to audit or inspect Contractor facilities, procedures, and safety management systems. The Contractor shall fully co-operate in such reviews and shall implement recommendations at its own cost where Project HSE Standards or

statutory rules and regulations are contravened. Contractor shall ensure the timely closing out of issues raised via these HSE assessments.

- b) The Employer's Engineer will bring to the attention of Contractor any situation where the Employer's Engineer observes, or is informed of, a contravention of the HSE rules and procedures or unsafe acts; or a situation where those contraventions or unsafe acts identified are not considered likely to present an immediate risk, but are likely to lead to injury, ill health, or damage to the environment.
- c) If the Employer's Engineer observes, or is informed of, a contravention of the safety rules and procedures or unsafe acts, and if those contraventions or unsafe acts identified are considered likely to present an immediate risk to personnel, then they shall have the authority to stop such work until remedial actions have been addressed to prevent such unsafe acts from recurring.
- d) If contraventions or unsafe acts persist or present an imminent risk of serious injury or ill health to the persons involved, Employer's Engineer will have the right to stop work being performed and to order a suspension of the execution of any new work in that part or parts of the Works affected by Contractor's HSE violation or negligence.
- e) Suspension of work shall be measured from the date of issue of an instruction from Employer's Engineer to Contractor to suspend work on that particular part of the Works until the unacceptable safety violation has been fully rectified. In such an instance, Contractor shall have no right to claim for any extension of time or to claim for compensation for the suspension of the work or for the waiving of the liquidated damages.
- f) Contractor shall not resume provision of the Works affected until the Employer's Engineer is satisfied that the non-compliance has been rectified.
- g) In addition to enforcement requirements stated in HSE legislations, Contract Requirements and Project HSE standards, the Employer's Engineer may require the removal any person from the site, who in the opinion of Employer's Engineer, fails to observe HSE procedures. That person shall not be employed again on the project or any of the sites without the written approval of the Employer's Engineer.
- h) The Contractor shall be responsible for enforcing the Site HSE Rules and Regulations upon its Subcontractors and all other persons entitled to be on any work sites.

19.5.7 Environmental Management

The contractor shall specify in their HSE plan the measures applied to avoid harm to the environment. These measures shall meet the requirements of the HSE standards as described in the document.

19.5.8 HSE Personnel

- 19.5.9
- a) The contractor shall ensure that an adequate number of HSE personnel are appointed on the project. No HSE personnel on the project shall be appointed without prior written permission from the Employer's Engineer. The Contractor shall ensure that all HSE personnel meet the requirements as indicated in the project HSE standards.
 - b) The name, address, educational qualification, work experience and health condition of each personnel deployed for the HSE role shall be submitted to the Employer in the format prescribed for the purpose for comments and approval well before the start of the work. These personnel shall be authorised to work only upon approval from Employer's Engineer.
 - c) In case any of the HSE personnel leaves the Contractor the same shall be intimated to the Employer. The Contractor shall recruit new personnel and fill up the vacancy within 60 days.
 - d) It shall be the responsibility of the Contractor/ lead JV member to provide required HSE manpower for all the works executed by the JV members/sub-contractors. Necessary conditions shall be included in all sub-contract documents executed by the main Contractor.

19.5.10 Competence and Training

- 19.5.11
- a) The contractor shall ensure that that all personnel are competent, capable and qualified to a level that allows them to work without creating unnecessary risk for themselves and others. All personnel shall have and maintain the necessary HSE competencies to perform work on the project to the required HSE standards.
 - b) The contractor shall ensure that all supervisory personnel have formal training in supervisory activities and specialist HSE training to conduct their duties.
 - c) The contractor shall ensure that a project HSE training matrix is produced. The training matrix shall include the various positions on the project and detail the HSE training that is required for each position.
 - d) The refresher-training programme including HSE induction to all employees shall be conducted once in twelve months

19.5.12 HSE Orientation Training

- 19.5.13
- The Contractor shall ensure that all personnel working at the project receive an induction HSE training explaining the nature of the work, the hazards that may be encountered during the site work and the particular hazards attached to their own function within the operation on the first day of work on the project. The training shall cover the contents as detailed within the Project HSE standards.

The contractor shall ensure that any new personnel are informed in an equal manner.

19.5.14 ID card & Booklet

- 19.5.15
- a) The contractor shall ensure that all personnel working on the project (including sub- contractors) be issued with a photo identity card duly signed by the authorized representative of the contractor before they are engaged for any work.
 - b) The contractor shall also issue a personal HSE handbook in a language known to the workers, which provides information on HSE and emergency procedures that all working personnel are required to know and need to follow. Contractor shall ensure that this is distributed, and its content introduced to all personnel working at the site.

19.5.16 Intervention

- 19.5.17
- a) The contractor shall have implemented a system that assures competence (including HSE) of personnel. For those roles where no suitable recognized competence standards exist, the contractor shall provide, upon the Employer's Engineer's request, information on the selection criteria and/or method used to provide assurance of individual competence.
 - b) The contractor shall establish and agree with the Employer's Engineer a key list of personnel undertaking taking HSE critical roles. The list shall identify these key individuals by name and by (key) role. For every role on this list, the contractor shall define minimum requirements for HSE competences and qualifications relevant to the work.
 - c) The contractor shall minimize turn-over of HSE personnel, where possible, to ensure established competence levels and to minimize role discontinuity. The contractor shall obtain the Employer's Engineer's written approval prior to replacing any personnel on the list.
 - d) The contractor shall have implemented a system that records the training of personnel. The contractor shall keep training records up-to-date and shall furnish information about the system and/or records of training upon request by Employer Engineer/ PMC.

19.5.18 Medical fitness to work

- a) The contractor shall ensure that all personnel engaged on the project are medically fit for the job to be undertaken. Where required, the contractor shall be able to demonstrate that personnel selected for key positions are evaluated for their fitness to work on the project.
- b) The contractor shall arrange a medical examination of all his employees including his subcontractor employees employed as drivers, operators of lifting appliances and transport equipment before employing, after illness or injury, if it appears that the illness or injury might have affected his fitness

and, thereafter, once in every two years up to the age of 40 and once in a year.

19.5.19 HSE Communications and Meetings

- a) The contractor shall ensure efficient and effective HSE communication and consultation with all personnel involved on the project. This includes but is not limited to toolbox meetings prior to the start of work, regular worksite HSE meetings with all parties involved (including subcontractors).
- b) The contractor shall participate in any HSE meetings as organized by the Employer's Engineer.

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- b) The contractor shall participate in any HSE meetings as organized by the Employer's Engineer.

19.5.21 HSE Performance Reporting

The contractor shall submit monthly an HSE performance report to the Employer's Engineer. This report shall contain as a minimum the following data, as related to the project:

- a) A list, including a brief description, of all incidents (including near misses and potential incidents);
- b) Number of Fatalities (FAT).
- c) Number of Lost Workday Cases (LWC).
- d) Number of Restricted Workday Cases (RWC).
- e) Number of Medical Treatment Cases (MTC).
- f) Number of First Aid Cases (FAC).
- g) Number of Environmental Non-conformances.
- h) Number of Environmental Spills.
- i) Leading performance indicators as agreed with the Employer's Engineer .
- j) Additional project specific HSE performance data, as to be agreed with the Employer's Engineer.

The format & content for the HSE performance report shall be agreed with the Employer's Engineer prior to the commencement of the project.

19.5.22 Target and Objective Setting

The contractors' HSE goal shall be "Target Zero" to reflect the project's commitment to an accident-free workplace. The contractor's targets and objectives shall be focused on leading indicators and proactive efforts to reduce the likelihood and severity of incidents.

19.5.23 HSE Incident Management

The contractor shall report any HSE incident and/or accident, related to contractor activities or personnel, to the Employer's Engineer within 1 hour & to the National or Local authorities as required by relevant legislation. It shall be the responsibility of the contractor to ensure the timely reporting of such accidents/incidents. The Contractor shall report to the Government Authorities (Regional Labour Commissioner) as per Rule 210 of BOCWR, notice of any accident to a worker at the building or construction.

The contractor shall also notify the Employer's Engineer immediately of any near misses and significant potential incidents arising from the contractor's or sub-contractor's activities associated with the project, related to:

- Harm to contractor and/or subcontractor personnel and/or Third Party.
- Harm to the environment,
- Damage to, or loss of, contractor or subcontractor/Third party assets.
- Harm to Client/PMC/Contractor reputation.

The contractor shall fully investigate any incidents on the project and cooperate with the Employer's Engineer and participate as necessary in any investigation of HSE incidents as required by the project HSE standards.

19.5.24 Emergency Preparedness and Response

- a) The contractor shall maintain a documented, robust fit-for-purpose Emergency Response Plan for the project. The contractor shall also provide fit-for-purpose survival equipment, first-aid equipment, life-saving equipment, fire-fighting equipment, and oil/chemical spill equipment. The contractor shall ensure that the involved personnel are trained and competent in its use.
- b) The contractor shall develop and maintain a programme of training and exercises to ensure the competency of all individuals and teams involved in the emergency response teams in accordance with the project HSE standards.

19.5.25 HSE Audits, Reviews, and Inspections

- a) The contractor shall perform audits, reviews and inspections on the project as required by project HSE standards. During these audits, reviews and inspections, the contractor shall verify that they have fulfilled any and all legal obligations, including conditions and stipulations in all relevant licenses, consents and permits and that the work on the project is performed in accordance.

- b) The contractor shall develop a detailed HSE inspection & audit schedule for the project and submit copies of the reports to the Employer's Engineer.
- c) Contractors' Site HSE Manager will ensure that a system of routine inspections of all plants, equipment, powered tools and any other temporary structures that may pose a hazard to operators and workmen is carried out periodically.

19.5.26 HSE Records

The contractor shall retain all relevant HSE records resulting from work on the project in line with relevant legislation & project HSE standards. Copies of these records shall be maintained by the contractor on the project site and shall be made available to the Employer Engineer /PMC on demand.

19.5.27 Sub-Contractor Management

- a) The contractor shall ensure that all sub-contractors comply with all the HSE standards relevant to the project (including these conditions).
- b) The contractor shall be accountable for the sub-contractors HSE performance.

19.5.28 Project HSE Plan

The contractor shall prepare and submit to the Employer's Engineer a project HSE plan which covers all work under the project. This project HSE plan shall be reviewed by the contractor at regular intervals of not less than 6 months.

19.5.29 Substance abuse

- a) The contractor shall ensure that all personnel working on the project do not at any time partake of, be under the influence of drugs, alcohol, sedatives, or other similar intoxicating substances, other than for bona fide medical reasons.
- b) Any personnel found contravening with the above will be removed from the project with immediate effect and Contractor HSE Plan Template

19.6 Template for Contractor's HSE Plan

This plan is provided as a guidance template for the Contractor to include in their HSE plan. The sections mentioned in this HSE plan template will be the minimum standards that the Contractor's HSE plan will be assessed against.

Section No.	Titles of sections	Details of what is required in each section
Contractor must ensure that these sections are included in their Construction HSE plan. The details in the sections are provided as guidance.		

Section No.	Titles of sections	Details of what is required in each section
1.0 Section 1 - Project Details		
1.1	Project Specific Details	Contractor to provide contact information for Key Contractor personnel. Contact information to include Name, Mobile number, email id. Key personnel include: Contractor Project Director Contractor Project manager Contractor Construction manager Contractor HSE Manager Contractor General Foremen.
1.2	Details of other Consultants	Details as above of any consultants that the contractor may employ on the Project.
1.3	Project Security	Contractor to detail the Site security arrangements that will be in place on the Project. Suggestions as below: Site entrance control points Identity card system Vehicle barrier types Visitors to Site procedures Delivery vehicle procedures Vehicle parking restrictions Need for 24hr cover etc.

Section No.	Titles of sections	Details of what is required in each section
1.4	Welfare Arrangements	Contractor to detail what arrangements will be made on Site to ensure that appropriate welfare facilities are provided and maintained according to the size of the workforce and nature of the work. As a minimum, an assessment must be carried out to determine specific welfare requirements and arrangements throughout the Project, from day one to the last day persons are on site. Consideration must be given to any requirements for male/female changing, showers or disabled facilities, etc. Details to be included: What type and size of facilities are required? When they will be operational, State what the initial set-up is and what the subsequent set-up will be, where they are located. Produce a clear layout Drawing. Who provides and maintains each facility? Expected standards and monitoring requirements.
1.5	Project Organization Chart	Contractor to include a detailed organization chart with names, designations & contact numbers for the Project.
1.6	Arrangements for communication	Contractor to detail how they plan to communicate HSE with the different Parties on the Project. For example, what kinds of HSE meetings will be held on the Project, how often, who will attend etc. Suggestions HSE Communication include: Regular team meeting. Early morning meetings with key personnel. Formal correspondence (e.g. Appointment Letters). Management Walks Toolbox talks Trainings
1.7	Project Goals	Contractor to detail what are the Project HSE goals.
1.8	HSE Compliance monitoring	Contractor to detail how HSE compliance monitoring will be conducted, who will conduct how often this will be conducted.

Section No.	Titles of sections	Details of what is required in each section
1.9	Senior Management HSE monitoring	Contractor to detail how Senior management on the Project will be involved in HSE monitoring, how often will they be involved, what is the process.
2.0 Section 2 - Information and Training for People on Site		
2.1	Inductions & Trainings	Contractor to detail the methods by which they will check that people on Site have been satisfactorily inducted & trained. Suggestions include: - Arrangements for delivery – i.e. who does the induction? Who does the training? Arrangements by which management are informed of new starters. Arrangements for recording of inductions/trainings? Any passes, or other identification issued after induction. Arrangements for re-induction or safety updating as the contract enters a new phase or persons are transferred to a different section. What are the training arrangements for the Project?
2.2	Site Safety Rules	Contractor to detail what Site safety rules will be developed or is available for the Project.
3.0 Section 3 - Contractor Management		
3.1	Selection of Contractors	Contractor to detail how they will select sub-contractors on the Project. How will they ensure that only competent HSE contractors are on site? How do they plan to communicate HSE issues with the sub-contractors? How do they plan to coordinate the Works with the sub-contractors?
3.2	Selection of Plant	Contractor to detail how they will ensure that only safe Plant & equipment is bought to the Project. How will they check the Plant & equipment? How often? Who will check?

Section No.	Titles of sections	Details of what is required in each section
4.0 Section 4 - Emergency Procedures		
4.1	First Aid	Contractor to detail what are the first aid arrangements that will be made on site. For example: Locations of first aid boxes Names of First aid personnel and their locations Location of First Aid room Numbers of First Aider's required. Location of accident book
4.2	Fire and Emergency Procedures	Contractor to detail what are the fire safety arrangements that will be available on site. For example: Fire points – How many, where will they be located. What kind of extinguishers will be available? What kind of training will be available? What will the emergency actions be for the Project
4.3	Accident & Incident reporting	Contractor to detail what are the accident & incident reporting procedures for the Project. For example: How will accidents be reported? To whom? Who will coordinate? How will they be recorded?
5.0 Section 5 - Arrangements for Controlling Significant Site Risks		
5.1	Production of Method Statements	Contractor to detail how method statements will be checked for HSE hazards & risks?
5.2	Risk Assessments	Contractor to detail how risk assessments will be produced? Who will produce these? How will they be reviewed? Methods of communicating to the workforce on the content of the risk assessments. How will sub-contractor risk assessments be checked for the above?

Section No.	Titles of sections	Details of what is required in each section
6.0 Section 6 - Environmental Management		
6.1	Environmental Management Strategy	The contractor to detail how they plan to manage the environmental aspects of the Project. Suggestions include: Environmental management plan. Project specific Environmental processes Environmental aspects & impact register
6.2	Waste Management Planning	Contractor to detail how they plan to manage waste (Construction, hazardous & non-hazardous). Suggestion includes: How will waste be collected on site? How do they plan to dispose the waste? Who will dispose it, where?
6.3	Environmental Emergency plans	Contractor to detail what are the environmental emergency plans for the Project. Suggestion includes: Who will initiate action? Who will report? To whom? What are the foreseen emergencies?

21. PROJECT MANAGEMENT REQUIREMENTS

The Contractor shall perform all the Project Management activities necessary for proper planning, management, and control of the work. Below are the Project management requirements that Contractors need to comply with at different stages of the project:

- 20.1.1 Participate in the Project kick-off Workshop with the Project stakeholders designated by the Employer/ Employer's Engineer. The kick-off Workshop shall accomplish the following objectives:

Common understanding of the Project goals and objectives

Define respective roles and responsibilities and agree on the methods of communication and reporting throughout the Project duration.

- 20.1.2 Participate in monthly Project status review meetings and present the Project progress update in the meeting. The frequency of Project status review meetings may change based on actual requirements

- 20.1.3 Schedule: The Contractor shall submit a detailed schedule with narration in soft and hard copies that covers the full scope of the Contractor's work within 30 calendar days of date of appointment. This will be reviewed within 15 calendar days by the Employer's Engineer. The Contractor shall incorporate the comments and resubmit the schedule no later than 15 calendar days after receiving the comments from the Employer's Engineer. Upon approval, the above schedule will become the baseline schedule for all future monitoring and tracking.

- 20.1.4 The Contractor should keep to the following guidelines:

- a) Develop and incorporate a detailed Work Breakdown Structure (WBS) for all Project schedules that are submitted.
- b) All schedules shall be created, maintained, and submitted to Employer/ Employer's Engineer in Oracle Primavera P6 or a higher version of Primavera P6 in an electronic format.
- c) All schedules shall follow the Critical Path Method (CPM) of scheduling and shall have meaningful and realistic logical ties and relationships between activities.
- d) The use of negative lags is not permitted in the baseline and all other versions of the schedule.
- e) The schedule must contain all the long lead procurement items identified.
- f) Shall exercise reasonableness while assigning constraints in the schedule and milestones.
- g) The Contractor shall allocate the Contract amount in detail to all the activities. It shall be used as a guide for progress (S-Curve) monitoring only. Progress S-Curve to be updated each month, and Progress Measurement will be on the basis of Earned Value Management.

- h) The Contractor shall provide narration with all the calculations, reports, forecasts, supporting documents and a detailed list of assumptions made on the development of the project schedule.
- i) Activities shall comprise specific and measurable elements of work. Durations for each activity shall be calculated using productivity rates.
- j) All schedules shall be resource-loaded, and the Resource Histogram shall be submitted along with the schedule.
- k) Upon approval, the copy of the Baseline schedule will become the first Current Schedule. The Contractor shall not change the approved schedule unless instructed in writing by the Employer/Employer's Engineer. It shall be used as a basis for measuring progress performance.
- l) The Current schedule shall be actively updated and maintained by the Contractor every month.
- m) The updated Primavera P6 schedule file should be submitted every month along with the Monthly progress report in electronic format. A PDF copy of the updated schedule with all activities also needs to be submitted.
- n) A schedule narrative document shall accompany the updated electronic schedule describing the work performed in the reporting period.

Two-month look-ahead schedule should be submitted along with the Monthly Progress Report.

- 20.1.5 Cash Flow: Cash Flow shall be extracted from the Baseline Schedule and Updated Schedule every month. Cash Flow shall be submitted along with the Monthly Progress Report to show the actual versus plan and updated on a monthly basis.
- 20.1.6 Lessons Learned Database: The Contractor shall develop and actively maintain a "lessons learned" database on a monthly basis (to be included in the monthly Project report) and submit it to the Employer's Engineer/ Employer at the end of the Project during closeout.
- 20.1.7 Risk Register: Maintain an active risk register addressing the risks and mitigation measures (could be in Excel format) that lists the Project risks related to their Scope of Work. Risk Register shall be updated every month and submitted every month along with the Monthly Progress Report.
- 20.1.8 Inter-Project Links: Identify potential inter-project links, inter-dependencies, or conflicts/ interference to work or work areas and narrate them in the monthly progress report.
- 20.1.9 Monthly Progress Report: Prepare and submit a monthly progress report no later than the 7th of each month (standard format and template will be provided by the Employer's Engineer at a later date). Items 3 to 7 mentioned above shall be the minimum information that will need to be included in the monthly progress report.

20.1.10 For better collaboration, Contractor shall use the Programme and Document Management system that will be provided by Employer/Employer's Engineer at a later date and pay for the cost of procuring licenses to use the system.

20.1.11 Payments are subject to the timely submission of a monthly progress report and the monthly updated electronic schedule file in the required and acceptable format.

20.1.12 Non-Compliance

If the Contractor fails to submit Baseline Schedule within Thirty (30) days after appointed date or the Baseline Schedule is not approved by the Employer's Engineer within Three (3) months after the first submission, or the Updated Schedule within time prescribed, then the Employer's Engineer shall deduct retention of Five Percent (5%) of the Contractor's Progress Payment over and above the 5% Retention amount until such time that the Contractor has provided submissions that are acceptable to the Engineer. The sum retained will not earn interest and shall only be released to the Contractor upon due certification by the Employer's Engineer that the amount retained may be released to the Contractor.

20.1.13 Project Management Plan

Within 21 days of the Appointed date, the Contractor shall submit a Management Plan. The Management Plan shall be in accordance with the Contractor's Quality Assurance Accreditation, and the contents shall include, but not be limited to

- a) Site Management Structure.
- b) Contact Details for Key Staff.
- c) Programme.
- d) Document Numbering and Document Control Procedures.
- e) Pro-forma for Requests for Information, Requests for Inspection etc.
- f) Checking and Approval Procedures for Design elements under the Control of the Contractor.
- g) Change Control.
- h) Control Procedures for key activities, including survey, placement of concrete, pipe laying, testing, and preparation of as-built records.

The Management Plan shall be updated as appropriate throughout the duration of the Contract.

20.1.14 Progress Reporting

- a) Within the period stipulated in the Contract, the Contractor shall submit for approval, a programme or programmes for the execution of the Works. The programme(s) shall be presented in Gantt chart format, to the approval of the Employer's Engineer, with the critical path and float periods clearly shown. The Schedule will be a Level 4 schedule. The Schedule should be prepared using P6.

- b) All construction activities, including those by sub-contractors, shall be shown, together with any temporary works construction, services diversions, traffic diversions and the like.
- c) Critical interface dates for the issue of information for construction and for design and materials or equipment ordering by the Contractor shall be included.
- d) If instructed by the Employer's Engineer, the Contractor shall provide additional detailed tables, bar charts and critical path(s) networks of the whole or parts of the Works.
- e) The programme(s) shall be updated and/or expanded at such times as the Employer's Engineer shall direct. Updated programming data in the form of Networks, Tables and Gantt charts showing actual progress in comparison with the Contract programme shall be submitted to the Employer's Engineer at monthly intervals.
- f) Any delay claims have to be supported by a time-impact analysis submitted along with the delay claim submission.

